# Correlates of success of adult nontraditional college students 

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For the Graduate College

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## INTRODUCTION

The median United States age is now 29.4, and the number of young adults--ages 25 to 34 --increased by eight million, or 31.8 percent, between 1970 and 1977. During this time, preschool population, including children five and under, declined 11.2 percent, or 1.9 million (United States Census Bureau, 1978). When this phenomena of growth in the young adult age group is coupled with the fact that the number of adults completing from 15 to 21 years of formal schooling has increased from approximately 12 percent to about 50 percent of the total United States population, the implications for increased needs in adult continuing education are impressive.

Another dimension which has implications for increase and change in adult education programs is the growth in the numbers of part-time students.

The full-time student, once the standard figure in the student population, is becoming a minority in total post-secondary education, is a minority in the community college population. . . . Between 1972 and 1974, the full-time student population grew by 5.8 percent; the part-time population grew by 39.7 percent (0'Hara, 1975, p. 64).

There is evidence that "open learning systems are increasingly being considered as appropriate responses to the changing realities of communities and schools. In 1972, for example, there were some 700 programs identifiable as "open learning" programs in our colleges and universities. However, data from which analyses of the population served and the degree to which these offerings were meeting needs were seldom available (Cowlan, 1975).

With the growth in "open learaing systems" is an accompanying explosion in the use of technology. New educational technology is becoming a
vital force in the development of curricula for continuing education. Film, radio, television, computers, and recordings are all in use as educational tools (Rockart and Morton, 1975; Murphy and Gross, 1966).

For years the fear among educators has been that technological devices might replace the human element in education and should be resisted. Now it is becoming more creaible that these technological devices are no more than tools of the teacher, and in fact may free him or her to interact personally with numbers of students in a manner superior to their encounter without technological assistance (Muller, 1978, p. 41).

The development of technology has also made it possible to take education to the student. In a rapidly changing society throughout the world, on-going education has become a necessity. Since the application of technology to education is now feasible and more accepted and since the majority of adult students cannot spend most of their study time in a conventional school environment, a reasonable solution is some form of distance education.

The University of Mid-America is one form of distance education which might, in its present format or with modificacions, be a model for distance education. It is a consortium consisting of ten member universities in seven states: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. Iowa joined the consortium in 1975, and the first courses were offered in February, 1976. Since that time a group of courses has been offered twice a year, every spring and fall.

The continued success of the program depends on many factors, but central to its expansion is a. satisfied student body. Adults enroll in continuing education programs for many reasons which Houle (1961) has categorized as 1) goal, 2) learning, or 3) activity orientations. They also drop out of programs for many reasons (Boshier, 1972, 1973), and Niemi (1976)
called attrition one of the severest problems confronting adult education. If this very promising innovation in open learning is to succeed, continuing changes based on research and evaluation of these problems will need to be implemented.

## Purpose of the Study

This study is a descriptive survey of the enrolled students in the University of Mid-America program at Iowa State University. The purpose of the study is to gather and analyze data relating to the pilot UMA/USA program in Iowa which might provide guidelines for the evaluation of certain aspects of the program. An attempt will be made to identify correlates of success based on student characteristics and reactions to the program.

## Limitations of the Study

This study is based on data relating to the students in the first two groups of course offerings in the University of Mid-America program at Iowa State University, spring, 1976, and fall, 1976.

## Definition of Terms

"Enrolled students": This term refers to the students who enrolled and actually began studying the course. This does not include the students who enrolled and then dropped before attempting study in the course. Through a mailed questionnaire to these students and spot phone calls, it was learned that the majority stated they did not begin study for two general reasons: 1) unforeseen events had suddenly occurred in their life which either prevented them from investing the time necessary to take the course, or their original reason
for enrolling had changed, making it unnecessary to take the course or 2) after an examination of the course content they decided the course did not meet their needs and/or appeal to their interests.
"Nonstudents": The students who enrolled and dropped immediately before actually beginning study in the course (described above).
"Drop-outs": The students who enrolled and began study in the course but who did not complete the course or receive an "incomplete" in the course. This includes:

1) all students who dropped or withdrew after attempting study in the course
2) all students who changed to audit from credit
3) all students who enrolled on an "audit" basis and did not change to credit
"Satisfactory course completion": This was based on three possibilities:
4) receiving a passing grade, that is an $A, B, C$, or $D$
5) if course was on a satisfactory-fail basis only, receiving a grade of $S$ for satisfactory
6) receiving an $I$ grade indicating an incomplete. To receive an $I$ grade, a student would be required to give evidence of satisfactory progress and intent to finish the course within a time specified by the instructor
"Successful experience": This was based on two conditions:
7) satisfactory course completion
8) satisfaction with the overall experience regardless of satisfactory or unsatisfactory course completion
"Unsatisfactory course completion": This was based on three conditions:
9) receiving an $F$ grade
10) changing to audit during the time the student was working on the course
11) registering as audit
12) dropping a course after actually attempting to study in the course

Background and Justification for the Study
The Iowa situation
The need for ever increasing levels of knowledge and understanding is apparent in our society.

Almost every observer of our culture points to increasing levels of alienation and anomie, anonymity and lack of feeling that might otherwise forge bonds of love and community, of family and civic responsibility. . . . The society seemingly confronts a general crisis brought about in large part by its inability to overcome its ignorance, despite the existence of the largest educational establishment in the world (Ritterbush, 1976, p. 28).

An attempt to educate an increasing percent of our adults is one approach by society to alleviate the conditions described by Ritterbush. Adult education per se is not a new phenomena in higher education in the United States, however, and the Agricultural and Cooperative Extension Service is the largest and most successful adult education enterprise in the United States. It has an illustrative history of serving very adequately farmers and agribusiness and has moved into suburban and urban areas where it has developed concern for major national questions and for the problems of the disadvantaged. By these and similar channels, higher education has links to many movements for social change (Harrington, 1977).

In addition to established Cooperative and General University Extension Programs, many state public colleges and universities are exploring a variety of nontradition credit granting programs which mày or may not culminate in the awarding of a degree from the instituticn. Decisions governing choice of type and scope of program are generally based on some concrete evidence of need, and a study relating to the needs of Iowans was made in 1975 for the Higher Education Facilities Commission by a research team from the College Entrance Examination Board and Educational Testing Service (Hamilton, 1976). The primary finding of the study was the existence of a sizable, identifiable interest in further learning by a significant number of adults who, at the time of the study, were not being adequately served by the state's postsecondary institutions. A total of 36 percent or approximately 676,800 adults expressed some degree of interest in further learning at that time. Of the 36 percent, 12 percent stated that they desired and planned to participate in further education. A description of these respondents includes a tendency for them:
--to be female. Almost two out of every three of those who planned to participate were women.
--io reside in metropolitan areas, cities, and larger towns. (The report states that the rural respondents tended to indicate "possible" interest in learning, perhaps recognizing that significant barriers exist for them.) A report by James Risser, the Des Moines Register's Washington Bureau Chief (1977) confirms this assumption.
--to be younger. A quarter of the 225,000 residents in this group were 18-24 year olds, another fifth were between $25-34$. Only 8 percent of the 50 years and older group planned to stucy.
--to have average incomes or better. Thirty percent of those earning over $\$ 10,000$ planned to study.
--to already have college experience. They report that the dictum that education is habit forming is borne out by this study. The higher one is educated, the more likely one is to want more education.
--to come from families whose principal wage earner (in some cases this was the respondent) had an occupation classified as professional, managerial, white collar clerks or sales personnel, or be skilled craftsmen. Fewer of those from semi- or unskilled labor or farming families report an interest.
--to be a member or have a close family relation who belongs to a business or service club.

This overview reveals that the people who indicated plans for participating in continuing higher education were those who knew they had the opportunity (that is, educational facilities were available to them), who had the background, and who had the resources to afford further education. Those who lacked obvious opportunities close to their homes, who were older, who came from less education-oriented occupations, and who had less discretionary income and a history of less education, were not very likely to indicate plans for future participation. These people were more cautious in their replies, stating that they would like further education but had no definite plans, or perhaps would like it if problems could be surmounted, or said they had no interest.

The reasons given for wanting to continue their education emphasized a desire to become better informed and for their personal satisfaction.

Other reasons such as improving income, preparing for a job or to get a better job, or to meet new people, or secure a degree, were ranked lower.

In an effort to serve the needs of the citizens of Iowa, its network of public and private institutions of higher education has a history of attempting to offer a broad variety of learning opportunities. For example, Iowa State University at Ames, Iowa, as the land grant institution of the state, has three missions including resident instruction, research, and outreach programs. The outreach function of the university includes many programs directed toward the continuing education of the adults of the state. While many parts of the state tend to be educationally alienated by distance from the three state universities, the regional communities in Iowa are by no means unorganized. They are organized from the agricultural and rural development standpoint, through the area educational agencies, the area community colleges, and the network of agricultural extension offices in most counties and extension districts in regional centers in the state.

Iowa State University has a record of delivering off-campus credit and noncredit courses to centers throughout the state, frequently capitalizing on the network of extension offices for assistance in organization and execution. In addition to the off-campus classes for adults, several innovative programs have been added. In the fall of 1975, the university became involved in a public employee education program through the Political Science Department. In this program individuals were afforded an opportunity to complete a master's degree program without establishing residence on the campus. It is unique in that its delivery arrangements are itinerate and rotational, moving from one regional center to another to
accommodate personnel in various areas and avoiding the permanent offcampus educational establishment in any particular regional community (Lee and Wessel, 1976).

In addition, a program leading to a B.S. degree in distributed studies was instituted by Iowa State University in the fall of 1975 in Mason City. It is intended for persons who have completed two years of college but who are unable to spend the last two years on campus. There is a current effort to incorporate this program into the Bachelor of Liberal Studies Program.

The three regents universities, through joint effort, have also been engaged in planning programs for adults and began offering the Bachelor of Liberal Studies external degree program in the fall of 1977. This program enables persons who cannot attend college as full-time, on-campus students to complete an undergraduate degree through Iowa State University, the University of Northern Iowa, and the University of Iowa. However, to be admitted to this program, a student must have completed an Associate in Arts or Associate in Science degree from an accredited postsecondary institution or have earned at least 93 quarter credits (or 62 semester credits) of transferable degree credit. For the Bachelor of Liberal Studies degree, a total of 186 quarter credits (or 124 semester credits) is required, and there are stringent requirements relating to the number of credits that must be taken through the three universities and the type of courses permitted on the degree programs.

Another joint effort of the three regents universities in Iowa is the program offered through the Quad-Cities Graduate Study Center located in the Quad-Cities area (or more specifically, Rock Island, Illinois). This
concept in higher education gives the individuals working in this area an opportunity to continue their education without undue commuting and permits a student to earn credits through any of nine cooperating institutions.

The private colleges and universities in the state have also been expanding their on-going commitment to continuing education, and many have appointed continuing education directors. Many of these institutions have also demonstrated their interest in nontraditional students through their sponsorship of programs planned for this particular group.

The Iowa colleges that have probably been most involved in the group of learners who traditionally have not continued their education at the college level, are the 15 area community colleges strategically located throughout Iowa. Service to the nontraditional learner has been central to their mission, and their success in accomplishing this is well-documented.

To serve better all of the adult students in Iowa and to facilitate the cooperation of its postsecondary institutions, Iowa is exploring an arrangement that would permit a student to take credit courses from any accredited Iowa institution and have the credits transferred to one central clearing house which would be called the Iowa Commonwealth College. This has not as yet become a reality. In a report prepared for the Higher Education Facilities Commission of the State of lowa by the planning coordinator of the 1976-1977 Study on Postsecondary Planning for the Nontraditional Learner in Iowa, it was recommended that the Iowa Coordinating Committee for Continuing Education be expanded and that one of its missions include the re-examination of the Iowa Commonwealth College concept. As a result of a two-year study of the needs of adults who want to continue their education by the Iowa Higher Education Facilities Commission,
recommendations were made for the formation of five regional clusters for postsecondary continuing education in the state of Iowa. The clusters would consist of representatives of each institution serving in each respective region. The functions of the clusters would include: the establishment of clearing houses to disseminate information about programs; plans for sharing personnel, educational resources, and facilities; exploration of opportunities for the use of mass media; coordination of educational activities in the region; communication with local advisory groups; and many other ways of sharing and planning to promote educational services to the adults in the state. At this point in time, these are in the planning stage. The Higher Education Facilities Commission proposes that 1977-78 should be the year of regional planning and implementation on behalf of the nontraditional student (Project Task Force, 1977).

In an effort to continue to serve the individuals in the state better and to complement the existing opportunities in higher education, early in 1975 Iowa State University became part of an innovative "open learning" program. Speaking to the Iowa State University faculty and staff in September, 1975, President W. Robert Parks said:

Perhaps the greatest challenge the university will be facing in broadening and extending its quality of excellence, however, lies in the growing social need for developing new forms, new formats, for off-campus learning processes which can lead to academic degrees. This year, as one of the five charter member institutions of the University of Mid-America, Iowa State will be participating in a regional "open learning" undertaking whose purpose is to carry its educational resources out to where people live and work. Also, this year, Iowa State, in cooperation with its sister Regents' institutions, will be participating in the development of a state-wide off-campus educational program, designed to lead to a Bachelor of Liberal Studies degree.

These programs have great potential for extending and enriching the educational mission of this university. But they must be
undertaken with a care for excellence. It will be the responsibility of the faculty of this university, working through its curriculum committees, to so fashion the educational content and academic standards of both of these programs that Iowa State's traditional levels of excellence can be retained within these new educational formats.

Following precedence for outreach programs, the extension branch of the university was chosen to administer the program, again capitalizing on the well-organized extension network and ulcimately expanding to include all interested institutions of higher education in Iowa.

To insure that the best efforts would be invested in carrying out the mission of the University of Mid-America in Iowa, it was the desire of the Dean of Extension, Charles E. Donhowe, that continuing research and evaluation be a part of the program. It is for this purpose that the present study has been undertaken, and from the time of the return of the first questionnaire in January, 1976, information gained has given valuable insights to this unique, innovative effort at taking education out into the homes of Iowans.

Background of The University of Mid-America
The national higher education research study group known as the Carnegie Commission issued a report in 1973 which urged "universal access to post-secondary education for all Americans . . . , flexibility in enrollment patterns . . . , and adaption of nontraditional and diverse programs" (Carnegie Reports: "Will They Have Much Impact?," The New York Times, October 14, 1973; Carnegie Commission on Higher Education, 1973). The Newman Reports (1971, 1973) gave further endorsement to these concepts. These two national reports on higher education emphasized that, despite the vast number of institutions offering some form of postsecondary education,
there still remained a significant national population which could not take advantage of the opportunities offered by on-campus programs. This situation was especially prevalent in the state of Nebraska. In April of 1971, a university-wide committee was named to study this question, and in June, 1971, the committee presented its report to President Varner and the board of regents of the University of Nebraska. This report recommended the establishment of the State University of Nebraska project, thereafter known as the SUN project.

The rationale behind the recommendation to create SUN, and the SUN institutional concept itself, was a re-statement of similzr proposals which were developed earlier in several other states and which would continue to surface through the early 1970s, wherever university reform and development were under study. The similarities in these reports were indicative of the prevailing mood of reform in United States higher education. The common themes included: higher education should be made more "open"; new learner groups must be accommodated; technology could be a means for improving access to education and improving instruction; United States higher education could reform and extend itself either through evolving new and separate institutions (as in the case of SUN, Minnesota Metropolitan State College, Empire State College) or through the adaptation of present institutions. The experiment in 1964 in Wisconsin, the Articulated Instructional Media program funded by the Carnegie Corporation, which in turn had an impact on the development of the Open University in the United Kingdom, stimulated investigations into the development of open universities in the United States, Canada, and elsewhere.

The initial report, submitted in June, 1971, to President Varner and the regents at the State University of Nebraska (SUN) was accepted and studies began. As a result of a major clientele study which indicated that 1.7 percent of the adult population of Nebraska were potential enrollees of the program (approximately 20,000 to 24,000 individuals), officials of the United States Office of Education began to see in SUN the potential for a regional model for the states surrounding Nebraska and possibly for the nation. In January of 1974, after a succession of initial studies covering institutional relationships, public broadcast television and delivery, and the basic research, development, and field testing of the program, the National Institute of Education awarded a continuation grant for the calendar year to accomplish work assignments essential to the orderly development of a postsecondary "Open Learning" model in Mid-America. In June of 1974, the National Institute of Education initiated an intensive review of SUN's accomplishments, and SUN appointed an advisory committee of national authorities in nontraditional education to assess its progress and advise SUN in the preparation of its NIE proposal for the development of the University of Mid-America (UMA), a model regional Open Learning system. The University of Mid-America (UMA) itself is a central coursedevelopment and evaluation agency that makes courses availabie to individual state institutions for delivery as those states determine. UMA coordinates state delivery systems, the link between the learners and the UMA course development, and evaluation activity. It is a private, not-forprofit corporation, organized by a consortium of state universities, and the founding participants of the consortium include: Iowa State University, Kansas State University, and the Universities of Kansas, Missouri, and

Nebraska. In 1976 these founding universities were joined by the University of Iowa and the University of South Dakota, and later, in January of 1977, the University of Minnesota and South Dakota State University accepted invitations to join the consortium, for a total of nine participating universities. Thus UMA is making progress in its aim to consolidate its membership within the present region and to extend the region into contiguous states for the purpose of achieving economies of scale. For additional information, see the recent brochure published by UMA (Appendix E).

Research and evaluation needs
By 1980 UMA intends to have a well-developed curriculum with operating delivery systems across several states providing open, flexible, and responsive educational services to its clientele. To achieve these goals effectively, it is necessary for UMA to sponsor extensive and vigorous evaluation of all aspects of the project. Lent (1974) states, "If UMA is to serve as a model solution for a wide range of adult education problems, then a large and diverse body of valid information must be collected on its procedures, costs, benefits, and effectiveness" (p. 1). He adds that much of the information will be used by UMA on a day-to-day basis to guide its activities, and much of it will also be needed by external audiences trying to decide whether to commit their resources to this kind of endeavor.

The necessity of on-going research relating to the functioning of an Open Learning system (which is often called "institutional" research) cannot be stressed too strongly, state MacKenzie, Postgate, and Scupham (1975). They continue:

Such a system, which may be highly innovative at the outset, will undoubtedly need continuous monitoring to ensure that it is
carrying out its proposed work effectively, to make the inevitable adjustments in structure and methods of operation, and to indicate the lines of development for future policy. . . . There should be, for example, a systematic scrutiny of the teaching system itself and of its effectiveness, of the responses, behaviour and characteristics of its students, of the relative costs incurred by each part of the system, and of the means for policy control within the whole organization (p. 49).

The authors suggest that while it is difficult to approximate a target figure for the budgetary allocation to institutional or policy research, a figure sometimes used is about 2 percent of the operating budget. The authors conclude:

Institutional research and educational technology have developed too recently, and the systems with which they are dealing are too novel, for "new" research results and "new" techniques to emerge easily and quickly. Most of the work undertaken so far is drawing upon the level of knowledge at the end of the 1960s. The analysis and application of the systems created in the last ten years is likely to take several years: it may well be 1980 before significantly new work is available in a form which can affect practice.

This means that all new learning systems have a general responsibility to contribute to that research: without providing some resources for this purpose, even if immediate results are not obtainable, they will be failing to undertake their share of this investment in research and development work. How they do this, and on what scale, may well be vital, to their own future operations as well as to the "state of the art" generally. To require that research and consultancy be limited to what is urgently demanded by a system is not merely short-sighted, it also lacks hindsight. Such an attitude fails to recognize that the emergence of Open Learning systems in the first instance--the overall objectives, their organization and their methods of work --was to a considerable extent the outcome of research and of the repertoire of concepts and procedures loosely described as educational technology. Planning for the future must provide for such work to be continued, extended and improved (p. 52).

There has been continuous research relating first to the SUN program in Nebraska and later to the University of Mid-America in Nebraska when the consortium was created. These research efforts have provided considerable insight and direction for the development of the various component parts of
the UMA consortium. Each state, however, has autonomy in relation to many of the component parts of the system, as, for example, courses to offer, methods of delivery, establishment of learning centers and degree of assistance provided for learners. Research pertaining to any of the varying delivery systems in the member states of the consortium may provide valuable insight which could give direction to all delivery systems.

The choice of courses, the delivery system adopted, and the assistance given to learners either by the instructors, learning center personnel, or other personnel will probably have considerable effect on the future successes of UMA in Iowa and other states and possibly for the continued existence of the program.

The development of a credit based adult education program which is readily accessible to the majority of adults in the state of Iowa will probably have considerable impact on the future welfare of the citizens of the state. Hyman, Wright, and Reed (1975) found a significant difference in measurements of knowledge based on attained levels of schooling. This difference was apparent in areas of vocabulary, humanities, geography, science, civics, and in other fields. Even when social origins were controlled, schooling clearly made large differences.

An opportunity to learn is also clearly related to test results of adult citizen populations. Of hundreds of variables surveyed by the International Association for the Evaluation of Educational Achievement (Purves and Levine, 1975), one cluster of indicators, aside from home background, was most closely related to achievement and that was "the opportunity to learn." Whether indicated by hours of instruction, homework per week, cumulative years of study in the subject, curricular emphasis and challenge,
or years of postsecondary preparation of teachers, "opportunity to learn" is clearly related to test results. The importance of education therefore in the lives of the citizens of our country is easily discernable, and the implementation of continuing education programs for the adults is of primary importance. Efforts to reach those adults desiring and/or needing additional education will necessitate employing careful planning based on related research findings.

Since the University of Mid-America is a new and innovative effort to reach adults who are interested in expanding their education, research relating to components of its program may provide guidelines for improvement and expansion. Insights may also be gained by others engaged in similar pioneering efforts.

## REVIEW OF LITERATURE

Open learning is a comparatively new concept in education, and it comes at a time of heightened interest and expansion in efforts to educate adults. Studies relating to existing systems are few, and most have not been published in readily available sources such as those included in Educational Resources Information Center (ERIC) or professional journals.

To gain information about the existence of completed or on-going studies, contact was made by letter, telephone, or in person at professional meetings, with personnel in each of the known open learning programs in the United States, and on a limited basis with those abroad. As a result of these contacts, reports of completed and on-going studies were obtained.

The programs in every instance had been tailored to the unique needs of the personnel they served. Since they were all basically open learning programs which served distance learners and employed a variety of media and materials, there were similarities, but the value of each study was the insight provided relative to the creation and projections to accomplish goals in a particular situation.

The one common thread throughout most of the open-learning studies was the concern for the students who dropped out of a program, either temporarily or permanently. While drop-out was a concern, it was not the primary focus in many of the studies. Most of the programs were just beginning or not more than a few years old, and the studies were mainly descriptive.

To gain an adequate background for the study, a review was made of the concept of open learning, open learning programs in the United States and
abroad, and the problem of "drop-out" in adult education programs. This chapter includes four sections:

1) a rationale and definitions of an open learning approach
2) descriptions and studies of selected open learning programs in the United States and abroad
3) national studies of courses produced and used in open learning programs
4) phenomena of "drop-out" in adult educational programs

Rationale and Definitions of an Open Learning Approach
Continuing education for all is a dominant theme throughout the world for our present time in history. In the report of the International Commission on the Development of Education, Faure states:

The demand for education, characteristic of our time, is of unprecedented dimensions and strength. This evolution is taking place-for various yet concordant reasons--in all regions of the world, whatever their level of economic development, their demographic growth rate, population density, extent of technological progress, and whatever each country's culture and political system. It is incontestably a universal historical phenomenon (Faure et al., 1972, p. 25).

This trend Faure contends is not just a unique situation peculiar to our time but a basic fact that will gather momentum and is irreversible. For this reason he believes educational policies must be formed based on this new revolutionary development in education.

Education must serve many purposes and is therefore one of the most important services in which a country can expend its wealth and energy. Education is the main source of the trained manpower needed to realize development plans; it is a principal and continuing expression of the
society that a country or state wishes to create or sustain and it has to preserve continuity and tradition.

These multiple roles produce many different patterns of specific requirements and sets of priorities for education; nevertheless the outline of an educational system to which most countries would assent would contain many common items. These include the following:

1. Universal basic general education from early childhood to late adolescence, with gradual additions at either end on a less than universal basis until a total span from age 3 to 18 is achieved. For the core of this period, if not for the whole, the provision would be compulsory and free.
2. A wide range of opportunities for general and vocational instruction at the later stages of basic education and for prolonging basic education on a less than universal basis; the provision being kept in rough accord with the needs of the economy and with employment prospects, through deferring to popular demand.
3. Steadily extending opportunities for adults to: (a) requalify themselves for employment as their qualifications become obsolescent or as the need for their skills alters; (b) remedy the deficiencies of their basic education.
4. At all levels, the provision of courses that are appropriate to the geographical, economic and social realities of the particular society, and adjusted to the requirements both of the subject studies and of the needs and situation of the students concerned.
5. Over all, the achievement of an educational service that will assist the society to attain, regain and maintain its political and cultural identity; that will equip individuals to withstand the impact of change and to avoid submersion in the vastness and impersonality of modern life.
6. The economic achievement of all this within the constraints of shortage of finance and of material and human resources imposed by the claims of other areas of public provision (MacKenzie et al., 1975, p. 22).

The educational programs in operation throughout the world today may
be evaiuated against these items. Meeting the needs of the individuals
within society and of society as a whole is a central theme. The trend, however, is to focus on the adults in society, to provide them with the education they want or need. Gould adds that full opportunity to learn cannot be limited to the young; it must be for everyone, in any walk of life, for whatever purposes are beneficial. It cannot be reserved to a single period of life; it must be a recurrent opportunity; an opportunity to update a skill, to broaden the possibilities of a career whether old or new, or to add intellectual zest and cultural enrichment throughout life. No longer can it be the single opportunity of a lifetime: now it must become the total opportunity for a lifetime (Commission on Non-traditional Study, 1973).

Definitions of an "Open Learning System" for "Nontraditional Study" Throughout the world personnel working with and interested in education have been exploring new types of systems for meeting the educational needs of their citizens. These systems are known as "nontraditional" in the sense that they do not fit the patterns of traditional educational systems. The Commission on Non-traditional Study, set up in 1971 under the chairmanship of Dr . Samual B. Gould, attempted a definition of "nontraditional" study:

Despite our lack of a completely suitable definition, we always seemed to sense the areas of education around which our interests centered. This community of concern was a mysterious light in the darkness, yet not all mysterious in retrospect. Most of us agreed that nontraditional study is more an attitude than a system and thus can never be defined except tangentially. This attitude puts the students first and the institution second, concentrates more on the former's need than the latter's convenience, encourages diversity of individual opportunity rather than uniform prescription, and de-emphasizes time, space, and even course requirements in favour of competence and, where applicable, performance. It has concern for the learner of any age and
circumstance, for the degree aspirant as well as the person who finds sufficient reward in enriching life through constant, periodic or occasional study. This attitude is not new; it is simply more prevalent than it used to be. It can stimulate exciting and high-quality educational progress; it can also, unless great care is taken to protect the freedom it offers, be the unwitting means to a lessening of academic rigour and even to charlatanism (Commission on Non-traditional Study, 1973, p. XV).

An "Open Learning System" of education is one approach toward accomplishing the aims of nontraditional study. MacKenzie et al. (1975) adopted a set of criteria for a working description of an "open learning system."

It includes the following:
Students not adequately catered for at the present time for some reason or other (e.g., remoteness, disadvantage).

Courses outside full-time formal education, but related to some important national purpose and having a substantial following.

Learning systems having some element of "newness" whether in curriculum, organization, course development and delivery, assessment or support (as group study).

Attainment leading to some recognized qualification.
Efficacy, attempting some form of assessment beyond the gaining of a bachelor degree or certificate.

The National Association of Educational Broadcasters published a report in which the association identified several characteristics that they believed were essential to an open learning system. These items serve to give a comprehensive description and include the following:

The system must guide a student by eliciting, interpreting and analyzing goals at the beginning point and throughout the student's contact with the program of instruction.

The system must formulate learning objectives in such a way that they serve as the basis for making decisions in instructional design, including evaluation, and in such a way that they will be fully known to, accepted by or capable of modification by students.

The system must facilitate the participation of learners without imposing traditional academic entry requirements, without the pursuit of an academic degree or other certification as the exclusive reward.

To provide the flexibility required to satisfy a variety of individual needs, the system should make it operationally possible to employ sound, television, film and print as options for mediation learning experiences.

The system should use testing and evaluation principally to diagnose and analyze the extent to which specified learning ojbectives have been accomplished. In other words, the system should be competency-based.

The system must be able to accommodate distance between the instructional staff resources and the learner, employing the distance as a positive element in the development of independence in learning (National Association of Educational Broadcasters, 1974) .

The report emphasizes that open learning is a fundamentally new institutional concept of education and not simply a variation on traditional academic themes or relaxed entry requirements. It is not a variant form of traditional education but the opposite of it.

In addressing the participants in the second National Conference on Open Learning and Nontraditional Study, the president of the National Association of Educational Broadcasters stated:

We believed that if our pursuit of open education and open learning were focused simply on devising new ways of offering traditional academic degrees, we would be limiting the scope of its potential: we would have done less than it is possible to do: we would have burdened the development of this exhilarating new institutional concept with the trappings, however meritorious in their own setting, of traditional education: and we would have deprived millions of interested persons from essential and useful learning opportunities (Harley, 1975, p. 276).

Postgate (1975) observed that definitions of open learning had some differences but noted that there were common characteristics of most open learning systems which included: positive attitudes towards innovatory
plans, interdisciplinary studies, the identification and satisfaction of
new needs, and intellectual adventure generally. Postgate continued:
Open learning, however defined, is becoming an important "locus" of fundamental reconsideration of the aims, purposes, organization, methods, and relationships between students and their teachers, helpers, and advisers. It is natural that it should attract people interested in and capable of the imaginative effort, the drive, and the commitment to actualize by example new thinking about education, about the use of new facilities, and about serving new student clienteles (p. 88).

The University of Mid-America, an open learning system
The particular characteristics of the open learning system known as
the University of Mid-America include:

1. A policy of unrestricted admission, so that anyone who wishes to learn may do so, but with a primary target audience of adults who are interested in continuing their education, but who cannot or are reluctant to participate in campus-based programs;
2. An understanding of the needs and educational objectives of its learners, with a commitment to using that understanding in the planning of learning opportunities made available through the system;
3. The willingness and ability to try to meet the learner where he or she is educationally, by recognizing individual differences in entry levels, and by affording the learner advice and counsel as to how best to use resources available throughout the system to achieve personal or professional goals. This includes a willingness to help the learner overcome any initial reluctance to attempt postsecondary education. This might be accomplished by helping the learner design learning programs which will maximize the possibility of success, while recognizing that not all potential learners will be able to achieve success in college-level work;
4. Provision of learning opportunities which enable the learner to learn at times and at places convenient to him, without prohibitive interference with job, family, or other obligations;
5. Reduction of constraints on how people can learn by utilizing a variety of educational media and materials, and personal
contacts with faculty counselors, and other learners. Thus, persons can learn in ways which are most comfortable for them;
6. Provision of learning opportunities which allow the student flexibility in constructing his own learning sequence, so that UMA "courses" do not have single entry and exit points, nor single evaluation requirements, for all learners;
7. Provision of learning opportunities which are not dictated by the requirements of individual disciplines, but address themselves to subjects or problems that draw on whatever disciplinary expertise is appropriate;
8. The use of local and regional resources that already exist, in cooperation with present institutions, to expand the educational opportunities available to the learner in his own environment;
9. Reasonable costs, both to individuals and to society, so that the individual and societal benefits of learning become available to the target learners in this system at no economic penalty in comparison with the cost of attending traditional campuses;
10. An emphasis on learning rather than the meeting of arbitrary standards of time, courses, or curricular requirements and recognition of achievement of learning by students, however it occurs;
11. In courses bearing college credit, a level of academic quality (meaning the achievement expected of learners) no lower than that at a traditional university, so that work accomplished through the open learning system is fully accepted by other institutions;
12. More openness to self-examination, to research and evaluation than has heretofore been the case in postsecondary education; this openness includes a commitment to evaluation of learner achievement, to evaluation of effectiveness in meeting institutional and learner objectives, to incorporation of the results of these evaluations into policies and procedures, and to research that will contribute to generalizable knowledge about how the educational franchise can best be extended to all who wish it (UMA, 1974, pp. 15-17).

These characteristics exemplify the goals of the University of Mid-
America's Open Learning Model. It is these characteristics that the new
innovative experiment in open learning will strive to make a viable part of the on-going system.

## Selected Studies of Open Learning Programs

Overview of open learning systems
By 1972 over 700 programs in open learning had been established in colleges, universities, and as independent programs, but very little data from which analyses of populations served and degree to which these offerings were or are meeting needs are available. This is a comparatively virgin territory for the planners in higher education, and little is known about this whole new field.

Brief descriptions of open learning programs and, when available, evaluation and/or research studies of these programs give insight which may serve as guidelines for those attempting comparable programs. There is great diversity of needs between countries, however, depending on disparities in wealth and development and differences in political belief and systems. On the other hand, it is surprising that in matters of education much common ground exists between the nations especially in relation to its indispensability, its purposes, duration, content, and cost. In national public expenditure, education occupies either the first or second place, and among developing countries it is usually the first. National spending on education has greatly increased over recent years throughout the world. Between 1960 and 1968 the average increase was 150 percent, representing an increase in the proportion that educational expenditure bore to both total national public expenditure and to gross national product.

Since cost is so often the basis on which decisions are made, the picture for open learning, based on cost effectiveness, is complicated. The cost of an open learning system is very difficult to estimate since many of the functions of such a system overlap with courses offered for resident students as, for example, course development, administrative costs (which rise with increases in student numbers, though not in direct proportion), instructors which serve in both on-campus and nontraditional capacities and counseling. To use cost as a basis for the decision to launch an open learning system or as a basis for the continuation or discontinuation of an existing system is not wise--it is wiser to base the decision on the conviction that it will achieve nationally important purposes that would not otherwise be achieved and that it will do so at a cost that the country can afford. Also, it is important to note that the students involved in open learning systems are normally in full employment throughout their participation, contributing to the gross national product. As a result of their experience in advancing their education, they often increase their productivity, and these benefits are not included in cost effective studies. The basis for establishing an open learning system, then, should be based on other considerations, and the research which precedes the establishment of such a system should be directed toward other goals (MacKenzie et al., 1975).

The Outreach Target Population Committee in a California study on community service and continuing education (California State Coordinating Council for Higher Education, Sacramento, 1973) stated that in addition to identifying and describing the target population and the specific educational needs of groups within the target population, it is equally
important to recognize the reasons for attendance, dropping out, and nonattendance at college. "The multitude of personal and environmental variables which come into play must be dealt with to truly change people's attitudes about the necessity and relevance of higher education for them and elicit a commitment to further learning from them" (p. 3).

Also, to gain insights on which to base current and future planning, it is important to study existing open learning systems. There are many nery programs being implemented throughout the country, and the programs in Europe have tended to establish a pattern that has been adapted by organizations of higher education in the United States. Successful open 1earning programs abroad include, among others, those in Australia, France, Federal Republic of Germany, Iran, Israel, Japan, Kenya, Lebanon, Poland, Union of Soviet Socialist Republic, Canada, and the United Kingdom.

The British Open University in the United Kingdom is probably the most well-known of open learning systems, and it has spread. The British open system is actively engaged in The Free University of Iran and in Everyman's University of Israel. In North America, the open learning system in Canada is patterned after the British Open $\mathbb{C}$.iversity, and in the United States the Universities of Rutgers, Maryland, Houston, and the Community Access Education program at California State University, San Diego, all offered an Open University Foundation course, Fall, 1972, to test the instructional viability of the British system for American students. The experiments proved the applicability of the courses for United States students, and variations of the programs have continued. Many universities use the British Open courses but have not implemented copies, as such, of the entire British Open program.

In this section of the review are descriptions of open learning programs with unique features that contribute to an understanding of the scope and diversity of open learning programs. Also included are studies relating to the specific programs reviewed and studies based on several courses produced for open learning and tested in various open learning programs. The British Open system, the United Kingdom

Study of withdrawal in the Open University Free University of Iran--patterned after the British Open University Everyman's University, Israel--patterned after the British Open University

British Open University in the United States
Chicago TV College, Chicago, Illinois
The Chicago city-wide institute of the city colleges of Chicago
Predicting student withdrawals in open learning courses (Chicago TV College)

Miami-Dade Community College

Study based on effectiveness of telephone dialogues Usefulness of locus of control measure as related to completion of psychology course

The Dallas County Community College District

Telecourse students: Comparison statistics, DCCCD Telecourses: The "Open University" in Dallas, a technical research report

Southern California's KOCE-TV
Student reaction to television courses, spring semester, 1973-74 (KOCE-TV)

Television students' TV viewing log report (KOCE-TV, October, 1974) Coastline community opens new no-campus college

Project Outreach, California
University of Minnesota television independent study
Demographic information on enrollment, fall and winter quarters, 1975-76

Student evaluation of courses, fall quarter, 1975
Studies relating to the University of Mid-America
Characteristics of SUN learners (first five offerings)
University of Mid-America, learner characteristics
An examination of goals of potential and actual UMA/SUN learners
An evaluation of a variety of television lesson formats for potential
adult learners in an open university system
Learner responses to the use of television in UMA courses
Employment of an open learning course with traditional and nontraditional learners

Analysis of the cultural history field test data
Course evaluation report, Accounting I--first and second offering, SUN/UMA

Introductory Psychology--first and second offerings
The Consumer Experience (first offering) course evaluation report

Evaluation of courses produced for television by the producers-selected studies

Evaluation of the English 101 telecourse Writing for a Reason
English 101 telecourse report: Withdrawing student follow-up
Nationwide study of the course Classic Theatre--The Humanities in Drama

Adams Chronicles--Coast Community College district

## The Open University in the United Kingdom

The idea of an "Open University" began in the United Kingdom as early as 1950 when suggestions were made that broadcasting should be used more purposively for education, but it wasn't until 1963 that Harold Wilson, then the Leader of the Opposition, announced his idea for a University of the Air. The Robbins Report on Higher Education, published in 1963, further reinforced Wilson's aim. In 1964 an Advisory Committee was established, and in 1966 the committee published a White Paper which suggested that this new university for adults should combine the use of television and radio with correspondence texts, tutorials, practical work, and discussion groups. It was recommended that a planning committee be established.

A Planning Committee was set up in 1967 under the chairmanship of Sir Peter Venables who later became the first Pro-Chancellor of the Open University. It published a report in 1969 that confirmed that the University's main objective was to offer "a second chance" to those deprived of higher education. It stressed the need for postexperience and refresher courses as well as broad-based degree courses. It also introduced the concept of foundation courses--first-year courses designed to suit students
from differing educational backgrounds. As a result of the Planning Committee's work, a Royal Charter establishing the Open University became a reality in 1969.

The Inaugural Address by the Chancellor, Lord Crowther, delivered on July 23, 1969, captures the emphasis on accessibility to all interested and capable of continuing their education at the university level:

We are open, first, as to "people." Not for us the carefully regulated escalation from one educational level to the next by which the traditional universities establish their criteria for admission.

The first, and most urgent, task before us is to cater for the many thousands of people, fully capable of a higher education, who, for one reason or another, do not get it, or do not get as much of it as they can turn to advantage, or as they discover, sometimes too late, that they need. Only in recent years have we come to realize how many such people there are, and how large are the gaps in educational provision through which they can fall. The existing system, for all its expansion, misses and leaves aside a great unused reservoir of human talent and potential. Men and women drop out through failures in the system, through disadvantages of their environment, through mistakes of their own judgment, through sheer bad luck. These are our primary material. To them we offer a further opportunity.

But if this were all, we could hardly call ourselves a Univerisity. This is not simply an educational rescue mission--though that is our first task, and we do not decry it. But we also aim wider and higher. Wherever there is an unprovided need for higher education, supplementing the existing provision, there is our constituency. . . .

The Open University is not the rival of the existing universities. It is designed to take over where they are compelled to leave off. . . .

We are open as to "places." This University has no cloisters--a word meaning closed. Hardly even shall we have a campus. By a very happy chance, our local habitation will be in the new city that is to bear two of the widest-ranging names in the history of English thought, Milton Keynes. But this is only where the tip of our toe touches ground. The rest of the University will be disembodied and airborne. From the start, it will flow all over the United Kingdom. . . .

> We are open as to "methods." We start, in dependence on, and in grateful partnership with, the BBC. But already the development of technology is marching on, and I predict that before long actual broadcasting will form only a small part of the University's output. The world is caught in a Communications Revolution. . . Every new form of human communication will be examined to see how it can be used to raise and broaden the level of human understanding. . . .
> We are open, finally, to "ideas" (The Open University, 1972, pp. 2, 3).

Students In 1971 the Open University began to enroll students, and 24,000 students began studying with the University in this first year. By 1975 the number of students had increased to 50,000 on degree programs, with 5,000 additional students taking single self-contained courses in the "postexperience" program. Nearly 10,000 students had graduated in 1975. The majority of students are adult independent learners. No qualifications are needed to apply for admission except that the person be 21 or over and a resident in the United Kingdom. There is, however, an arrangement for some merchant seamen and British servicemen stationed in Germany and Cyprus to take Open University degrees. Places are offered on a firstcome first-served basis within three constraints. There are course quotas, and the applications for Arts/Social Sciences far exceed those for Maths/ Science/Technology. They try to keep a balance between the various regions of the country, and places are kept broady in line with the occupational groups of applicants.

The 21 -year-old requirement is waived in special circumstances as for example, individuals with physical or other disabilities who might find degree-level study difficult at residential universities. Provision is also made for a certain number of prison inmates to take Open University courses. Applications to the Open University have continued to rise since
its beginning in 1971. The places available are determined by a grant from the Department of Education and Science. Because continuing students may take up to six years to work through the system, the number of places available for new students each year has to be curtailed. In 1975, 20,000 new students were admitted, and in 1976 plans were made to admit another 20,000. This compares to 15,000 places in 1974. The number of applicants is much greater than places available. In 1974, 35,000 students applied, and in 1975 the applications totaled 52,537 students.

The characteristics of the students enrolled have been changing since the beginning of the program. The ages of students range from 20 to 70 , but there has been a trend towards younger applicants after the first year. The average age of students for 1972 to 1974 is just under 30. For 1971 the percent of students ages $21-25$ was 9.2 percent, and there has been a steady rise until, in 1974, the percent was 36.5 (for newly admitted students). In the 26-30 age group, from 1971-1974 there was a decrease of 2 percent, from 38.6 to 36.7 . As the age brackets became older, the decrease in age increased, as for example, in the 40-50 age group, 17.1 percent in 1971 decreased to 6.9 percent in 1974.

The percent of females has been increasing, and the percent of males has been decreasing slightly from 1971 to 1974. In 1971, 73 percent were males and 27 percent females. The female population has increased steadily until it reached 38 percent in 1974, and the male enrollment decreased from 73 percent to 61.9 percent in 1974.

As the Open University became more well-known to a broader base of the population, the character of the student body changed. In 1971 the
largest proportion of applicants were teachers and professional people. This has had a slight but steady decline, and the applicants in manual and routine nonmanual occupations and those classified as "at home" have had a slow steady increase until these categories make up about one-third of all applications.

Applicants with minimal educational qualifications are also enrolling in ever increasing numbers. In $1975,38.5$ percent of applicants had less than "A" leve1 qualifications, and in 1974 this was 32.7 percent, which is typical of this trend.

The actual number of applicants from the older, higher level of education group has not been decreasing, but the number of younger, with less educational background and with lower occupational levels has been increasing at such a rate that the quotas admitting these students have increased, changing the percent of students in these groups. The expectation is that as awareness of the University becomes more widespread, it is reasonable to expect a gradual increase over the years in the number of applicants without previous educational qualifications. As more from these categories graduate, proving it can be done, the more these students will have the courage to enroll. The numbers applying for enrollment continues to grow each year (British Open University, Information Services Department, 1975).

Drop-out--success rates More than 5,300 students graduated from the Open University in 1974, and a total of 9,600 students earned B.A. degrees from the Open University between 1972-74. Students with prior university credit were able to graduate as early as spring, 1972. The staying rate has been quite high. About $50-60$ percent of the students who joined in the first year (1971) will graduate. Twelve percent of the 1974
graduates had less than the normal entry qualifications for a university, and of these 2 percent had no formal educational qualifications at all. Twenty-six percent of those enrolled left school before the age of 18. Of the 1971 students graduating in 1974, one in five, or 21 percent, would not have been eligible for entry to higher education on conventional criteria (British Open University, Information Services Department, 1975).

Courses of study Three programs of study are offered, undergraduate, postgraduate, and self-contained postexperience courses. A B.A. degree is offered at the undergraduate level, and a degree requires six undergraduate credits. A one-year credit course requires 32 weekly units of work (each demanding 10-14 hours of study). It is expected that it will generally require a student to study for six years for a B.A. degree, however, a student is permitted to take two courses a year (earning two credits) and thus graduate in three years. The Open University accepts credits from other universities.

The courses are offered at four levels--foundation, second, third, and fourth. All students start with a foundation course, and after the foundation level the student can make up his own program of study. Courses are offered in the area of Arts, Social Sciences, Mathematics, Science and Technology; the number of courses chosen in each area varies with the choices of the students. Many of the courses are offered for one-third or one-sixth of a credit which the students may combine in any way to gain the half credit of a half year's work, or one credit for one year's work.

Postgraduate credits are all research based. There are as yet no graduate level courses. The three higher degrees, B.Phil., M.Phil., and Ph.D., are all awarded when a student completes a program of research or
advanced study and submits a dissertation or thesis. The student's progress is assessed by means of research credits which are earned by completing three months' full-time work or its part-time equivalent. There are 300 postgraduate students, and 40 of these are supported by grant-giving bodies.

There are 14 postexperience courses, which are self-contained and vary in length from five to ten months. These are nondegree courses designed for students who wish to extend their knowledge of their own career or acquire knowledge of a new field. Some of the courses can be taken for credit if a student plans to work toward a degree at a later date. In 1973, the first year this program was offered, 2,012 students enrolled, and in 1975 it grew to 5,311 students.

Cost The Open University produces graduates much more cheaply than do other universities. According to a study based on the first three years of its operation, to produce a graduate from the Open University cost less than a third as much as at other institutions. Great savings are possible because a student lives at home, and a campus is not provided; also, as student numbers rise, the high fixed cost of course production becomes less per student. The cost of producing a course unit or television program is the same for one student as for thousands. Another savings is in using other universities' existing staff--over 5,500 faculty who serve the Open University on a part-time basis.

The basic fee for an Open University course is L25 plus the cost of books (about L10 to L15 per full credit). In addition, all foundation and some higher level courses have a week's residential summer school which costs around L40. However, most local education authorities give students
grants towards the cost of summer school, and many employers help with fees and book costs, so the average outlay for the student is around L70 per course (one year's work) or about L 400 for the six-credit degree.

Teaching methods The courses consist of printed material, television and radio, tuition and counseling, and assignments and assessments. The student spends the largest part of his preparation in reading, or approximately 65 percent. In addition to his reading, he spends about 10 percent of his time viewing television and/or listening to radio broadcasts. An important component of each course is the individual and group tutoring and counseling which is set up for each individual student. He is encouraged to attend study centers (there are over 260 in the United Kingdom), have meetings with other students and with tutors and counselors who help him with his course work, give encouragement, and provide motivation in addition to helping him set up his plan of work toward obtaining the B.A. degree. He must also spend about a week in summer school, at least the first year. In addition, the courses are much like most correspondence courses in that tutor-marked assignments are often required, computermarked assignments are increasingly being used, and end-of-course examinations are required. Practical experiments (kits included with course materials) and self-assessment materials are often a part of the course materials. These materials are often quite sophisticated, and the student pays a basic fee for the use of the kit (Shorthouse, 1975, 1976).

Impact at home and abroad In every way the Open University has justified the faith of its early supporters. Transfers are welcomed at all the universities, and Oxford has accepted Open University graduates to study for higher degrees. The teaching materials are used widely in other
universities and higher educational institutions. Many schools and colleges now recommend Open University television and radio broadcasts to their own students. The programs are transmitted on the national network, and the programs are watched by thousands of casual viewers.

International interest has been created in the teaching-at-a-distance techniques and systems. The Marketing Division sells correspondence texts, films, tapes, and home experiment kits not only within the United Kingdom but also to many other countries throughout the world. The success in the Open University has also helped in the creation of similar institutions around the world as the Free University in Iran, Everyman's University in Israel, The People's University in Pakistan, and the Open University in Spain. There are also adaptations at three universities in the United States.

In evaluating the progress to date, Shorthouse (1976) said that above and beyond all things "needs definition" is crucial--what student clientele, what rate, why they need the course, when they will take it. He adds, "Once these can be defined, objectives can be formulated. A considerable amount of input is required at this stage, not the least from information collection systems, systems modeling, analysis, and testing" (pp. 149-150). He concluded:

Those sympathetic to the aims of this conference (open learning) should take heart from at least one fact: In my hidebound and traditionally oriented country, over 60,000 adults are benefitting from a university education previously unavailable to them and the demand still exceeds the opportunity by a factor of five (p. 150).

Withdrawal in the Open University In 1974 there was a small study of all Open University students who withdrew from one or more courses in
the Northern and Yorkshire Regions during that year (Kennedy and Powell, 1976). Early in 1974 all counselors in the two regions received a briefing document together with copies of two forms: 1) a report on "students who might be 'risks' due to background and extenuating circumstances' and 2) a withdrawal report which reported the student's reason for withdrawing. In all, 200 counselors in the two regions reported on the "at risk" students and all of the withdrawals. At the conclusion of the study, the 200 counselors had reported on 684 students who withdrew entirely and 291 who partially withdrew from their studies. They also reported on 236 students who were identified as being "at risk", and of these 184 remained in the system to take their end-of-course exams.

As a result of information gained in this study and other studies that had been conducted in open learning systems, the authors attempted to gain insights that they believed had been overlooked in previous studies. They were concerned with developing a "way of thinking" about drop-outs.

Kennedy and Powell (1976) report that most studies of drop-out result in statistical description and analysis; for example, of what sorts of students are most likely to drop out, and what courses have higher drop-out rates than others. While the value and even the necessity of such basic research is not under dispute, the important question they believe is why students drop out together with the related issues of why they enroll in part-time education in the first place.

One of the biggest problems with most research designs is that they rely on just the reasons the students give for dropping out. Due to the negative connotations associated with dropping out, the student will probably contribute the cause to "outside" forces, such as job
pressures, rather than such personal factors as lack of motivation, preparation, or ability. Another difficulty derives from the problem of translating what are often a complex of reasons for withdrawing into a schematic form amenable to quantitative analysis.

To circumvent these difficulties, Kennedy and Powell attempted a micro-sociological approach. They attempted to reconstruct the phenomenon of drop-out from the point of view of the student on the basis of detailed case study information. They also attempted to construct a student's eye view of drop-out but did not use the student as the primary source of data but instead the reports of the counselors.

As a result of their investigations, it became clear that two general aspects of the phenomena of drop-out must be taken into account: the characteristics of students (e.g., their motivations, ages, etc.) and their circumstances (e.g., financial situations, personal crises, family problems). A student's profile is thus composed largely of either characteristics, which are constant (e.g., previous educational background), or characteristics subject to slow change (e.g., motivation), or circumstances, which are subject to rapid, indeed almost overnight, change (e.g., redun-dancy--exceeding what is usual or natural). The individual part-time student has a difficult time in maintaining an equilibrium of pressures within his life, pressures arising from his job, from his domestic situation, from his academic work, and also from possible variations in his own personality. If one or more pressures increase unduly, the equilibrium is upset, and the student may become "at risk." Given knowledge of a student's predominant characteristics and a particular set of circumstances, a counselor can develop insight into the conflict of pressures that the student is
trying to resolve. There are certain characteristics present in some students that help him survive regardless of life circumstances, and a counselor cannot predict these. For example, qualities such as strength of will, clear perception of personal objectives, resilience, or persevarance are not restricted to particular occupational groups or people with certain levels of academic attainment; also, a complex intermix of characteristics and circumstances often are the cause of a student's dropping out. There also is a difference between reasons for a young university student dropping out and an older part-time student dropping out.

They conclude that situations and characteristics which affect dropout include: motivations, stages of adult development, previous educational background, educational self-concept, and the interplay of these. They recommended that students should be advised of all opportunities open to them for furthering their education and reaching their goals. Also, counselors and instructors should be informed about a student's background since a student who has little in the way of formal training may be hesitant about seeking help from a counselor or instructor when the whole process is so very foreign to him and when through the act of seeking help he may fear he is exposing weaknesses and doubts about his abilities. If instructors are to meet students' needs, they must be informed of circumstances which might impede a student's progress. If he was aware of a student's background, he could more nearly tailor his teaching style to the learning strategies most appropriate for the student and help motivate him when the need arose. The manner in which a student perceives a situation is his "reality," regardless of the true situation, and an instructor or counselor needs to relate to him from his frame of reference. Being
informed of his background and personal problems is a beginning (Kennedy and Powell, 1976).

Free University of Iran--patterned after British Open
The Free University of Iran is being patterned after the Open University in the United Kingdom. The planning began in December of 1973, and the first students will be admitted in 1977. The Free University is to be different from existing universities with respect to its objectives, students, educational programs, teaching system, and mode of operation. Due to Iran's rapid rate of economic and industrial expansion with its accompanying increase in career opportunities, the existing institutions of higher education in Iran have been forced to step up the training of skilled manpower to meet the demands. They have not been able to meet the demands due to shortage of faculty members and the high costs of traditional education, and the government, in searching for an alternate method of supplying this demand, chose a distance method of education.

The goal of the Free University is to train the badly needed specialists and produce active professional men and women whose skills, knowledge, and attitudes will enable them to contribute effectively to the welfare of their society. A second goal is to provide re-training of individuals and to upgrade and improve skills of those already trained. A third goal is to upgrade the general public's awareness of their culture, environment, and the problems of their society.

The emphasis is on vocational education, and the choice of courses will not be as great as in the Open University in the United Kingdom. As Ahmadi (1976) commented, they found that a focus on society's needs implies
the establishment of educational priorities in vocational areas and specifically in the sciences and more technical fields. Also, as the need is usually for additional and new types of manpower, priority must be given to pre-service training.

The Free University of Iran will differ from the Open University to quite a degree in its emphasis on learning centers. The Free University's decision to allocate a significant role to its regional and local center network was based on a number of considerations:

1. It was obvious that none of the prospective students would have had any experience in self-directed study.
2. As many of the students would be recent high school graduates, they might lack the motivation found in more adult students.
3. The geographical location of the students would probably compound the problem of isolation and depersonalization experienced in all distance learning systems.
4. Access of television or even radio of the Iranian students could not be assumed. Community resources such as those existing in the United Kingdom are not available.
5. The programs of the Free University (vocational in nature) would require practical work experience and those experiences would require organization, guidance, and supervision.
6. The university plans to play a role in the development of the communities where centers are located.
7. It is believed that much of the success of the university will depend upon the extent to which three basic needs of the students are met:
a. the need to learn how to study effectively and efficiently on one's own
b. the need for general advice, help, and encouragement
c. the need for assistance to set up and to run self-help groups

In addition to establishing fully staffed and equipped centers and urging students to make full use of the centers, Iran decided to develop mobile units to bring the resources of the centers to students unable to attend them.

The program will begin with four 16 -week courses for the first year, and they project an enrollment of 6,000 students the first year. Only five regions out of a possible 13 will be in operation.

The program is tailored to meet the needs in Iran, and because they wish to control the quality of their graduates, they are putting a great deal of emphasis on the development of a competency-based curriculum. To assure the quality of their courses, they plan to carry out extensive developmental testing on sample target populations before introducing them on a nationwide basis.

It is called the Free University because it allows every human regardless of age, sex, religion, or geographical location free access to higher education. It also does not require expenses on the part of the students; it is absolutely free.

It is an extremely ambitious program. They believe that construction of a revolutionary educational structure from used and old parts is not possible and are beginning from the bottom to build a completely new revolutionary educational system open to all. By 1984 they hope to have their program fully implemented and their dreams come true (Ahmadi, 1975, 1976).

## Everyman's University, Israel--patterned after British Open

In several ways the Israel open learning system, "Everyman's University," is unique. It was established with private funds; it has drawn upon the expertise of Open Learning systems in several other countries; it required its newly acquired staff members, as well as applicants being considered as potential staff, to undergo extensive training in teaching methods unique to an open learning system.

In 1974 the Rothschild Foundation set up the Everyman's University in Israel. This followed two earlier projects which had been created by the Foundation, namely the instructional Trust in 1963 and the Centre for Educational Technology in 1971. The three bodies are now located on one and the same campus and work closely together which provides a solid base for the future developments of all three.

Before plans were made for setting up Everyman's University, three experts were invited to examine and advise on the needs, scope (academic or otherwise), methods to be used, the organizational framework, the economics, and the integration of the proposed university into the existing Israeli educational system. The three experts were Professor Wilbur Schramm (then of Stanford University), Professor David Hawkridge, Open University, England, and Harold Howe II, Vice President, Ford Foundation. In October of 1972 , the committee issued the "Schramm Report," and the project in open learning has followed this report very closely.

The needs that were identified to be served by the Open Learning system included: teacher training, second chance for the disadvantaged, and adult education. It was decided that the greatest urgent need was for teacher training, and the first academic courses were planned for teacher
training and included mathematics, science, technology, Jewish studies, Jewish history, and Jewish thought. In addition to planning their own courses, it was decided that when possible courses be purcheged from the Open University in the United Kingdom and from the UMA consortium. The academic courses will lead to the B.A. (Humanities and Social Sciences) or the B.Sc. (Sciences and Mathematics).

According to the Schram Report, the Everyman's University should not be conceived of solely as another academic institute (Everyman's University, Israel). For this reason, it also will pursue social objectives within the contact of Israeli society. The first nonacademic courses include: Electronics I, Electronics II, Electricity I, and Computer (Introduction). There are plans to add more courses from year to year. The second chance courses will include preparatory courses leading to the University entrance examination (especially Mathematics, English, and Jewish studies) or vocational courses (Electronics, Electricity, and others). Early plans included the addition of adult courses in 1977.

The courses rely largely on the printed component as do courses in other Open Learning systems. In addition, media will be used fairly extensively as TV, slides, home laboratories, and experimental kits, depending on the format and needs for a particular course.

It was the original hope that study centers would not be needed, however, it was feared that isolation and resulting depression of students might cause a high rate of attrition, and, therefore, centers were set up. Each center is staffed with tutors based on a ratio of one tutor to 20 students. The tutors are available at the centers and by telephone. It is
also hoped that students will attempt to set up their own "self-help" study groups.

As stated earlier, a very unique aspect of Everyman's University is the intensive training given new staff members. New candidates are paid for the time spent in training, and no assurance is given that they will be hired after the training period, in fact, many are not. The training program consists of exposing them to the specific tasks that instructors must learn to do in an Open Learning system. In addition each trainee was required to submit a self-study package and related materials by the end of the fourth week of training. The package had to include explicit learning or behavioral objectives, learning experiences, evaluation methods, etc. In addition each trainee had to "become a student" in an open learning situation and complete a unit in an area of study different from his area of expertise. They also were asked to prepare a five-minute television production which was video taped and critiqued by those in charge of the training. They also prepared a five-minute "radio" broadcast. As a final exercise, each trainee was asked to choose a particular learning audience and was asked to prepare an appropriate learning package for that audience which demonstrated their comprehension of the needs of various kinds of "learners" and the problems of putting together self-study courses and using media effectively. Speakers and other presentations were also included in the five-week learning session.

The overall aim is for high academic standards, and each course-team is led by a well-qualified academic staff member. The team consists of specialists in all areas as media specialists, graphic artists, and
language editors. The University itself is guided, in all aspects of its academics, by an Academic Advisory Comittee, made up of leading academics.

The first courses were offered in April of 1976, and over 3,000 registered for the first five academic courses. In addition 250 places were made available (a limit had to be placed as each student was provided with home laboratories) in the nonacademic courses, and these were all filled. No figures have been available relating to the success of these first offerings.

The first three years are to be experimental with the understanding that if it looks promising, the private support will be gradually withdrawn and public funds will be used to support the venture in Open Learning (Rowe, 1975, 1976; MacKenzie et al., 1975).

The British Open University in the United States
After the Open University in the United Kingdom became a full-fledged university in 1971 , it received considerable attention from many groups in the United States which had become aware of and interested in the concept of "open learning" or "nontraditional study" as a result of new trends and needs and due to the focus of several studies (Carnegie Commission on Higher Education, 1970-75; Commission on Non-traditional Study, 1973). The groups were beginning to explore ways of making universal higher education a reality. There were also hopes of doing this in ways that were financially within reason. The British had spent several million dollars developing a delivery system, and if it could be shown that these materials were appropriate for use (or could be modified for use) in American colleges, a great savings would be made in time and dollars.

The administration of the Open University was also interested in possible use of their materials in other systems since this would be a legitimate and attractive way to help finance the expansion and updating of their course offerings. The result of these interests prompted a study by the College Entrance Examination Board and the Educational Testing Service of the feasibility of investigating this possibility. Three universities met the criteria set up by the investigating bodies and participated in the study. These three included The University of Houston, The University of Maryland, and Rutgers, the State University of New Jersey.

The participation of the three universities differed somewhat. In terms of courses to be offered, the University College at Rutgers chose to try out three foundation courses (humanities, science, and mathematics), the College of Arts and Sciences at Houston offered two courses (humanities and science), and the University College at Maryland opted only for humanities. There were also differences between the schools in the specific nature of the delivery system, number of tutorial centers, etc.

The purpose of the project was to assimilate as much relevant information as possible that might be useful to other institutions considering adopting the Open University program. Eight major questions guided their efforts:

1. Who were the people who enroll for Open University courses?
2. Why did they enroll?
3. How many students succeeded (that is, finished the course with satisfactory marks)?
4. How did the succeeders differ from those who dropped out or failed? What were the implications for student recruitment and guidance?
5. What did the students think of the Open University matrices and delivery system? What criticisms did they have? What suggestions did they have for optimal use in this country?
6. What did the faculty think of the Open University materials and delivery system? What criticisms did they have? What suggestions did they have for optimal use?
7. What were the implications of the Open University delivery system for faculty recruitment and training?
8. What did the Open University cost--from both the student and institutional point of view?

Data to answer the eight listed questions were gathered through the use of five questionnaires: (1) a background questionnaire, completed by students at the beginning of the course, in which students were asked about their biographical backgrounds, reasons for enrolling in the Open University course, current occupational status, and so forth; (2) a courseexperience questionnaire, administered to students at approximately the end of the eighth week, in which students were asked about their experiences with the course so far, including their perceptions of the utility of specific components of the course, the problems they had experienced to that point, their overall satisfactions, and the like; (3) a second course experience questionnaire very similar in content to the eighth-week questionnaire, which was mailed at approximately the halfway point of the course to withdrawn as well as continuing students; (4) an end-of-course questionnaire, repeating many questions dealing with student satisfaction and experiences; and (5) a questionnaire to those who inquired about the Open University course at one of the three institutions but chose not to enroll.

In addition to the five questionnaires, interviews were conducted with selected students. Since the academic aptitude of each student would probably affect a student's performance in a course, a brief academic aptitude measure was administered to each student at the beginning of the academic term at each institution. The measure employed was the Control Test of Academic Aptitude or CTAA.

Students' final grades in courses were the sole criterion of academic performance. In the original research design, they planned to administer to standardized achievement test to the students to have a measure that was objective and common across students. This plan was not acceptable, however, since a test was not available that would adequateily measure the content, and it would have been difficult to find a suitable group of traditional students covering identical material.

Due to the large volume of data collected, findings were interesting and extensive. A very limited report is as follows:

Characteristics of the nontraditional students

1. Larger numbers were attracted to the humanities than to the science or mathematics courses.
2. Compared to the general populations in the areas from which they came, the nontraditional students tended to be younger, and more were women.
3. Compared to the general populations in the area, they came from high-status occupations, the well-educated strata of the population, and from affluent families.
4. Compared to the traditional students, the nontraditional students had lower aptitude scores and lower high school grade averages.
5. The nontraditional students who enrolled in the mathematics and science courses had on the average higher aptitude scores and higher high school grade averages; they also planned to spend longer hours studying than those enrolled in the humanities.
6. Those who had been out of school longer expected to study longer hours.
7. Among high school graduates who had not continued their education after graduation, no single factor seemed to be dominant, but a combination of factors accounted for their decision.
8. The greatest attraction of the courses was the delivery system. A close second was the desire to earn college credit and also a desire for personal enrichment (especially among those enrolled in the humanities).
9. Among those employed, expectations were high that the courses would help them in their jobs. This was more the case for men in lower status occupations than for men in higher-status occupations, but for women it was the reverse.
10. The fees that were charged were the single greatest deterrent for those who inquired but did not enroll.
11. Most of the nontraditional students had small children at home.
12. Relatively few nontraditional students knew another person who was enrolled, and even when they did know another person they did not have plans to study with them.

Student attrition and performance in the three courses

1. The overall course completion rate for the entire course was around 50 percent, which was considerably lower than in Great Britain.
2. At Houston and Maryland, where the Open University courses were made available by semesters and quarters, respectively, the term-by-term completion rates ran consistently over 80 percent.
3. Completion rates for nontraditional humanities students varied by sex, age, employment status, and number of years since last formal schooling but not by CTAA scores or high school grades.
4. For students who withdrew from the course (without receiving even partial credit), the reasons cited most frequently for discontinuing were inability to keep up with the work schedule, dissatisfaction with British aspects of the course, and lack of interest in course content. The difficulty of the course was mentioned very infrequently as a reason for withdrawing.
5. Of those students who completed the courses, the overwhelming majority received grades of $A, B$, or C. Very few students received D or F grades.
6. For nontraditional humanities students, grades, like completion rates, were related to certain background characteristics, especially sex (with females obtaining better grades than males) and CTAA scores (students with higher scores earned better grades).
7. In spite of a generally positive relationship between CTAA scores and course grades for nontraditional humanities students, most students with low scores still achieved grades of C or better.

## Student experiences and opinions

1. Over half reported spending more than 12 hours per week on the course, and many spent 16 hours or more per week.
2. Of the time devoted to a course, approximately 25 percent was spent at an Open University study center. (The video tapes were not broadcast over the air but could be viewed at a study center).
3. The overwhelming majority of students who completed the Open University courses were satisfied with the experience and would enroll in such a course again if given the opportunity.
4. The major source of dissatisfaction among those who completed a course was finding the time to study.
5. Though often referred to as an "independent study" program, students regarded contact with both course tutors and other students as being important--with contact with tutors more important.
6. As a result of taking an Open University course, nearly half the nontraditional humanities students reported that they were more interested in pursuing a college degree and had much more confidence in their ability to do college-level work.

Data were also collected from faculty, and the following recommendations were made:

The minimum staff for an Open University course, regardless of its size, should consist of a coordinator and enough tutors to staff the study centers and provide individual consultation for students. Based on the experiences of the three universities one half-time tutor for every 25 to 40 students would be an appropriate rule of thumb. . . .

Since the instructional role played by faculty members in Open University courses differs, in some ways dramatically, from the typical higher education teaching role, faculty members should be selected carefully and special training sessions should be given
serious consideration. Tutors must be given an adequate briefing, time to preview the course, encouragement to meet frequently with other turors, and continued help and support, since in many instances they will find that the Open University course requires a different style of teaching and a different relationship with students and with other faculty members (Hartnett, Clark, Feldmesser, Gieber, and So11, 1974).

Conclusions relating to cost In relation to traditional education in the United States, the Open University courses are unlikely to show the dramatic savings they do in Great Britain. Conversely, they need not be more expensive than courses offered in a traditional manner if enrollments are adequate. The economic advantage of using the Open University courses in the United States would be in comparison to producing courses to use in nontraditional situations.

The overall conclusions regarding use of the Open University courses in the United States were favorable, but the greatest contribution of the study is the information made available about the feasibility of nontraditional systems in the United States. Based on the attitudes and characteristics of the students, a need for the opportunities for study provided by an open learning type system was demonstrated (Hartnett et al., 1974). (References for overall summary: Hartnett, Clark, Feldmesser, Gieber, and Soll, 1974; Mayeske, 1973; Hartnett, 1974; Taylor, 1977.)

Chicago TV College, Chicago, Illinois, USA
One of the first nontraditional learning systems in the United States was founded in 1956 in Chicago by a Ford Foundation grant and was known as the TV College. There have been five progress reports published since its founding, the latest in 1974 (Zigerell and Chausow, 1974). Since its beginning the TV College has grown phenomenally and has merged its identity
with that of a larger instructional unit known as the Learning Resources Laboratory of the City Colleges of Chicago. This learning center provides a full range of innovative instructional services delivered in both conventional and unconventional ways.

The five published reports have included information pertaining to enrollment and viewing records, attitudes and reactions of students, description of the type of student enrolled, subjects chosen most frequently as areas of interest to students, and changes in popularity of courses with apparent reasons.

The enrollment and viewing records for the first three years were:
More than 150,000 individuals enrolled in televised courses, with most taking no more than one course. Of these 150,000 , about 80,000 students enrolled officially in the college for credit, and 70,000 enrolled unofficially as noncredit students.

An average of 10,000 viewers watch every TV College program, and about 250,000 "casual" viewers view from one program to a whole series.

TV College is on the air an average of 26 hours weekly.
The student retention (those who complete a semester's work) averages between 70 and 80 percent.

About 425 students were awarded the Associate of Arts degree for study entirely by TV.

About 2,500 students graduated from City Colleges of Chicago with an Associate of Arts degree taking, on the average, one semester of their work by TV. TV College has therefore contributed to the student population at various campuses rather than taking students away from the classroom.

In any one year, about 6,000 individuals account for 9,000 registrations (3,000 take more than one course). A sizable proportion of TV College students are also enrolled in conventional courses on the colleges' campuses.

Other interesting facts include (Zigerell and Chausow, 1974; Anonymous, 1975) :

The TV College requires no tuition from Chicago residents, but nonChicagoans enrolling in TV College pay $\$ 33.50$ per credit hour and an additional $\$ 10.00$ service fee. A three-hour course costs about $\$ 110.00$ which is beyond the amount many people are able, or willing, to pay. When the TV College began in 1956, a tuition charge-back privilege was available. All who lived in areas without junior colleges could enroll in another area's junior college without personally paying the tuition. When this was discontinued, there was a 10 percent drop in enrollments outside the Chicago district.

The length and frequency of broadcasts--there are two 45-minute lessons per week. An hour and a half of on-the-air instruction covers the material of the three 50 -minute conventional class sessions. In fact, two carefully planned half-hour programs, supplemented by readings, written exercises, and telephone and face-to-face conferences, can more than equal a week's work in an on-campus course. TV College students are unanimous in believing that open-circuit television instruction is more tightly organized and effectively paced as compared to on-campus classes.

A range of courses broad enough to attract and hold the attention of an audience with varied interests is necessary for constant enrollments. Also, frequent repetition of courses must be avoided. The TV College
offers all of the general education or liberal studies courses required of all students who earn Associate degrees and certificates from the City Colleges of Chicago. These include Natural Science, Humanities, and Social Science courses and are rotated to enable a student to complete the four semesters required for the degree in a period of about three years over TV. Many students, however, supplement their TV courses with courses taken on campus.

In addition to the required courses for the Associate of Arts degree, many elective courses are offered. The popular areas for these elective courses are mathematics and sciences, business and secretarial skills, and general cultural subjects. A part of the TV College audience have definite career and vocational goals and particularly in the business area which include courses such as Typing, Shorthand, Accounting, Business Law, and Business Organization. There have been some shifts in the popularity of some areas, as for example, foreign languages. There has been a definite decline in interest in foreign language, and presently (1975) only Spanish is offered and that on a conversational basis for those who work closely with Spanish speaking people as policemen and social workers and teachers. The interest persists, however, in cultural subjects as Art and Music Appreciation, Philosophy, and History.

The present trend for TV College is to broaden its goals and cultivate audiences with needs different from those of students seeking the Associate of Arts Degree. It plans to direct its programming toward an occupational and community service emphasis.

While the TV component is important, it cannot carry the entire teaching burden. TV College personnel find that printed study aids and
supportive face-to-face activities are essential if a high level of student interest is to be maintained and student success insured.

Every Chicago TV College student is furnished a Study Guide for each course he is enrolled in. Each Study Guide lists course and unit objectives in behavioral terms. The title of each program and the required texts are also listed, and mail-in assignments are described in detail. The evaluation procedure for each assignment is very carefully outlined.

A valuable aid for reducing passivity on the part of the student and increasing the percentage of students who complete courses is the addition of self-scoring and programed instruction. All instructors involved in TV courses are encouraged to prepare such materials to be included in Study Guides used by all students.

A description of the students:
The objective of the college is reflected in the type of students it draws. They state their primary goal of existing as "enabling residents of the Chicago area within the broadcast range of the local public television station to complete junior college courses by watching television in their homes" (Zigerell and Chausow, 1974, p. 10).

First and most important is the quality of work produced by the TV College average student--it is consistently of very high level performance, and the researchers conclude that this is not a sign of the superiority of televised instruction but is due to the type of student who enrolls in this kind of program. A home viewing student selected at random would probably be a 30 -year-old woman, married, with a home and children to look after. Her past school record was good, and she ranked in the upper half of her high school class. They continue:

Since she is tied down by her duties as housewife and mother of small children, she can take only one or two courses at a time. If she did go to college before she married, she finished no more than a year. Now she is intent on making a career for herself outside the home-to achieve personal fulfillment or add to the family income. TV College courses start her on her way. Later on, when circumstances are right, she will transfer her TV credit to another college and enroll in conventional courses (Zigerell and Chausow, 1974, p. 22).

Teaching methods used:
The "talking face" is avoided and producers of the TV courses insist they "show" rather than "tell." Recently, as they become available, the TV College has been making an effort to use courses produced elsewhere for television teaching rather than attempting to produce all of their own courses. When they produce them, however, an effort is made to include televised actual situations, as for example, children filmed at home, in play centers, at schools, etc., in child development courses.

They have found that it is not too successful to import "specialists" to teach courses as they do not generally have the same philosophy about the televised portion or the production of supplementary materials as programmed learning, study aides, etc.

The Chicago City-Wide Institute of the City Colleges of Chicago
In 1974 a city-wide institute, a noncampus college, was established as the ninth administrative unit of the City Colleges of Chicago. This mission of the institute was (1) to develop and operate programs at the college level for adults who cannot or choose not to go to a traditional college campus, (2) to provide better coordination of programs for the entire City Colleges of Chicago system, (3) develop new curricula, (4) provide new educational services, (5) provide services to nontraditional clienteles, and (6) integrate services of the Institute and the traditional campuses.

A variety of pre-service and in-service programs is provided by three service institutes (Health, Human, and Pub.lic) to meet the manpower needs of cooperating public agencies. An Open Learning Division serves minority and other nontraditional students through the utilization of self-paced media delivery systems and an open entry-open exit, competency-based format. The Division of Continuing Education and Community Services offers job-related courses, courses related to the handicapped, courses for older adults, public issues courses, and community education activities. And, to make the services of the institute as complete and beneficial as possible, the Center for Student Development provides counseling and assessment of life/work experiences for college credit.

The functional organization of the Institute and its interaction with the other components of the City College system permits the maximization of limited resources, especially faculty services. It also permits the City College System to serve new students, especially minorities and adults, in new ways. The Institute will serve as a single representative of the college system to city organizations and agencies so that uniform practices and procedures can be established for educational programs (Anonymous, 1975).

Predicting student withdrawals in open learning courses (Chicago TV College) In 1975 Duby and Giltrow tried to predict overall completion rates of students enrolled in Chicago's TV College. After identifying the key factors for predicting overall withdrawal rates, the researchers hope to work backward and establish nonobtrusive measures for estimating probabilities for individual completions. This second part of the project has not been reported on to date.

For purposes of this research project, completion rates were defined as achieving an $A, B, C$, or $D$ grade at the conclusion of the 15 -week semester. Since the students had two semesters to remove an incomplete grade, they were treated as withdrawals. Failure was also considered as withdrawal or unsuccessful completion of the course. The base enrollment figure was the initial registration, thus they worked with gross enrollment figures rather than adjusted figures, which tends to inflate the withdrawal rate. Using these figures, typical withdrawal rate for Chicago's TV College was 60 percent.

It is a standing practice to have Chicago's TV College students complete an evaluation instrument early in the semester as one of their course requirements. A one-page questionnaire is given out at registration and is to be returned at the end of the third week of the semester.

In the spring of 1975, four TV College courses were offered (Child Development 101, Business 101, Economics 201, and Mathematics 111), and these were examined to determine if certain repetitions or patterns would surface. The analyses of the data from these courses showed that trends and patterns do exist and can serve as baseline information for later courses. The following three factors or patterns emerged:

1. sex effect--female open learning students complete their courses more often than do their male counterparts.
2. campus effect-open learning students who register at certain City College campuses consistently complete their courses more often than do students who register at other campuses.
3. questionnaire effect--students who complete and return an assigned student questionnaire are much more likely to complete
their courses than are students who do not complete their assignment.

Two further secondary relationships were found which involved the interaction of the sex and questionnaire variables:

1. Females who complete the questionnaire are more likely to complete their open learning course than are males who complete the questionnaire.
2. Females who did not complete this instrument are more likely to complete their course than are males who do not submit the student questionnaire.

Using the results from the baseline courses, a numerical value was attached to each dimension of the factors described above, and each factor was weighted according to the results from the combined baseline courses. These weighted variables were then used in formulas which were used to predict student withdrawals. After each semester the formulas were refined based on the data for that semester, thus, the formula became progressively more accurate at predicting withdrawals. Predictions ranged within 4 percent of the actual withdrawal, and where the range of predicted withdrawal was much greater or less than actual withdrawal, the researchers searched for the cause as, for example, courses requiring excessive workloads, or out-of-date material, an uncooperative instructor, etc.

The practical administrative uses of the formula and the data generated are considered to be numerous by the authors and include:

1. Predicting the course load for instructors and thereby adjusting their work load accordingly.
2. The number and size of examination rooms can be planned in advance along with proctor requirements.
3. The courses having excessively high withdrawal rates could be examined for possible causes.
4. Campuses which register TV students having low performance can be singled out for special attention.

The next step is to attempt to classify students according to their "risk" of withdrawing. It would mean establishing a matrix of relevant characteristics and combinations of characteristics sensitive to predicting withdrawal. At registration time or shortly thereafter, the high, medium, and low risk groups could be designated. Those in the high groups could be contacted individually and receive the necessary counseling to determine the students' home situation, prior educational background, and interest in the course.

Those in the lower risk groups might require attention and encouragement toward the end of the course and at examination times. The load of the counselors could be spread out over the course by concentrating on the high risk group at the beginning. In summary, it would be an attempt to use the tools of evaluation and research to provide for individual needs in what has become a very massive and impersonal learning environment classroom. Since this type of educational program is growing, the need for services will continue to grow and particularly for counseling. In conclusion it is the hope of the authors that the sense of anonymity inherent in mass education techniques can be counterbalanced with human concern for the individual (Duby and Giltrow, 1976).

Miami-Dade Community College (Open College), Florida, USA
The year 1975-76 was the fifth year for Open College, and it progressed from offering one course in the year 1971-72 to 11 courses in the fifth year. The courses include: Introduction to Cultural Anthropology (ANT 220), Man and Environment I (ECY 101), Man and Environment II (ECY 102), Spanish Version of Man and Environment (ECY 104), Utilization of Television and Audio Visual in the Classroom (EIM 290), The Ascent of Man (HSC 101), Classic Theatre (HUM 204), Business Law I (LAW 205), Business Law II (LAW 206), General Education Math (MAT 201), Introduction to Psychology (PSY 211).

It has not been the philosophy of Open College to equate growth with "goodness" but rather to partial out the "goodness" of the growth from the "weakness," specify the conditions under which "weakness" occurs, and focus on changing the conditions. This study reflects this philosophy.

In Open College the instruction is planned, packaged, and delivered in such a way that a student can receive that instruction regardless of where he is and when he wishes to receive the instruction. The package includes all or some of the following--TV broadcasts, radio broadcasts, back-up tapes for both on-campus and off-campus viewing provision for obtaining personal copies of radio broadcasts, textbooks, study guides, and RSVP study questions. (RSVP is an acronym for Response System with Variable Prescription which is a computer system which allows the instructor to assess how well the student is understanding the course content from the answers to the RSVP study questions, diagnose the deficiencies, and prescribe individually for each student whether there be 50,500 , or 5,000 students in the course).

Number enrolled Over the three terms in 1975-76, there were 19 course offerings arising out of the 11 courses listed earlier. The two new courses for 1975-76, Classic Theatre and Spanish Man and Environment, did not parallel the large enrollment of 1,238 witnessed by the first-time offering of The Ascent of Man in the previous year. Consequently, the average course enrollment in Open College for $1975-76$ was 237 per course as compared to the 334 per course in 1974-75.

Number dropped The number of course drops (before and after the 100 percent refund date) was 979 which was about 22 percent of the total enrollments of approximately 4,500.

Characteristics of students who dropped and who stayed Home campus for registration (by implication, residential location of the student) or sex of the student did not differentially affect the course drops. Attributes such as matriculation status, age, cumulative GPA, being only an Open College student, did not show consistent trends from term to term. There was consistent indication, however, that: 1) students in the minority groups (B1acks and Spanish-American) dropped the course more often than the Whites; 2) students receiving veteran benefits did not drop the course as often as the others; and 3) students taking one Open College course dropped the course more often than those taking two courses.

Characteristics of enrolled students Women enrolled in Open College courses more than men; whites dominated the enrollments; 50 percent of the Open College students were 30 years or older; 7 percent of the students were 50 years or older; 14 to 18 percent of the students received veteran benefits; and 43 to 50 percent of the students took only Open College
courses and no on-campus courses. There was no significant difference between the years 1975-76 and 1974-75 in terms of the cited attributes.

Correlations between student attributes, RSVP participation, and examination scores Generally speaking, women made significantly greater use of the RSVP System although in six of the 16 course offerings which used the RSVP System, sex made no significant difference in how much the students used the system. The courses which reflected the desirable trend were ANT 220, EIM 290, HSC 101, LAW 205, LAW 206, and HSC 101. In nine of the 16 course offerings, the older the student, the greater the participation in the RSVP System of learning. In seven course offerings, students participated in the RSVP System equally well regardless of their age. These courses were LAW 205, PSY 211 (fa11); EIM 290, HSC 101, and LAW 206 (winter); and HSC 101, LAW 205 (spring/summer).

For correlations of the combined percent score obtained in the midterm and final examinations with sex, age, and week of entry, the significant correlations reported indicated that women obtained higher scores in the examinations in nine of the 16 course offerings; older persons obtained better scores in 11 out of the 16 course offerings, and the week of entry had significant effect in three of the 16 course offerings. In the case of week of entry, the later the students entered the course, the lower their percent score in the examinations.

Participation in the RSVP learning system correlated significantly with the percent score in all but one of the 16 course offerings. Since there were significant correlations between percent score and factors such as sex, age, and week of entry, and since these latter factors also correlated significantly with participation in the RSVP system, partial
correlations were computed correlating participation in the RSVP System and mean score in surveys with the percent score in the examinations. In all but one of the 16 course offerings, the partial correlations between participation in the RSVP System and the percent score were significant. Partial correlations between RSVP survey mean score and the percent score in the examinations were significant in eight out of nine course offerings for which they were computed. In five of the nine course offerings, the numeric value of the correlations between RSVP survey mean score and the percent score was lower than that for correlations between RSVP participation and the percent score. This would mean that participation and not how well they perform in the RSVP surveys was more important.

Evaluation of Open College by students During the year 1975-76, evaluation of Open College by students was solicited two times. Interim Research Report Nos. 1 and 4 in 1975-76 presented the findings (Anandam, 1975-76). Use of the telephone to elicit students' evaluation proved to obtain a more representative sample of the Open College population than the mailed-out questionnaire method. In general, the students were positive about the courses, appreciative of the faculty, and extremely appreciative of the Open College concept. RSVP was claimed as the most useful component of the instructional materials used in Open College. The students also appreciated being contacted by telephone (Anandam, 1975-76).

Effectiveness of telephone dialogues and usefulness of locus of control measure as related to completion of psychology course in Open College Fleckman and Anandam (1975) hypothesized that an important variable in a student's ability to meet all of the above requirements was his locus of control as presented by Rotter (1960). According to this construct,
individuals tend to have either an external or internal locus of control for reinforcements they receive in life. Rotter (1960) hypothesized that this variable is of major significance in understanding the nature of learning processes in different kinds of learning situations and also that consistent individual differences exist among individuals in the degree to which they are likely to attribute personal control to reward in the same situation.

Lefcourt (1972) reports that a possible relationship exists between "locus of control" measure and academic performance in on-campus studies. To date, however, such data are not available for open learning students. Fleckman attempted to explore this possibility. In addition, Fleckman explored any possible relationship between a student's early participation in the computer managed instructional system that was available to all students and course completion. The computer managed instructional system is a learning package. A student also receives a series of questions which aim to assess progress toward course objectives. Instructor's feedback on student responses to the questions is mailed back to the student with perscriptions as a means for providing corrections and guidance. Participation is entirely voluntary on the part of the student. Since the previous research at Miami-Dade Open Learning System indicated that survey participation significantly correlated with course completion, an experimental component was included to answer the question: Does an experimental intervention (telephone dialogues) differentially affect the completion rat: of students who did not participate in the first computer assistance survey.

Selection of students Two separate lists of students were generated from students who enrolled in a Psychology course. They were assigned
to groups on the basis of whether they turned in the first survey on time. From the "survey-in" list, 25 students were randomly selected to form control group 1 (C1). Out of the other list, 50 students were randomly selected and randomly assigned to two groups of 25 each, designated as control group 2 (C2) and experimental group (E). Prior to selection of subjects from either list, students who had dropped the course and/or had not given a telephone number in their applications forms were excluded.

Locus of control measure The Nowicki-Strickland Locus of Control Scale for Adults (ANS-IE Scale) could be administered over the telephone. It consists of 40 items answered either yes or no. A trained research assistant administered the ANS-IE Scale to the 75 subjects over a period of one month, keeping the number contacted in each of the three groups equal, week by week. The assistant was not cognizant of the nature of the three groups.

Experimental intervention The subjects in the E group were contacted by telephone by their instructor once in two weeks, for a total of six times in the semester. The contacts followed the due dates for the six assignments provided in the course. Included in all six conversations were the following:

1. Positive reinforcement for turning in assignments and/or taking the mid-term examination.
2. Progress statement on work done thus far.
3. Discussion of students' difficulties in understanding the course materials.
4. Encouragement to send the assignments and keep up with the course.

An attempt was also made to obtain some unique information in each of the six conversations as: general plan of work, background likes/dislikes about the course components, intention to take midterm examination, method of studying in going through course materials, and feelings about being contacted over the telephone.

Conclusions The Nowicki-Strickland Locus of Control Scale failed to discriminate among the three groups and among the completing vs. noncompleting students when the three groups were considered together. It was recommended that the Rotter I-E Scale be explored. In the telephone conversations, it was noted that the greatest need for the subjects was to give vent to their personal problems and anxieties. A second great need of the students was to be apprised of the logistics of the course. They labored with many misunderstandings and lack of information. It was recommended that instructors, or paraprofessionals, be trained to contact students early in the courses and at critical points as just prior to examinations.

Subjects revealed that incompletes were due to excessive personal problems, work loads which were heavy, and familial obligations which demanded priority. Whether these were real or actually demanded the amount of time given by the student is not known and whether all students had comparable personal problems, but some continued with their courses regardless of outside interference is not known. It was concluded that some personality characteristic within the student might be the determining variable.

The Dallas County Community College District (open university), Texas, USA
The DCCCD is a large, multi-campus district with a current enrollment of more than 33,000 students. Since its inception, the district has been concerned with providing quality instruction to a heterogeneous population of students with diverse educational backgrounds and aspirations. Beginning in 1972, the DCCCD became involved in developing telecourses in order to meet the dual objectives of providing an alternative educational environment for current students and extending educational opportunities to community members who were unable to take advantage of on-campus course offerings. In 1976, 4,896 students were enrolled in TV courses.

The district has established an Instructional Television Center which has the responsibility of developing and producing new telecourses using the expertise of faculty members from the colleges. After a telecourse is produced, the administration of its implementation is assumed by the colleges themselves. Thus, telecourses are alternative offerings of the existing colleges rather than the domain of a separate administrative structure.

Components of the course An orientation session is conducted for all students enrolled. This is held on campus, and all components of the course plus suggestions for effective study methods are covered. Each course includes: 30 broadcasts, each lasting 30 minutes and these consist of a great variety of media; a comprehensive study guide with behavioral objectives, self-pre-tests, topic outlines, study questions, reading and homework assignments, self-posttests, and enrichment activities, a textbook and/or readers; discussion meetings scheduled two or three times a
semester, hotline telephone service, and video cassettes of TV broadcasts available at the on-campus library.

Data on students Extensive data have been gathered on telecourse students from 1972-76, and several conclusions have been drawn. Demographic characteristics of students enrolled in telecourses are similar to characteristics of the on-campus community college students yet there are some unique differences, and as new courses are added the number of TV students taking only telecourses continue to grow. Increasing numbers of students commented that they would not have been able to take college courses if it had not been for the telecourse offerings because of family and job commitments, transportation and health difficulties, etc.; thus it became increasingly evident that telecourses were serving a group of students who would not otherwise be able to take advantage of college course offerings. Many on-campus students took telecourses in addition to their on-campus courses. They also worked and could not enroll full-time on campus; therefore, the telecourses enabled them to progress more rapidly through increasing their actual college load.

Students' evaluation of the telecourses was quite high. They felt they accomplished their objectives. They rated the study guide as a vital course component for elaborating and reinforcing the material presented in the telecasts and in the textual readings. The seminars were less helpful, and the hotline was satisfactory for most who used it. Some reported having difficulty getting answers to their questions.

The percentage of students who contact an instructor has continued to decrease. It was concluded that this could be attributed to the orientation sessions and the newsletters which were constantly being refined in an
attempt to anticipate student questions and problems. There was a significant concern, however, when over half the students enrolled in the American Government course during fall of 1973 had difficulty in having questions answered. It was concluded that having a single faculty member to answer all the students' questions was not feasible, thus more faculty were assigned to the hotline, remedying the situation.

As a whole, the students seemed strongly to be in favor of the application of television to instruction and often listed its many advantages, as interviews with famous individuals, film clips, and dramatizations. Telecourses also seemed to be an advantage to many in that they could proceed at their own pace, could schedule their time more effectively, and did not have to travel to campus as frequently. However, a minority of the students viewed the so-called "advantages" as "disadvantages." Some of the students stated that they lacked the personal motivation to keep up in their studies without the prodding of instructors, that they had difficulty in pacing themselves and scheduling their time productively, and that they missed the face-to-face contact with instructors and fellow students. The conclusion of the researchers was that possibly television was the medium of choice for these students and that more study should be devoted to the types of students who are most successful in independent study modes and that informed counseling might assist students in selecting the mode of instruction which would suit them best and that study skills instruction might be developed to help telecourse students learn to "work the system" to advantage.

A need for better broadcast times was shown, and as a result the DCCCD negotiated an agreement with the Public Communication Foundation for North

Texas to open a new station for the primary purpose of broadcasting college instructional programming. The importance of general implementation was emphasized, as for example, the operation of the hotline telephone service, discussion meetings and seminars, and the mailing of newsletters and test results. The presence of the video cassettes in the libraries of the various community colleges that were within ten miles of any particular student was also very helpful. On-campus students also made use of the video cassettes.

Telecourse grade distributions Grade distributions from the spring semester of 1976 were collected, and numbers and percentages of students in telecourse and on-campus courses were computed. The grades were divided to reflect "successful" (those who received grades of A, B, C, and D) and unsuccessful students (those who received grades of $F, I, W$, and $P$ ).

In each case, the on-campus students had a higher success rate than did the telecourse students. When tests of proportions were performed, it was found that all of these differences between telecourses and on-campus grades were significant at the .05 level (Agler and Linn, 1976; Linn, 1976).

Telecourse students: comparison statistics--study in Dallas County Community College District The purpose of the study was to examine the characteristics of students enrolled in telecourses at the Dallas County Community College District in the spring semester of 1976. It was hoped that the information would 1) provide a data base for course developers which would better enable them to meet the needs of this population of students and 2) reach some tentative conclusions as to whether the district
telecourses are serving a different population from that served by the on-campus courses.

Statistical analyses were carried out to determine whether the students in the TV course differed significantly from the students in the total district and to determine whether differences existed between students enrolled in the telecourse and on-campus sections of the English 101 course. Twelfth day enrollment figures were used in all cases. Since figures for the total district $(33,012)$ included the students taking $T V$ courses, there was some bias in the total district figure.

Comparisons between all students enrolled in telecourses and all students enrolled in the district revealed:

1. More male students are enrolled in the telecourses than in the district as a whole ( 58 percent in the telecourses, 56 percent in the district).
2. More full-time students enrolled in telecourses than throughout the district.
3. More high school graduates and transfer students enrolled in telecourses.
4. Many more students taking telecourses are taking evening school and day school classes ( 48 percent of the telecourse students take classes at both times as opposed to only 13 percent of the students throughout the district--telecourses are listed as day school).

It was concluded that telecourse students comprise a distinct population since they differ from the district-wide enrollment along a number of
dimensions. That is, telecourses are reaching students that other forms of delivery are not reaching (Agler and Linn, 1976; Linn, 1976).

Telecourses: the "Open University" in Dallas, a technical research report The Corporation for Public Broadcasting sponsored a research project in the fall of 1974 (Topper, Singleton, Attebury, Birdwell, and Schumann, 1975); the focus of the project centered on four areas: the reaction of the general Dallas County community to the telecourses, the reactions of the students who took telecourses during the fall of 1974 , the reaction of business corporations towards hiring people who have received open university degrees, and the reactions of the authors to the educational quality of the telecourse segments which they personally viewed.

The reactions of the citizens in the community were 90.7 percent in favor of the courses. When asked if they would enroll in a telecourse, nearly half of the respondents of the general audience survey said they might, depending upon the subject matter. They then offered a variety of topics which could be developed into telecourses.

In addition to general citizen interest in Dallas County, the response of the telecourse students who answered the mail-out survey was also very positive. There were specific complaints about specific courses, but even Writing for a Reason, a course with which they had the most problem, received a favorable or very favorable rating from over 50 percent of its students. Overall, the student response argued strong1y for the development of more telecourses. Of the enrollees 38.8 percent said they might be interested in taking an entire A.A. degree by telecourse, and just over 30 percent said that they might be willing to take a B.A. degree over
television (even though the DCCCD does not offer one). In addition, the students surveyed offered hundreds of suggestions for new telecourses.

The telecourses in the DCCCD also exhibited some deficiencies. The most obvious one was the failure to reach out to the nonwhite, old, and poverty stricken in large enough numbers. These, of course, are the segments that the institutions of higher learning have never been able to attract, but that does not afford an excuse to discontinue trying. The household penetration for television is nearly 100 percent, and the tuition is much lower ( $\$ 25$ for the first course and $\$ 18$ for the second, etc.). Therefore, it should be possible to draw more into the program; the problem was how to go about doing this.

The first step suggested would be to offer telecourses aimed specifically at one or more of the target populations. When interviewing the general population, the minority respondents suggested courses as Black history, Mexican history, Spanish language, etc., which would fit their own personal interests. It was also suggested that some of the telecourses could be integrated with the General Educational Development program through the development of special study guides and reading materials on a high school level. A third step in reaching the minorities might be the opening up of a new channel that could be used for just education, and in that way the programs could be offered at optimum viewing times for all students.

The researchers also found a great need to increase the advertising of the telecourses. They found that most students learn about the telecourses through the school or by word of mouth. They suggested that advertising through the newspapers, radio, and regular television channels would be
more effective. Another need was improved guidance and counseling at the time of registration to insure that the student is suited to the telecourse. Employers were asked if they approved of the open university concept, if they would hire a graduate, and if a person with an "Open University" degree would have the same potential for advancement with their company. A total of 32 business concerns responded and of these 26 stated they approved of the concept, six disapproved, and one gave no answer. They explained that they probably would not hire a liberal arts graduate since they needed employees with particular skills. As for advancement, it would depend on the individual's performance on the job. Also, they indicated that the method of teaching was not important, but the reputation of the degree granting institution was important in their considerations.

They concluded that if a separate instructional channel was granted by the FCC and if further telecourses were developed, there would be little reason to doubt that a nontechnical Associate of Arts degree of high quality could be available through the development of a true open university junior college level in Dallas County. They added that even the student seeking the technical Associate of Arts degree might find it much easier to return to school by fulfilling introductory course requirements through enrollment in telecourses and then taking only the "lab" courses on the campus. They also stated that the ramifications of such an open junior college would go far beyond Dallas County and would affect all of rural North Central Texas. They stated, "The telecourse has shown a bright ray of light into the dark and stormy skies of continuing education" (Topper et al., 1975, p. 20).

## Southern California's KOCE-TV

Since 1967 the 31-institution Southern California Consortium for Community College Television serving the Los Angeles area counts 20,000 individuals a year as registrants for its broadcast credit courses. The separate California Instructional Television Consortium consists of 19 state universities and colleges. In addition to these is the Coast Community College District headquartered in Costa Mesa, just at the southern border of Orange County.

Coast Community College District consists of two institutions, Orange Coast College in Costa Mesa and Golden West in Huntington Beach, just to the north. The Chancellor for the District in 1974, Dr. Norman E. Watson, promoted the idea of open learning courses using television and wrote that about 80 percent of the leisure time of the average American is spent either watching television or listening to the radio. He continues by asking what responsible institution can turn its back on this potential for education and community service and concludes that with the possibility of converting every household into a classroom and with the opportunity of implementing the "learning society" by utilizing 20th century technology, it is incumbent upon us to act decisively.

At Coast Community College, this has in a sense been accomplished. On November 15, 1972, they opened up their one million-watt public TV station KOCE at Golden West College. By the spring of 1974, this new outlet, Channel 50 , had signed up 3,100 men and women for six broadcast credit courses, three of them produced at KOCE. College courses made up nearly one-half of the station's broadcast schedule.

The Telecourse Operations Department of Coastline Community College coordinates all of the courses offered with television as one of the main components. Assisting the Telecourse Operations Department is the District Information Services Department (Data Processing), the Instructional Media Center, and KOCE-TE, the District-owned television station.

The District Information Services Department provides mailing labels or computer addressed envelopes for all mailings and pre-printed quiz/ examination cards for all enrolled students. Each of the courses requires from four to 13 Hollerith quiz cards pre-printed with student's name and I.D. number. In the fall of $1976,5,000$ students were enrolled. The prescriptive feedbacks for the quizzes for the individual telecourses are printed on a data sheet with a box including the student's name and address.

The Instructional Media Center processes approximately 280,000 copies of letters and instructional material for Telecourse Operations during a semester. The operation includes collating, stapling, and folding.

The District-owned television station assists in providing duplicates of the television cassette tapes of the telecourses for the media centers of the affiliated college libraries, libraries in the community, and businesses within the community. They also announce the enrollment procedures and the midterm and final examination sites and dates.

The course facilitators (instructors) hold California Community College credentials in the discipline related to the telecourses they are facilitating. They are hired on an overload or part-time hourly basis. Facilitators are strongly urged to keep in regular contact by telephone with each student. The students are given a list of the facilitator's
office hours, and in addition, each facilitator's telephone is equipped with an Ansafone, enabling students to call and leave messages at any time.

Telecourse Operations also provides assistance to the students and the facilitators. The staff is available from 8:00 a.m. to 5:00 p.m. to answer any questions that are not related to course content.

To assure complete student services on the part of the facilitators and to help clarify any policies, a detailed handbook is provided for all facilitators. The result has been a successful program for all involved (Jelen, 1976; Anonymous, 1976; Moore, 1976; KOCE-TV, 1974a).

Student reaction to television courses, spring semester, 1973-74, KOCE-TV Coast Community College District, which owns and operates the noncommercial educational television station, KOCE, has offered community college courses for credit to residents of the Orange County area since spring semester, 1972-73, just two months after KOCE-TV began broadcasting in November, 1972.

Enrollment of students in the three television courses offered that initial semester totaled 1,388 . It dropped 17 percent, to 1,151 in the fall, 1973-74, and then rose during the spring of $1973-74$ to 3,200 , an increase of 133 percent over initial registration figures. Final registration figures for fall, 1974-75, show that 4,952 students enrolled in the six television courses offered. This is an increase of 257 percent over spring, 1972-73. The average enrollment per TV course in the fall, 1974-75, was 825 , an increase of 83 percent over spring, 1972-73.

The researchers believed that since interest is growing in pursuing educational opportunity through enrollment in televised college courses, it is increasingly necessary to assess the effectiveness of this kind of
learning process and its role in the academic community. This research project was for the purpose of assessing student evaluation of the television course. It pursued two major lines of inquiry: 1) How do students rate the several aspects of these courses and 2) What kind of student enrolls in a television course?

Five courses were offered during spring, 1973-74: Dimensions in Cultures and Physical Geography, courses which satisfy basic requirements in the fields of the social and physical sciences; Freehand Sketching and Connie's Clothing Corner, courses teaching basic techniques, are less academic in their orientation and are perhaps more aptly described as courses which develop certain areas of skills; Family Risk Management, a business course traditionally academic in content yet with broad interest for families in area of management.

All students were asked to respond to a postcourse reaction questionnaire, and part of the students enrolled in anthropology, sketching, geography, and family management were asked to keep a diary which had to be mailed in at the end of every week. Another group of students enrolled in these classes was asked to keep another form of diary that was to be mailed in at three-week intervals. In addition, students keeping the weekly diary were asked to take part in a midterm personal interview. For this and the diary they were paid $\$ 10$.

A summary of the findings indicates:

1. Increasing numbers are enrolling in television courses.
2. More people are enrolling in television courses for reasons other than earning credit toward a degree. In the spring, 1972-73, 64 percent indicated their reason for taking their course was to
earn credit; 59.9 percent did so the following fall. Less than half, or 44 percent of those sampled during spring, 1973-74, checked this reason.

Part of the shift can be accounted for by the addition of the two courses that were less academically oriented, Freehand Sketching and Connie's Clothing Corner, but even in the anthropology and geography courses less than two-thirds indicated their primary concern was to earn credit.
3. More people who can be defined as "nonstudents"--by virtue of no other on-campus affiliation or on-going commitment to education beyond high school--are enrolling in television courses. Spring, 1973-74, 39 percent did not consider themselves students of any kind.
4. A greater percent of housewives are enrolling. Each semester this group was the single largest occupational category.
5. More women than men enroll. Women constituted 54.6 percent in the fall, 1973-74, and 67.2 percent in spring, 1974.
6. The average age of television students is rising. Fall, 1973-74, half were over the age of 31.8 years, and in spring, half were over 34.9 years.
7. Course completion rates are not improving: Percent completed was spring, 1972-73, 46.1 percent; fall, 1973-74, 44.9 percent; spring, 1973-74, 37.6 percent.
8. The group of students that were asked to become involved in keeping a diary and a personal interview had higher completion rates and better grades.
9. The students who do not complete their courses, that is take the final examination, tend to: be enrolled in only a TV course, have less education beyond high school, consider themselves nonstudents, and give the reason for taking a course as personal fulfillment-not to earn credit.
10. Regarding their course experiences, the students had the following concerns:
--desire for more and more varied forms of evaluation
--desire for increased availability of review sessions, on-campus or taped
--more continuity among the components of TV lesson, text, and syllabus
--better textual aids, particularly syllabi
--more explanation of the function of these components in relation to one another
--more clearly detailed and more repetitive information in the areas of broadcasts which include the number and title of the lesson being aired; times and dates of testing, seminars, etc.; what textual materials accompany which lessons
--greater availability of course materials
11. Students who failed to take their final exam assigned a lower ranking to nearly all course components about which they were asked, thus they had difficulty with all aspects of the course.

It is important to note that no less than two-thirds, and in three of the classes, 90 percent of the course variables for all TV courses offered spring semester received a higher ranking from students who took the final
examination. It is also important to note that those involved in the experiments that required interaction with those knowledgeable about the logistics of the courses received higher grades, and student withdrawal was less than in the central group where interaction was less (KOCE-TV, 1974b). Television students' TV viewing log report, KOCE-TV The television viewing behavior of students enrolled in television courses offered by the Coast Community College District was described in a research report published as a result of a research project funded by the Corporation for Public Broadcasting to determine the educational and public service needs of the service area of KOCE-TV, a public UHF station owned and operated by the Coast Community College District (KOCE-TV, 1974a). A demographic profile of the sample TV student households for the fall and spring semesters of the 1973-74 academic year was also obtained.

The results of the demographic profile included the following information:

1. Over two-thirds of the sample households during both semesters had more than one television set.
2. Households of fall psychology and art students averaged 3.6 persons, those of consumer economics, 3.0 persons. Households of spring anthropology and geography students also averaged 3.6 persons; those of Freehand Sketching and Family Risk Management students averaged 4.0 and 4.3 persons, respectively. Spring sample households averaged 3.9 persons; fall sample households averaged 3.5 persons.
3. In the fall there were 95 men 18 years old and older and 105 women. In the spring there were 129 men 18 years old and older and

139 women, thus the percentage of adult men to adult women remained virtually the same. In overall family composition, adults constituted nearly two-thirds of the households; of those under the age of 18 , one in three were teenagers and the remainder 12 and under.
4. The percentage of adults in the sample households who were over the age of 40 increased during the spring semester, 38.9 percent compared with 31.5 percent the preceding semester.
5. Nearly half of the men of the household held jobs of a professional or managerial nature during both semesters. More than eight in every ten men indicated they worked 40 or more hours per week. Thirteen percent of the women of the household categorized their jobs as professional or managerial. During the fall semester, one in every ten women indicated she worked 40 or more hours a week; this figure rose to nearly one in three during the spring semester. Fifty-two percent of all female heads of households identified themselves as housewives, whereas only 38 percent did so from the spring semester sampling.

In summary, the resulting profile conformed in large part with information that was gathered previously by the researchers in an attempt to identify the average or typical person who takes a television course through Coast Community College District. The student is somewhat older than his on-campus counterpart (that is a community college student who enrolls in the course offered on-campus), is more likely to be married, is quite possibly either a housewife or working full time, and has more dependents than does an on-campus student.

In reference to the sample TV student households' viewing behavior, the following conclusions were reached:

While the relationship between viewing preferences and program categories is dependent on the latter's content and availability in a few instances (e.g., sports, specials, documentaries, and music programs), most of the viewing and size of the audience is concentrated in the categories made up with programs the formats of which remain essentially the same: news, childrens' programming, comedy and variety, and dramatic fare. There was no relationship between the amount of time and audience size an area of programming commands and its ability to hold the viewers' attention. When combined, the above categories constituted from 61.8 to 75.9 percent of all program mentions the first week and from 57.0 to 75.2 percent the second week (students kept logs for two weeks--one week near the beginning of the course and one week near the end).

The comparison of viewing behavior for the TV courses for the fall quarter, 1973-74, was:

Proportionately fewer TV lessons (3.5 percent of all program mentions) were watched in households of psychology students during the first week. During the second week, lesson viewing in proportion to other kinds of programs rose slightly ( 10.3 percent), but the actual number of lessons watched was less: 39 versus 57 mentions or a decrease of 31.5 percent. Lesson viewing in households of both consumer economics and art students was less the second week. In consumer economics student households, mentions of lesson viewing constituted 6.5 percent of all program mentions the first week; the second week they were down 48.4 percent to 3.3 percent of all program mentions. History of Art sample households indicated that
lesson viewing constituted 6.2 percent of their program selections the first week and 5 percent the second, a decrease of 42 percent. In all sample households, they watched to or near completion more than nine in every ten lessons.

Comparison of viewing behavior for the TV Courses for the spring quarter, 1974, was:

In all household groupings, lesson viewing during the second week was less. Households of anthropology students which maintained the first week's log (at or near the beginning of the course) had a viewing average of 2.2 lessons; those which completed the second week averaged 1.2 lessons, or a decrease of 45.5 percent. Households of sketching students averaged 2.3 lessons the first week; those which completed the second week viewed 39 percent fewer lessons (1.4 per household). Geography student sample households averaged 2.9 lessons viewed the first week; data for the second week indicate nearly a 45 percent drop to 1.6 lessons per household. Viewing completion rate for lessons during both weeks (one near the beginning and one near the end of the course) was above 90 percent.

In the fall group, lessons were watched half as often the second week of the viewing $\log$ in households of consumer economics students. Lesson viewing was also less frequent for families of art students, although their decline in frequency was not as great. Sample households of psychology students viewed more lessons in proportion to other kinds of programming during the second week but fewer lessons compared to the first week's log. This contrast to the other two household groupings is consistent with regard to audience size: More people in psychology student households watched lessons the second week. In households of both art and consumer
economics students, audience size declined at a rate commensurate with that in lesson viewing.

It is interesting that the course-viewing behavior of the sample TV student households is not indicative in a way one might expect, for example, lesson viewing in the sample households of psychology students fell less than that in the other households during the second week of viewing log maintenance (near end of course), and yet the completion rate for psychology students overall was the lowest for any of the courses ( 34.8 percent of those who registered). Conversely, households of art and consumer economics students watched fewer lessons during the second week, and both of these courses reflected an overall completion rate considerably higher than that for psychology ( 44.9 percent for art students, 58.1 percent for consumer economics students).

For the spring quarter, households of geography students--which watched more lessons than those of anthropology or sketching students during the first week--reflected the largest drop in lesson viewing, from 6.4 percent of all program mentions the first week to 3.8 percent the second week. The researchers comment that perhaps it is significant that within TV course completion rates for spring, 1973-74, geography students were lowest with 29.9 percent. This can be compared to the completion rates for anthropology students of 41.7 percent and art students of 44.6 percent. It is also interesting that fewer people in all households watched lessons during the second week of viewing log maintenance and that for geography the rate of completion for each viewing time was 100 percent and only a bit lower for the other two courses.

An interesting incentive to aid in data collection was used--students were paid $\$ 10$ for maintaining the two-week television viewing log.

Coastline Community opens new no-campus college In Orange County a need was recognized for added facilities of learning at the postsecondary level, and in answer to this, a fully accredited, high1y diversified community college was established without building a single building and with no campus. A total of 95 different classrooms were rented in virtually all types of establishments. Fully accredited teachers with at least seven years of experience were hired on a part-time basis, and many teach full time or part time in another college setting; the other teachers are business and industry professionals who will teach in their area of expertise. A total of 850 part-time teachers were hired. They were prepared for an enrollment of 20,000 in the fall of 1976 , with a projection of 50,000 students.

The instructors were trained in adult teaching methods, and a fulltime staff of advisers and counselors assisted students to create a prescribed learning package that suits their interests and time. They were encouraged to coordinate a mix of courses, TV courses, some on-campus courses, examinations for life experience, and whatever was available that would help them realize their goals. The overriding principle of the Coast Coastline venture is its flexibility to new trends. For this reason, the college will closely monitor the futures of all its students (Moore, 1976).

## Project Outreach

Project Outreach is a consortium of 18 public higher education institutions in California that aims to provide access to learning opportunities,
by use of televised instruction, to those in the community who do not have access to educational institutions or programs. It was stimulated under Title I of the Higher Education Act of 1965 and brings together representatives of the three segments of public higher education in California in consortium. The University of California is represented by the University of California, Extension, San Diego; the California State Universities and Colleges are represented by California State University, San Diego; and the California Community Colleges are represented by the Coast Community College District. In addition, all public higher education institutions in San Diego and Orange Counties have been involved.

The overall goal is to design, coordinate, and implement means of extending educational opportunities to a large segment of the community not now having access to continuing education, community service programs, or course work for college credit. Its major concern is in the area of television and involves joint use of faculty, staff, and production facilities. Through a combination of televised programming, correspondence materials, individual tutoring, study center based activity, and counseling, the plan will permit educators to deploy needed educational substance to what has been a poorly served segment of the population. Working together, scholars and media professionals plan to develop programs which combine the outreach of modern mass communications with effective teaching methods. An education of the highest standards, including credit, skills packages, and degree programs, will now be made available to those who have either been unable to attend traditional institutions or who find traditional institutions unattractive (California State Coordinating Council for Higher Education, 1973).

## University of Minnesota Television Independent Study

Since 1955 the University of Minnesota has offered credit courses to residents of the State of Minnesota on both commercial and educational television, One of the purposes of television credit courses has been to meet the needs of the part-time "nontraditional" student.

Developments have been continuous in the structure of the television credit courses, and currently the courses are integrated instructional programs designed for people who wish to study independently. They typically include: ten half-hour television presentations, a study guide, audio cassettes, reading texts, written assignments, and examinations.

Enrollments in the television independent study courses have averaged 250 students per course, and the highest enrollment to date for a single course is 425 students. This is evidence that these television courses have been effective means of extending the University to the community. These courses have also served a special purpose in attracting many new students to the University. Some of these students have become full-time resident students and have gone on to graduate work. In addition to the students who register for credit, the televised courses are viewed systematically by another large group who purchase a study guide for the course and watch each broadcast. As many as 700 viewers have purchased a study guide for a single course, in addition to those who registered for credit. There is a third group of viewers who watch the programs for self-enrichment, without either registering for credit or purchasing a study guide. Through the telephone calls and letters received, the University is assured that the courses provide a valuable public service.

The purpose of the video component is to develop general concepts and to present concrete examples. It also serves as a very important motivational device, designed to stimulate students who are learning independently.

The study guide is considered the core of the instructional program. Its function is to guide the student through the course by outlining the procedures. It enables the instructor to assist the student's progress and to motivate him throughout the course.

The audio cassettes are effective for presenting materials that are primarily aural. They are used to guide students through problem-solving sessions or to provide alternative viewpoints on topics that could not be explored at length on television.

The Television Independent Study courses are developed and produced by University Media Resources and Extension Independent Study. Teams of people from the two departments work with an instructor interested in creating a course for television. For the development of a study guide, an editor from the Department of Independent Study is assigned to work with an instructor. For the video scripts, an executive producer will help to develop and produce the television segments of the course. The overall undertaking of producing a course for open learning is a joint venture resulting in a quality production and always with the instructor making the decisions pertaining to course content (Willeke and Sleeper, 1976).

Television Independent Study, demographic information on enrollment, fall and winter quarters, 1975-76, University of Minnesota Television Independent Study During the fall quarter, 1975, two Television Independent Study courses were offered: Introduction to Women's Studies and Psychology
and Religion. During the winter quarter, 1976, three Television Independent Study courses were offered: The Dynamics of Divorce, People Power: The World of Practical Politics, and The Dynamics of Marriage and Parenthood: Living Married. In the fall quarter, the questionnaires consisting of student background information and course evaluation were mailed to all students who had not officially withdrawn from the course. The return rate was 69 percent. During the winter quarter, the questionnaires were inserted in all study guides sent to registered students. The part pertaining to demographic data was to be returned immediately, and the part relating to course evaluation was to be sent at the end of the course. The return rate was 73 percent.

Summary of findings:
Almost half of the respondents ( 47 percent) were between 26 and 35 years old. Another 25 percent were between 36 and 45 years old. There was considerable variation in sex distribution from course to course. Women predominated in the courses Introduction to Women's Studies (80 percent), Dynamics of Divorce ( 73 percent), and Living Married (55 percent). Men formed the majority of respondents in Practical Politics (55 percent) and Psychology and Religion ( 55 percent). The majority of all respondents were married (71 percent).

The majority of students had between one and three years of college ( 42 percent), 30 percent had a college degree, and 10 percent had a master's degree.

The general profile of the students could be summarized as follows: The representative television student is a married, 26-35-year-old woman who enrolls in the course because of special interest in the subject,
because of a general desire for intellectual stimulation, or for professional improvement or advancement. She is either a housewife who has had some college experience and is now enrolled in an undergraduate degree program, or she is employed as a teacher and is working toward a further degree or updating a teaching certificate.

The reasons given for choosing a course that utilizes television was convenience and flexibility. In many instances, commuting to a campus would have been almost impossible, and family responsibilities, particularly where young children were involved, made on-campus classes impossible from their point of view. They also expressed a desire to study at their own pace in their own manner and in their own home (Willeke, 1976a).

Television Independent Study, student evaluation of courses, fall quarter, 1975 During the fall quarter, 1975, two television courses, Introduction to Women's Studies and Psychology and Religion were offered for credit by the Continuing Education and Extension Division at the University of Minnesota. At the end of the quarter, about 41 percent of the students in both courses had met the official assignment deadlines. During the three-month extension period allowed, more than 12 percent completed the course assignments. At the time of the study, 53 percent had completed assignments in Introduction to Women's Studies, and 57 percent had completed assignments in Psychology and Religion.

Of special interest is the distribution of grades achieved in each course. The students in Psychology and Religion scored almost a letter grade lower than the students in Introduction to Women's Studies. The difference is reported as evidently due to the grading approach of the two instructors. In Psychology and Religion, the students were given an
opportunity to work for a higher grade by submitting a term paper in addition to the basic assignments. The majority elected to not work for the higher grade by writing a term paper.

Respondents to the course evaluation questionnaires were asked to rate the overall quality of the courses on a six-point scale. Introduction to Women's Studies was given a 4.65 rating and Psychology and Religion was rated 3.88 or slightly lower but both above average. Between 74 percent to 80 percent were interested in taking another course by television.

In both courses the area of least student satisfaction seemed to be with the volume of assignments. Both courses required both reading and written work. Aside from the amount of work, the reading and writing assignments were ranked high from the helpfulness aspect in both cases. There was also dissatisfaction with delay in feedback to students. Students learning at a distance express a need for less delay in receiving answers to their questions and test returns. Of the course components, mean evaluation responses of the students were: (A four-point scale, four was high).

$$
\begin{array}{ll}
\text { Study guide } & 3.38 \\
\text { Required readings } & 3.35 \\
\text { Assignments } & 3.01 \\
\text { Television presentations } & 2.96 \\
\text { Television contact with instructors } & 2.09
\end{array}
$$

Open comments by students on the evaluation questionnaires were very positive. The information gained was judged to be very helpful, but results showed a need for questionnaires that were much more detailed. Information gained was not as comprehensive as needed for future guidance. (Willeke, 1976b).

Studies relating to the University of Mid-America
Since the University of Mid-America (UMA) came into service in 1974 as a major experiment in education beyond high school, it has been essential for the UMA to study the many components of the program. For a brief review of background information about the UMA, see Appendix E.

The studies have been quite diverse, exploring most of the facets of the program; those directly relating to the present study and included in this review are as follows:

Characteristics of SUN learners (first five offerings)
University of Mid-America, learner characteristics--overall summary
An examination of goals of potential and actual UMA/SUN learners
Evaluation of a variety of television lesson formats for potential adult learners in an open university system

Learner responses to the use of television in UMA courses
Employment of an open learning course with traditional and nontraditional learners

Analysis of the Cultural History field test data
Course evaluation report, Accounting I--first and second offering, SUN/UMA

Introductory Psychology--first and second offerings
The Consumer Experience (first offering) course evaluation report Characteristics of SUN learners (first five offerings) The first courses were offered through the State University of Nebraska delivery system in October of 1974. Included in this report are the characteristics of students enrolled over a two and one-half year period and in 15 courses. The courses include Accounting I, Accounting II, Adams Chronicles,American

Economy, Anyone for Tennyson?, Classic Theatre, Consumer Experience, Freehand Sketching, Fundamentals of Computer Science (Making it Count), History of Nebraska, Home Gardner, Introductory Psychology, Learning Disabilities, Psychology II, and Writing for a Reason.

Sources of information for the study consisted of two primary sources: the registration form and the Student Information Questionnaire. The registration form was filled out once for each offering by every learner and contained very basic demographic data such as age and sex. The questionnaire was an extensive five-page document that was sent to each student and was returned by 61 percent of the learners. It covered general information, previous education, work experience, use of leisure time, sesources available for study, student goals, and public relations information.

Since the registration form was filled out by virtually all of the students who enrolled in SUN, the basic demographic information covered by this form is accurate. The information based on the student information questionnaires is not quite as reliable since only 61 percent returned these questionnaires. Analysis indicates there was little difference between those who did not and those who did return the questionnaires, however, a slightly greater proportion of women than men filled out and returned these questionnaires.

Based on the returned questionnaires, the general demographic profile of SUN learners did not change greatly from the first to the fifth offering of courses. A summarized profile is as follows:

Average age was 37 years, 75 percent women, median income, \$11,000 (1974-1976 incomes), percent who lived on farms, ranches, small towns, and cities were comparable to the general population pattern, and about half of
the learners had taken some college courses and half had not. Also, about 50 percent of the learners had not participated in a formal educational experience during the five years previous to enrollment in the SUN program. The most important reasons for enrolling included career improvement and personal satisfaction goals, and approximately two-thirds of all enrollees hoped to eventually obtain an academic degree at the undergraduate or graduate level.

The type of course offered tended to attract students with different types of background and goals. In the fifth offering, the course Home Gardner was included, and it accounted for 30 percent of the total enrollments. The people taking the Home Gardner course were older (average of 42 years) and much more interested in personal satisfaction goals than most SUN students. This seems to be a trend, thus, the balance between personal satisfaction and career improvement goals may be changing.

There is a group of students who re-enroll, and these students must find that the courses serve their needs to some degree. There are some noticeable differences in the demographic profiles for this group. They are older and more apt to live on a farm or ranch. They also have less formal education and have been out of school longer than one-time SUN learners. In addition, more re-enrollees aspire to either associate of arts or bachelor's degrees.

On the basis of the findings to date (in the SUN program), Bryan and Forman (1977) state that the less educated adult may prefer an open learning type program due to a lower academic self-concept. The open learning program allows them to test their academic abilities in a relatively private and nonthreatening context (Bryan and Forman, 1977).

University of Mid-America, Iearner characteristics-overall summary A synthesis of the studies relating to the kinds of people enrolling in the courses offered through the University of Mid-America resulted in the following conclusions:

1. Women represent 75 percent of the learners.
2. Three of every four learners are married.
3. About 40 percent have young children at home.
4. Ages range from teens to 80 s with 37 as the median age.
5. About 10 to 15 percent are college graduates.
6. About 25 percent have completed at least one to three years of college study.
7. About 4 percent have not completed high school.
8. Half said they had no formal education experiences within the past five years.
9. Two-thirds said they hoped to gain a degree of some kind eventually.
10. In the first offering of SUN courses, 36 percent called themselves homemakers, but by the third offering a year later, only 23 percent identified themselves as homemakers.
11. Income was from $\$ 1,000$ to $\$ 40,000$ a year with a median of $\$ 10,000$.
12. By mid-1976, more than half ( 57 percent) of all students originally enrolled for credit completed their work. Of these 98 percent received a passing grade.

The data show that learner characteristics are remarkably similar from state to state in the UMA region (Wall, 1977).

An examination of goals of potential and actual UMA/SUN learners Three market surveys of midwestern populations were conducted early in the development of SUN. The first market survey was designed to portray characteristics of potential students for a multi-media off-campus approach to college education. Phone surveys, mailed questionnaires, and personal questionnaires were used to gather information from high school juniors and seniors, as well as adults throughout the state of Nebraska.

The second survey was of six geographic areas of the country: Nebraska, Iowa, Kansas, Missouri, Baltimore, and Portland. Mail questionnaires were used and homemakers, husbands, and children were included. Respondents were asked to consider involvement in three different kinds of educational programs: adult education, college correspondence, and SUN.

The third survey was conducted in five cities in the midwest: Omaha, Madison, Colorado Springs, Fort Wayne, and Peoria. An interview technique was used, and 1,250 interviews were conducted with adult residents in these cities. It focused on both general attitudes toward education and schooling and specific attitudes toward a SUN-1ike educational program.

The surveys were in agreement that there is a potential audience for a SUN-like program, although the actual size of that audience and of its actual participation could not be determined with much accuracy. It seems that many people are interested in learning to improve their own minds and are not too concerned about obtaining a college degree--yet most indicated a desire to obtain college credit for their work.

There was agreement as to courses in which people seemed to be interested, and these included Accounting I and Introductory Psychology. However, it was not clear just what the people meant when they said they
wanted these courses, that is, did they have a clear understanding of the content of these specific courses. Also, the surveys did not give much insight into the importance of these academic courses relative to nonacademic kinds of educational experiences, such as a course in investing or gardening.

In the 1974 market survey, there was an attempt to learn about the goals of UMA/SUN's potential Nebraska audience. Names of about 1,600 persons were selected randomly from all telephone books in the state, and each one was mailed one of three different questionnaires. A total of 156 persons responded or about 50 persons for each form of the questionnaire.

Due to the telephone book method of selecting names, many more men than women were selected and responded. Also a higher rate of middle-aged and better educated persons was selected than is found in the state.

The first choice for what they wanted to learn was some type of course that would help them to advance economically. The answer to why they would like to participate in an educational activity was "to increase my general knowledge." To the question asking how they wanted to learn, most persons responded in a fairly traditional manner. Traditional educational institutions were generally rated as being satisfactory places to learn, and most preferred a combination of directed and independent study. Evening classes were deemed most suitable, and studying "on one's own" was least suitable. When asked to rate educational media based on preference as a learning source the order was: lecture, book, television, booklet, tape or records, and radio. It is interesting that the only exception to the traditional was the rating as "satisfactory" of learning centers as a place to study by 82 percent of the sample and of the home by 65 percent of the sample. The
rating of educational media in such a typically traditional manner raised the question of why this was the case, and a need for educating the public with regard to the utility of alternative media was suggested.

About 50 percent said they would probably engage in some type of academic course work during the next five years. Deterrents were listed as lack of time and family responsibilities. They added that leisure time activities would need to be sacrificed if they elected to take courses (Eggert, 1975).

Evaluation of a variety of television lesson formats for potential adult learners in an open university system The purpose of the study was to evaluate the relative appeal and effectiveness of several television lesson formats with adult audiences. TV lessons have essentially been televised versions of lectures with the blackboard and chalk rather than instructional television. The question was, could lesson formats that were entertaining and fun as well as instructional be used at the college level for adults with success.

Subjects included 154 individuals ranging in ages from 17 to 58. These were volunteers and people who had expressed an interest in actually taking a college course through an open learning system.

Four major television formats were employed. These included: 1) a story line which ran through an entire lesson, 2) a news-magazine format which dealt with different concepts in each segment, 3) a narrator on screen who was a sharer of information, and 4) an authority narrator in a highly illustrated but nonlecture style.

Mean performance on achievement tests was compared, as were ratings of usefulness and interest level. Also, in-depth interviews were conducted with each participant.

Conclusions included:

1. Learning outcomes were not influenced by the differing TV formats as much as were attitude outcomes.
2. Older adults preferred some form of on-camera authority figures more than did younger adults.
3. When the course content was intrinsically interesting to the learner, a straight-forward, low entertainment value format was preferred.
4. All learners preferred real-life settings, positive themes, documentary approaches, and some identification of instructional goals.
5. In many instances, the subjects learned more than they thought they had, and some had difficulty accepting the fact that they could learn and enjoy the activity at the same time.
6. Younger adult learners were generally more responsive to subtle instructional formats than older adults, but there was enough variation in both groups for a substantial amount of overlap.

An interesting result was that the more serious-minded student did not appreciate the lighter, novel instructional approaches in Accounting. Less serious students seemed to accept this better. Also, some had difficulty in what seemed to them an incongruency between enjoyment and learning.

The Psychology segments which demonstrated actual experiments were positively received as well as being highly memorable.

The overall results raised the question of whether it was advisable to include entertainment per se as a part of a format for learners who are highly motivated to learn college level material. There was general agreement, however, that the general approach used in the television programs was in the right direction. Young adults and the "current students" used in the tests were highly supportive of efforts to employ formats other than the "lecturing professor" (Brown, Cavert, Craig, and Snodgrass, 1973).

Learner responses to the use of television in UMA courses Since television is one of the newer course components in learning-at-a-distance education, student reaction is of importance for future plans for the overall program. Data relating to learner responses to television in the UMA courses were gathered from a variety of sources and related to the first two offerings of Accounting I, Introductory Psychology, and one offering each for Consumer Experience and Making it Count. General findings included:

1. A large majority of learners considered the television programs of a course to be helpful to very helpful.
2. At least half of those completing a course perceived that the broadcast television component served an important pacing function for them.
3. Course completers generally rank the television component as less important in their study than other principal components in the course.
4. Learners tend to respond positively to the television programs of courses in which the role of television is perceived as

> principally that of presenting material clearly related to explicit course objectives.
5. Learners tend to respond negatively to those aspects of the television programs of a course that are perceived as having exclusively an entertainment function.
6. Learners seem more satisfied with the television programs of a course when the programs present material of clear importance in the course but present it in a manner that is distinctly different from the way the material is covered in other components (Brown, 1975b).

Employment of an open learning course with traditional and nontraditional learners In 1975 there was a unique opportunity to examine the differences in the effects of the course Accounting I developed for the nontraditional students in UMA on college age students in a traditional class setting. The course was used with the television component for teaching one group of traditional students and without the television for a second group. Evaluations of the course by the traditional students were compared to the evaluations given by a group of nontraditional students enrolled at the same time.

The principal conclusion that was drawn from the study was that it is an extremely difficult and problematical task to compare the use of an open learning nontraditional course (even when developed as a college-level credit course) by its intended open learning adult audience and the traditional on-campus student. This must be considered when reviewing the findings.

This study examined the following:

1. The relative achievement and appeal effectiveness of a multi-media nontraditional course with open learning adult learners and on-campus students.
2. The achievement and appeal effects, with on-campus students, of employing or omitting the television component in the offering of a nontraditional course.
3. The relative appeal with on-campus students between a multi-media nontraditional course and a comparable traditional on-campus course.

The more important findings from the study include:

1. The achievement of nontraditional learners and on-campus students enrolled in multi-media open learning is reasonably comparable.
2. Nontraditional learners rated the open learning course overall more appealing than did on-campus students.
3. Whether the integral television component of a multi-media nontraditional course was used or not had no significant effect on either achievement or course appeal with on-campus students. (The justification for use of the television component with nontraditional students is for its pacing effect.)
4. No significant difference was detected between the appeal of a multi-media nontraditional course and the appeal of a traditional college course with two groups of comparable on-campus students (Brown, 1976).

Analysis of the Cultural History field test data Several issues were investigated relating to the Cultural History course developed by

University of Mid-America and included: the relationship of certain personal and course evaluation responses to the criterion of final test score; the interrelationship of personal, course evaluation, outcome, and learning style variables; and profiles of different learning styles. Following is a brief review of the results of each study:

1. Correlations with final test scores:

Several variables were identified as possible correlates of the final achievement test given on course content. These included: personal and educational background, factors relating to study habits, the amount of time spent on the materials, ratings of the television components and printed materials, and personality characteristics (the adjective checklist). The significant correlations included demographic and psychographic variables as Total Nelson-Denny Score ( $\mathrm{r}=.53$ ), Vocabulary Score ( $\mathrm{r}=.52$ ), Reading Comprehension ( $r=.49$ ), Age ( $r=-.26$ ), Education Level ( $r=.24$ ), and Sex ( $\mathrm{r}=.24$ ).

Nonsignificant correlation with final achievement test score included: difficulty encountered with the materials; time spent on studying course materials; evaluation of written materials; and evaluation of television programs.
2. Interrelationship of personal, course rating, outcome, and learning style variables:

A series of approximately 60 variables were entered into a correlation matrix, and several findings have emerged. These findings must be couched in tentative terms because they need to be validated in different courses for different learners. Also the number of variables were large and the sample size rather small which results in some limitations for this
statistical procedure. However, based on the limited sample size, two learner profiles emerged: one, an educated, well-read, and fairly young student, and the other, a less educated and older student.

The variables comprising learner profiles included:
Directly related:

1. The Nelson-Denny Reading Comprehension test scores
2. Education level and the number of books read
3. Various personality characteristics such as self-confidence, achievement, autonomy, order, and dominance (as defined by the Adjective Checklist test)

Indirectly related:

1. Age
2. Recency of educational experience

Differences between learner profiles included:
The younger, more educated group of learners:

1. Rated the television programs lower
2. Did not enjoy the television programs as much
3. Rated the print materials higher
4. Scored higher on the final test
5. Had better study skills
6. Did not have as much difficulty with the study materials
7. Wanted fewer guidelines on what to study each day
8. Learning styles: It was found that the field test participants were a very diverse group in their interests and abilities. They were especially diverse in their preferences of learning styles which included:
1) preferences for types of student activities, 2) structure in instructional materials, and 3) guidelines on what to study.

Findings included: Learners with more education and who read frequently do not need as much structure and guidelines; older people in general (regardless of educational level) preferred more specific guidelines about what to study each day, however, certain types of learning aids, such as preview questions before readings, did not seem to be favored by older learners. The older people also seemed to prefer independent study experiences to the classroom educational experience.

In relation to learning sources and activities, it was found that:

1. Learning preference for television: younger people and people with less education rate it very useful as a source of information.
2. Learning preference for textbooks: adults who read more often and have a higher Nelson-Denny score rate this high.
3. Learning preference for lectures: older learners and those with a lower vocabulary rate it higher than others, also those who prefer more specific guidelines.
4. Learning preference for novels and personal accounts: younger and more educated learners rate these higher than other learners.
5. Learning preference for writing out answers to questions on reading: younger and less educated rate this higher than older and/or more educated.
6. Learning preference for multiple-choice review questions on reading: learners with less formal education and lower vocabulary test scores prefer multiple-choice review questions.
7. Learning preferences for an activity which applies knowledge gained in reading: learners with more education rate this higher and older learners find this useful (Forman, 1975).

Course evaluation report, Accounting I--first and second offering, SUN/UMA The intent of the report was to provide interested audiences with a summary of data gathered during the first and second offerings of the course. Since the results of the data were very similar and since the second offering had much fewer enrollees, the most meaningful data are a comparison of the effect of the second offering data on conclusions from the first offering.

Over 440 persons enrolled in the first offering, two-thirds on a "for credit" basis. The average age of enrollees was 40 , and the majority were female, married, and with little or no college experience. A total of 132 enrolled for the second offering, 84 percent for credit. The second offering learners were somewhat younger, a higher percentage were males, a higher proportion were nonmarried, had more education on the average, and included a smaller proportion of those classifying themselves as "homemakers."

In the first offering, 57 percent returned the questionnaires and 67 percent in the second offering.

The additional findings include:
Enrollees in both the first and second offerings were generally wellsatisfied with the overall course.

The conclusion relating to expectations of completing the course was that the enrollees in both offerings could be expected to complete the
course if they were provided with sufficient time to do so, and contact was maintained with enrollees through the delivery system.

Slightly over 50 percent stated that more tests should be included on which grades were based. There was general agreement among the completers that the test length, difficulty level, and fairness in terms of content covered were satisfactory.

Based on the scores gained in the examinations, it was concluded that nontraditional adults enrolling in college level courses can attain satisfactory levels of achievement.

The adult enrollees in the two offerings of Accounting I responded most positively to course media components that provided considerable content density with a minimum of elements perceived as noninstructional or merely entertaining.

A lack of teacher contact was a major problem, and 61 percent said they needed specific help. The need for delivery systems to ensure maintenance of contacts with enrollees was reinforced through the second study. (Brown, 1975a, 1975b).

Introductory Psychology--first and second offerings The intent of the studies and reports was to provide interested audiences with a summary of data gathered during the first two offerings of Introductory Psychology.

After the initial eight-week period (after which refunds for tuition were not made), there were 267 enrolled, 83 percent for credit. By the end of an extended period beyond the course completion date, 64 percent had completed the course, 6 percent were still trying, and 29 percent had changed to noncredit status. In the second delivery, there were 96 enrolled, 81 percent for credit and the remaining 19 percent for noncredit.

At the end of the course, 45 percent had completed the course, 33 percent were still trying, and 22 percent had changed to noncredit. It is interesting that 90 percent of the credit enrollees who remained during the first delivery had completed all five exams within 11 months after starting the course.

Nineteen of the 25 learners ( 76 percent) of all who completed the second delivery and 75 of the 107 ( 70 percent) of all who completed the first delivery of Introductory Psychology returned the end-of-course evaluation form. The following conclusions were based on that data:

For both deliveries, the overall course ratings were excellent or good for 98 percent, and 84 percent of the second offering and 68 percent of the first offering felt the course was very interesting.

The population that enrolled was very heterogeneous, the median age for the first delivery was 39 years and the second was 34 years. They tended to lack recent formal educational experience and had serious doubts about academic and learning abilities.

The study guide seemed adequate for guiding learners through the units in the course.

The television programs were generally criticized for their lack of overlap with the text material, however, they found them to be informative and pleasurable. Also, the external pacing of the broadcast schedule was an important element for some learner's progress in the course.

The newspaper component was neither highly endorsed or criticized, and many learners found it worthwhile.

The trial tests received outstanding support for their value in preparing learners for the graded exams.

Many learners desired more information about the recommended readings, pronunciation of key terms, and explanation of key concepts by the course faculty.

Based on all original credit enrollees, after the initial eight-week period (during which time enrollees could drop and receive a refund), the completion rates by the nominal ending date of the course were just under 50 percent. When the time was extended an additional five months, the rate was 64 percent.

An "excellent" course rating was found to be highly and positively correlated with learner rating of 1) course interest level, 2) quality of course exams, 3) likelihood to enroll in another SUN course, 4) increase in confidence as a result of the course, and 5) extent of accomplishing personal goals.

Personal goals were fulfilled by 92 percent of respondents, and 72 percent reported an increase in confidence in their own ability as a result of taking the course (Se11, 1975, 1976).

The Consumer Experience (first offering) course evaluation report Thirty-nine learners (52 percent) completed a Student Information Questionnaire sent to all enrolled learners upon receipt of their registration forms at SUN. An analysis of the returned questionnaires revealed that of the 39 students, the majority were between 25 and 35 years of age, married with young children, and were distributed across the state in approximately the distribution of the population and within access of a SUN learning center. Most were relatively well-educated with previous college experience and had participated in a formal educational experience within the last five years. Those who completed the questionnaire were enrolled for
credit, however, many enrolled for credit did not return the questionnaire.

In addition to the Student Information Questionnaire, 31 learners (70 percent) who completed the course returned an end-of-course evaluation form. Most found the course very acceptable, with few complaints, and 97 percent felt they would recommend the course to a friend. However, 23 percent would have preferred more examinations, and 39 percent indicated they would have liked a means of having course work other than the multiplechoice exams contribute to their grade. Only 26 percent felt the need for course-related assistance and did get the help they needed. Twenty-seven percent made use of the learning centers, and 37 percent used the toll free telephone.

Two factors were mentioned by 25 percent of the learners as presenting course related difficulty: domestic interruptions and demands and a lack of self-discipline in getting down to regular work.

The students rated the television programs, the Student Learning Guide, and the text PLAID, in that order, as the most helpful learning resources in the course.

The course Consumer Experience tended to attract a smaller, better educated group of enrollees than did the more traditional, academic disciplines (Aversa, 1975).

## Evaluations of Courses Produced for Television

In addition to evaluations of overall programs of open learning and of the students who enroll in these programs, evaluation studies, both formal and informal, have been conducted of several of the more widely distributed
courses. The purpose of the evaluation efforts was to gain insight that would be used in production of forthcoming TV courses.

Evaluation of the English 101 telecourse, Writing for a Reason
The study had three goals: 1) to ascertain the ability of the telecourse to provide effective instruction to students; 2) to compare the effectiveness of the telecourse instruction with that of the parallel instruction offered in the classroom; and 3) to gather information about students enrolled in the telecourse and on-campus sections of English 101 in order to answer the questions: a) were the students in the telecourse and on-campus English 101 similar with regard to demographic characteristics; b) how did the student perceptions of the course components used by the two methods of instruction compare; c) how did students who withdrew from the telecourse evaluate the course; and d) what reasons did students give for withdrawal. (A smaller study similar to this study is reported on earlier in this review.)

A pre-test/post-test control group design was implemented in the spring semester of 1976 to assess changes in student writing performance and attitudes from the beginning to the end of the semester. Demographic data were collected from all the students. Questionnaires were mailed to all who withdrew in an attempt to isolate the reasons for their withdrawal and to obtain the students' impressions and evaluations of the course. End of course evaluations were obtained from all students and grade distributions for all students.

Findings: Statistically significant improvement occurred in all eight areas on which the compositions were rated for both groups of students. In
three areas the telecourse students obtained higher ratings: 1) organization of the entire paper, 2) organization of individual paragraphs, and 3) "holistic" or overall quality of the paper. In the other categories, no significant differences between groups were encountered, however, all groups made significant improvement. These categories included spelling and mechanics, diction, usage, and sentences.

Grades for the two groups were similar: average grade of the on-campus students was 2.7; the average grade of the telecourse students was 2.8 .

Drop-outs were higher for the telecourse students at 52 percent; for on-campus students it was 30 percent. A study of withdrawing students indicated that the most common reason students gave for withdrawing from the course was that they "had personal problems." Very little dissatisfaction with the telecourse was expressed. The rating for the telecourses was 3.8 on a five-point scale with five as the high point.

From the study of student attitudes, it was found that a significant improvement in writing self-concept was made by both groups. Telecourse students reported more positive feelings toward "TV Instruction" than did the control group students at the beginning and end of the semester.

End-of-semester evaluations indicated that students in both the telecourse and control group sections were enthusiastic about their English 101 class, giving high ratings to all of the course components, from 3.0 to 3.7 on a four-point scale. Telecourse students rated the study guide as the most helpful aspect of the course; the control group classes found the instructor to be the most helpful component.

Some of the weaknesses of the telecourse as indicated by the students included: they felt they did not get as much individual help with their writing as they needed; they were not always able to get answers to questions when they asked them.

The demographic information collected was combined to create profiles of each student population. The typical telecourse student is married, female, about 29 years old, is employed full time, and takes classes part time. She is not working toward a degree at the Dallas County Community College District (DCCCD) but hopes eventually to transfer and receive a bachelor's degree in education. The "typical" on-campus English 101 student is an umarried male about 25 years old, working toward an associate degree at the community college, and hopes to receive a bachelor's degree in business. He is a full-time student and does not hold a full-time job (Leo, Grizzle, and Ag1er, 1976).

English 101 telecourse report: withdrawing student follow-up
The purpose of this study was to determine the reasons that students withdrew from the English 101 telecourse Writing for Reason. It was hoped that this information would help course developers and instructors better meet the needs of students enrolling in the course in future semesters.

Questionnaires were mailed to students when they dropped the course. Those who withdrew before actually beginning the course were not included in the study. Of the 191 questionnaires which were mailed, 8 were returned undeliverable. Of the 183 students who received the questionnaires, 42 responded for a response rate of 23 percent.

The most common reasons given by students for dropping the course were (in order from most to least often mentioned item):

I had personal problems
I had no time to work on the course
The course demands too much work
I became ill
I was constantly confused about what to do next in the course
The TV programs were boring
I missed some of the TV programs and couldn't catch up
I did not have the background needed for the course
The TV programs were aired at bad times
I was unable to get help when I needed it
Most of the respondents cited more than one reason which led them to drop the course. The majority of the reasons (58 percent) indicated that students were experiencing difficulties in their personal lives which led to their withdrawal from the course. The remaining reasons seemed to indicate problems students were experiencing with the course itself.

Encouraging was the fact that other data obtained by the questionnaire indicated that students' feelings about the course were positive. The average rating was 3.7 on a 5-point scale. Almost half of those who dropped indicated they had talked to and been helped by their writing consultant (Leo et al., 1976).

English 101 TV follow-up
The purpose of this study was to examine the success of the English 101 telecourse students in their English 102 course.

Of the 299 students who successfully completed the English 101 telecourse during the spring semester of 1975 , 151 students subsequently enrolled in English 102 during the summer or fall semesters of that year. When final grades in English 102 were compared for students who had taken English 101 by telecourse with students who had taken English 101 on campus, there was no difference. The percent of successful students was 85 percent in both cases. The results of this study supported the hypothesis that the English 101 telecourse prepares students for English 102 as well as on-campus English 101 courses (Leo et al., 1976).

Nationwide study of the course Classic Theatre--The Humanities in Drama
A grant from the National Endowment for the Humanities made this study possible. The purpose of the study was to answer questions in which educators and broadcasters across the country have been interested, including: Who take the national television courses such as Classic Theatre: The Humanities in Drama, The Adams Chronicles, and The Ascent of Man. Are the students similar to on-campus learners? Do they vary from course to course and region to region? Are there optimal broadcasting times? Do the students need and want repeats of programs and local broadcasting supplements? What kind of campus services such as meetings with the faculty and other students do these students want and need? How can colleges and stations cooperate to inform potential students of this new educational venture?

The study focused on the students, teachers, and administrators who were connected with the course and was conducted during the winter and spring of 1976 following the first showing of the series. In conducting the study, a first step was to send out questionnaires to all institutions
that offered the course. Over 200 institutions offered a credit course, and $12,000-15,000$ took it nationwide. There was a 50 percent response rate from the schools, and of these 24 were chosen. Of the $12,000-15,000$ enrolled in the course, 5,500 students took the course from a two-year institution.

Questionnaires were mailed to 1,700 students enrolled in the course in the 24 institutions chosen for the study. A return of 30 percent or 558 questionnaires was considered fairly good, and of these returns, three of five students were enrolled in the 14 two-year colleges and the others were from the ten four-year institutions. Of the students who returned the questionnaires, 88 percent indicated they had finished the course which would build in a bias since these students were more likely to find it interesting, not too difficult, and find that it was offered at a convenient (to them) viewing time.

The attitude of the participating institutions toward the utilization of course materials and prescribed format was positive; however, the faculty in the two-year institutions gave some criticism of the level of difficulty for two-year college students. Almost without exception the faculty considered television to be an effective mode of delivery of humanities materials to the public.

Apart from the materials, the concern faculty had was for the need for more interaction with students. There was a great difference in the way the course was offered from one institution to another. There was also little uniformity in standards for the amount of reading, amount of required classroom attendance, or the level of difficulty of test questions,
even when limiting consideration only to a given level of credit, or number of credit hours awarded for participation in the course.

The response to the course by students and extent to which the course reached a population not previously involved in higher education was a second area of exploration in the study. The students' response was generally approving and often enthusiastic. A majority of students indicated:

1) that they had never taken a drama or literature course before and that they intended to take more in the future; 2) that they had never taken a television course before and that they would be receptive to taking more in the future; 3) that they would recommend the Classic Theatre course to family and friends should it be offered again in the future; and 4) that their reading, television viewing, and entertainment habits had all been influenced by the experience of the Classic Theatre course.

Response to the reduced classroom attendance was ambivalent: They missed it, wished it were possible to have more interaction with faculty and other students, yet the convenience of the independent study-at-home format was a significant influence in their decision to take the course.

The average age of the two- and four-year students combined was 36 years. Over 50 percent of the students were between the ages of 26 and 45 . More than three-fourths were women, and 75 percent of the students were employed full time. An additional 17.7 percent were employed on a parttime basis. Only about 11 percent classified themselves as students. Also, nearly one-fourth of the two-year college students and one-half of the four-year college students had completed more than four years of college education prior to enrolling in the Classic Theatre course. Nearly three-quarters of the enrollees aspired to a higher degree.

The "typical" student enrolling in the Classic Theatre course was a woman employed outside the home taking the course as a part-time enrollee in a local institution, encouraged to enroll by the convenience of televised instruction and the need for enrichment-learning-as much for personal growth as for the practical value of the credits earned. "This audience has come to be known as the 'continuing education' audience, and constitutes the most rapidly growing segment of the current national higher education clientele" (Purdy, 1976, p. 113).

The researchers report that there is a significant opportunity for local faculty and administrative input which should largely counteract the "not invented here" syndrome which has been heard. Also, a significant potential advantage, suggest the researchers, is that this kind of programming can allow faculty to be free of many of the traditional burdens of presentation in favor of many other kinds of creative involvement and interaction with students. They conclude that their findings indicate that the national television course is an important development in higher education in terms of both curriculum development and educational delivery and should receive increased attention by policy-makers and researchers alike (Purdy, 1976; Purdy and Icenogle, 1976).

The Adams Chronicles (Coast Community College District, 1976)
The Adams Chronicles is an American series adapted for education and one in which the producers cooperated with those designing the course even before the shows went into production. It has been called by some a major breakthrough in the growing effort to make colleges adapt to the technological revolution (Brown, 1976).

It was first offered in the spring of 1976 and of the regular weekly audience of more than four million viewers, 45,000 were students in collegelevel programs offered by 305 institutions around the country. Most were taking the course for credit. Additional thousands watched regularly for continuing education discussion groups or for high school classes.

Instructors responsible for the classes planned varied formats, for example, Dr. Frank Cavaioli, an instructor at State University of New York in Farmingdale, met with the enrolled students about once a month for discussions. A student stated that in these seminars points were raised and observations made that escaped her while she was watching television. Tuition at Farmingdale was $\$ 67.00$ for the course. Required in addition to the TV component and seminars (both of which were optional) were reading assignments, a mid-term and final exams, and a book report on books similar to, for example, The Education of Henry Adams. There was a hotline service to the instructor that either the instructor or students could use as frequently as they believed necessary.

Prof. Kevin Sullivan of Bergen Community College in Paramus, New Jersey, stated that he designed an independent study course for 50 students his own way, modifying the basic blueprint for the course. He held optimal on-campus seminars every second week for two hours, and these drew around 80 percent of the students enrolled. Students also discussed the materials with him by telephone. Drop-outs were few. The tuition was $\$ 45.00$ for a three-hour credit course.

Most students contacted through a spot check conducted by The New York Times appreciated the television series as a way to encourage study. Some reported that students who had tried conventional television courses and
had lost interest in that form of teaching were more than satisfied with the televised Chronicles as a substitute for a lecture. (In many television courses, the television portion consists of the professor giving a lecture as he would in a class on campus.) At most schools, the curriculum called for at least two required texts, a mid-term and a final exam, and, usually, a term paper and/or book reports.

Additional informal feedback on the initial success of the course, The Adams Chronicles, was gained from the colleges that offered it in the spring of 1976. Coast Community College in Costa Mesa, California, the institution which produced The Adams Chronicles, with the aid of several grants (at a cost of $\$ 5.2$ million) secured another grant which enabled them to distribute the course free of charge to colleges that wished to use it. In return for this free usage, they requested information from each participating college regarding enrollment, promotion, and form of offering of the course. Coastline Community College chose ten replies from the many colleges that responded, and a summary of five typical replies follows:

Bakersfield College, Bakersfield, California, total enrollment 11,000 Enrollment in course 1,715 Sent brochures to all previous television students and advertised in local newspaper. Gave three units of college credit, aired it three times a week, had excellent evaluations from students. E1 Camino College, Via Torrance, California, total enrollment 25,904 Enrollment in course 407 Newspaper advertisement was most effective in gaining enrollment. Gave two units of college credit and aired it on two stations.

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Kingsborough Community College of The City University of New York, Brooklyn, New York, total enrollment 6,056 Enrollment in course 240 Attributed enrollment to extensive mailings in the community, also used newspaper.
Brief and easy registration they believed aided enrollment. Gave three units of credit
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Mercer County Community College, Trenton, New Jersey, total enrollment 1,792

Enrollment in course 76
Promotion was multiple, but they reported word of mouth was best. Of the 75 enrolled, 20 were faculty members.

Offered for three units of credit or audit, aired four times a week on six channels.

San Bernardino Valley College, total enrollment 15,226
Enrollment in course 668
Promotion through extensive radio and television and distribution of 33,000 brochures. The brochures were particularly effective. Gave three units of college credit and aired it on two channels three times a week.

Included a captioned program for those with hearing impairments.

Dr. Gary Goldsberry, director of distribution for Coast Community College and one of the organizers of the course, believes the acceptance of the Chronicles package was a major breakthrough in the growing effort to make college adapt to the technological revolution. He stated that there is still a lot of resistance to the idea of using television as a key
component in teaching and that when it is rejected, it is not for the content but for the method. Many schools, he adds, are still afraid of TV. We are, after all, asking teachers to change their roles and the schools to change their idea of the classroom. He concludes that all of this could have been done years ago, but it wasn't done because schools were myopic, (Brown, 1976; Goldsberry, 1976).

Conclusion, Part I
This first part of the Review of Literature included a rationale and definitions of the Open Learning approach, descriptions and studies of selected open-learning programs in the United States and abroad, and national studies of courses produced and used in open-learning programs. Open Learning is a new concept in education and consequently most studies were designed to find ways to improve and expand the innovative programs.

In the majority of programs in the United States and abroad, decisions pertaining to directions of the program were based on the needs of potential students in the particular area the programs were designed to serve. For this reason, the course offerings have been predominantly conventional and career oriented since the needs assessment studies often showed an interest in these type courses. Enrollment records have also shown success in these areas. There is beginning to be a change, however, and courses relating to topics such as home gardening, family relationships, and consumerism are being added with great success.

The Open Learning programs were similar in that the concept of teach-ing-at-a-distance was central to all programs. Television was used extensively, and most concluded its main contribution was that of pacing the
student. Completion rates for Open Learning programs have been considerably higher than completion rates in correspondence courses. Additional materials were supplied in all Open Learning courses, and these generally consisted of a text, study guides, cassettes, sample tests, and occasionally newspaper articles which were printed in a local paper or included in the course materials. The nature of the course generally influenced the type of supplementary materials provided. Radio is being used with increasing success, and in some areas it is used exclusively since the use of television is not feasible.

The degree of personal contact varied considerably and tended to change as the need for more or less contact became evident in any one situation. In some areas, or courses within areas, introductory cassettes were made for each course. In this cassette the instructors were introduced, and they explained the format to be followed and gave some background information about themselves and the course. Friendliness was emphasized, and the students were cordially invited to contact them by telephone whenever they needed assistance or just to discuss points of interest pertaining to the course. Calls just to get acquainted were even encouraged. In some areas the telephone was used extensively. The learning center had many and varied functions from counseling to student assistance. In other areas it was used just for the administration of tests.

The privilege of "studying at home" was considered so important in some programs that seminars requiring students to travel to some central location were discouraged; in other areas seminars were an integral part of the whole program, and some met as often as once a week. The geographical
restraints of some areas governed these decisions--in others, the circumstances of the student were given most weight.

Scope of programs differed widely--some offered a selection of courses large enough to enable a student to complete a two-year degree over a period of time. Other programs had very limited offerings and were meant to be used as supplements to other programs if a student was pursuing a degree. In general, the older the program the more extensive the course offerings.

The student population in most programs changed gradually over time. Of the initial students interested in taking courses, two general groups often predominated: individuals with some college and teachers interested in taking courses that could be applied toward renewal of certificates. Men and women interested in upgrading or acquiring vocational skills also were among the first enrollees. Over a period of time, the programs seemed to attract an increasing number of individuals interested in learning just for the excitement of acquiring new knowledge and broadening their scope of interests. Homebound women tend to increase in numbers, and these are the students who often become repeaters.

Many of the programs to date have been descriptive and oriented toward basic demographic data. Since in Open Learning programs the learning experience is planned and designed in terms of the needs of the individual learner and the circumstances in which that learner happens to be, rather than in terms of a structured situation into which that learner must come in order to avail himself of the benefits of education, these studies are necessary. However, as Rowe (1975) suggests, there is a need to go further than this.

Persistence vs. Drop-out
To complete the Review of Literature for this study, it was considered necessary to include a review of persistence vs. drop-out in adult education programs. Not all adults plan to complete or value the completion of an adult education program whether or not college credit could be gained through completion. Persistence, however, is generally valued by organizations sponsoring the course and is often used as a measure of success. Knowledge of situations and student characteristics relating to persistence are important in evaluating the success of a course based on percent of completions. This review includes:

Persistence vs. drop-out
Introduction
Goals as motivating factor
Adult life cycle as a factor
Life change as a factor
Characteristics as factors
Personality characteristics
Demographic and other characteristics
Summary

## Introduction

Adult educators have viewed drop-out as a problem through the years. As early as 1816 Pole encouraged the instructors of adult classes to visit the homes of absent students to prevent the learners from "relaxing their attendance" (Pole, 1967), and Hallenbeck (1965) describes it as the "old story." In a recent study, 40 percent of the adult education teachers
surveyed reported a student attrition rate of 10 to 24 percent during the first five weeks of their classes (Mezirow, Darkenwald, and Knox, 1975). Another 17 percent reported the drop-out rate was in the 25 percent to 49 percent range. John Niemi (1976) has called attrition one of the severest problems confronting adult education. One result of excessive attrition is loss of resource allocation which, unfortunately, is often related to attendance patterns. Also, due to the present attitudes toward attrition, group morale is lowered as teachers and program directors confront withdrawals.

In the study of drop-outs, the assumption has been made that dropping out was in some way an adverse reflection of the course or program and that, conversely, persistence is necessarily good and is to be expected to the completion of the course in which a student is enrolled and possibly continued re-enrollment in the program. In a study of a California Community College, Knoell and others (1976) made the observations:

As the study progressed, it became apparent that the questions were based on two somewhat invalid assumptions. The first is that persistence is necessarily good and to be expected from semester to semester, and from year to year, in curricula leading to degrees and certificates and/or transfer. The assumption ignores the increasing majority of Community College students who are enrolled in programs of continuing education of their own design, whose objectives are achieved in nontraditional patterns of enrollment. The second invalid assumption involves an expectation that Community College students are employed only after completing (or dropping out of) occupational and transfer programs. It ignores the growing number of students who are employed adults and women whose family responsibilities will keep them out of the job market for a time, and who are enrolled in courses (not curricula) for various educational, occupational, and personal reasons (Knoe11, 1976, p. 26).

Kohen (1976) cites additional problems commonly found in research relating to drop-outs of college students which also have application for adult open
university students. One of the problems is failure to distinguish between "permanent" and "temporary" withdrawals. He states:

At the conceptual level, the researcher must deal with the ambiguity of what constitutes permanent withdrawal--especially in view of the recent trends toward lifelong learning and recurrent education. Virtually any time span of nonattendance after which a dropout is defined as permanent is open to challenge. At the empirical level, difficulty in distinguishing temporary from permanent drop-outs is compounded by data limitations (p. 6).

Another issue is definitional--i.e., "drop-out" means different things to different people. For example, few researchers have distinguished between "drop-outs" and "push-outs"--i.e., between voluntary and involuntary withdrawal. The distinction is ambiguous, even theoretically, when one considers that a student doing acceptable academic work may be "forced" to discontinue his/her schooling by a lack of funds to cover the necessary expenses incurred by attendance, or in the case of an adult, at-home student, the situations in her immediate environment might necessitate her "going back to work" or assuming another job in addition to work in which she/he was already employed which would demand the time that had been designated for study. In addition, research that employs self-reported reasons for discontinuation may well be faulted for excessive reliance on data whose reliability is at least open to question. It is the tendency of an individual to "save face" when giving reasons, and the true reasons may relate to lack of finances, lack of ability, lack of self-discipline in relation to study and submitting assignments, and as many other reasons (depending on the imagination and the self-concept of the individuals) as they feel are important to them. Each individual would make these judgments based on his frame of reference (Edwards, 1957; Snygg and Combs,

1949; Cronbach, 1970; Crowne and Stephens, 1961; Shavelson, Hubner, and Stanton, 1976); Combs, Blume, Newman, and Wass, 1974).

The drop-out phenomenon, consequently, is very complex. Factors include the individual's goals and strength of his motivation, based on his goals, when balanced against other forces. His ability to persist is also affected by his characteristics, including his abilities relating to academic success, vocational interests in relation to the content of the course in which he is enrolled, and other personality variables as cognitive styles and his self-concept. These are also affected by his life stage, and in turn, this affects the type and number of external forces with which he may be forced to cope. Variables encountered by the student relating to the course as interest level, content, and difficulty also affect the student's decision to continue or to drop out. There is limited research relating to the various contributing causes for drop-out, and a brief review follows. This is in addition to the references to drop-out in the previous studies reviewed.

## Goals as motivating factor

Leaders in adult education have emphasized the necessity of including the learner in program planning activities to help meet his needs, expectations, and educational goals (Boyle, 1958; Knowles, 1967, 1974; Moore, 1969). Moore contends that the more a teacher can learn about the typical adult student's educational and life goals, the more effective he may become in meeting student classroom expectations. Teachers reluctant to provide opportunities for exploring expectations and goals may extend, unwittingly, an invitation to become potential drop-outs to weakly
motivated students with low personal investment in their educational activities. Conversely, providing the opportunity to examine personal goals and expectations yields a strong reinforcement that helps to clarify the student's goals and reasons for enrolling and may strengthen his motivation, which in turn would probably help him to complete the course or program.

A theoretical framework for analyzing and predicting adult participative behaviors has been provided by Douglas (1970) who identified six motivational based models of participation. These models are based on a Needs-Social System-Satisfaction construct.

To some people, personal satisfaction through growth is so very necessary that they actually seek avenues of disrupting their comfortable state of equilibrium because it eventuates in a higher level of personal growth and accomplishment (Boshier, 1971).

In a Los Angeles Community College study, 1,474 students who withdrew during the spring, 1975, spring, 1974, and spring, 1972, semesters and who completed the exit questionnaire stated that they were generally not certain about their future educational plans, and compared to the other students who did not withdraw, the lack of plans in the withdrawing group was considerable (Stine, 1976).

Londoner (1972a) investigated the reasons why adults drop out by comparing their initial reason for enrolling in adult education with those who completed the program. It was predicted that perseverers and nonperseverers had different goals and reasons for enrolling in education and that the strength of the goals were mainly responsible for perseverance or nonperseverance behaviors. At the end of the semester, the records showed that 19 percent of the students had left the program, and these were the
students that had been classified as "nonperseverers" and their goal statements and reasons for enrolling were different than those of the persisters. In the research design, a questionnaire was developed from the findings on adult participation. A pool of participation items was generated and, by definition, each item was classified according to Parsons' external or internal instrumental preferences. Students were asked to rate the items using a four-point scale. Nonpersisters rated the items that related to internal reasons higher, and persisters rated the external items higher. It was discovered that there was a definite shift in importance among educational goals since perseverance and the externally oriented goals were positively related. As age, marital status, employment, and income increased, the importance of the external goals increased, and also the individual was more likely to persist in his adult education course or program. That is, among perseverers there is a decided shift to specific tangible goals achievable through adult education; in fact, age and marital status act as pivotal linkages from an internal to an external reference. Londoner suggested that possibly the greater the personal responsibilities vested upon the adult learner through his changing social roles, the more likely he is to complete his educational program. This generalization is consistent with the findings reported by Dickenson and Verner (1967) and is also consistent with the theory of life stages (Sheehy, 1976; Gould, 1972). In a later research project, Londoner (1972b) found that teachers of adults and the adult students identified the goals of the students correctly for both the persisters and the drop-outs. There were some isolated instances of discrepancies in the way the students rated the reasons for enrolling and the teacher ranked the reasons for the students'
participation. In the case of the nonpersisters, the teachers ranked the reason "To Gain Prestige with One's Friends" as an important reason for enrolling. The drop-outs ranked it much lower than did the teacher. From the drop-out's view of this "reason" for enrolling, it may be concluded that he would probably not feel it important to finish the course to impress friends--that finishing the course was probably not of high priority and dropping out was not to be viewed as an undesirable act. To substantiate this finding, Boshier (1972) found that an adult education student who would rate a "persistent" adult education student as more worthy than a "drop-out" adult education student would in turn be less inclined to drop out of class than persons who regard drop-outs in the same or more positive light as persisters. Boshier's findings were based on the use of a Drop-out Prediction Scale (DPS) which he developed. It is an attitudinal scale on which respondents are asked to evaluate certain behaviors in an adult educational environment. Boshier also concluded that noncourse reasons for drop-out behavior are often used as a rationale for dropping out because of course related reasons. He advocates behavior modification techniques to contain drop-out rates. In 1973 Boshier viewed drop-outs as "an extension of a nonparticipant" with the characteristics of one associated with the other and developed a model which asserted that the congruence of the internal psychological determinant of an adult student and his educational environment determine drop-out/persistence behavior (Boshier, 1973, p. 260).

In a study by Cassara (1970), it was possible to predict correctly three drop-outs and four graduates out of ten admissions selected at random in the Goddard College Adult Degree Program by applying predictor
variables in the socio-economic, value, and goal orientations toward pro-fessional careers and self-actualization.

Motivation in the form of a pay check was a factor in persistence in the Ulmer and Verner study (1963). They compared the rate of discontinuance of adults in an academic program at Meridian Mississippi Junior College on the following statistically identifiable variables: age, sex, marital status, course load, veteran nonveteran status, completion of prior semester, and distance traveled to the institution. All adults used in the Ulmer and Verner research were enrolled in an evening adult credit program leading to the Associate in Arts degree. All were registered in regular freshman and sophomore level courses which met three evenings a week. During the four academic years selected for the study, the enrollment in the evening program totaled 1,200 students. Of this, 315 discontinued. A significantly lower rate of discontinuance was established for veteran students than nonveterans. Since veterans received financial assistance from the U.S. government which was withdrawn if studies were discontinued, the authors point out that this motivational incentive might have been important. Also, a significantly lower rate of discontinuance was found for students admitted on the basis of General Educational Development test than for students who were high school graduates. The authors note that since GED (General Educational Development) students tended also to be veterans, this factor, rather than the basis of admission, might have been the more important influence in their lower rate of discontinuance, that is, the financial assistance was the motivating factor.

An interesting theory is suggested by Boshier (1971) who questions Houle's three-factor typology which suggests that adult education
participants can be typed as goal oriented, learning orienced, or activity oriented (Houle, 1961). Boshier suggests that all participants are goal oriented and emphasizes the fact that their goal is related to the extent to which they have satisfied the lower order needs on Maslow's hierarchy. In a subsequent paper, Boshier (1973) suggests that deficiency motivation is related to intra-self incongruence, self/other incongruence (in the adult education environment), and drop-out. He expresses the notion that growth or life-space oriented people participate in adult education for "expression" rather than in an attempt to "cope" with some aspect of their life. Life-chance oriented people participate because of the need to survive and acquire utilitarian knowledge, aittitudes or skills (which are usually psychological or vocational), and are largely attempting to satisfy the lower-order needs on Maslow's hierarchy; life-space motivated participants have largely satisfied the lower-order needs and are primarily enrolled to expand their life-space (growth-motivation). Boshier contends that life-chance and life-space motivation are opposite ends of a single continuum and that this continuum is a "psychological" dimension which underlies reasons for participation.

This theory has important "prediction" connotations. The amount of motivation that has life-chance and life-space origins changes as persons increase in age and accomplish developmental tasks appropriate to their cultural and social situation. Psychological differences between lifechance and life-space participants also have important implications for predicting continuity of enrollment and participation patterns over several years.

> In the growth-motivated self-actualizing person, impulses are desired and welcomed rather than rejected or feared. Gratification increases motivation . . instead of wanting less and less, the person wants more of, say, education. . . . These motives can never be satisfied because growth is continuing (Boshier, 1971 , p. 22 ).

At the other end of the continuum, the life-chance type people behave in accord with the homeostasis model. Their short-term needs (generally psychological or vocational) can be satisfied by participation. This may or may not include the act of completing a course. They tend to stop when their needs have been satisfied, and this type of person includes the vast majority of the population (Boshier, 1977a). In addition, based on conservatism data and the correlation between self-concept and C-scale scores, life-chance participants are more likely to be found in fundamentalist religious groups, to be attracted to quasi-religious activities (e.g., scientology and astrology), and to feel more congruent in authoritarian learning environments than life-space participants. Also, life-chance participants are more likely to be following the advice of a doctor, employer, spouse, social worker, priest, or some other "authority." Thus gratification will restore homeostasis for the life-chance participant, and motivation for further participation may cease (Boshier, 1977a). Conversely, in the life-space individuals, as related previously, growth is so very important that they actually create a disequilibrium which then leads to an ever higher state of growth and accomplishment (Boshier, 1971; Haag, 1976).

Adult life cycle as a factor
In participation in adult education studies, the motives cited tend to change as a function of age. The theories of Maslow support this as he considered congruence, self-actualization, or growth motivation to be an
ultimate state of affairs and expected young people to be more deficiency motivated than older people. However, this trend does not necessarily continue uninterrupted into old age. Gerontological studies (Gubrum, 1973; Neugarten, 1968, 1975) and the theorizing of Erikson (1959, 1963) suggest that life-space motivation may reach a peak in middle adulthood and then, depending on the person's social and psychological circumstances, return to a more life-chance orientation.

Youth or young adulthood, at one end of the continuum, has been found, in one study, to be associated with life-chance motivation. Johnstone and Rivera (1965) observed that job-centered reasons most frequently propel younger adults into education and, by comparison, the uses made of education by older adults to be much less pragmatic and utilitarian. This was reflected in the extent to which leisure centered goals were endorsed by persons in different age groups. Boshier (1977a) stated that it is probable that the amount of motivation which has life-chance and life-space origins changes as the participant passes through the developmental tasks associated with age. Londoner (1972a) also supports this view and as a result of her study proposes the guarded generalization that the greater the personal responsibilities vested upon the adult learner through his changing social roles, the more likely he is to complete his educational program. This generalization is consistent with the findings of Dickinson and Verner (1967).

The life stage models and conceptual schemes relating to human development have furnished the adult educator with a gestalt or everarching structure for diagnosing adult learning needs, for planning educational programs, and for selecting appropriate strategies for the teaching-learning
situation all of which may also affect, to some extent, completion rates. The constructs developed by Havighurst (1973), Neugarten (1975), Erikson (1963), Buhler and Massanik (1968), Gould (1972), Kohlberg (1963), Levinson, Darrow, Klein, Levinson, and McKee (1976), Sheehy (1976), Vaillant and McArthur (1972), and others have noted phases, periods, stages, or life cycles during which adults similar in age seem to face common problems, events, pressures, and situations. These writers have viewed adult development as an interactive process between the adult and his/her environment, a process based as much on life events and circumstances as on aging. The stages identified most frequently are described as: Leaving the Family life-stage: late teens and early twenties, the stage which centers on the separation from the family, including the reduction of dependence on familial support and authority, and re-definition of one's self as an adult.

Provisional Adulthood: early twenties to late twenties, the stage in which the person is making initial (and sometimes tentative) commitments to adult roles and responsibilities in both occupational and interpersonal contexts.

Age 30 Transition: the late twenties and early thirties, the stage in which the focus is on the questioning of one's self and one's relationships as defined in the preceding life-stage.

Settling Down: early thirties to the late thirties, the stage which focuses on the deeper commitments that are made as the person invests more in work, family, and valued interests.

Mid-Life Transition: the late thirties and early forties, the stage which includes the re-examination of the earlier dreams of life,
the beginning of the time squeeze in life, the feeling of bodily decline, the reduction of differences between masculine and feminine personality characteristics, and the increasing concern for future generations (Brim, 1976; Gould, 1972; Levinson et al., 1976; Sheehy, 1976).

The descriptions seem to imply that all of the characteristics "fit" the particular life stage, and one cannot assume that just because an individual is in a particular age group he/she possesses particular life-stage characteristics. Kummerow and Hummel (1977) suggest that it may be more fruitful to look at probabilities of possessing particular characteristics, thus avoiding the "all or nothing" stance the life-stages seem to imply with regard to descriptive characteristics. Further caution is given by Brim (1976) who states "there is a danger of our using this facile scheme (life-stages) as a cover for loose thinking about human development, without carrying forward the necessary hard-headed analyses of the evidence" (p. 8). However, while life-stages do not completely fit for the age groups studied, they nevertheless are reliably associated with differences between age groups, and Kummerow and Hummel found that on the basis of information collected in interviews with individuals representing different age groups, raters found the information to form patterns which they perceived to differ from group to group.

Verner (1964) is one of several writers who has used the notion of social role to highlight an important difference between pre-adult and adult education. He emphasizes that social role is a way of identifying the responsibilities vested in individuals at various stages in life. As he relates, youth have some responsibilities, and adults have others. The
presence of these responsibilities creates a need for learning throughout life. However, for adults learning is secondary to behaviors associated with their primary role, which is usually that of producer, spouse, parent, and citizen. Conversely, for most children and adolescents the primary role is that of a learner in a formal educational setting-the school.

The notion of defining adulthood by reference to social role and associated behaviors is functional and has important implications for all steps of the adult education process. It means the social functions fulfilled by adult education are different from those fulfilled by pre-adult education. It has important implications for program planning (which will be more tied to the learner's needs, roles, and developmental tasks than in pre-adult education); it has implications for the design and management of instruction and the evaluation of learning in adult education (Boshier, 1977b).

Neugarten (1975) also endorses this concept and has noted that the stages of adult development indicate that the chronological age of adults coincides with their moving from an outward direction to an inner-directedness. Adults in their 20 s and early 30 s are concerned with external developments such as establishing marriage, family, career, and social status. Adults in their mid 30 s and beyond, once the "externals" are fairly secure, then turn inward and re-examine their achievements, goals, and future directions. This inward look has definite implications for the adult students who are returning to college or entering college for the first time. Bloom (1956) endorses the trend toward "self-directedness." His theory of cognitive development is based on a progression from one stage of intellectual ability to the next higher stage, from memorization, the lowest stage, to application, analysis, synthesis, and evaluation, the highest
stage. Bloom has found that as a learner moves through each stage, he/she tends to become increasingly self-directed.

Chickering (1976) has translated age, moral, and intellectual development into a schema that includes several educational components along with the developmental stages. These educational components include motives or goals for continuing education, learning process, source and use of knowledge, teaching practices, and student/teacher relationships. Chickering has based his studies on materials developed by Dr. Harry M. Lasker and Cynthia DeWindt, Harvard Graduate School of Education.

This also ties in with Knowles' (1974) concept of the adult learner. He suggests there are four characteristics found in most adult learners, and all pertain to both program planning and the conduct of educational experiences for adults. Adults are purported to:

1. Be more self-directed than pre-adults.
2. Have a greater volume and variety of experience than children.
3. Have their orientation and readiness to learn determined by the nature of their social roles and developmental tasks, all of which means they tend to
4. Be problem-centered rather than subject-centered.

Verner (1964), whose definition of adulthood is based on his role in life, states:

For purposes of adult education, at least, we can say . . . that an adult is a person who has come to that stage of life in which he has assumed responsibility for himself and usually for others, and who has concomitantly accepted a functionally productive role in the community (p. 29).

In a recent study, Boshier (1977b) asked the questions:

1) If liberalism (as opposed to conservatism) (Wilson, 1973) can be regarded as one manifestation of self-directedness, as described by Knowles, to what extent do pre-adults become more self-directed as they make the transition into adulthood? and 2) To what extent is attitude change occurring during transition from pre-adulthood to adulthood meaningfully related to the occupation of social roles (and concomitant experience)? (p. 15).

This was a longitudinal rather than a cross-sectional study, and Boshier found the 60 respondents in his study became more liberal during the fouryear period. In this study the subjects were between the ages of 17-19 when the study began and were $21-24$ when the study was finalized. The analysis of data also supported the fact that occupancy of adult roles (and the concomitant exposure to adult experiences and influences) is associated with attitude change.

From an adult education perspective, this study did show that the psychology of pre-adults and adults changes during transition. Boshier concluded that definitions of adult which invoke notions of social role as the central explanatory construct are well-founded, and if adult education is supposed to consist of concepts and processes which are somehow different from those utilized by pre-adult educators, then studies focusing on purported differences are needed.

Additional support for the life-stage factors relating to drop-outs is gained from the many adults who attribute their dropping out to such life changes as health and job related causes (Carey, 1953), illness, childbirth and family problems (Ewigleben, 1959), work schedule conflicts, personal and family illnesses (Bennet, 1968), illness, conflict with work schedules, and child care problems (Hawkins, 1968). Larson and Bible (1969) found
that drop-outs tend to be younger, separated or divorced, have fewer children, more incidents of illness, and have more family problems than persisters.

The influence of outside variables on academic performance, which tends to be more prevalent as the individual moves from the pre-adult stage through the adult stages, was demonstrated by Di Salvi (1971). In comparing the subsequent academic performance of a group of evening adult students who had received remedial training to a control group which had received no training, he could find no significant difference in the grade point averages of the two groups. He concluded that uncontrolled, nonacademic variables exerted as great or greater influences on grade point averages than did the treatments imposed on the experimental group.

Most of the available research suggests that females drop out more often than males (Ulmer, 1960; Ulmer and Verner, 1963) especially if they are married or are getting married (Hunt, 1967). Hunt found the major reasons why females dropped out of the university revolved around time and financial factors. Having young children or not being able to afford the cost of university courses were cited as the major barriers to attending. The grade-point average of the married students who had been attending and dropped out was higher than the grade-point average of single students. Beagle (1970) similarly found that the academic performance of female adult students was significantly higher than that of male adult students, yet female students in the Ulmer and Verner (1963) study showed a significantly higher rate of discontinuance.

In a study of part-time on-campus students at the Sir George Williams Campus of Concordia University, Canada, Bhatnagar (1975) found an
interesting curvilinear relationship between age and drop-out. The 20-25, 36-40, and 41+ age groups showed the higher drop-out while 26-30 and 31-35 groups showed higher persistence rates. Of the drop-out group, 58.7 percent came from the 20-25 age group.

The country of birth also had a significant relationship, with students who were born outside of North America and the European students having a higher persistence rate while those born in Canada had a higher drop-out rate. This supports the research literature (Bhatnagar, 1970) which indicates that immigrants, on the whole, have higher motivation for education than the local population.

A larger number of married students dropped out after their first year of part-time studies than single students, and since married students did not obtain lower grades than single students, their drop-out was voluntary indicating some outside reason.

The course load was also a factor--those carrying heavier loads tended to persist, and those planning on heavier loads for the following year tended to persist, indicating, possibly, a definite goal or life-stage demands for added education. It was also found that students who started their part-time university studies immediately on completion of their high school had a relatively high drop-out ratio.

Contrary to research on persistence relating to full-time students (Tinto, 1975; Sewell and Shah, 1967; Jaffe and Adams, 1970; Spady, 1970), Bhatnagar (1975) found that socio-economic status of the parents, educational level of the parents, and attendance at a university of a sibling all had no relationship to persistence in the part-time college student. The spouse's level of education, however, was highly related to drop-out--
when the spouse had some form of postsecondary education, the student was much more likely to persist.

The more money a student spent per year for his university education (part time), the more he tended to complete his course, possibly showing a greater commitment, and this was supported by the students who stated their financial sacrifice was great. There was a definite correlation between degree of sacrifice and persistence.

A student's employment status had no affect on his decision to continue his studies beyond the first year; however, the nature of his occupation revealed a higher persistence rate among those employed in business and commercial organizations and a higher drop-out rate among those employed in technical jobs. Also, those who worked between 31-40 hours per week had a relatively higher proportion of drop-outs.

## Life change as a factor

Stresses and change due to the life stage of an individual tend to affect his performance, however, the way an individual reacts to these changes varies with the individual. Mandler and Watson (1966) hypothesized that when an individual's life style is suddenly interrupted with either a positive or negative life change, the person characteristically responds with feelings of anxiety. In turn, his anxiety arousal affects his performance by setting the stage for a wide variety of responses, the specific character of which is related to environmental press and cognitive factors. Thus it would be reasonable to assume that when an adult's life change consists of entering a learning environment, this environment will impost adaptive tasks on him which require the mobilization of new resources.

Such similar situations which require adaptation to a life change continually face every individual during his life time. These situations are conceptualized as "crises" (Erikson, 1963; Caplan, 1964; Lindemann, 1964).

The way in which an individual responds to the "crisis" situation in his life may be either regressive or defensive, such as dropping out, or may represent efforts, to master the environment, reorganize the perception of the task ahead, and solve the problem of dealing with the new situation. This ability to manage is called "coping" (Hamburg and Adams, 1967), and the process of "coping" may include dropping out of a situation.

Holmes (1970) initiated research related to life change and its effects on students. He followed 54 medical students from the beginning of their freshman year to the end of their sophomore year. Of these 86 percent with high life change scores, 48 percent with moderate life change scores and 33 percent with low life change scores experienced major health changes. Also, subjects with major health changes experienced more minor health changes than subjects without major health changes.

In a study of the relationship of life change and occurrences of infectious mononucleosis among students at Kansas State University, the incidence of mononucleosis had no correlation with frequency of life change. However, in all students included in the study, the median score on life change for students who reported physical illness within the year was significantly higher than those reporting no illness (Wilder, Hubble, and Kennedy, 1971).

In a life-change study of football players, Bramwe11 (1971) found that 50 percent of the players in the high risk group experienced injury, 25 percent in the medium risk group had suffered an injury, and 9 percent
of the low risk group experienced an injury. Of the ten players who sustained multiple injuries during the season, seven were in the high risk group.

Carranza (1972) found that high life change activity is associated with the less desirable aspects of teacher performance. There was also a significant negative correlation between the amount of life change and graduate education attained beyond the bachelor's degree.

The first study which applied the concept of life change to academic achievement was performed by Harris (1972). The purpose of his study was to investigate the effect of over-stimulation at the cognitive level which results from a too rapid change and interferes with a subject's ability to concentrate (Toffler, 1970, p. 348). In addition, since the efficiency of individuals at tasks requiring cognitive skills deteriorates when the rate at which they must function is increased (Miller, 1967), time pressed subjects sometimes reach limits beyond which they are unable to function (Toffler, 1970, p. 351). Harris divided freshmen in college into low, medium, and high academic risk populations based on their American College Test (ACT) scores. The life change data were collected through the use of the Social and Collegiate Readjustment Rating Scale (SCRRS). Academic Achievement was evaluated by grade-point averages of the subjects at the end of one semester. It was found that grade-point averages tend to be inversely proportional to the amount of life change experienced. The effect of life change on grade-point average remained constant regardless of the level of college readiness as measured by the ACT (Harris, 1972, p. 43).

In a later study by Bassetti (1973), the rate of academic achievement was compared to degree or life change, trait anxiety, and dogmatism. Bassetti used the Social and Collegiate Readjustment Rating Scale (a variation of the SRRS designed for full-time college students) (Holmes and Masuda, 1973, p. 178), the Trait Anxiety Inventory (Spielberger, Gorsuch, and Lushene, 1970), and the Dogmatism Scale (Rokeach, 1954). He divided the population into low, medium, and high academic risk categories based upon academic achievement expectancy as reflected by the college entrance tests. He found that in the low academic risk category population, mean grade-point averages among students with high life change scores were significantly lower than mean grade-point averages among students with low life change scores.

Garry (1975) explored the effects of a history of recent life crises on the drop-out behavior of adult continuing education students. The population consisted of 100 freshman adult evening students at a community college. The students were divided into groups of low, medium, and high academic achievement expectancy based on their high school grades. Data on their recent life change events were collected through the Social Readjustment Rating Scale. After five months (at the end of the quarter), drop-out data for the population were obtained. Six hypotheses were tested with the following conclusions: no significant difference existed in mean life change scores among the adult students at the low, medium, and high academic risk populations; there were no significant differences in the freqencies of drop-out behavior of adult students in low, medium, and high academic risk categories; there was a significant relationship between the amount of life change in adult students and the frequency of their drop-out behavior.

Drop-outs, regardless of academic risk category, had experienced significantly more life change than nondrop-outs.

## Characteristics

Personality traits Several studies using personality measures have been successful in the prediction of drop-outs. In 1962 Heilbrun found the Adjective Check List need scales useful to predict first-year drop-outs among female college freshmen. Subjects who dropped responded significantly higher on variables "Heterosexuality" and "Change" while lower on "Achievement," "Order," and "Endurance." In a later study using the Adjective Check List, Heilbrun (1965) predicted that when intellectual ability was controlled as a variable, college freshmen who dropped out were more assertive and less task oriented than those who persisted. The results supported the hypotheses for both sexes but only at the higher ability level.

Scharles (1966) used the Edwards Personal Preference Schedule with adult students and found: 1) persisting males expressed a significantly higher need for affiliation and a lower need for autonomy than did drop-out males and 2) persisting females showed a higher need for abasement and a lower need for achievement than females who were drop-outs.

Larson and Bible (1969) constructed an adjective list and asked adult career education students to indicate on a scale of 1 (least) to 7 (most) how well each adjective described their "self." He found drop-outs significantly more often rated themselves lower on "leadership," "cooperative," and "talkative."

Killian (1969), using the California Test of Personality with a sample of adults enrolled in a learning laboratory, found drop-outs scored significantly lower than persisters on the "social adjustment" and "total adjustment" scales.

Boshier (1973) constructed a list of 23 semantically differentiated pairs of adjectives. He asked adult students to use the differential to project personality descriptions of the hypothetically typical general adult education persister and drop-out. Students who ultimately withdrew from their programs (drop-outs) projected fewer differences between the two hypothetical personalities, while students who persisted projected significantly greater differences. Boshier concluded he could predict drop-outs from his adult programs from their scale scores prior to the withdraw decision.

Wilson (1977) measured differences in response patterns to the Adjective Check List (Gough, 1952) of drop-outs and persisters in a group of 142 adults enrolled in a GED program of a midwestern capital city community college. The age range was 16 to 63 years with a mean of 27 and mode of 18 years. It was found that significant ACL scale scores did exist between the self-descriptions of enrolling GED students who drop out and those who complete their programs or persist for at least ten weeks. Drop-outs described themselves as more rebellious and hostile. They were seen as less socialized, while being more impulsive, headstrong, and irresponsible. They were less able to give prolonged effort, being more impatient, and yet were more comfortable with disorder and change than the persister. The drop-out was seen as indifferent to the feelings and needs of others as he was assertive, less willing to subordinate himself, and more desirous of
attention and authority. The drop-out seeks succorance and while being inattentive to the needs of others may desire more supportive and dependent relationships than persisters.

The persisters were seen as more obliging, tactful, diligent, practical, and compliant than the drop-out. They were more interested in stability and reduced risk taking. In relationships they were more concerned about the needs of others, more supportive, more persevering, more able to yield to the reasonable requests of others.

Wilson concluded that if the nonpersisters are to be retained, they will need more understanding and support. The drop-outs' past failures and anxieties would require greater efforts and consideration from the teacher. Also learning periods might need to be shortened and the number of success experiences increased in order to retain these persons. Peer relationships might also need to be encouraged and fostered to increase their bonds to the program. And, most important of all, they would need instructors who would be mature and willing to absorb some of the jolts and jars encountered when working with persons who may tend to be self-centered and insensitive. Their psychological needs are great, and they are able to give little.

Teichert (1969) also found that persisters tended to possess certain personality traits that were not as pronounced in nonpersisters. Persisters were able to control both their domestic circumstances and academic programming, showed greater geographic and socio-economic mobility, and were less satisfied with their present jobs than nonpersisters. Also, LeClair (1969) found that persisters perceived university evening classes as a need fulfillment and as a means of advancement. Sainty (1971), in a
comprehensive research study, concluded that drop-outs were not as successful as their counterparts in either their previous schooling and in their work experience, thus confirming the findings of Teichert (1969) and LeClair (1969) in identifying certain individuals as tending to be nonpersisters. Sainty (1971) generalized from high school level research that factors which might have prediction value for adults would be intelligence, reading ability, personality factors, and certain biographical data. Upon identifying a group of 104 male adult students in Canada enrolled in a program with a 55 percent drop-out rate, he administered the Terman-McNemar Test of Mental Ability, the Gates Reading Survey, the Q-Tags Test of Personality, and a personal data questionnaire. He found 17 significant predictor variables, of which four were measured on the tests, the remainder were biographical differences. The majority of the 13 biographical differences was categorized by the researcher into a "nonsuccess syndrome."

Vaughan (1968) found that drop-outs tend to be more impulsive than persisters. Jones (1955) and Lavin (1965) found drop-outs lack flexibility in dealing with changing circumstances, and Grace (1957), Grande and Simmons (1967), and Vaughan (1968) found them more anxious and restless relative to their successful college counterparts.

Sanford (1970) and Knoell (1966) both stressed a need for additional nonintellectual research, and Knoell added that in addition to personality factors, a student's environmental pressures should be studied.

Demographic and other characteristics In addition to such factors as life stage, life change, and personality, other variables have been found to influence persistence in adult students. Brown, Knox, and Grotelueschen (1966) studied several university adult education programs
for student characteristics, community size, institutional size, etc., to determine any differences that might exist between those who continue taking courses and those who drop out. They found that the persisters tend to be older and have higher verbal ability. However, Ulmer (1960) found no differences in age between those who persist and those who drop out, but as described earlier in this review, his data were contaminated by the fact that a large proportion of those taking courses received subsistence allowance and of those receiving subsistence the drop-out was comparatively low. Zahn (1964) and Zahn and Phillips (1961) found that students with low academic ability tended to drop out of credit classes more often than students with high academic ability. Zahn (1964) suggested that feedback from examinations and grades determines which of the low achieving students will persist.

Bhatnagar (1975) found successful completion of high school and not having repeated any high school grades were positively related to persistence while high school grades and the type of high school attended did not bear any relationship with drop-out behavior. Thus performance at the high school level is predictive of persistence with part-time university student only at the lower end of the scale (based on this study). Students who do relatively poorly at the high school level in the sense of having to repeat a grade or those who fail to graduate are more likely to drop out. It is interesting that these findings are dissonant with studies based on fulltime college students in which high school performance was related to persistence in college (Chase, 1970; Lawhorn, 1971; Astin, 1971). This study is in agreement with Eagle (1972) who failed to establish any relationship between entry variables and dropping out. No significant differences
between persisters and drop-outs were found in high school average, high school curriculum, reading score, and type of high school attended.

## Summary

The phenomena of "drop-out" in education, and particularly adult continuing education through the open university concept, is exceedingly complex. It cannot be assumed that it is undesirable. However, if circumstances occur, relating to the method in which the course was presented or within the course itself, which precipitates the drop-out, it should then be remedied if possible because the effect on the individual student and consequently the overall program might be adverse.

The main objectives for most continuing education programs from the standpoint of the student would probably include the gaining of knowledge, skills, attitudes, improvement of self-concept, continuing motivation to learn, and hopefully some sense of satisfaction with the course or courses and the program. These objectives may be realized without course completion. It may also be possible for a student to have failed in reaching any of these objectives and to have completed the course and to even enroll in a subsequent course or courses, depending on his goal or motivation. It is for these reasons and possibly others that drop-out statistics are of ien contradictory and difficult to interpret. For example, in the Stine (1976) study, about 97 percent of the withdrawees felt that they were adequately or better served by the college with more than half of these rating the service excellent. About half of the withdrawees indicated that they expected to return to the college.

The purpose of this study was to gain comprehensive information from and about the students who enrolled in the first and second offerings of the University of Mid-America that could be used as one basis for decisions relating to improvement and expansion and that might serve as guidelines to others engaged in similar pioneering efforts.

This chapter includes a statement of the 1) objectives of the study, 2) description of the population, 3) rationale for the selection or development of instruments used in the study, and 4) delineation of procedures employed for the collection and analyses of the data.

Objectives of the Study
The objectives of the study were to:

1. Obtain information about attitudes and reactions of the learners toward the experience of participating in a UMA course at Iowa State University, including:
a. The learner's evaluation of the course including role of the mentor, video component, textbooks, learning aids and experiences, evaluation devices, role of the center personnel.
b. The learner's views of the value of the experience to himself/ herself.
c. The learner's views of the impact of the experience on his life style, family, self-identity.
2. Identify learner characteristics which tend to correlate with: a. A successful experience as viewed by the learner.
b. A successful learning experience as measured by the satisfactory completion of the course.

## Population of the Study

The subjects for this study included all of the students who enrolled and actually began working in the courses offered through the University of Mid-America at Iowa State University in the spring and fall of 1976.

The courses offered and students enrolled included:
Spring term--February 9 to June 30, 1976

| Course | Quarter hour <br> credits | Students <br> enrolled |
| :--- | :---: | :---: | | Non- |
| :---: |
| students |

Accounting I
(Industrial Administration 282X)
Consumer Experience 3
(Family Environment 215X)
Psychology Today
(Psychology 100X)

Fall term--late September or early October (depending on the course)

| Course | Quarter hour <br> credits | Students <br> enrolled | Non- <br> students |
| :--- | :---: | :---: | :---: |

Accounting I
Psychology Today
Adams Chronicles
Writing for a Reason
$4 \quad 92$
$4 \quad 48$
$3 \quad 29$
non-credit 26

The total number of students enrolled in the spring term was 188 and for the fall term 95. The number of students originally enrolled does not reflect the number of students who actually participated in the program and either completed it or dropped out after attempting study in the course(s). A total of 17 students enrolled in the spring group of 188 elected not to begin studying the courses, and 14 of the 195 enrolled for the fall term made the decision not to proceed with their original decision to take the
course. Through telephone contact with each of these students, it was learned that their decisions for not beginning study in the course(s) at that particular time were based on such reasons as a change in work schedule, change in family plans, unforeseen emergencies, and health, or a review of the course materials revealed content that they had not anticipated and which did not suit their current interests or needs. The information gained relating to their reaction to the course content was valuable in that it revealed some need for increasing descriptions of the courses in promotional materials. The promotion time was very limited for the first (spring, 1976) term offerings.

Since the students who enrolled but did not begin their studies could not react in any way to the various components of the program, they were considered nonstudents and dropped from the study.

Registered for two or more courses
Spring, 1976 In the first enrollment, 17 students registered for two or more courses--one student registered for all three courses that were offered. Of this group, the one who registered for the three courses and seven of the 16 students who registered for two courses completed the courses for a total of 50 percent; three or 18.75 percent of the students who registered for two courses changed from "credit" to "audit" for both courses; four or 25 percent dropped one course (one student dropped Accounting I and three students dropped Psychology Today); one student or 6 percent dropped both courses.

Fall, 1976 In the second enrollment, 19 students registered for two or more courses; seven students, 37 percent, completed both courses;
six students, 32 percent, completed one course and changed the second course to audit or dropped the course; four students, 21 percent, did not remain in either course for credit--two of these students changed both courses to audit and two dropped both courses.

Selection and Development of Instruments
It has been theorized that in an educational setting a population can be well-served only if those responsible for the planning have a comprehensive picture, including the interests and needs, of the individuals to be served (Tyler, 1950). In the last few years, the fastest growing population in education has been the adult group, and there has been extensive discussion of the "life-1ong learning" concept. In operationalizing this concept, gaining a better understanding of the characteristics and attitudes of adult learners has important implications for program development in adult education. Morstain and Smart (1974) add that "This is especially true if one accepts the premise that an institution's programs and policies are best considered with reference to the characteristics of its students" (p. 97). Since UMA/ISU is endeavoring to serve its adult students in the best way possible, it was the objective of this study to gain the information necessary to serve as a basis for making policy decisions. To accomplish this goal, it was decided that essential data would need to include selected demographic and personality characteristics of the enrolled students and the reactions of the students to the overall program. In addition to the information obtained through the student registration form (see Appendix E), four instruments were used as follows: Student Information Questionnaire, Strong Campbell Interest Inventory, Nelson Denny Reading

Test (Vocabulary Section), and a student reaction questionnaire sent at the end of the course called the UMA/ISU Student Questionnaire. A description of the instruments and the rationale for the selection, revision, and/or development of the instruments follows.

## Student Information Questionnaire

In October, 1974, the first students enrolled in the open learning program at the State University of Nebraska (SUN). This provided the opportunity to study actual learners rather than prospective learners as had been done rather extensively.

In an effort to implement this, the Office of Research and Evaluation prepared an extensive Student Information Questionnaire. The questionnaire included questions about many aspects of the background, hopes, and ideas of SUN learners, and the questions were grouped into sections titled: General Information, Education, Work, Leisure Time, Resources, Goals, Enrollment, and a space for any additional general comments the student wished to make.

When the decision was made to study the initial learners in the University of Mid-America program at Iowa State University, the Director of Research and Evaluation of the University of Mid-America Consortium, Dr. Dennis D. Gooler, requested (on behalf of the research staff) that the questions included in the questionnaire used in the SUN experiment in open learning be incorporated in the Iowa study. Since the topics covered would not supply all of the data needed for the present study, revisions were necessary. Under the direction of Dr. Leroy Wolins, a specialist in the area of research and statistics at Iowa State University, changes were made
through the addition of relevant questions, retaining the format and all of the original questions in the SUN questionnaire. A copy of the questionnaire is included in Appendix B.

Strong Vocational Interest Blank Merged Form T325 known as the StrongCampbel1 Interest Inventory

Adult education stresses the importance of developing programs compatible with the needs and motives of participants. An associated aim is the desire to create learning environments congruent (Boshier, 1973) with the needs, expectations and learning styles of adults (Boshier, 1976, p. 24).

He adds that motives for participation and the learning environment are also linked to drop-out. Thus it might be possible that a student's reaction to an adult education program and his inclination to persist or drop out would be related to his basic vocational interests and certain personality traits among other factors.

The decision to use the Strong-Campbell Interest Inventory in this study was influenced by the examination of research which indicated 1) relationships between adults' vocational interests and personality traits and their satisfaction, persistence, and performance in areas of study and work and 2) relationships between satisfaction and success in an educational endeavor and the learning environment. A brief overview of the studies which relates to these factors and which influenced the selection of this instrument follows.

Adults' orientation towards learning Houle (1961) described three groups of adult students, each with a uniquely different orientation towards learning. Flinck (1977) concluded that the findings in many studies could be classified to advantage according to Houle's typology. Flinck included the studies of Hoy (1933), Sheffield (1964), Tough (1969),

Boshier (1971), and Burgess (1971), however, adults' reasons for engaging in continued learning that have been identified in additional studies also can be classified according to Houle's typology and a composite follows:

1. Goal oriented persons--those who utilize education to reach fairly clear-cut objectives. These have been described as primarily joboriented or credential or degree-oriented for the purpose of vocational advancement. Studies have found vocational reasons paramount for participation in various forms of adult education (Hoy, 1933; Sheffield, 1964; Tough, 1969; Boshier, 1971; Farnum, 1960; Carter, Kerr, and York, 1962; Johnstone and Rivera, 1965; Wedell and Perraton, 1968; Glatter and Wedell, 1971; Morstain and Smart, 1974; Sovie, 1972; Grabowski, 1972; Burgess, 1971).
2. Activity oriented persons--who want activity for the sake of activity. These adults take part because they find in the circumstances of the learning a meaning which has no necessary connection, and often no connection at all, with the content or the announced purposes of the activity. Reasons include: social, leisure time activity, hobby, puzzlement or curiosity, pleasure and/or satisfaction, noneducational television abhorrence, and desire to escape (Hoy, 1933; Sheffield, 1964; Tough, 1969; Boshier, 1971; Burgess, 1971; Houle, 1971; Morstain and Smart, 1974; Sovie, 1972; Grabowski, 1972).
3. Learning orientation--who seek knowledge for its own sake. The reasons these adults enroll in adult learning activities include: the desire to know, a thirst for knowledge in general, wanting to improve themselves, an interest in a specific area of study-or
curiosity about it and satisfaction from possessing knowledge apart from using it (Hoy, 1933; Sheffield, 1964; Tough, 1969; Boshier, 1971; Burgess, 1971; Morstain and Smart, 1974; Sovie, 1972; Grabowski, 1972).

While Houle's three-factor typology serves to classify many of the reasons for adult participation, it does not include all of the reasons adults give for continuing to learn. Many additional reasons have been expressed by adults included in studies (Dickinson and Clark, 1975; Sheffield, 1964; Sovie, 1972; Boshier, 1977a; Zack, 1976; Haag, 1976; Morstain and Smart, 1974; Grabowski, 1972).

Adults' motivational factors for learning Certain factors have been identified which tend to motivate adults to continue their learning endeavors. These factors include, among others, the following:

1. Life-chance motivation (Boshier, 1977a), which is an attempt to satisfy the lower-order needs on Maslow's hierarchy--that is to cope with some aspect of life through acquisition of utilitarian knowledge, attitudes, or skills.
2. Life-space motivation (Boshier, 1977a), which is an attempt at self-expression. This leads to gratification which in turn increases motivation and heightens excitement.
3. A stage in the life cycle (Neugarten, 1975; Kuhlen, 1963; Friedmann, 1964; Havighurst, 1964; Havighurst, Neugarten, and Tobin, 1975).
4. The self-concept (Dildine, 1969; Boshier, 1973).
5. A personality trait (Flinck, 1977).
6. Particular educational needs (Atwood and Ellis, 1971; Knowles, 1973).

A review of these studies indicates that the "self" is organized in a number of interdependent sub-categories which are situationally oriented. When facing a "problem" or "making up one's mind" about something, one refers to a complex of situations known from previous experience. The "problem" will give rise to a behavior cycle and to a great extent the way through this cycle is directed by emotions and feelings which implies that a person's action will be unique to him. Consequently, the way in which he interprets and experiences the world around him (him phenomenal field) will be unique, too. This in turn is dependent on his personality and interests (Flinck, 1977). Since the manner in which an adult reacts to each new experience he encounters is dependent on the interaction of his personality and interests, based on past experiences, it is necessary to gain some insight in reference to these for a meaningful interpretation of his evaluations.

Implications of UMA students' orientation to adult education
Recent studies of UMA/SUN indicated that the majority of students enrolled wished to update their employment skills, change employment, seek advancement on the job, or were interested in seeking training of some kind in the future and were anxious to know if they were capable of "studying again." The relationship of the content of the course to their vocational interest might have had an affect on their reaction to the course and overall program since it has been found students are more successful in college if their choice of major is similar to their occupational interests (Nafziger, Holland, and Gottfredson, 1975).

In support of Nafziger's et al. (1975) conclusion, Nunnally (1970) states:

Interests are very important to consider in choosing occupations. If an individual really likes a particular type of work, often he can succeed in spite of only a moderate amount of aptitude. No matter how much initial aptitude a person has, he can fail in a line of work through inattention and lack of effort (p. 418).

There is also supporting evidence that interest inventories can predict future satisfaction on the job (Nunnally, 1970) and predict tenure (Porter and Steers, 1973; Ferguson, 1958; Boyd, 1961; Mayeske, 1964; Aiken, 1976), thus "interests" tend to be predictive, at least to some extent, of job performance and satisfaction. It would also tend to follow that an individual's interests might correlate quite strongly with performance in an educational endeavor and with attitudes toward the overall experience.

Vocational choice based on personality theory One of the major theories of career choice and development is the personality theory, and the major assumption from the personality frame of reference is that an individual's personality structure reflects different need dispositions and the satisfaction of these needs is sought in occupational choices (Holland, 1966, 1973; Roe, 1956). Accordingly, Roe states that various career areas attract persons of need dispositions and personalities unique to those career choices and states that:

1. Early child rearing practices are related to the kinds of interactions that persons establish with other persons--toward or away from--and with things.
2. Securing opportunities to express individual styles of behavior is inherent in choices made and vocational behavior. Thus, occupational choices are processes of self-categorization.
3. Occupations can be described in terms of fields which describe an individual's orientation to or away from people or things.

Roe particularly emphasizes the part personality plays in career choice and points out the importance of a person's orientation toward or away from people or things as an attribute of career choice.

Holland concurs with Roe and emphasizes hierarchies within occupational clusters requiring various kinds and amounts of education as well as the importance of self-knowledge in relation to choosing a career. His theoretical tenets include:

1. Self-knowledge is important to the individual's movement through educational decisions to occupational environments.
2. People seek those settings and occupations, including curricula, which permit expression of their personality styles.
3. Personality types and career environments can be classified on a similar basis.

On the basis of his proposition that people's vocational choices are expressions of their personalities, he has categorized occupations into six groups with each group representing a different personality type (Hearn and Moos, 1978, p. 113):

Holland Orientation

Realistic

Relevant Classroom Subjects

Auto repair, carpentry, electronics general shop, machine shop, power mechanics

Characteristic Personality and Environmental Type (from Holland, 1973)

Asocial, conforming, frank, genuine, materialistic, persistent, practical, stable, thrifty, uninsightful

involvements. It is also an important aspect of cognitive orientation. The concept refers to the manner in which the individual perceives himself in relation to his environment and is generally described as the extremes of a continuum. Essential characteristics of cognitive style are that they are concerned with the form rather than the content of cognitive activity-that is, they refer to individual differences in "how" individuals perceive, think, solve problems, learn, and relate to others. They are also pervasive dimensions that help to restore the psyche to its proper status as a holistic entity, and thus tests of cognitive style have poten tial value in also assessing what have come to be called "noncognitive attributes." Cognitive styles tend to be stable over time and are value free--that meaning, it is not better to be at one or the other end of the continuum or toward the middle--all "styles" have merit.

Perceptual style of field dependence/independence The terms "global" and "articulated" or "field dependent" and "field independent" are used in reference to one of the most researched cognitive styles, and there has been a preponderance of studies that has examined the relationship of educational-vocational "interests" and "attitudes" to field-dependenceindependence (Arbuthnot and Gruenfeld, 1969; Chung, 1966; Crutchfield, Woodworth, and Albrecht, 1958; Keen, 1974; Pemberton, 1952; Scheibner, 1970; Zytowski, Mills, and Paepe, 1969; Cross, 1976). The majority of these studies used the Strong Vocational Interest Blank or similar instruments and have explored the relationship between cognitive style and interests defined in vocational terms. It was generally found that fieldindependent persons were interested in the analytical impersonal domains, and the field-dependent persons were interested in the interpersonal
domains that require social skills. Studies show that vocational interest measures are more likely to show a relation to measures of field-dependenceindependence when these measures call for both the cognitive and social characteristics found together toward each pole of that dimension (Clar, 1971).

Vocational "choices" based on vocational interest, are also related to the cognitive styles of individuals and strongly reinforce the finding from the studies of interests that relatively field-independent persons favor impersonal domains which require competence in cognitive articulation, and field-dependent persons favor interpersonal domains which do not call for that kind of cognitive competence (Baker, 1971; DeRussy and Futch, 1971; Holtzman, Swartz, and Thorpe, 1971; Kangas, 1971; Mayo and Bell, 1972; Paeth, 1973; Peterson and Sweitzer, 1973).

Introversion-extroversion as a personality characteristic In addition to the identification of an individual's vocational interests, the Strong-Campbell Interest Inventory has two scales that have relevance for the present study, the Introversion-Extroversion Scale and the Academic Orientation Scale.

The Introversion-Extroversion Scale was formerly titled the Occupational Introversion-Extroversion Scale and has proved useful in understanding a person's pattern of interests. Scores on the IE Scale reflect the person's interest in being alone as opposed to working closely with other people; high scores are earned by introverts, people who would rather work with things or ideas; low scores are earned by extroverts, people who enjoy working with others, especially in social-service settings. Based on the validity statistics, the IE Scale successfully discriminates between
people-oriented occupations and nonpeople-oriented occupations (Campbell, 1971).

The IE Scale for the SCII booklet was constructed by using the items from the two earlier scales that survived the screening for the merged booklet. Only those items common to both the male (Form T399) and female (Form TWe98) booklets were used so that the occupational-criterion groups could be scored on the new IE Scale for the SCII booklet. The original IE Scale was constructed by using the Social Extroversion-Introversion scale from the Minnesota Multiphasic Personality Inventory. College students with high scores (plus one standard deviation, i.e., 60 or above) and low scores (minus one standard deviation, i.e., 40 or below) were separated out, and their SVIB response percentages were compared.

Test-retest statistics over 14 -day and 30 -day intervals for the IE Scale show the scale to be stable over short time periods with test-retest correlations of around . 90 and test-retest means within one point of each other.

Interpretive statements for the Introversion-Extroversion Scale include:

Score
57+ Your high score on the Introversion-Extroversion (IE) Scale indicates you prefer working with things rather than people. Skilled trades people, scientists, and artists score high on this scale while sales and social-service occupations have low scores on this scale.

44-56 Your score on the Introversion-Extroversion (IE) Scale is an average score. Scores greater than 50 indicate a mild preference for
working alone, while scores less than 50 show more of a liking for working with people.

Your low score on the Introversion-Extroversion (IE) Scale indicates you prefer working with people rather than things. Sales and social-service occupations score about the same as you, while people who like to work alone have high scores.

The use of the Introversion/Extroversion Scale to help gain insight relative to the levels of satisfaction and performance of UMA students is based on studies which find introversion/extroversion to be a basic personality characteristic. Eysenck and Eysenck (1963) and Peterson (1965) state that at the present time two factors explain much of the common variance among personality self-inventories, "adjustment" and "introversionextroversion." Studies concerning the relation between achievement and Eysenck's (1963) factors of introversion-extroversion and neuroticism present a complex picture. Anthony (1973) states that, based on ability scores, introverts score higher at any age and are the early developers. However, Entwistle (1972) and Eysenck (1971) theorize that there are apparent age trends which suggest that the better performers are the "stable extroverts" in primary school and are the "neurotic introverts" in the university. In fact, Eysenck describes introverts as retiring, bookish, wellorganized, and controlled; he pictures extroverts as sociable, impulsive, aggressive, and lacking in reliability. This suggests that in an educational context introverts should be better learners than extroverts. Eysenck's theory implied that in laboratory studies of conditionability, introverts should be more quickly conditioned than extroverts and that the introvert's conditioned responses should decay more slowly. Franks (1957)
found that the predicted relation between conditionability and I-E as measured by the Maudsley Personality Inventory (MPI) was significant, which was in accordance with Eysenck's theory (Eysenck, 1959). Furneaux (1956) and Broadbent (1958) also concur by showing that high attainers among university students were significantly more neurotic and introverted than low attainers, and Lynn (1971) found a positive correlation between neuroticismintroversion and attendance at a university.

Of particular added interest for this study are findings that have noted a significant relationship between the SVIB Occupational Scales and various measures of introversion-extroversion (Bendig, 1963; Johansson, 1970; Lanna, 1962), and Johnson, Flammer, and Nelson (1975) found a resemblance between the extroversion factor of personality and the social (S) dimension on Holland's scales (as opposed to the investigative-realistic (IR) dimension).

Academic Orientation, a relationship to persistence in academic situation The Academic Orientation Scale in the SCII was constructed by using items from the SVIB that were common to both the men's and women's Academic Achievement Scales and that had survived the item screening for the SCII. All of the items in the new scale are included in all three booklets, therefore, all samples in the Strong archives responding to any of these booklets can be scored with this new scale.

The items in this scale weighted positively cover a wide range of academic topics with emphasis on the arts and sciences. The items weighted negatively are fewer in number, with no particular theme, and include minor clusters of sales and blue-collar items.

The mean AOR (academic orientation) scores for 100 occupational samples constitute the validity foundation for the scale. Occupations requiring a high level of academic training--psychologists, chemists, physicists, mathematicians, physicians--scored the highest (high 50 s or low 60s) and with means more than three standard deviations lower were occupational samples with much lower requisite educational levels--farmers, beauticians, sewing machine operators, and realtors.

The scale reliability is . 90 based on test-retest correlations. The test-retest means were within one point of each other, and the tests were spaced from 14- to 30-day intervals.

The scores for this scale should be interpreted as an indication of the degree of academic orientation of the respondent. High scores are usually found among people who are well-educated or intend to become so, and low scores are found among those who are uncomfortable in academic settings and/or find intellectual exercises a bit of a bore. Most individuals with advanced degrees score high, and high school drop-outs score low. It is interesting that many college drop-outs also score quite low but not as low as high school drop-outs.

Of particular significance for the present study is the correlation of AOR scores with length of college attendance; also this scale tends to increase with age, at least during college attendance. In a Minnesota study, mean scores increased from 41 to 51 , however, this type of increase did not occur among Harvard students where the initial scores of freshmen were already high (Campbell, 1974; Strong, 1959).

A caveat is in order in interpretation of this scale; high does not mean "good" and low "bad." For example, in an extensive study, scores were
collected on outstandingly successful men, and many generals and admirals, football coaches, corporation presidents, state governers, etc., had comparatively low scores. The score shows only interest in an academic setting, and if a student is to persist in this type of endeavor, he will probably succeed better if he also has a basic interest in the academic area (Campbell, 1971).

The interpretive statements for academic orientation (AOR) further clarify the significance of the scores and these follow:

Score
Statements
-30 Your score on the academic interest scale (AOR) indicates a similarity of your interests with people who usually do not go to college for training after high school. You probably would find college courses very uninteresting and not very satisfying.

31-39 Your score on the academic interest scale (AOR) indicates a similarity of your interests with people who go to college for a year or two; generally they do not find college very rewarding.

40-52 Your score on the academic interest scale (AOR) indicates a similarity of your interests with people who go to college and receive their baccalaureate degree such as teachers, nurses, and architects. They generally do not have interest in or wish to continue their education for a more advanced degree.

53+ Your score on the academic interest scale (AOR) indicates a similarity of your interests with people who go to college and obtain an advanced degree beyond their baccalaureate degree, such as doctors, scientists, and professors.

Choice of an interest inventory for the study The decision to use an interest inventory was based on several factors and the first and most important was the type of information that could be gained from each adult student through its use. In addition, other factors include the ease of administering the instrument, of scoring the instrument, and of interpreting the results. The Strong-Campbell Interest Inventory was chosen because it is one of the two inventories that have become the most prominent in the use of measuring vocational interests (Aiken, 1976). There was a particular bonus in selecting it for this study as a "profile" is sent to each individual taking the inventory, and the students could interpret this as a service to them by the university since many had indicated on their first questionnaire that they were searching for knowledge about themselves and their future directions.

Since the gaining of information about the personalities of the students was one of the objectives of the study, the choice of an interest inventory rather than a personality inventory might be questioned. While an interest inventory is the best instrument to use to measure vocational interests, it might be argued that a personality inventory might be a better choice for the measurement of the personality traits. This possibility was explored, but the difficulties encountered in the use of personality measures were numerous. The type of items included in most personality inventories could be interpreted by the students as an invasion of privacy and/or the questions might be threatening to them and lead to the inclination of the average individual to describe himself in a socially desirable manner (Yonge and Heist, 1965; Edwards, 1953, 1957). The variability in interpretation of items and the ability of the respondent to accurately
describe himself and his actions also tend to result in fake or distorted scores (Vernon, 1964). It is also a possibility that a student may fake his replies to an interest inventory, however, Ruch and Ruch (1967) suggest that "real life" incentives to fake may actually improve the predictive validities of vocational interest inventories. Hathaway (1960) adds that if a student knows for what purposes the tests will be used, he will be better able to indicate the specific role which he is willing to play in that particular situation. It has also been found that when an inventory is built according to the pattern of the Strong-Campbell Interest Inventory, a lack of self-insight resulting in unintentional faking is not of cynical importance since the keying of an item is based not on its obvious content but on the empirical fact that it did distinguish between criterion groups, whereas the opposite is true where items and scores are interpreted on the basis of their manifest content and taken at face value, as is the case with the Guilford-Zimmerman Temperament Survey or the Kuder Preference Record (Thorndike and Hagen, 1969).

Nelson-Denny Reading Test, Part I, Vocabulary Test
The Vocabulary Test, which is Part I of the Nelson-Denny Reading Test, was selected for this study to ascertain the verbal proficiency of the enrolled students. Correlations have been found between scores on the vocabulary test of the Nelson-Denny Reading Test and continuation or dropout in a postsecondary program (Hawaii University, 1976) and final achievement test scores in a UMA course (Forman, 1975). Studies using similar tests have found correlations between vocabulary scores and vocational interests (Welsh, 1967) and between vocabulary and drop-out (Sainty, 1971).

In the Hawaii study, analysis of student scores on the Nelson-Denny Reading Test Vocabulary section revealed that highest mean scores were found among older students, married students, graduates of mainland high schools, liberal arts majors, students with grade point averages of at least $3.5(\mathrm{~A}=4)$, and continuing students (as opposed to those who dropped out). Of further interest to this study is the correlation coefficient of . 664 between "Vocabulary" scores and "Comprehension" scores. Also students differed significantly in performance on the total $N \in 1$ son-Denny Reading Test by the following characteristics: sex, age, high school background, educational objective, curriculum program, grade point average, and continuing/noncontinuing status.

In the Forman study, correlation of the Nelson-Denny Reading Test with the Final Achievement Test Score (significant at . 05 level) for the Cultural History UMA/SUN course is as follows: Total Nelson-Denny Score, $\mathrm{r}=$ .53, Vocabulary Score, $\mathrm{r}=.52$, and Reading Comprehension, $\mathrm{r}=.49$. In this same study, the correlation of "Education Level" of the students with the Final Achievement Test Score was just $r=.24$.

Using the Terman Concept Mastery Test (Terman, 1956), a nonverbal intelligence test, the D-48 (Black, 1963), and the Strong Vocational Interest Blank (Strong, 1959), Welsh found a consistent relationship between verbal intelligence in gifted adolescents.

Students scoring relatively higher on a verbal as compared with a nonverbal test of intelligence show higher interest scores on verbal-1inquistic scales, and conversely, students with higher verbal interests score relatively higher on a verbal intelligence test (Welsh, 1967, p. 352).

In the Sainty study, drop-outs were less intelligent and had lower reading ability than those who persisted in an adult retraining program.

The Terman-McNemar Test of Mental Ability and the Gates Reading Survey were used. The correlation coefficients between the continuous predictor variables (the scores on the reading test) and the criterion variable--drop-out or completion, were as follows: Gates Reading "Speed and Accuracy," r = .333, Gates "Vocabulary," r = .349, and Gates "Comprehension," r = . 315 . It is interesting to note the close correlations between the "Vocabulary" and "Comprehension" parts of the Gates test. The Vocabulary Test of the Nelson-Denny Reading Test could easily be administered at a learning center by a learning center person since no special training was required. It could also be administered at the time set for administering a test in a course since it required only ten minutes and the time periods suggested for the tests were quite flexible; thus a student could probably take the extra ten minutes without disrupting a personal time schedule too seriously.

## UMA/ISU Student Questionnaire

There is a fundamental need to understand educational change and innovation better, but the caveats are multiple. Some have argued that the very way many innovations are planned and conducted precludes a capacity to address the really important questions about those innovations (Rivlin, 1971). While evaluation is generally advocated as a vehicle for understanding innovation and improving public policy, some have urged caution in the use of evaluation (Mushkin, 1973) largely because the process of evaluation is not well-understood, and interpretations made from findings are often confused and confusing. A major issue is the success criteria employed, and this depends on the perspective adopted (Gooler, 1975).

Rationale for basis of reaction and evaluation instrument Forest (1976) urges that adult education program evaluation be thought of "literally." He adds:

It is simply the determination of the goodness, worth, or value of programs (defined as systems of social interaction with both experiences and outcomes) . . . that the real value of an experience varies, depending on its consequences and outcomes. The more useful the outcomes, the more valuable the experience (p. 167).

If this view is accepted, the value of program outcomes must also vary according to a person's experiences related to the program, and the relationship goes both ways. The value of program outcomes and the value of program experiences are interdependent.

This reasoning leads to the conclusion that people involved in adult education programs will place varying values on that program's outcomes, depending on their experiences with it, and whether the program met their own concerns and expectations (Forest, 1976; Gooler, 1975; Eggert, 1976). A person's judgments of a program are not necessarily "the way it is," however, to each individual making the judgment "it seems so." In fact, based on the humanistic-perceptual theory of psychology, an individual's own perception of events seems so "right" and so certain that one is likely to jump to the conclusion that the way one sees things is the way things are. It is not the external facts that are important in understanding behavior but the meaning of the facts to the behavior (Goble, 1971; Combs, Blume, Newman, and Wass, 1974).

The way in which an individual reacts to any experience is dependent on 1) how he sees himself, 2) how he sees the situations in which he is involved, and 3) the interrelations of these two. In addition, in a
situation in which interaction occurs between individuals as in a teacherstudent relationship, "symbolic interaction" is also taking place. "Symbolic interaction" is the peculiar and distinctive character of interaction as it takes place between human beings. Blumer says:

The peculiarity consists in the fact that human beings interpret or "define" each others' interactions instead of merely reacting to each others' action. Thus, human interaction is mediated by the use of symbols, by interpretation, or by ascertaining the meaning of one another's actions (Blumer, 1973, p. 145).

Again, this is based on an individual's concept of self and his need to preserve this concept.

This "self" enables people to be the "object" of their own actions. Thus, people set goals for themselves, argue with themselves, and engage in countless other interactions with themselves and other "objects" in the course of their lives. This power of "indication" and reflection upon themselves and other things as "objects" enables people to treat them as problems to be defined, interpreted, and consciously solved.

By virtue of indicating such things to himself, a man places himself against them and is able to act back against them, accepting them, rejecting them, or transforming them in accordance with how he defines and interprets them (Blumer, 1973, p. 148).

Human action, then, flows from these definitions and decisional solutions with regard to objects as they arise in experience; in this way, people exercise some control over these objects. Thus :

Instead of the individual being surrounded by an environment of pre-existing objects which play upon him and call forth his behavior, the proper picture is that he constructs his objects on the basis of his ongoing activity (Blumer, 1973, p. 147).

In relation to this study, the "objects" an individual constructed, based on his view of his needs, was an "educational experience," and his reaction to this total experience was on the basis of his necessity to
preserve his concept of "self." In turn, his self-concept is the product of the interaction of his personality with the totality of his experiences.

Construction of UMA/ISU Student Questionnaire To gain information about the all encompassing effect of the experience on the learners, an ethnographic paradigm was employed. To implement this, the "setting" in which the educational experiment occurred was viewed as a "culture" and served to illuminate the meaning of the innovative educational experience to the students. While, according to the humanistic-perceptual theory each individual's experience would be unique to him as viewed from his frame of reference, it was assumed that there would be threads of commonality based on similarities in their background (Iowa, predominantly middle class). Since the philosophical orientation toward research of the enthnographer is humanist, ethnography explicity makes use of "intelligent, informed intuition in the search for truth" (Broudy, Ennis, and Krimerman, 1973, p. 158). Based on this approach, an attempt was made to anticipate the scope and variety of experiences a UMA/ISU student might encounter. To gain a more accurate perspective, these steps were followed: 1) reviewed all of the returned Student Information Questionnaires, 2) reviewed comments which had been made by students when telephone contact was made to remind them to return the first questionnaire, 3) interviewed by telephone two students in each of the three courses offered in the spring who had returned their questionnaires promptly, 4) requested each of the instructors (two for each of the three courses) to respond to a questionnaire which had been used in the UMA/SUN program, 5) requested personal interviews with each instructor and prepared an interview schedule which was attached to the questionnaires for their review prior to the personal
interview, 6) interviewed personnel at the University of Mid-America at Lincoln, Nebraska, 7) consulted recognized specialists in questionnaire construction (Bruce Hamilton and Ronald Flaugher of the Educational Testing Service, Princeton, New Jersey; Mr. Bodwell of the National Association of Public Broadcasting; National Institute of Education; Audrey Forrest of the American College Testing, Iowa City, Iowa), 8) consulted specialists in statistics, evaluation, and research methods (Iowa State University), 9) reviewed samples of various types of questionnaires and consulted relevant literature.

The purpose of the questionnaire was to gain information about the reactions of the students toward all facets of the course, its effect on them personally, and its effect on their families. Likert-type attitude items were used, and an effort was made to have a thorough mix of items dealing with the various topics throughout the questionnaire.

The certainty method of scoring using the 99 -point scale was used to record the responses of the students (Warren, Klonglan, and Sabri, 1969). Directions for use of the scale were printed on the back side of the introductory page which included the letter signed by the Dean of University Extension at Iowa State University and general information relating to the course, faculty, and learning center (Appendix A). To facilitate ease in scoring, the scale was printed at the top of each page in the questionnaire.

The questionnaire was submitted for critical review to: 1) all of the course instructors (one of whom had assisted in designing one of the courses), 2) UMA/ISU coordinator, 3) research personnel at the University of Mid-America in Lincoln, Nebraska, 4) recognized specialists in adult education, statistics, research methods, and evaluation at Iowa State

University, and 5) several adult students beginning study at Iowa State University as freshmen but not a part of the UMA/ISU program. Revisions were made on the basis of the suggestions given, and the revised questionnaire was reviewed by recognized specialists in adult education, evaluation, research methods, and statistics.

For ease in grouping the returned questionnaires and as a precaution for accurate course identification, the questions pertaining to the specific courses were printed on colored paper that was coded for each of the courses (yellow for Accounting I, green for Psychology Today, peach for Consumer Experience) all for spring, 1976, offerings. For the fall, 1976, offerings (Accounting I, Psychology Today, Adams Chronicles, and Writing for a Reason), just the yellow color was used. To avoid unnecessary duplication, just one of the colors was selected for the questionnaire, and this happened to be green (Appendix B).

## Collection of Data

## Spring UMA/ISU program

The first four courses offered by UMA/ISU began in February, 1976, and the first questionnaire (Appendix B) was included in the course materials. An introductory letter which prefaced the questionnaire explained the purpose of the questionnaire, and the respondents were assured that the contents of the questionnaire would be held in the strictest confidence. The letter also communicated the need for additional information from each student at a future date.

The second instrument sent to the students was the Strong-Campbell
Interest Inventory (Appendix B). A letter explaining the value of the
inventory to the student was enclosed (Appendix A), and a brief explanation of the procedure a student would follow in interpreting the profile sheet that would be sent to each student was included as part of the contents of the letter. It was assumed that the assurance of a forthcoming interpretation of the results of the inventory might serve as an incentive for responding to and returning the inventory promptly.

When the profile sheets interpreting the Strong-Campbell Interest Inventory were returned to the students, a letter was included giving directions that would increase the ease of using the profile sheet (Appendix A). It was also suggested that they visit the learning center and view a video tape made by Dr. Donald Zytowski, who is a counseling psychologist and a specialist in the interpretation of the Strong-Campbell Interest Inventory.

The use of the Strong-Campbell Interest Inventory with part-time enrolled students at Iowa State University could have resulted in an over load for the Student Counseling Service since these students were eligible for services from the center. Before a final decision was made to use the inventory and after extensive consultation with the administration and Dr. Zytowski, the decision was made to use the inventory and to supplement the interpretation given through the profile sheets (which were sent directly to the students) with a taped explanation of the profile and suggestions for sources of additional information that were easily available to the student. Dr. Zytowski is a recognized research specialist in the area of vocational counseling and particularly in the use of the various vocational interest inventories by E. K. Strong, Jr. and David P. Campbell.

Dr. Zytowski offered his services without charge, and the media specialist, Douglas Brown, at the Scheman Continuing Education Center also offered his services without cost. The cost of the tapes and use of the equipment was covered by a grant from the University of Mid-America at Lincoln, Nebraska. A dubbed tape of Dr. Zytowski's interpretation was sent to all learning centers prior to the return of the interpretation profiles to the students.

In April, 1976, the Nelson-Denny Reading Tests, Part I, Vocabulary Test, and UMA/ISU Student Questionnaires (Appendix B) were distributed to the various learning centers. Instructions for administering the questionnaires were sent to the learning center personne1. Since the time required to take the Nelson-Denny Reading Test was only ten minutes, students were asked to take this test at the time they visited a learning center to take a course test. There was an occasional student who did not go to a learning center to take tests but had some other type of substitute arrangement. These students were asked to go to a learning center to take the NelsonDenny test, but since it was on a voluntary basis and since this might have been difficult for the student, it did not always work out. Another problem with an instrument administered by learning center personnel was their inability always to be present for a student's visit to the center. Many worked on a part-time basis, and their schedules did not coincide with a student's schedule. Substitute personnel served during the absence of the assigned learning center personnel, but it was not always possible for them to carry out all of the responsibilities of the regularly assigned personnel. For this reason, some students did not take the Nelson-Denny Reading Test, Part I, Vocabulary Test.

The UMA/ISU Student Questionnaires were distributed by the learning center personnel to students when they visited the center for tests or any other reason. The student was asked to take the questionnaire home, respond to it, and mail in the addressed, stamped envelope that was supplied. If they preferred, they could respond to the questionnaire at the center, place it in the envelope supplied, seal it, and give to the learning center person or mail it themselves. When a student did not visit a learning center and, therefore, did not receive a questionnaire, one was mailed to him. A stamped, self-addressed envelope was enclosed for the student's convenience in returning the questionnaire.

Following the final tests at the end of June or the first part of July (for most of the students), a reminder in the form of a letter including a checklist was sent to all students who had not returned all of the instruments and/or had not taken the Nelson-Denny Reading Test (Appendix A). A copy of this questionnaire was included for all students who had failed to return the questionnaire. The students were also instructed to contact their learning center to take the Nelson-Denny Reading Test, Vocabulary Part $I$, if they had not had an opportunity to take the test at their learning center (Appendix A).

At the end of July, 1976, a letter and copies of the instrument that had not been returned were sent to all who had dropped out of the courses regardless of date of dropping. It was also an effort to assure that dropping a course did not reflect adversely on them and that the University of Mid-America/ISU would welcome their participation in the fall of 1976 when additional courses would be offered (Appendix A).

The brochures with a listing of the new courses were sent to all who had enrolled in the spring courses by the middle of August, 1976 (Appendix E). On August 20, 1976, a letter was sent to the students who had not yet returned the end-of-course questionnaire (UMA/ISU Student Questionnaire). In this letter, an invitation was again extended to enroll in the fall course offerings of UMA/ISU (Appendix A).

## Fal1 UMA/ISU program

Toward the end of September or the beginning of October, four courses were offered through UMA/ISU. Accounting I and Psychology Today were repeated, and Adams Chronicles and Writing for a Reason were added. Adams Chronicles was the first sophomore level course offered and was on a satisfactory/fail basis only, and Writing for a Reason was offered on an audit (no credit) basis only.

As in the spring course offerings, the Student Information Questionnaire (Appendix B) was included in the course materials. However, in the fall a change was made in reference to the Strong-Campbell Interest Inventory, and it, too, was included in the original materials. In just a few instances this was not done, and in these cases the Strong-Campbell Interest Inventory with a letter of explanation was sent October 19, 1976, just two weeks after the beginning of the course (Appendix A).

The UMA/ISU Student Questionnaire (Appendix B) was sent to all who initially enrolled in the course, and it was emphasized that whether they finished the course or dropped, their reactions were valuable to UMA/ISU (Appendix A). A follow-up letter was sent March 14, 1976, reminding them to return the questionnaire (Appendix A).

In both the spring and fall programs, telephone calls were made to randomly selected individuals who had failed to return questionnaires. This was effective in most cases, and additional valuable information was gained.

When a student dropped a course in the first few weeks of the trial period, a questionnaire was sent asking the student to state his reasons for dropping. This effort was not a part of this study, but information gained from the few questionnaires returned revealed that reasons given for dropping included such unforeseen events as illness or a change in work status, location, and/or family responsibilities. In a few cases, the course content was quite different than their expectations, and they realized they were not interested in remaining in the course.

In spring, 1976, there was a total of 188 original enrollments in the three courses offered: Accounting I, 98 enrollments; Psychology Today, 58 enrollments; and Consumer Experiences, 32 enrollments. Of this number, 16 individuals enrolled in two courses and 1 individual enrolled in three courses; thus total enrolled individuals was 171. The first questionnaire (Student Information Questionnaire) was returned by 150 individuals. The 21 failing to return the first questionnaire included 17 nonstudents (those dropping imnediately) and 5 students enrolled for credit or audit (1 student was involved in two courses). Excluding the nonstudents, the return rate was 150 questionnaires which was a return rate of 98 percent based on an average of the three classes.

In fall, 1976, there was a total of 195 enrollments: Accounting I, 92; Psychology Today, 48; Adams Chronicles, 29; and Writing for a Reason, 26. Of this number, 19 individuals were enrolled in two courses and

8 individuals did not return the questionnaire (4 enrolled students and 4 nonstudents) which left 168 individuals who responded to and returned the Student Information Questionnaire, a response rate of 99 percent (excluding the 4 nonstudents), based on average of the four classes.

## Return rate for data

Spring, 1976, enrolled students, average for all courses Percent
Student Information Questionnaire (beginning-of-course
questionnaire)
Strong-Campbell Interest Inventory 89.00
Nelson-Denny Reading Test, Part I, Vocabulary Test 61.00
UMA/ISU Student Questionnaire (end-of-course questionnaire)
84.00

Fal1, 1976, enrolled students, average for all courses Percent

Student Information Questionnaire (beginning-of-course questionnaire)
98.50

Strong-Campbell Interest Inventory 95.00
Nelson-Denny Reading Test, Part I, Vocabulary Test 74.00
UMA/ISU Student Questionnaire (end-of-course questionnaire)
83.00

Returns from students who completed the course satisfactorily or received an incomplete, average for all courses
$\frac{\text { Percent }}{\text { Spring Fall }}$

Student Information Questionnaire (beginning-of-course questionnaire)
$99.0 \quad 99.6$
Strong-Campbell Interest Inventory
93.697 .3

Nelson-Denny Reading Test, Part I, Vocabulary Test $82.0 \quad 92.3$
UMA/ISU Student Questionnaire (end-of-course questionnaire)
91.387 .0

For additional information on rate of return for data collection, see
Tables 1 through 6.

Discussion of return rate
In the spring, 1976, the Student Information Questionnaire was included with the original course materials, and the Strong-Campbell

Table 1. Total students enrolled excluding nonstudents who completed instruments, spring, 1976

|  |  | Nelson-Denny |  |
| :---: | :---: | :---: | :---: |
| Student | Strong-Campbe11 | Reading Test, | UMA/ISU |
| Information | Interest | Part I, | Student |
| Questionnaire | Inventory | Vocabulary Test | Questionnaire |

## Accounting I

Total enrolled $\underline{98}$ minus $\underline{5}$ nonstudents $=93$

| 96\% | 88\% | 48\% | 84\% |
| :---: | :---: | :---: | :---: |
| credit) ${ }^{\text {a }}$ | (4 credit) | (21 credit) | (6 credit) |
| audit) | (2 audit) | (14 audit) | (4 audit) |
| dropped) | (5 dropped) | (13 dropped) | (5 dropped) |

## Psychology Today

Total enrolled 58 minus 11 nonstudents $=47$

| 98\% | 87\% | 55\% | 81\% |
| :---: | :---: | :---: | :---: |
| (1 audit) | (1 credit) | (3 credit) | (3 credit) |
|  | (1 audit) | (11 audit) | (3 audit) |
|  | (4 dropped) | (7 dropped) | (3 dropped) |

Consumer Experience
Total enrolled 32 minus 1 nonstudent $=31$
100\%
$91 \%$
$(3$ credit)
$\quad 81 \%$
(3 credit)
(2 audit)
(1 dropped)

88\%
(2 credit)
(2 audit)

Average for return of questionnaires for all courses, enrolled students
$98 \% \quad 89 \% \quad 61 \% \quad 84 \%$
${ }^{\mathrm{a}}$ In parentheses are the students who did not complete the instruments.

Table 2. Total students enrolled for credit and received it, spring, 1976

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Student <br> Information <br> Questionnaire | Strong-Campbe11 <br> Interest <br> Inventory | Nelson-Denny <br> Reading Test, <br> Part I, <br> Vocabulary Test | UMA/ISU <br> Student <br> Questionnaire |

## Accounting I

62 students

| 97\% | 94\% | 66\% | 91\% |
| :---: | :---: | :---: | :---: |
| (1 incomplete) ${ }^{\text {a }}$ | (2 incompletes) | (4 grade of A) | (3 incompletes) |
| (1 grade of B) | (1 grade of C) | (4 grade of B) | (2 grade of C) |
|  | (1 grade of B- | (7 grade of C) | (1 grade of B) |
|  | blind) | (1 grade of D) |  |
|  |  | (5 incompletes) |  |

Psychology Today
30 students
$100 \%$

97\%
(1 grade of C)

90\%
(1 incomplete)
(2 late enroll-ments-incomplete)

Consumer Experience
30 students

100\%

90\%
(2 incompletes)
(1 grade of $B$ )

90\%
( 1 grade of B)
93\%
(1 grade of B)
(2 incompletes)
oll courses
Average for return of questionnaires for all courses, for credit students only
$99 \% \quad 94 \% \quad 91 \%$
${ }^{a}$ In parentheses are the students who did not complete the instruments.

Table 3. Total students enrolled who changed to audit or dropped, spring, 1976

|  |  | Nelson-Denny |  |
| :---: | :---: | :---: | :---: |
| Student <br> Information <br> Questionnaire | Strong-Campbell <br> Interest <br> Inventory | Reading Test, <br> Part I, <br> Vocabulary Test | UMA/ISU <br> Student <br> Questionnaire |

Accounting I
31 students

| 94\% | 77\% | 13\% | 71\% |
| :---: | :---: | :---: | :---: |
| (l $^{\text {audit) }}{ }^{\text {a }}$ | (2 audit) | (14 audit) | (4 audit) |
| (1 dropped) | (5 dropped) | (13 dropped) | (5 dropped) |

Psychology Today
19 students

94\%
79\%
(1 audit)
(1 audit)
(4 dropped)

5\%
(11 audit)
(7 dropped)

68\%
(3 audit)
(3 dropped)

Consumer Experience
4 students
$100 \% 100 \%$
25\%
(2 audit)
(1 dropped)
Average for all courses
$96 \% \quad 85 \%$
$11 \%$
63\%
${ }^{a}$ In parentheses are the students who did not complete the instruments.

Table 4. Total students enrolled (excluding nonstudents) who completed instruments, fall, 1976

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Student | Strong-Campbell | Nelson-Denny | Reading Test, |
| Information | Interest | Part I, | UMA/ISU |
| Questionnaire | Inventory | Vocabulary Test | Questionnaire |

## Accounting I

Total enrolled $\underline{92}$ minus $\underline{2}$ nonstudents $=\underline{90}$

| 97\% | 94\% | 74\% | 84\% |
| :---: | :---: | :---: | :---: |
| (1 credit) $^{\text {a }}$ | (1 credit) | (9 credit) | (3 credit) |
| (1 audit) | (2 audit) | (7 audit) | (6 audit) |
| (1 dropped 1ate) | (2 dropped) | (7 dropped) | (5 dropped) |

Psychology Today
Total enrolled 48
100\%

94\%
(1 audit)
(1 dropped)
(1 credit)

81\%
(6 credit)
(2 audit)
(1 dropped)

71\%
(5 credit)
(4 audit)
(5 dropped)

Adams Chronicles
Total enrolled $\underline{29}$ minus $\underline{4}$ nonstudents $=\underline{25}$

|  | $92 \%$ | $80 \%$ | $92 \%$ |
| :---: | :---: | :---: | :---: |
|  | (1 credit) | (3 credit) | (2 credit) |

## Writing for a Reason

26 students

97\%
$100 \%$
(1 audit)

62\%
(9 audit)
(1 dropped)

85\%
(3 audit)
(1 dropped)

Average for return of questionnaires for all courses, enrolled students
$\begin{array}{lll}99 \% & 95 \% & 74 \%\end{array}$
${ }^{a}$ In parentheses are the students who did not complete the instruments.

Table 5. Total students enrolled for credit and received it, fall, 1976

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Student | Strong-Campbell | Nelson-Denny |  |
| Information | Interest | Part I, | UMA/ISU |
| Questionnaire | Inventory | Vocabulary Test | Student |
|  |  |  |  |

Accounting I
65 students
${ }_{(1 \text { grade of } C}^{99 \%} \quad \begin{gathered}99 \% \\ (1 \text { grade of } C)\end{gathered}$
(3 grade of A) ( 1 grade of B)
(2 grade of B) (2 grade of C)
(1 grade of C)
(3 incompletes)
Psychology Today
26 students
$100 \%$ 100\% 85\% 85\%
(1 grade of A)
(2 grade of $C$ )
(1 incomplete)
(2 grade of B)
(1 grade of C)
(1 grade of $F$ )

Adams Chronicles
25 students
100\%
96\%
92\%
92\%
(1 grade of B)
(1 grade of A)
(2 grade of B)
(1 grade of $B$ )
Writing for a Reason
All audit only
Average for return of questionnaires for all courses, for credit students only
$99 \% \quad 98 \% \quad 98 \% \quad 91 \%$
${ }^{a}$ In parentheses are the students who did not complete the instruments.

Table 6. Total students enrolled who changed to audit or dropped, fall, 1976

| Student Information Questionnaire | Strong-Campbell <br> Interest <br> Inventory | Nelson-Denny <br> Reading Test, Part I, Vocabulary Test | UMA/ISU <br> Student Questionnaire |
| :---: | :---: | :---: | :---: |
| Accounting I |  |  |  |
| 24 students |  |  |  |
| $\begin{gathered} \quad 92 \% \\ \text { (1 }_{1} \text { audit) } \end{gathered}$ | $\begin{gathered} 83 \% \\ \text { (2 audit) } \\ (2 \text { dropped) } \end{gathered}$ | $\begin{aligned} & 42 \% \\ & \text { (7 audit) } \\ & \text { (7 dropped) } \end{aligned}$ | $\begin{aligned} & 54 \% \\ & \text { (6 audit) } \\ & \text { (5 dropped) } \end{aligned}$ |
| Psychology Today |  |  |  |
| 15 students |  |  |  |
| 100\% | $\begin{aligned} & \quad 87 \% \\ & \text { (1 audit) } \\ & \text { (1 dropped) } \end{aligned}$ | $\begin{gathered} 80 \% \\ (2 \text { audit) } \end{gathered}$ | $\begin{aligned} & 33 \% \\ & (4 \text { audit) } \\ & (6 \text { dropped) } \end{aligned}$ |
| Adams Chronicles |  |  |  |
| 4 students |  |  |  |
| 100\% | $\begin{gathered} 75 \% \\ \text { (1 dropped) } \end{gathered}$ | $\begin{gathered} 50 \% \\ (2 \text { audit) } \end{gathered}$ | 100\% |

## Writing for a Reason

2 students
$100 \% \quad 100 \%$

50\%
(1 dropped)

50\%
(1 dropped)

Average for all courses
$98 \% \quad 87 \% \quad 59 \% \quad 64 \%$
${ }^{a}$ In parentheses are the students who did not complete the instruments.

Interest Inventory was sent later with a cover letter explaining its purpose (Appendix A). In the fall, 1976, the Student Information Questionnaire and the Strong-Campbell Interest Inventory were both included with the original course materials. The immediate return rate was better for fall. The students seemed to be very interested in the Strong-Campbell Interest Inventory, and since they wanted the results of the inventory, they returned it immediately and also included the Student Information Questionnaire. Much greater effort had to be expended to gain a comparable return of the Student Information Questionnaire for the spring group of students. In both the spring and the fall, 1976 , groups, return of the Strong-Campbell Interest Inventory was excellent with very few reminders needed, which is possibly an indication of the average UMA/ISU student's interest in the SCII.

In just one instance a student seemed a bit irritated at being reminded to return an instrument, and one student stated he was not going to return the questionnaires because he did not have the time. In all other instances involving "reminders," the students were very cooperative, even apologetic for not having returned them at an earlier date. The excuse was generally lack of time or good intentions and the problem of "not having gotten to it." These were very interested, cooperative students and communicating with them was a pleasure.

Since the Nelson-Denny Reading Test, Part I, Vocabulary Test was administered at the learning centers and a student rarely visited a learning center except to take a test, many students who did not take the tests at a specific learning center (that is, used either designated facilities as was occasionally the case) did not have an opportunity to take the

Nelson-Denny Test without making a special visit to a learning center--just to take the Nelson-Denny Test. Students who changed to audit before taking a test in a course also did not generally take the Nelson-Denny Test as this situation also would have required an extra effort on the part of the student. Another reason for the lower rate of participation in the NelsonDenny was due to the failure of some learning center personnel to administer the test. This generally was not due to any omission on the part of the learning center personnel as was stated earlier but rather a situation caused by personnel who were hired on a part-time basis and who needed to delegate their responsibilities to substitute individuals when they would not be present. Since taking the test was strictly voluntary, one or two students chose not to take the test. Most students were quite interested in receiving the results of the test, and one student enrolled in a vocabulary building program after taking the test and then asked to repeat the test--her score was higher on the second test.

Initial return on the UMA/ISU Student Questionnaire administered toward the end of the course might have been higher if the cover letter had not stated, "You are one of the first group of students to complete a University of Mid-America (UMA) course offered through Iowa State University (ISU)." Some of the students who elected to take an incomplete or who dropped the course believed they should not respond. A letter was sent to these nonrespondents explaining that their answers would be especially valuable to the program and requested they respond to and return the questionnaire. Many complied, but several felt they had completed so little of the course that their responses would contribute very little of value-or at least this was the reason they gave for returning blank questionnaires.

Some of the nonrespondents were contacted by telephone, and in every case they expressed appreciation for the opportunity provided them to take a course "at home." Many were not able to commute to an institution of higher learning or elected not to do so and preferred this method of study. When the student had failed to complete the course and had changed to audit or dropped, often he/she explained that they liked the idea of this type of offering and planned to take courses in the future either when time and circumstances permitted or when a course that met their interests or needs was offered.

In the fall, 1976, 17 individuals who had been students in the spring, 1976, group reenrolled, however, 1 dropped immediately. Of these remaining 16 students, 10 responded again to the Student Information Questionnaire, and 6 returned the questionnaire without responding a second time explaining they had responded in the spring, 1976. Most added that if it was necessary to respond a second time, they would do so.

## Analysis of Data

Data for the study were collected from the Iowa State University registration forms, the Student Information Questionnaire (basically background information), the UMA-ISU Student Questionnaire (a reaction questionnaire administered at the end of the course), the Strong-Campbell Interest Inventory (a standardized interest inventory), and the vocabulary section of the Nelson-Denny Reading Test (a standardized test). The methods used in the initial analysis of each instrument and the final analysis of the resulting data are included in this section.

## Student Information Questionnaire

The raw data from each respondent for the Student Information Questionnaire were coded and re-coded on IBM coding forms in preparation for keypunching. Questionnaire items with open ended options were coded on the basis of coding schemes that were developed as a result of reviewing these open ended items in a majority of the returned questionnaires. The initial analysis of the Student Information Questionnaire resulted in a score analysis for the 1976 spring and fall enrollees which included: frequency distributions, cumulative frequency, percent, and cumulative percent. This compilation of descriptive statistics provided a comprehensive view of the respondents including demographic variables and information relating to their background and preferences in areas of education, work, leisure time, resources, goals, and, in addition, their source or sources or information about UMA and reasons for enrolling. The resulting percentages for all questions for both the spring and fall enrollees are given in Appendix D.

The Student Information Questionnaire was then factor analyzed. The decision to include items for the factor analysis was based on the frequencies. For example, if 85 percent of all the individuals responding to an item chose one response, the item was not used because there was very little variability in relation to the item. If variability existed in a twochoice item, that is if approximately 30 percent chose one of the two possible choices and 70 percent chose the other, the item was coded 1 and 0. If in a six-choice item the large majority of respondents chose one of the responses, the remaining five were grouped together, and the responses were coded 1 for the choice with the large majority and 0 for the others grouped together. This resulted in 122 questions that had enough variance
in the answer to be meaningfully analyzed. These items were coded for the factor analysis (AppendixD). All enrollees in the combined classes who had responded to the three instruments were included.

Correlations were computed around the 122 variables, and the highest correlation in each row was placed in the corresponding diagonal of this correlation matrix. Hotelling Principal Components were used to extract the factors ( ZO ), and then 14 factors were rotated by varimax. The most meaningful solution appeared to be a nine-factor solution and that is reported.

## UMA/ISU Student Questionnaire

The open ended questions were coded and recorded on IBM Coding Forms. Coding schemes for these questions were based on examination of a majority of returned questionnaires. The responses to the open ended questions for the spring enrollees were also grouped for each question (Appendix D). These responses were immediately shared with all interested personnel and specifically instructors for the fall, 1976, course offerings.

The responses for the questions scored on the 1-99 scale were coded and keypunched directly from the questionnaire. Due to the type of analysis used for the study, it was theoretically necessary to discard any questionnaires from individuals who had not also responded to the first questionnaire, the Student Information Questionnaire. However, every individual who responded to the UMA/ISU Student Questionnaire had also responded to the Student Information Questionnaire eliminating the necessity of discarding any questionnaire for that reason.

The questionnaires were divided on the basis of courses. The questionnaires returned from the students enrolled in Accounting $I$, spring and fall, 1976, were sufficient for a separate factor analysis. The remaining questionnaires from the students enrolled in the spring, 1976, offerings (Psychology Today and Consumer Experience) and the fall, 1976, offerings (Psychology Today, Adams Chronicles, and Writing for a Reason) were grouped together since there were insufficient numbers for a separate factor analysis for each course.

Correlations between questions were found for each group. In group one the responses for the two accounting courses (identified as courses 1 and 4) were grouped together to find the correlation matrix. In group two (Psychology Today, spring and fall, each separate; Consumer Experience, spring; Adams Chronicles, fall; and Writing for a Reason, fall), an individual covariance matrix was found for each of the five courses, and then these covariance matrices were pooled to obtain the correlation matrix upon which the factor analysis was based. Group one and group two were analyzed separately, and for each group the highest correlation in each row was placed in the corresponding diagonal and used as the commonalty estimate and Hotelling Principal Components was used to extract the factors, (Z0). Then 16 factors were rotated by varimax. The most meaningful solution appeared to be the ten-factor solution, and this is the solution that is reported (Appendix D).

For the second group, 15 factors were rotated and 15 factors were retained. This is the solution that is reported (Appendix D).

The factors for the two groups were compared to identify factors which were common to both groups. When factors were found that were identical in
both groups, the identical items with high loadings in each group were compared and the loadings averaged. The resulting items with averaged high loadings were selected for scoring. Where factors were independent, that is not common to both groups, the items with high loadings on the particular factor were selected for scoring.

The means and standard deviations for each item for each course (Accounting, spring and fall, are combined), and the factor and factor loadings are given in Appendix D. In the UMA/ISU Student Questionnaire, the 1 to 99 continuum response framework was used with the certainty method which employs the normal deviate ( $Z$ ) for the transformation. The scores for the 99 categories can be obtained directly from a table of normal deviates ( $Z$ ), and when using this table, a response of 99 would be coded $+2.326,75$ as $+0.674,50$ as $0.000,25$ as -0.674 , and 01 as -2.326 , etc. This has the effect of spreading out the tails of the scale and pushing together the scores occurring near the middle (Wolins and Dickinson, 1973). The means were determined for the responses on each item from the coded scores.

Strong-Campbell Interest Inventory and Nelson-Denny Reading Test, Part I, Vocabulary Test

The Strong-Campbell Interest Inventory is a standardized inventory for which factors have already been identified. For this study, Holland's classifications have been used (Hearn and Moos, 1978; Campbell, Crichton, Hansen, and Weber, 1974). The six identified factors include categories named Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (which have been described in this chapter, pages 171 and 172). In addition to the six factors, the Academic Orientation Scale and the

Introvert Extrovert scales were selected for analysis. The scores from the Nelson-Denny Reading Test, Part I, Vocabulary Test were added to this group of data. (Nelson-Denny Reading Test has been described in this chapter, beginning on page 181).

For each class (Accounting I, spring and fall combined; Psychology Today, spring and fall, each separate; and Consumer Experience, Adams Chronicles, and Writing for a Reason), the means of each of the nine scales were computed. For each scale the means for each of the different classes were examined by a one-way analysis of variance to detect significant differences.

Final analysis of combined data
For the scales identified in the three instruments, a one-way univariate analysis of variance was performed by course, and an $F$ test was used to detect course differences. For each course (Accounting, spring and fall together, all others separate), a correlation matrix was run on the identified scales in the three instruments, the information from the Nelson-Denny Test, and other demographic variables. The resulting correlation matrices were examined for high, correlations. Finally a correlation matrix was formed by pooling within courses. This matrix was examined for high correlations.

## FINDINGS AND DISCUSSION

The first two sections of this chapter contain the descriptions and the composition of the factors derived from the factor analysis of the two questionnaires: the Student Information Questionnaire contained items relating to the students' general background, interests, and goals, and the UMA/ISU Student Questionnaire contained 170 statements describing facets of the overall experience to which the students were asked to respond using a 1-99 certainty scale. The third section is a description of selected background information from the Student Information Questionnaire, and the fourth section includes the correlations among the Strong-Campbell Interest Inventory Scales, the scales resulting from the Student Information Questionnaire, and the UMA/ISU Student Questionnaire. Also, the Nelson-Denny Reading Test, Part I, Vocabulary Section scores were correlated with the previously mentioned variables for those subjects where this test score was available. In this fourth section, the means for the courses on all of these variables were compared using analysis of variance.

## Factor Analysis of the Student <br> Information Questionnaire

The first step in the analysis of the Student Information Questionnaire was to obtain a frequency count on the responses to all items in the questionnaire. The items were then reviewed, and the decision to include items for the factor analysis was based on the frequencies, that is, items were retained when the responses resulted in enough variance to be meaningfully analyzed. The number of items retained was 122 , and these were coded (Appendix D) and factor analyzed. The Student Information Questionnaires
from all students who had also responded to the UMA/ISU Student Questionnaire and the Strong-Campbell Interest Inventory were included in the analysis.

Correlations were computed among the 122 variables, and the highest correlation in each row was placed in the corresponding diagonal of this correlation matrix. Hotelling Principal Components was used to extract the factors, ( ZO ), and then 14 factors were rotated by varimax. The most meaningful solution seemed to be a nine-factor solution, and this is reported.

Items were selected for each factor on the basis of the size of the factor loadings and rationality of fit. A factor loading of .40 or greater served as a guideline, however, factors were included with lower loadings when there seemed to be a meaningful relationship to other items in the factor and to the underlying construct. Items selected for scoring included only the items that loaded highly on the factor and were good examples of the basic concept of the factor. The names given to the nine factors identified as a result of the factor analysis of the Student Information Questionnaire are as follows:

Factor I (Scale 1) Person Centered Vocational/Practical Goals
Factor II (Scale 2) Evaluation of High School Attended
Factor III (Scale 3) Personal Goal of Increasing Scope of Interests and Awareness

Factor IV (Scale 4) Interest in Humanities
Factor V (Scale 5) Interest in Home Economics, Art and Church Related Activities

Factor VI (Scale 6) Stress Engendered by Involvement in the Course Relating to the Individual

Factor VII (Scale 7) Education
Factor VIII (Scale 8) Interest in Physically Oriented Activities
Factor IX (Scale 9) Degree of Involvement, Work/Social
Each of the nine factors is briefly described, and a list of items included in each factor follows. The coded (AppendixD) number of each item, the item as it appears in the questionnaire, the factor loading, mean, and standard deviation are also listed for each item in each factor. Factor I (Scale 1) Person Centered Vocational/Practical Goals

Items loading highly on this factor describe goals that are very personally oriented. The items that load most highly all contain specific reference to goals that will improve or help the individual as, for example: to become a better person or citizen, to become a better friend, spouse, or parent, and to attain specific skills or a degree required for a present or future job. The item which refers to leisure time--to use leisure time creatively--even implies a specific goal, that is, to use leisure time in a way that will help to improve the individual to be a better person, spouse, citizen, etc., depending on the individual's personal goals. The items point to the gaining of knowledge and skills but for vocational or practical reasons. The factor loadings were relatively high, and there were many items in this factor indicating high variability, that is quite a high degree of disagreement among those who responded to the items.

| Item no. | Item | Fac. <br> load. | Mean | Std. dev. |
| :---: | :---: | :---: | :---: | :---: |
|  | How important is it that you achieve the following goals by studying with UMA? To become a better person or citizen. (Three responses, Not important to Very important) | 73 | 2.25 | . 75 |
| $118 .$ | How important is it that you achieve the following goals by studying with UMA? To become a better friend, spouse or parent. (Three responses, Not important to Very important) | 68 | 2.15 | . 81 |
| $106 .$ | How important is it that you achieve the following goals by studying with UMA? To attain specific skills that will be useful on a job. (Three responses, Not important to Very important) | 67 | 1.92 | . 72 |
| $119 .$ | How important is it that you achieve the following goals by studying with UMA? To get to know other adults with interests similar to mine. (Three responses, Not important to Very important) | 67 | 1.70 | . 71 |
| $109 .$ | How important is it that you achieve the following goals by studying with UMA? To obtain a degree which is required for my present or future job. (Three responses, Not important to Very important) | 64 | 1.86 | . 70 |
| $115 .$ | How important is it that you achieve the following goals by studying with UMA? To use leisure time creatively. (Three responses, Not important to Very important) | 62 | 2.05 | . 76 |
| $101$ | How does your employer feel about your enrollment in UMA? (Six responses from Strongly encouraging to Don't know) | 61 | 1.79 | . 74 |
| $114$ | How important is it that you achieve the following goals by studying with UMA? To increase my confidence to undertake learning projects. (Three responses, Not important to Very important) | 60 | 2.36 | . 70 |
| $111 .$ | How important is it that you achieve the following goals by studying with UMA? To develop an understanding and an appreciation of science and technology. (Three responses, Not important to Very important) | 57 | 2.31 | . 71 |

110. How important is it that you achieve the following goals by studying with UMA? To learn how to participate effectively as a citizen in my community. (Three responses, Not important to Very important) $56 \quad 1.74$
.73
111. How important is it that you achieve the following goals by studying with UMA? To develop a new career. (Three responses, Not important to Very important)
$55 \quad 1.70$
.69
112. How important is it that you achieve the following goals by studying with UMA? To satisfy my curiosity about a particular topic. (Three responses, Not important to Very important) 40 2.30 $\begin{array}{ll}.74\end{array}$
113. In addition to the UMA course in which you have enrolled, which of the following are available to you? A private two- or four-year college within 40 miles. $(1=$ yes, $0=$ no $)-29$. 53 . 50
114. In addition to the UMA course in which you have enrolled, which of the following are available to you? A university within 40 miles. ( $1=y e s$, $0=$ no ) -27 . 44 . 50
115. How important is it that you achieve the following goals by studying with UMA? To improve my self-image, simply, to learn. (Three responses, Not important to Very important)
$26 \quad 2.70$
.53

Factor II (Scale 2) Evaluation of High School Attended
Items which loaded most highly on this factor include statements which serve to evaluate various components of a high school experience. The scope of the items is quite broad and includes statements as: teachers tended to be fair, teachers were interested and concerned, examinations were fair, my high school experience was enjoyable, teachers graded fairly, size of classes was about right, etc. Three of the five items with the highest loadings on this factor relate to teachers, and the fourth is about
examinations which tend to tie very closely to a student's feelings about a teacher. Since the factor loadings are moderately high, there is quite a range of disagreement among respondees.

| $\begin{gathered} \text { Item } \\ \text { no. } \end{gathered}$ | Item | Fac. <br> load. | Mean | Std. dev. |
| :---: | :---: | :---: | :---: | :---: |
|  | Describe the high school you attended for the longest period of time. Teachers tended to be fair. (Five responses, Never to Always) | 71 | 4.03 | 71 |
|  | Describe the high school you attended for the longest period of time. Teachers were interested and concerned (Five responses, - to +) | 69 | 4.08 | . 81 |
| 45. | Describe the high school you attended for the longest period of time. Examinations were fair (Five responses, Never to Always) | 67 | 4.16 | . 70 |
| 51. | Describe the high school you attended for the longest period of time. My high school experience was enjoyable. (Five responses, Never to Always) | 67 | 4.11 | . 83 |
| 50. | Describe the high school you attended for the longest period of time. The teachers graded fairly. (Five responses, Never to Always) | 66 | 4.00 | . 66 |
| $42 .$ | Describe the high school you attended for the longest period of time. Size of classes was about right for the classes taught. (Five responses, Never to Always) | 63 | 4.17 | . 90 |
| $46 .$ | Describe the high school you attended for the longest period of time. The administration placed the welfare of students first when establishing school policy. (Five responses, Never to Always) | 62 | 3.70 | . 84 |
|  | Describe the high school you attended for the longest period of time. The students made friends. (Five responses, Never to Always) | 60 | 4.07 | . 81 |
| $48$ | Describe the high school you attended for the longest period of time. The teachers did a good job of teaching the subject matter content of courses in which I was enrolled. (Five responses, Never to Always) | 56 | 3.82 | . 67 |



Factor III (Scale 3) Personal Goal of Increasing Scope of Interests and Awareness

The items that loaded highly on this factor have an orientation toward the "world beyond" their present immediate environment and scope of interests. It describes an individual who wants to become more aware of the knowledge in the world in areas of philosophy, diversity of cultures, political and social concerns, and about the world of work. The underlying theme could be described as a personal desire to "grow," to "branch out," to "become more informed," and through this process to gain more professional status as an individual. Therefore, it is not just through the humanities that the person wishes to pursue this growth but also through exploring whatever opportunities the world might hold in the world of work --the professional status sought, from his/her viewpoint, could stem from improvement in the areas of culture, type of employment, and/or involvement
in political or social concerns. This type of individual is ready and anxious to break out of the limiting (from the individual's point of view) environment. There is moderate disagreement on the items which loaded highest; however, that is, some are very content to remain much as they are, and this may result from a different self-concept rather than varying circumstances.

| Item | Item | Fac. |
| ---: | :--- | :--- |
| no. | Soad. MeanStd. <br> dev. |  |

107. How important is it that you achieve the following goals by studying with UMA? To increase my awareness of different philosophies, cultures and ways of life. (Three responses, Not important to Very important)
108. How important is it that you achieve the following goals by studying with UMA? To become involved in political and social concerns. (Three responses, Not important to Very important)
109. How important is it that you achieve the following goals by studying with UMA? To improve my professional status. (Three responses, Not important to Very important)
$59 \quad 2.13$81
110. How important is it that you achieve the following goals by studying with UMA? To discover my vocational interests. (Three responses, Not important to Very important)
572.10 .79
111. Indicate your interest in these school subjects even though you may not have studied them. $\begin{array}{lllll}\text { Mathematics. (Five responses, }- \text { to }+ \text { ) } & -40 & 3.69 & 1.16\end{array}$
112. How important is it that you achieve the following goals by studying with UMA? To increase my appreciation of art, music, literature and other cultural expressions. (Three responses, Not important to Very important)
$36 \quad 2.05$
113. Indicate your interest in these school subjects even though you may not have studied them. Economics. (Five responses, - to +) $\quad-34 \quad 3.31 \quad 1.10$
114. How important is it that you achieve the following goals by studying with UMA? To improve my chances of making more money. (Three responses, Not important to Very important) $34 \quad 1.90$. 86
115. Indicate your interest in these school subjects even though you may not have studied them. Bookkeeping or accounting. (Five responses, - to +) $33 \quad 3.70 \quad 1.16$

Factor IV (Scale 4) Interest in Humanities
The items which load on this factor relate to the individual's interest in the area of humanities. The items which loaded on this factor include "school subjects," English literature, sociology or psychology, government, speech, biology, history courses, and Eng1ish composition, and television programs which include serious talks, discussions, interviews, and documentaries. Whereas sociology and particularly psychology are not generally classified as humanities, many facets of the disciplines do relate to the humanities. The subject of biology is very closely related to much of the literature published (including fiction) about the field of medicine and wide interest in television programs based on various segments of the medical profession might account for the moderately high loading of this item on this factor. The generally moderate loadings on this factor suggest a moderate amount of variability with respect to the factor.

| Item | Fac. | Std. |
| :--- | :--- | :--- |
| no. | Item | load. Mean |

18. | Indicate your interest in these school subjects |
| :--- |
| even though you may not have studied them. |
| English literature. (Five responses, - to +) |

| 33. |
| :--- | | Indicate your interest in these school subjects |
| :--- |
| even though you may not have studied them. |


| Sociology or psychology. (Five responses, - to |
| :--- |
| +) |

26. Indicate your interest in these school subjects even though you may not have studied them. Government. (Five responses, - to +) ..... $-56$30. Indicate your interest in these school subjectseven though you may not have studied them.Speech. (Five responses, - to +)5034. Indicate your interest in these school subjectseven though you may not have studied them.Biology. (Five responses, - to +)$\begin{array}{lll}-50 & 3.35 & 1.20\end{array}$
27. Indicate your interest in these school subjects even though you may not have studied them. History courses. (Five responses, Very uninter- esting to Very interesting) ..... $-49 \quad 3.62$ ..... 1.20
28. Indicate your interest in these school subjects even though you may not have studied them. English composition courses. (Five responses, Very uninteresting to Very interesting) ..... $\begin{array}{lll}-48 & 3.31 & 1.14\end{array}$
29. What types of television programs do you prefer? Serious talks, discussions, interviews, including domumentaries. ..... -42 . 66 . 47
30. What are your main leisure time activities and interests? Mark approximately how often you par- ticipated in these activities during the last year. Reading fiction and nonfiction books. (Four responses, - to +) ..... -40 3.19 ..... 85
31. Indicate your interest in these school subjects even though you may not have studied them. Chemistry. (Five responses, - to +) ..... -39 2.85 ..... 1.27
32. What type of newspapers and magazines do you read regularly? News and business magazines. ..... -35 . 47 . 50
33. Indicate your interest in these school subjects even though you may not have studied them. Foreign languages. (Five responses, - to + ) ..... -33 3.01 ..... 1.27
34. What types of television programs do you prefer? Drama/plays. ..... -31 . 52 ..... 50
35. What types of television programs do you prefer?Quizzes and games.$-27.24$42

Factor V (Scale 5) Interest in Home Economics, Art, and Church Related Activities

This is a factor based on the stereotype of feminine interests and therefore includes what has been historically the areas of interests typically expressed by females. Since there is a mix of males and females responding to the items, this factor may reflect the male vs. female general areas of interest. The factor loadings are high on the home economics related subjects indicating great disagreement. Again it could reflect the positive response of females and the negative response of males. In the areas of "Arts and Handicrafts, Painting, Refinishing Furniture, Woodworking, etc." and the church related items, the variability would be much less due to the lower factor loadings.

| Item | Fac. | Std. |
| :--- | :--- | :--- |
| no. | Item | load. Mean |

24. Indicate your interest in these school subjects even though you may not have studied them. Home economics (clothing). (Five responses, - to +) Indicate your interest in these school subjects even though you may not have studied them. Home economics (food and nutrition). (Five responses, - to + )

| -77 | 3.57 | 1.26 |
| :--- | :--- | :--- |

25. Indicate your interest in these school subjects even though you may not have studied them. Home economics (family relations). (Five responses, $\begin{array}{lllll}\text { Very uninteresting to Very interesting) } & -75 & 3.91 & 1.21\end{array}$
26. What are your main leisure time activities and interests? Mark approximately how often you participated in these activities during the last year. Arts and handicrafts, painting, refinishing furniture, woodworking, sewing, photography, etc. (Four responses, - to + ) $-46 \quad 3.24 \quad .88$
27. What are your main leisure time activities and interests? Mark approximately how often you participated in these activities during the last year. Participating in church and community activities (other than sports). (Four responses, $\begin{array}{lllll}\text { - to }+ \text { ) } & -42 & 3.19 & .92\end{array}$
28. Indicate your interest in these school subjects even though you may not have studied them. Art. $\begin{array}{llll}\text { (Five responses, }- \text { to }+ \text { ) } & -39 & 3.11 & 1.23\end{array}$
29. Please indicate whether you have participated in volunteer church related activities this year. $(1=$ yes, $0=n o) \quad-36 \quad .63 \quad .48$
30. Indicate your interest in these school subjects even though you may not have studied them. $\begin{array}{lllll}\text { Typing. (Five responses, }- \text { to }+ \text { ) } & -33 & 3.58 & 1.13\end{array}$
31. What types of newspapers and magazines do you read regularly? Local weekly newspapers. -30 . 69 . 46
32. Which best describes the community in which you presently live?
Factor VI (Scale 6) Stress Engendered by Involvement in the Course Relating to the Individual

The factor loadings for the items in this factor are quite moderate indicating unanimity of responses rather than high variability. There is some disagreement, however, about the items which all reflect the difficulties encountered by the students due to demands of the course(s) on their time. Based on the items which loaded most heavily on the factor, their lack of time was related to work pressures and responsibilities, lack of extra energy, and the program pace of the UMA schedule. Self-discipline and learning how to study again were items which also loaded on this factor, but the factor loadings were quite low, thus the problem of time and energy was paramount in their concerns.

| Item |  | Fac. | Std. |
| ---: | :--- | :--- | :--- |
| no. | Item | load. Mean | dev. |

96. In your planning for studying with UMA, which of the following are major concerns for you? Lack of time. (Three responses, Major to Don't know) -57 1.81 . 71
97. In your planning for studying with UMA, which of the following are major concerns for you? Work pressures and responsibilities. (Three responses, Major to Don't know) -56 1.84 . 68
98. In your planning for studying with UMA, which of the following are major concerns for you? Lack of necessary extra energy. (Three responses, Major to Don't know) -54 1.98 . 68
99. In your planning for studying with UMA, which of the following are major concerns for you? Program pace, keeping up with the UMA schedule. (Three responses, Major to Don't know) -51 1.93 .80
100. In your planning for studying with UMA, which of the following are major concerns for you? Selfdiscipline: getting down to regular work. (Three responses, Major to Don't know) -37 1.65 . 68
101. What are your sources of financing for your UMA course? Full and/or part-time work. (Three responses, Major source to Not a source) -35 2.27 . 92
102. In your planning for studying with UMA, which of the following are major concerns for you? Academic and learning problems: starting to study again, new methods, concentration, memory, etc. (Three responses, Major to Don't know)
$\begin{array}{ll}-34 & 1.55\end{array}$
103. Given your other responsibilities (job, marriage, family, etc.), how difficult do you think it will be for you to "keep up" with the UMA course(s)? (Five responses, Rather easily to Can't do it all) 32 2.29 80
104. To what extent will your participation in this UMA course affect the amount of time you will be spending with family members. (Three responses, Probably no effect to Probably will reduce it alot)
281.68 . 60
105. Finding the money to pay for tuition and materials for a UMA course is: (Four response, A severe hardship to No problem) -27 $3.20 \quad .71$
106. In your planning for studying with UMA, which of the following are major concerns for you? Lack of personal contact with teachers. (Three responses, Major to Don't know) -26 2.08 . 70
107. In your planning for studying with UMA, which of the following are major concerns for you? Domestic interruptions and demands. (Three responses, Major to Don't know) -24 1.63 . 65

Factor VII (Scale 7) Education
The two items loading most highly on this factor describe the education of the mother and the father and in that order. This essentially measures the socio-economic indexes of the parents rather than the individual's own, however, if item 3 is included with the two items loaded most heavily on the factor, the background and current status of the individual are also reflected.

There tends to be a closer correlation between a husband and wife's education than the parents and the children's education which accounts for the socio-economic index being generally determined by the parent's education. It should be noted that the higher loadings on the item relating to the mother's education in particular and to a lesser extent to the father's shows quite high variability in these items. That is, there were great differences in the adult students' mothers' educational levels. The differences weren't as great in the students' fathers' educational level nor in their own.

The remaining items with much lower loadings include additional references to the individual's interests in educationally related activities as religious programs, adult education television programs, and television
viewing in general, and items refer to the financial feasibility of continuing their education.
Item
6. What is the highest level of education attained by your parents or guardians and spouse? Mother. (Seven responses, 8 th grade to Graduate study)

Fac. | Std. |
| :--- |
| load. Mean | dev.

5. What is the highest level of education attained by your parents or guardians and spouse? Father. $\begin{array}{lllll}\text { (Seven responses, } 8 \text { th grade to Graduate study) } & -55 & 2.80 & 1.77\end{array}$
6. What is the highest level of education you have completed? (Six responses, llth grade or less to Graduate study)
7. How many years has it been since you last participated in a formal educational experience? (Four responses, Within past year to 5 years +)
$41 \quad 3.17 \quad 1.16$
8. How many years have you resided at your present address? (Four responses, l year to $11+$ years)
$38 \quad 2.95$
. 99
9. What types of television programs do you prefer? Religious programs.

34 . 22
7. What is the highest level of education attained by your parents or guardians and spouse? (Seven responses, 8th grade to Graduate study) -32
4.25
1.62
82. What are your sources of financing for your UMA course? Parental aid. (Three responses, Major source to Not a source)
63. What types of television programs do you prefer? Adult education programs.49
8. What was your total income last year? Consider annual income from all sources before taxes. $\begin{array}{lllll}\text { (Nine responses, Less than } \$ 1,000 \text { to } \$ 40,000+\text { ) } & 24 & 4.96 & 2.20\end{array}$
56. Estimate the number of hours you watched television in the past week? (Seven responses, None to 20-23 hours)

## Factor VIII (Scale 8) Interest in Physically Oriented Activities

The items that loaded most heavily on this factor include such areas as industrial arts (particularly woodworking and auto mechanics), agriculture, plays, sports events, physical education, outdoor activities including hiking, hunting, swimming, golf, and camping. Practically every item contained some type of physical involvement and many, especially those which loaded most heavily on the factor, tend to be male oriented. Since many women are also interested in some phase of most of the items, there is not the definite male-female dichotomy.

Since all of the items have moderate factor loadings, the variability is also moderate.

Item
no.
21. Indicate your interest in these school subjects even though you may not have studied them. Industrial arts (woodworking). (Five responses, - to + )
27. Indicate your interest in these school subjects even though you may not have studied them. Agriculture. (Five responses, - to + )
22. Indicate your interest in these school subjects even though you may not have studied them. Industrial arts (auto mechanics). (Five responses, - to + )
69. What are your main leisure time activities and interests? Mark approximately how often you participated in these activities during the last year. Participating in plays, concerts, sports events. (Four responses, - to + ) 40 1.57 89
31. Indicate your interest in these school subjects even though you may not have studied them. $\begin{array}{llllll}\text { Physical education. (Five responses, }- \text { to }+ \text { ) } & 39 & 3.33 & 1.20\end{array}$

Fac. Std.
1oad. Mean dev. $48 \quad 2.81 \quad 1.35$
$45 \quad 2.16 \quad 1.27$
67. What are your main leisure time activities and interests? Mark approximately how often you par- ticipated in these activities during the last year. Outdoor activities: hiking, hunting, swim- ming, golf, camping. (Four responses, - to +) 362.95 ..... 82
68. What are your main leisure time activities andinterests? Mark approximately how often you par-ticipated in these activities during the lastyear. Attending movies, concerts, plays, sportsevents, etc. (Four responses, - to + )$28 \quad 2.93 .70$
66. What are your main leisure time activities andinterests? Mark approximately how often you par-ticipated in these activities during the lastyear. Indoor activities: chess, poker, ping-pong. (Four responses, - to +)27 2.22. 92
57. What types of television programs do you prefer? Sports programs. ..... 27.30 ..... 46
74. What are your main leisure time activities andinterests? Mark approximately how often you par-ticipated in these activities during the lastyear. Taking special interest classes (i.e.,cooking, woodworking, tennis, etc.). (Fourresponses, - to +)$24 \quad 2.26 .97$
71. What are your main leisure time activities andinterests? Mark approximately how often you par-ticipated in these activities during the lastyear. Traveling. (Four responses, - to +) 242.98 . 74

Factor IX (Scale 9) Degree of Involvement, Work/Social
The items that loaded most heavily on this factor asked the respondent the number of jobs or number of hours the individual worked in addition to high school attendance. This may indicate socio-economic status, but it may relate more directly to the type of personality of the person--does this student seek out extra-curricular activities and/or involvement beyond the regularly scheduled itinerary associated with his regular work day as employee, wife and/or mother, or student. Since items loaded on this factor that referred to the independence allowed by UMA, social-community
activities, office held in these activities, television programs viewed that included detective, mystery, western, situation comedy, and comedy series, the basic construct of the factor seems to point to the degree to which individuals tend to want to become involved beyond their basic commitments.

The moderately high loadings on the items referring to high school jobs indicate substantial disagreement about whether they worked and number of hours.

The items relating to the number of hours an individual worked were scored positively, and the items asking whether they engaged in social and community activities and if they held an office were scored negatively which indicates that people who work do not also tend to engage in socialcommunity activities and hold an office in these organizations. Also, the individuals who worked in high school also tended to be the persons who worked later in life.

The type of entertainment for these working people includes television programs that just attempt to entertain, a lighter variety of shows as detective, mystery, and western series, and situation comedy and comedy series. Possibly for relaxation and recreation they need to choose programs and activities that serve to balance the concentration or dedication required by their jobs.

| Item | Fac. | Std. |
| :--- | :--- | :--- | :--- |
| no. | Item | load. Meandev. |

14. During the last year I was in high school, the average number of hours a week I spent on parttime paid jobs outside my home was: (Five $\begin{array}{lllll}\text { responses, None to More than 20) } & 62 & 2.05 & 1.36\end{array}$
15. The largest number of part-time jobs that I held at any one time during my last year in high school was: (Four responses, None to 3 or more) 61 1.51 $\quad .60$
16. Please indicate the importance of the following influences on your enrolling with UMA. The independence allowed by UMA. (Three responses, Not $\begin{array}{lllll}\text { important to Very important) } & 39 & 1.92 & 1.16\end{array}$
17. What types of television programs do you prefer? Detective, mystery and western series? 36.44 .50
18. How many hours per week do you work? (Include a second job or regular overtime). (Seven $\begin{array}{lllll}\text { responses, Does not apply to Over 50) } & 34 & 3.61 & 2.32\end{array}$
19. If you held an office, please indicate by checking. ( $1=$ yes, $0=$ no $) \quad-30$. 58 . 49
20. Please indicate whether you have participated in social-community activities in the past few years. $(1=$ yes, $0=n o)-29 \quad .65$. 48
21. My scholastic standing when I graduated from (or quit) high school was: (Five responses, Lower $\begin{array}{lllll}\text { half of my class to Upper } 5 \% \text { of my class) } & -29 & 3.70 & 1.19\end{array}$
22. How do your friends feel about your enrollment in UMA? Friends. (Six responses, Strongly encour$\begin{array}{llll}\text { aging to Don't know) } & -29 & 2.82 & 1.72\end{array}$
23. What types of television programs do you prefer? Situation comedy, comedy series. 26 . 68.47
24. In addition to the UMA course in which you have enrolled, which of the following are available to you? College level courses offered at a learning center like a library, extension office or public school within 40 miles of my home. ( $1=$ yes, $0=$ no $\quad 24 \quad .45$. 50

Several of the items selected for the factor analysis did not load on any of the selected factors. However, item 1 and items 120 and 121 were included as separate scores for the final analysis of the compiled data. The items not identified with a factor are as follows:

| Item no. | Item | Fac. load. | Mean | Std. dev. |
| :---: | :---: | :---: | :---: | :---: |
|  | Marital and family status. (Not married, 0, Married, 1) | 0 | 1.09 | . 42 |
|  | At the time I graduated (or quit) high school, my age was: (Five responses, 15 or younger to 19 or older) | 0 | 3.49 | . 77 |
| 15. | During the last year I was in high school, the average number of hours a week $I$ spent working for my family at home was: (Five responses, None to More than 20) | 0 | 3.12 | 1.17 |
| 28. | Indicate your interest in these school subjects even though you may not have studied them. Work related as DECA or T\&I. (Five responses, - to +) | 0 | 2.71 | 1.03 |
| 55. | What type of newspapers and magazines do you read regularly? Career or professionally-oriented magazines and journals. | 0 | . 30 | . 46 |
| 72. | What are your main leisure time activities and interests? Mark approximately how often you participated in these activities during the last year. Visiting with friends, relatives. (Four responses, - to +) | 0 | 3.43 | . 58 |
| $81 .$ | What are your sources of financing for your UMA course? Savings. (Three responses, Major source to Not a source) | 0 | 2.61 | . 75 |
| $83 .$ | What are your sources of financing for your UMA course? Grants/scholarships. (Three responses, Major source to Not a source) | 0 | 2.96 | . 25 |
| 84. | Which of these do you own or have easy access to? Slide projector/viewer. ( $1=$ yes, $0=$ no) | 0 | . 39 | . 49 |
| $85 .$ | Do you plan to make any special arrangements to enable you to take a UMA course? Rearrange working hours/duties. ( $1=$ yes, $0=$ no) | 0 | . 36 | . 49 |
| 89. | In addition to the UMA course in which you have enrolled, which of the following are available to you? Correspondence courses. | 0 | . 60 | . 49 |
| $99 .$ | How do your family feel about your enrollment in UMA? Family. (Six responses, Strongly encouraging to Don't know) | 0 | 1.08 | 1.04 |

3. How many states have you resided in (include
Iowa)?
4. How did you find out about UMA? From a newspaper advertisement. $(1=$ yes, $0=$ no $) \quad 0 \quad .22 \quad .41$
5. How did you find out about UMA? From a news article in a newspaper. $(1=$ yes, $0=$ no $) ~ 0 ~ .54 ~ .50$

Factor Analysis of the UMA/ISU Student Questionnaire
The UMA/ISU Student Questionnaires were divided on the basis of courses. The questionnaires for the spring and fall, 1976, offerings for Accounting I were combined, and the questionnaires for the remaining courses were combined. These courses included Psychology Today and Consumer Experience for spring, 1976, and Psychology Today, Adams Chronicles, and Writing for a Reason for the fall, 1976, offerings. These remaining courses were combined since there were insufficient numbers for a separate factor analysis for each course.

In Group I (the two accounting courses), the responses were grouped together to find the correlation matrix. In Group II (the remaining courses), an individual covariance matrix was found for each course, and then these covariance matrices were pooled to obtain the correlation matrix upon which the factor analysis was based. Group I and Group II were analyzed separately, and for each group the highest correlation in each row was placed in the corresponding diagonal and used as the commonality estimate. Hotelling Principal Components was used to extract the factors. In the first group, 5 to 16 factors were rotated by varimax, and the most meaningful solution appeared to be a ten-factor solution which is reported (Appendix D). For the second group, 7 to 15 factors were rotated, and the
most meaningful solution appeared to be the 15 -factor solution which is reported (Appendix D).

The 170 items in the UMA/ISU Student Questionnaire consisted of statements relating to possible attitudes or reactions a student might have toward a particular course in which he was enrolled and to the overall experience of engaging in an open learning college level course. The item loading on each factor was determined by inspection of the factor loadings. Items were placed in a factor on the basis of size of factor loading and rationality of fit. A factor loading of .40 or greater served as a guideline, however, the items with factor loadings below .40 were examined subjectively for psychological meaningfulness and similarity to other items within the factor and to the underlying conceptual unity of the factor itself. Factors were named on the basis of the underlying concept that made items within the factor cohesive. The names assigned to the ten factors identified for group one are as follows:

Factor I Impact of Course on the Students
Factor II Evaluation of the Video Component of the Course
Factor III Evaluation of the Course Structure
Factor IV This Mode of Obtaining an Education vs. Conventional Mode Factor V Availability of Faculty (Reaction to Faculty or "Assisting" Personnel)

Factor VI Family Involvement--Benefit to Family
Factor VII Motivation of Tests
Factor VIII Stress Engendered by Involvement in the Course Relating to Family

Factor IX Stress Engendered by Involvement in the Course Relating to the Individual

Factor X Vocational vs. Personal Development Motivation
The names assigned to the 15 factors identified for group two are as follows:

Factor I Impact of Course on the Students (same as Factor I, Group I)
Factor II Stress Engendered by Involvement in the Course Relating to the Individual (same as Factor IX, Group I)

Factor III Reaction to Faculty or "Assisting" Personnel (same as Factor V, Group I)

Factor IV Evaluation of the Course Structure (same as Factor III, Group I)

Factor V Evaluation of the Video Component of the Course (Same as Factor II, Group I)

Factor VI Personal Development Orientation
Factor VII Obtaining an Education through Conventional Mode (similar to Factor IV, Group I)

Factor VIII Obtaining an Education through Open Learning Mode (similar to Factor IV, Group I)

Factor IX Family Involvement and/or Support for Student
Factor X Evaluation of Course and Components
Factor XI Vocational Orientation (similar to Factor X, Group I)
Factor XII (Not a Factor--low and illogical loadings)
Factor XIII Cost of Course
Factor XIV Fairness of Tests (a sub-part of Factor VII, Group I)
Factor XV (Not a Factor--low and illogical loadings)

In comparing items in the two factor analyses, five factors in each of the two groups had many identical items loading on the respective factors, that is five of the factors identified in the first group also emerged as factors in the second group. These included Factor I in both Groups I and II, Factor II in Group I and Factor $V$ in Group II, Factor III in Group I and Factor IV in Group II, Factor V in Group I and Factor III in Group II, and Factor IX in Group I and Factor II in Group II. The remaining factors in the two groups were either similar or not related. When the factors were similar, a very limited number of items were shared, and in some cases these items tended to be either ambiguous in meaning or the factor loadings were very low and the items loaded quite evenly on several factors.

Factors selected for scoring and the names given these factors vary from the factor numbers and names for Group I and II and were selected on the basis of the cohesiveness of items which loaded on the particular factor and the weight of the factor loadings for the items within the factors.

The factors scored and the scale in which it was scored follows:

Factor I (Scale 1) Impact of the Course on the Students (Factor I, Groups I and II)

Factor II (Scale 2) Evaluation of the Video Component of the Course (Factor I, Group I and Factor V, Group II)

Factor III (Scale 3) Evaluation of the Course Structure (Factor III in Group I and Factor IV, Group II)

Factor IV (Scale 4) Obtaining an Education through the Conventional Mode (Factor VII, Group II)

Factor V (Scale 5) Obtaining an Education through Open Learning Mode (Factor VIII, Group II)

Factor VI (Scale 6) Availability of Faculty (Reaction to Faculty or "Assisting" Personnel) (Factor V, Group I and Factor III, Group II)

Factor VII (Scale 7) Fairness of Tests (Factor XIV, Group II)
Factor VIII (Scale 8) Evaluation of Course and Components (Factor X, Group II)

Factor IX (Scale 9) Stress Engendered by Involvement in the Course Relating to Family (Factor VIII, Group I)

Factor X (Scale 10) Family Involvement--Benefit to Family (Factor VI, Group I)

Factor XI (Scale 11) Family Involvement and/or Support for Student (Factor IX, Group II)

Factor XII (Scale 12) Vocational vs. Personal Development Motivation (Factor X, Group I and Factor VI, Group II)

Factor XIII (Scale 13) Vocational Orientation (Factor XI, Group II)
Factor XIV (Scale 14) Stress Engendered by Involvement in the Course Relating to the Individual (Factor IX, Group I and Factor II, Group II)

Factor XV (Scale 15) Cost of Course (Factor XIII, Group II)
The item loadings on the factors for Group I (spring and fall, 1976, Accounting I students) and Group II (the remaining five classes for spring and fall, 1976) are included in Appendix D. The means and standard deviations for each item in the questionnaire divided according to courses are also included in Appendix $D$.

The items in the factors identified for each group were reviewed in an effort to identify similarities in, and differences between, the two
solutions. The items with their factor loadings circled were scored by summing the responses to these items. The algebraic sum of the responses was obtained where the sign of the factor loading indicated the direction of scoring.

A discussion of the factors selected for scoring from both solutions and the items relating to these factors and resulting scales follows.

Factor I (Scale 1) Impact of Course on the Students
Many items in this factor were common to both groups, and this factor was identified as Factor I in both groups. The items that loaded highly on this factor indicate the impact of the course on the students varied. The high end of this factor describes students who felt the course was valuable, that is they received satisfaction from it and thought it was good. They would also recommend it to their friends which indicates a belief on their part that the course would affect others much as it did them, that it was generally a good course and not just good for them for some unique personal reason. The fact that many items loaded highly on this factor indicates a great deal of variability with respect to how much the students liked the courses.

Items which were common to Factor I in both Groups I and II and items scored:

| Item no. | Item | Factor 1oad. |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Group | $\begin{aligned} & \text { Group } \\ & \text { II } \end{aligned}$ | Items |
| 140. | The UMA courses provided me with a sense of accomplishment. | 88 | -60 | (74) |
| 157. | This experience has been a valuable supplement to my previous education. | 86 | -64 | (75) |

59. I gained personal satisfaction through taking this course. ..... 86 ..... $-68$
(75)
60. Overall this was a good course. ..... 85 ..... -54
(70)
61. I would recommend this course to my friends. ..... 83 ..... -55
(69)
62. I feel the knowledge gained from this course will be very useful to me. ..... $81-65$
63. The overall effect of this course on my life has been desirable. ..... $81-71$
64. Overall this course was very interesting to me. ..... 80 ..... $-45$
65. I learned a great deal in this course. ..... 80 ..... -65
66. The course was worth the money I spent to take it. ..... 79 ..... $-51$
67. I believe that I learned as much or more from this UMA/ISU course as I would have learned from a similar college level course offered on a col- lege campus. ..... 73 ..... $-47$
68. Taking this course has increased my confidence in my ability. ..... 73 ..... $-50$
69. The way the course was presented fit my particu- lar needs. ..... 69 ..... $-41$
70. In this course, I felt challenged to do my best work. ..... 69
71. Taking this course has given me valuable insight relating to this area of study. ..... 69 ..... $-60$
72. As a result of taking this course, I have become more interested in the subject and would like to take additional courses in this area. ..... 68 ..... -51
73. My personal goals have been advanced through taking this course. ..... 67 ..... $-62$
74. Through taking this course I have gained new knowledge that will help me to enjoy life more ..... 62 ..... $-72$
75. I was able to develop effective study techniquesas the course progressed.62$-40$
76. The illustrations in the course text were very useful. ..... 58 ..... $-36$
77. My family admires me for taking this course. ..... 52 ..... $-47$
78. I enjoyed reading the text. ..... 52 ..... $-50$
79. The overall experience of taking this course has had a positive influence on our family life. ..... 51 ..... $-58$
80. The tests adequately sampled the material covered in the course. ..... $49-49$
81. I would be interested in having someone explain how I might be able to obtain special expertise in an area of study or a degree by taking courses from UMA and a variety of other sources, as for example off campus courses from a four-year institution, a community college, and/or correspondence courses.
$32-33$
Factor II (Scale 2) Evaluation of the Video Component of the Course
Most of the items in this factor were common to both groups, however, in Group II it emerged as Factor $V$. The number of items loading on this factor in both groups were very similar, 11 items for the first group and 13 for the second group. The items that loaded highly on this factor indicate that the reaction of the students to the video component of the course varied. The high end of this factor describes the students who felt the video was a valuable part of the course, interesting to watch, helped clarify the material in the text, and was helpful in preparing for tests, in general a positive reaction to the video programs. However, the fact that the loadings on this factor are high indicates great variability about how the students reacted to and/or evaluated the video component of the courses.

Items which were common to both Factor II, Group I and Factor V, Group II:
Item
no.

Factor III (Scale 3) Evaluation of the Course Structure
Items in this factor were common to both Factor III in Group I and Factor IV in Group II. The large majority of items was common to both groups. The fairly high factor loadings and large number of items in this factor indicate fairly high variability. That is many of the students enrolled in the various courses indicated a change in existing course structure would be desirable. The high end of this factor describes students who would like to add various types of structure as, for example, a letter and/or introductory audio tape explaining the purpose of each component of the course, audio cassette tapes explaining study methods to use in
the course, a meeting of all students and instructor at the beginning of the course, and periodic phone calls from faculty. Due to the high variability in this factor, not all students would agree with the necessity or advisability of increasing the structure of the course in these ways or the need for more contact between faculty or students.

Items which were common to both Factor III, Group I and Factor IV, Group II and items scored:
Item
no. $\quad$ Item
118. A letter explaining the purpose of each component of the course would be helpful.

Factor load.
Group Group Items
I II scored

64
75
151. An audio cassette tape explaining study methods to use in the course would have been helpful.

61
65
74. An introductory audio tape explaining each component of the course would have been helpful.

58
57
128. It would have been helpful to have a meeting of all students enrolled in the area and the instructor at the beginning of the course to discuss expectations and an overview of the course.

54
56
86. Periodic calls from faculty would have served to motivate my studying.

5355
109. There should be at least one phone conference between the student and the faculty during the course.
77. A review of basic study skills at the beginning of the course would have been helpful.
$49 \quad 55$
131. I would like to be given the opportunity of taking comparable forms of an examination until $I$ reached the grade level I wanted to attain in the course.

48
34
119. I would have used supplementary "readings" (articles and/or other texts) if they had been available at the learning center.
61. I would have preferred having more contact with other students. ..... 46 ..... 61
117. I would have enjoyed more contact with faculty. ..... 44 ..... 78162. A mixture of projects and tests is better thanjust tests on which to base a student's grade.403594. In this course I became so actively involved inlearning on my own that I did not need facultyhelp.$-41 \quad 49$
49. I would have liked more information about where I stood in comparison to other students. ..... 36 ..... 43
36. I did not need more faculty contact for satis- factory progress in the course. (Factor IV, 40) -32 ..... 65

Factor IV (Scale 4) Obtaining an Education through the Conventional Mode
"This Mode of Obtaining an Education vs. Conventional Mode" was the name given to Factor IV in Group I. In Group I, this factor included both modes of obtaining an education, however, in Group II this factor split into two factors, one which related to obtaining an education through just the conventional mode (Factor VII) and a second factor which related to obtaining an education through only an Open Learning Mode. The items which were common to each are as follows: Factor IV, Group I, This Mode of Obtaining an Education vs. Conventional Mode. Items which were common to both Factor IV, Group I and Factor VII, Group II, which is similar but relates only to obtaining an education through a conventional mode.

Item no. Item
15. I plan to enroll in a community college or four-year institution to begin work toward a degree.
12. I plan to enroll in a community college or four-year institution for additional courses.

Factor load.
Group Group
I II
-49 81
$-42$
20. I would like to work toward a degree. $-35$

Items which were common to both Factor IV, Group I and Factor VIII, Group II, which is similar but relates only to obtaining an education through an Open Learning Mode.

| $\begin{array}{r} \text { Item } \\ \text { no. } \\ \hline \end{array}$ | Item | Factor load. |  |
| :---: | :---: | :---: | :---: |
|  |  | Group | Group |
|  |  |  | II |
|  | I plan to take more courses from UMA/ISU. | 69 | -48 |
|  | I would like to take courses which would help me become more aware of problems in the world today. | 39 | -40 |

The decision was made to score Factor VII, Group II and Factor III, Group II rather than the combined factors of IV from Group I and VII and VIII from Group II. For this reason, Factor IV will be named "Obtaining an Education through the Conventional Mode, and Factor V will be named "Obtaining an Education through the Open Learning Mode."

Factor IV (Score 4) Obtaining an Education Through the Conventional Mode consists of just six items, three of which loaded heavily which indicates a lot of variability. The items are quite specific about plans to enroll in a community college or four-year institution to begin work toward a degree or just for additional courses. Due to the degree of variability, some of the students plan to continue their education in this way while other students definitely do not plan to follow this course of action.

Items included in this factor:

| $\begin{array}{r}\text { Item } \\ \text { no. }\end{array}$ | Item | $\begin{array}{c}\text { Fac. } \\ \text { load, } \\ \text { scored }\end{array}$ |
| ---: | :--- | ---: | :--- |
| 15. | I plan to enroll in a community college or four-year |  |
| institution to begin work toward a degree. |  |  |$)$

20. I would like to work toward a degree. ..... 6725. I want to take additional courses which would help toupgrade my qualifications for a job and/or promotion.44
21. It is extremely inconvenient for me to take a courseat a junior or community college or a four-year insti-tution (on campus).33
22. I am currently enrolled at an area community college. ..... 31

Factor V (Scale 5) Obtaining an Education through Open Learning Mode Since the factor loadings are more moderate for this factor, there is less extreme variability between students in the way they responded to this factor. The high end of this factor describes students who elected to enroll in the UMA course because he/she wanted to learn while at home instead of attending a college where attendance at classes would be required, and they wish to continue with this type of learning. There is some variability among students in relation to this attitude or desire.

Items included in this factor:

| Item |  | Fac. Items |
| :--- | :--- | :--- |
| no. | Item | load. scored |

62. I took the UMA course because I wanted to learn while at home instead of the required attendance at a college.$-62$
63. I prefer continuing with UMA/ISU courses rather than taking a course on a campus. ..... $-144$
64. I plan to take more courses from UMA/ISU. -48
65. I would like to take courses which would help me become more aware of problems in the world today.
66. I wish UMA/ISU would offer more courses for personal enrichment.

Factor VI (Scale 6) Availability of Faculty (Reaction to Faculty or "Assisting" Personne1)

Items in this factor were common to Factor V, Group I and Factor III, Group II and related to the student's evaluation of their contact with the faculty. The high end of this factor describes the student's attitudes toward the way in which the faculty reacted to the student's telephone calls and questions and the way the student felt about contacting faculty. The high factor loadings indicate great variability in the student's reactions to these items, that is some students felt the faculty welcomed their calls and questions and were at ease in contacting faculty while other students either did not attempt to contact faculty or believed faculty were not too receptive toward calls and/or questions. They also may not have felt as at ease about attempting to contact faculty.

This factor could not occur because of differences among instructors because both sections of the Accounting I course were taught by the same instructors and instructor differences were adjusted out for the second group. As a result, this factor results from differences in the students' perceptions of faculty rather than actual faculty differences.

Items which were common to both Factor V, Group I and Factor III, Group II:

| Item no. | Item | $\frac{\text { Factor }}{\text { Group }}$ | load. Group II | Items scored |
| :---: | :---: | :---: | :---: | :---: |
| 67. | The faculty seemed to welcome my telephone calls. | 81 | 66 | (74) |
| 146. | The faculty was helpful in answering the questions I asked. | 78 | 74 | (76) |
| 104. | I felt free to ask the faculty questions about the course. | 74 | 74 | (74) |

150. I enjoyed talking with faculty over the tele- phone. ..... 73 ..... 63
(68)
151. I felt at ease talking with faculty by telephone. ..... 69 ..... 66(68)
152. I felt free to relate any complaints I had to faculty. ..... 68 ..... 72 ..... (70)
153. The faculty seemed genuinely concerned with my progress in the course. ..... 65 ..... 64
154. I felt the faculty was very competent. ..... 55 ..... 28
155. I received adequate feedback from the tests about the content of the questions I got wrong, that is, "why my answer was wrong." ..... 39 ..... 43
156. I felt free to complain to the learning center personnel about the things I did not like. ..... 35 ..... 55
Factor VII (Scale 7) Fairness of TestsThis factor is from only Group II and was identified as Factor XIV
with this same name. The loadings on this factor are moderate and theitems are few which indicates a moderate amount of variability and just afair measure of the factor. The items in the factor relate to the qualityof the tests, and since this group. consists of three separate types ofcourses in which tests were given (Adams Chronicles, Psychology, spring andfall, and Consumer Education), the disagreement about tests could beattributed to the differences in courses. The high end of this factordescribes students' reactions to the tests as believing the tests werefair, that if they knew the material included in the text they would dowell on the tests, and that after taking the first test they were morerelaxed about the other tests. This might indicate that they learned they could cope with the tests if they knew the material, that is, they gained a certain degree of trust relating to the tests. Course differences have
been adjusted out so this is not due to the actual quality of the tests but refers to the students' perceptions of the tests.

Items common to this factor which was Factor XIV, Group II, same name:

45. I felt that the amount of memorization required for the tests was about right.

Factor VIII (Scale 8) Evaluation of Course and Components
This factor was identified in Group II only (Factor X) and relates to the way in which the students viewed the difficulty level and comparison of the tests and text to what they believed an on-campus college level course would be like. In this context, it is also a measure of the quality of the tests and text. The moderate factor loadings indicate more unanimity than variability in their reactions, however, there is some variability and this could be attributed to the differences in the four types of courses included in the second group.

Items included in this factor:

| Item | Item | Fac. Items |
| ---: | ---: | ---: |
| no. | load. scored |  |

32. The tests in this course are similar to those given in other courses offered for college credit on a college campus.
33. The text used was similar to a text that might be used in a course offered on a college campus.
34. The majority of "directions" given in the text and study guides was clear and helpful. ..... $-50$
35. I appreciate having an opportunity to express how I feel about this overall experience.$-37$
36. I believe that the difficulty level of this course was equal to or greater than a course comparable to it on a college campus.$-35$
Factor IX (Scale 9) Stress Engendered by Involvement in the Course Relating to Family
This factor was identified in Group I (Factor VIII) but was not one of the factors in Group II. It deals with the stress caused by taking the course which in turn had some relationship to the family members. As a result of taking the course, the course taker believed she/he had less time to spend with the family, spent time worrying about tests, felt she/he might be neglecting the children and even detected this reaction in the spouse. The comparatively low factor loadings indicate unanimity rather than high variability. Since this factor was from only the group of students enrolled in Accounting $I$, spring and fall combined, and since many of those students (but not all) enrolled for job related reasons rather than personal enrichment or a leisure time activity, the stress caused by the course is more understandable. They tended to need the information for vocational purposes, and taking the course was in itself a "job" and, therefore, interpreted as "work."
Items included in this factor:

| Item | Fac. Items |  |
| :--- | :--- | :--- |
| no. | Item | Foad. scored |

141. As a result of taking this course, I had much less
time to spend with my family.
142. I worried about taking the tests. 48
143. My children felt a bit neglected at times due to the amount of time $I$ had to spend studying. ..... 47 ..... (47)
144. I believe I will remember longer what I have learned in this course than in courses $I$ have taken in a regu- lar class situation. ..... 4687. My spouse felt the amount of time I needed to spend onthe course interfered with our family life.45
(45)
145. It is extremely inconvenient for me to take a course at a junior or community college or a four-year insti- tution (on-campus). ..... 42
146. The pace of the course was too fast for the time I had to spend on it. ..... 40
147. Being able to budget sufficient study time for satis- factory progress in the course was no problem. ..... $-39$
148. Domestic interruptions and demands have interfered with the amount of time I felt I needed to spend on the course. ..... 38
149. The need for quiet study time for this course inter- fere with the family's activities. ..... 37
150. I enjoyed the course except for the tests. ..... 36
151. Taking the UMA/ISU course required a substantial effort on my part. ..... 30
Factor X (Scale 10) Family Involvement--Benefit to Family
This factor was identified in Group I as Factor VI and given this name. This factor was not identified in Group II. The items that loaded on this factor indicate that the course taker believed that his/her involvement in the course in some way affected her ability to contribute to the family's welfare. The high end of this factor describes students who say the knowledge gained in the course has helped them to be a better famill member, that they can be a better "spouse," better parent, and can communicate with their children more easily. Since the factor loadings are
not very high, there is not a great deal of variability, however, there is some. That is, some believed the course helped them make a positive contribution toward their family members and the family structure, and others definitely did not believe that taking the course helped them to make this kind of contribution.

Items included in this factor:

| Item |  | Fac.Items <br> no. |
| ---: | ---: | ---: |

84. Knowledge I have gained will help me be a better fam- ily member. ..... 62
85. As a result of taking this course, I believe I can be a better "spouse." ..... 60
86. My spouse enjoyed studying and learning with me. ..... 59
87. I found it helpful to discuss the course material with a member (or members) of my household. ..... 55
88. As a result of taking this course, I believe I can be a better parent. ..... 54
89. I find it easier to communicate with my children as a result of taking this course. ..... 50
90. As a result of taking this course, I feel I can be a more interesting companion and friend. ..... 48
91. I feel the knowledge $I$ acquired will help me to be a better citizen. ..... 46
(48)
92. As a result of taking this course, I have made some new friends. ..... 35
93. I have discussed this course with my spouse at least once a week. ..... 35
94. My spouse enjoyed watching the video programs with me. ..... 33

Factor XI (Scale 11) Family Involvement and/or Support for Student
This factor was not identified in Group I and was identified in Group II as Factor IX. The items that loaded more highly on this factor describe various types of family support for the individual taking the course. For example, the items include such avenues of support as taking the time and showing enough interest to discuss the course material with the course taker, expressing admiration to the course taker for taking the course, spouse feeling the course was worth the money invested, and taking time to view the television programs with the course taker. The factor loadings were moderate indicating more unanimity than variability in student reacton to the items in this factor.

Items included in this factor:
Item
Item
Fac. Items
load. scored
142. I found it helpful to discuss the course material with a member (or members) of my household. ..... -59
164. My family admires me for taking this course. ..... $-47$
138. My spouse feels the course was worth the money I spent to take it. ..... $-56$
153. The subject matter content of the course was about what I had expected it to be. ..... $-55$(-55)
33. My spouse enjoyed watching the video programs with me. ..... $-51$
102. The material covered in the course was quite different than I had expected it to be. ..... 46
114. The main benefits $I$ have received from taking this course were not my original purpose for enrolling. ..... 46
71. I have discussed this course with my spouse at least once a week. ..... $-45$
10. My family is favorable toward my enrolling in future courses. ..... -45
96. My spouse enjoyed studying and learning with me. ..... $-42$
39. My original purpose for taking this course changed as I progressed in the course. ..... 38
121. Members of my household (other than spouse) watched the video programs. ..... $-26$
160. My original purpose for taking this course has been fulfilled. ..... $-38$

Factor XII (Scale 12) Vocational vs. Personal Development Motivation
This factor was identified as Factor X, Group I and Factor VI, Group II. A11 of the items in this factor had moderate loadings indicating little variability. There is some variability but not as much as in factors with items having higher loadings. The items in this factor include personal reasons for taking the course as "simply to learn," to "gain knowledge," and university credit.

Items which were common to both Factor X, Group I and Factor VI, Group II:

| $\begin{gathered} \text { Item } \\ \text { no. } \end{gathered}$ | Item | Factor 1oad. |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Group } \\ \mathrm{I} \\ \hline \end{gathered}$ | Group | Items scored |
|  | I took this course simply to learn. | -57 | -40 | -49 |
|  | The knowledge I gained in this course is much more important to me than the grade I received. | -47 | -47 | (-47) |
| 165. | My primary interest in taking this course was to gain Iowa State University academic credit. | 43 | 36 | (40) |
| 30. | The grade $I$ will receive in this course is not very important to me. | -32 | -52 | (-42) |

Factor XIII (Scale 13) Vocational Orientation
This factor is Factor XI from Group II. Factor X, Group I was similar to this factor but just one item, No. 40, loaded on both factors, and the
factor loadings were comparatively low indicating weak association with this factor. The majority of items in this factor has moderate factor loadings which indicate more unanimity than variability. All of the items at the high end of this factor describe reasons for enrolling as job related. These reasons include "to make more money," "to gain job skills," "to begin developing a new career," and "to be a better employee." Since the factor loadings were not high, the students tended to agree in their reasons for enrollment.
Items included in this factor:

| Item | Fac. Items |  |
| ---: | :--- | :--- |
| no. | Item | load. scored |

53. Taking this course has improved my chances of making money. ..... $-65$
54. My primary purpose for taking this course was to gain job skills. ..... $-53$(-53)
55. This experience has helped me to begin developing a new career. ..... -51(-51)
56. I feel confident to try to seek employment relating to the skills I acquired in this course. ..... $-48$
57. This course has helped me to be a better employee. ..... $-48$(-48)(-48)
58. This experience has helped me become more aware of my vocational interests. ..... $-45$
59. I feel better prepared for a job as a result of taking this course (even though the job might not relate directly to this course). ..... $-45$
60. As a result of taking this course, I have made some new friends. ..... $-35$
61. As a result of taking this course, I have become acquainted with other adults with interests similar to mine. ..... -32

Factor XIV (Scale 14) Stress Engendered by Involvement in the Course Relating to the Individual

This factor was identified as Factor IX, Group I and Factor II, Group II. Since Factor IX, Group I had just five items and all of these items were also common to Factor II, Group II and Factor II, Group II had a large number of items, the decision was made to score items from Factor II, Group II. The factor loadings for many of the factors tended to be high indicating a great deal of variability. Students were not in agreement with the items which included statements such as: domestic interruptions and demands interfered with the time needed for the course, work pressures and responsibilities interfered, and not enough energy or stamina to keep up with course and everything else. That is, some students found this to be applicable to their situation, and others definitely were not pressured by these conditions. The variability in the demands for the various courses in Group II may have accounted for the high variability in the students' reactions to the items in this factor. Since the factor loadings were much lower for identical items in Group I and the items in the factor were very few, the students' reactions to the Accounting I course showed much less variability. Also, it is possible that the students enrolling for Accounting I had definite reasons for enrolling, were more familiar with the type of course content, and had a much better idea about the possible demands the course would make on their time and energy.

Items included in this factor:

| Item | Item | Fac. Items |
| :--- | :--- | :--- |
| no. | load. scored |  |

58. Domestic interruptions and demands have interfered with the amount of time I felt I needed to spend on the course.
59. Work pressures and responsibilities have interfered with the time I felt I needed to spend on the course. ..... $-79$
60. I did not have enough energy or stamina to keep up with this course the way I would have liked, due to all of the other demands on my time and energy. ..... $-74$
61. I felt free to relate any complaints I had to faculty.
62. I find it difficult to study for tests. ..... $-68$ ..... -68
63. Being able to budget sufficient study time for satis- factory progress in the course was no problem. ..... 67
64. The pace of the course was too fast for the time I had to spend on it. ..... -65
65. Finding time to study was difficult. ..... $-64$
66. As a result of taking this course, I had much less time to spend with my family. ..... -63
67. Disciplining myself to study for a test was difficult. ..... $-58$ ..... -
68. The most I could do was try to pass the tests; learn- ing all of the material seemed too much. ..... -56
69. I didn't mind studying for the tests. ..... 55
70. Too much reading was required for the course. ..... $-52$
71. I worried about taking the tests. ..... -47
72. There should be increased individual flexibility for course completion. ..... $-47$
73. My spouse felt the amount of time $I$ needed to spend on
the course interfered with our family life. ..... $-44$ ..... 
74. I don't learn as easily as I did back in high school. ..... $-43$
75. As a result of taking this course, I believe I can be a better parent. ..... -42
76. I enjoyed the course except for the tests. ..... $-42$
77. Taking the UMA/ISU course required a substantial effort on my part. ..... $-42$
78. The overall work load for this course was too heavy for the amount of credit given. ..... -41
79. The time $I$ had to spend on the course was too great for the benefits gained. ..... -41
80. The vocabulary used in the text was too difficult for a freshman or sophomore college level course. ..... -40
81. I feel I now know the material covered in the text. ..... 39
82. In this course, I liked feeling responsible for my own learning. ..... 35
83. My children felt a bit neglected at times due to the amount of time $I$ had to spend studying. ..... $-31$
84. Involvement with this course has made me feel that I can do college level work. ..... 30
Factor XV (Scale 15) Cost of CourseThis factor was identified in Group II as Factor XIII. It is a veryweak factor with low factor loadings and only two items, yet it is clearlya factor. There is very little variability associated with responses tothe items in this factor, that is the students agreed in their attitudestoward the cost of the course. In Group I both of these items loaded onFactor I, Impact of Course on Students. In Group I the loadings on FactorI were also low indicating agreement in the students' reaction to the costfactor of the course.

| Item <br> no. | Item | Fac. <br> load. <br> Items |  |
| ---: | :---: | :---: | :---: |
| 68. The cost of books and materials is too high. | -32 | -32 |  |
| 120. | The cost for tuition is too high. | -45 | -45 |

## Background Variables and Characteristics of 1976 UMA/ISU Students

The selected information included in this section was taken from the Iowa State University registration forms devised for this particular group of students and from the Student Information Questionnaire. The registration forms were filled out for each student who enrolled in the program, and the Student Information Questionnaire was responded to and returned by 98 percent of the spring, 1976, students who did not drop immediately and by 99 percent of the fall, 1976, students who did not drop out of the program immediately, that is before beginning to participate in any of the course activities.

## Year of first enrollment at Iowa State University

In the spring, just 20 percent of the students had been enrolled previously and in the fall, 19 percent. Thus about 80 percent of the UMA/ISU students enrolled as Iowa State University students for the first time. Approximately one-half of the 20 percent previously enrolled were spread quite evenly through the $1940 \mathrm{~s}, 50 \mathrm{~s}$, and 60 s with approximately 11 percent spring and 8 percent fall in the early 70s.

Sex and age of enrollees
In the spring, 17 percent were male and 83 percent female, and in the fall, 15 percent were male and 85 percent female. The ages of these students ranged from 18 to 78 (see Table 7).

The model age range for the two groups is around 40 with the number of students in the age groups decreasing in both directions from 40 up and 40 down. The differences between the spring and fall groups seem small.

Table 7. Ages of UMA/ISU students, 1976

| Ages of students | Spring <br> $\%$ | Fall <br> $\%$ |
| :--- | :---: | :---: |
| Less than 20 | 10 | 8 |
| From 20 to 30 | 13 | 18 |
| From 30 to 40 | 28 | 33 |
| From 40 to 50 | 29 | 26 |
| From 50 to 60 | 15 | 12 |
| From 60 to 70 | 4 | 2 |
| From 70 to 80 | 1 | .5 |

However, in the fall group there was a larger percent of the students in the 20 to 40 age range and a smaller percent of the students in the "less than 20 age group" and "over 40 age group." As a whole, the fall group was a slightly younger group due to a decrease in older students. This is consistent with the change in age groups enrolling in initial offerings of open learning courses in some other areas (Brown, 1975b; MacKenzie et al., 1975).

## Counties of residence

The counties in which the enrollees lived at the time of registration totaled 44 in the spring and 59 in the fall (Figures 1 and 2). The increase in the geographical area of residences of students might be accounted for by the increase in promotion and the fact that in the spring the courses were available to only those students who could receive the broadcast signal of WOI-TV (Channel 5 in central Iowa) or through cable television systems, and in the fall the four courses offered were available to all who could receive Iowa Educational Broadcasting Network (IEBN)


Figure 1. Students, learning centers, and TV broadcasting centers for UMA/ISU students, spring, 1976

Fall


The number of UMA/ISU students listed in each county
O Marks the learning centers
$\square$ Marks the TV broadcasting stations for the video component of the courses

Figure 2. Students, learning centers, and TV broadcasting centers for UMA/ISU students, fall, 1976
channels or WOI-TV. There were additional learning centers in the fall to assist students in some areas. In the spring, certain western Iowa learning centers had video cassette tapes of the television programs to accommodate students who could not view the tapes through WOI-TV. This might have been too inconvenient for some individuals and may have had the effect of decreasing enrollments in the area. When asked in the Student Information Questionnaire if they received WOI programs clearly, 88 percent of the spring group answered yes, and 79 percent of the fall group said yes, a decrease of 9 percent. It is assumed these students had access to an IEBN channel which broadcasted the course lessons.

The following is additional selected information from the Student Information Questionnaire (due to rounding and/or omissions on questionnaires, totals do not add to 100 percent).

## Marital and family status

The majority of students both spring and fall was married with either young or grown children. The next largest group was married but without children, followed by single persons, and the smallest group was the widowed or divorced with or without young or older children (Table 8).

The spring and fall groups were very similar in marital and family status, however, the fall group with 7 percent less students in the married with grown children category tends to follow the very slight trend toward younger students in the fall group.

The total students single, married, and widowed or divorced are shown in Table 9.

Table 8. Marital and family status of UMA/ISU students, 1976

|  | Single |  | Married |  |  | Widowed or divorced |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 0 \\ \text { children } \\ \% \end{gathered}$ | $\begin{gathered} \text { Young } \\ \text { children } \\ \% \end{gathered}$ | $\begin{gathered} 0 \\ \text { children } \\ \% \end{gathered}$ | $\begin{gathered} \text { Young } \\ \text { children } \\ \% \end{gathered}$ | $\begin{gathered} \text { Grown } \\ \text { children } \\ \% \end{gathered}$ | $\begin{gathered} 0 \\ \text { children } \\ \% \end{gathered}$ | $\begin{gathered} \text { Young } \\ \text { children } \\ \% \end{gathered}$ | $\begin{gathered} \text { Grown } \\ \text { children } \\ \% \end{gathered}$ |
| Spring | 9 | . 7 | 12 | 37 | 37 | . 7 | . 7 | 2 |
| Fall | 11 | 1 | 14 | 37 | 30 | 2 | 1 | 1 |

Table 9. Marital status of UMA/ISU students, 1976

|  | Single <br> $\%$ | Married <br> $\%$ | Widowed or divorced <br> $\%$ |
| :--- | :---: | :---: | :---: |
| Spring | 9.7 | 86 | 3.4 |
| Fall | 12 | 81 | 4.0 |

Number of years students have lived in Iowa
This is a very stable group of Iowans. In the spring group, 95 percent stated that they had lived in Iowa 11 years or more. In the fall group, 86 percent had lived in Iowa over 11 years with 7 percent stating they had lived in lowa 6 to 10 years and an additional 6 percent having lived in the state 1 to 5 years. They have tended to move within the state, however, with the spring group again being the most stable (Table 10).

Table 10. Number of years at present address

|  | Less than 1 <br> $\%$ | $1-5$ <br> $\%$ | $6-10$ <br> $\%$ | 11 or more <br> $\%$ |
| :--- | :---: | :---: | :---: | :---: |
| Spring | 5 | 30 | 19 | 45 |
| Fall | 10 | 33 | 23 | 35 |

As further demonstration of their tendency toward stability in respect to residence, a total of 51 percent in the spring and 58 percent in the fall group stated that they had lived in only one state during their lifetime. In the spring, 25 percent had lived in two states and 11 percent in three states. The fall group was similar with 18 percent in the two-state category and 8 percent having lived in three states.

Neither have most of these individuals experienced living in a country other than the United States; 93 percent of the spring group and 88 percent of the fall group have not lived in any other country. In the spring, 4 percent had lived in one other country and 10 percent in the fall group. This may be accounted for by overseas military service since 8 percent in both groups stated they had served on active duty in the United States Armed Forces. This would explain living in a foreign country--they tend to be Iowans unless forced to leave.

The community in which they live
The majority of the students live on a farm with the next largest group living in a town over 2,000 but under 10,000 . A general description of the majority of the students would be rural which probably accounts in part for the attraction of the possibility of taking a college level course without commuting (Table 11). In the spring, 70 percent of the students lived on a farm or in a town under 10,000, and in the fall, the total was 72 percent.

The majority lead stable lives in a rural community and have quite adequate incomes. In the spring group, 50 percent stated their incomes were from $\$ 10,000$ to $\$ 30,000$ a year, and in the fall 43 percent were in

Table 11. Type of residence of UMA/ISU students

|  | Farm or <br> ranch <br> $\%$ | Town <br> (under 2,000) <br> $\%$ | Town <br> $(2,000-$ <br> $10,000)$ <br> $\%$ | Town <br> $(10,000-$ <br> $50,000)$ <br> $\%$ | City <br> (over 50,000$)$ <br> $\%$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Spring | 33 | 11 | 26 | 19 | 11 |
| Fall | 31 | 15 | 26 | 13 | 14 |

this category. However, in the spring 37 percent had incomes of $\$ 10,000$ or less, and in the fall group, 47 percent were in this income range. Since the majority of students was married and many with children, some of them may fall in this group. Many of these with lesser incomes, however, were probably single students, most of whom were quite young. Since the data do not provide this information, it is impossible to do more than draw very tentative conclusions on the basis of information given. It is also of interest that 12 percent of the spring group and 10 percent of the fall group had incomes over $\$ 30,000$ a year. It is also impossible to draw any conclusions about their net worth. The older students, particularly those retired, may have a high net worth but limited income.

## Education

The educational level of the parents of the students is interesting and especially compared to the students' level of education. This information is presented for both the spring and fall groups. (Table 12).

Table 12. Highest level of education completed of UMA/ISU 1976 students

|  | Father |  | Mother |  | Spouse |  | Student |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \overline{\text { Spring }} \\ \% \end{gathered}$ |  | $\begin{gathered} \overline{\text { Spring }} \\ \% \end{gathered}$ |  | $\overline{\%} \underset{\frac{\text { Spring }}{}}{\text { in }}$ | Fall | $\underset{\%}{\text { Spring }}$ | $\begin{gathered} \text { Fal1 } \\ \% \end{gathered}$ |
| 8th grade or less | 35 | 29 | 29 | 21 | 2 | 2 | ques <br> not | tion asked |
| Some high school | 11 | 16 | 13 | 11 | 7 | 5 | 2 | 1 |
| High school graduate | 31 | 27 | 33 | 40 | 32 | 23 | 39 | 33 |
| Trade, business, etc. | 4 | 4 | 5 | 6 | 5 | 8 | 13 | 11 |
| 1-3 years college | 7 | 8 | 11 | 12 | 13 | 17 | 27 | 30 |
| College graduate | 5 | 7 | 6 | 5 | 15 | 15 | 12 | 19 |
| Graduate study or professional degree | 5 | 7 | 1 | 3 | 9 | 11 | 5 | 5 |

The parents and spouse of the UMA/ISU student and the UMA/ISU students terminating their education at or before high school graduation are shown in Table 13.

Table 13. Educational level of student, parents, and spouse

| Father |  | Mother |  | Spouse |  | Student (Prior to this experience) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spring | Fall | Spring | Fall | Spring | Fall | Spring | Fall |
| \% | \% | \% | \% | \% | \% | \% | \% |
| 79 | 75 | 76 | 75 | 57 | 49 | 43 | 36 |

The fall group of students had a larger percentage with some education beyond high school, and this was also true of their spouse, mother, and father. The difference between the spring and fall groups in relation to the parents' education was negligible, but the differences between the
student and his or her spouse are approximately 7 percent between the spring and fall groups. The student also tends to have more formal education than the spouse in both groups.

When asked how long it had been since they last participated in a formal educational experience, 56 percent in the spring group and 56 percent in the fall group indicated that it had been five years or more. For some it may have been many more than five years, and with this span of time between their last exposure to studying in a formal educational setting, that is, follow a schedule, submit assignments, and take tests, etc., "adjusting" may have presented quite a hurdle.

The span of time between their last formal educational experience and enrolling in a UMA/ISU course also reveals that this is not the typical college student who has been continuing his education on a fairly regular basis at some other type of higher education institution whether it be trade, business, technical school, or a college.

The reasons these individuals gave for previously terminating their education are shown in Table 14. The largest categories for not continuing their education were graduation, marriage, and beginning to work. The "other" category included a wide range of specific reasons that were grouped together.

The scholastic standing of these individuals when they graduated from high school (or quit), as reported by them on the Student Information Questionnaire, is indicated in Table 15.

In the spring group, 8 percent did not answer this question, and in the fall group, 5 percent did not answer. Since they answered other questions, it might be assumed that they did not wish to have this known or

Table 14. Reasons for terminating education

| Marriage |  | Began work |  | Illness |  | Had children |  | No time |  | Graduated |  | Other |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underset{\%}{\text { Spring }}$ | $\underset{\%}{\text { Fall }}$ | $\underset{\%}{\text { Spring }}$ | $\begin{gathered} \text { Fa11 } \\ \% \end{gathered}$ | $\underset{\%}{\text { Spring }}$ | $\begin{gathered} \text { Fall } \\ \% \end{gathered}$ | $\underset{\%}{\text { Spring }}$ | $\begin{gathered} \text { Fall } \\ \% \end{gathered}$ | $\underset{\%}{\text { Spring }}$ | $\underset{\%}{\text { Fall }}$ | $\underset{\%}{\substack{\text { Spring }}}$ | $\begin{gathered} \text { Fa11 } \\ \% \end{gathered}$ | $\underset{\%}{\substack{\text { Spring }}}$ | $\begin{gathered} \text { Fall } \\ \% \end{gathered}$ |
| 16 | 18 | 16 | 12 | 2 | 1 | 8 | 5 | 3 | 2 | 20 | 18 | 23 | 30 |

Table 15. High school scholastic standing of UMA/ISU 1976 students

| Lower half of class |  | Upper half <br> (not upper 30\%) |  | Upper 30\% <br> (not upper 15\%) |  | Upper 15\% <br> (not upper 5\%) |  | Upper 5\% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spring | Fall | Spring | Fall | Spring | Fall | Spring | Fall | Spring | Fall |
| \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |
| 5 | 5 | 18 | 14 | 17 | 24 | 22 | 23 | 30 | 31 |

they did not have this information. Based on these figures, the majority of JMA/ISU students in these first two groups were average or above students at the time of their high school graduation.

While attending high school, 56 percent of the spring group and 49 percent of the fall group did not hold paying jobs. However, just 10 percent of the spring group and 4 percent of the fall group stated that they did not work in some way "at home," and 37 percent in each group stated that they worked from 10 to more than 20 hours in their homes.

When asked which activities they participated in while attending high school, the two groups were very similar. The activities and the percent checking the category of "frequently" are shown in Table 16.

As a group, their main interests while in high school appear to be music followed by working on the school newspaper and/or yearbook and sports. Plays and debates were also an area of special interest for about one-fourth of the students. Since these students checked "frequently" from among four responses which included "never," "rarely," "occasionally," and "frequently," this category would tend to show a very definite interest and participation in these activities.

The school subjects checked "very interesting" by 30 percent or more of the spring group of students were: history, home economics (food and nutrition), home economics (clothing), home economics (family relations), bookkeeping and accounting, and sociology. The fall group included just home economics (clothing), home economics (family relations), bookkeeping and accounting, and sociology. History and home economics (food and nutrition) were not checked very interesting by 30 percent or more of the students but were close-history, 29 percent, and home economics (food and

Table 16. Participation in high school activities

| Plays, debate |  | Sports |  | Newspaper yearbook |  | Science projects |  | Arts, crafts |  | Woodworking |  | Mechan. projects |  | Student council |  | Cheer- <br> leading |  | Depart. clubs |  | Music |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S | F | S | F | S | F | S | F | S | F | S | F | S | F | S | F | S | F | S | F | S | F |
| \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |
| 21 | 25 | 30 | 28 | 33 | 36 | 6 | 7 | 7 | 8 | 5 | 5 | 5 | 2 | 13 | 17 | 11 | 10 | 29 | 34 | 49 | 52 |

nutrition), 26 percent. The school subjects checked "very interesting" by 10 percent or more of the participants include (spring group): foreign languages, industrial arts (woodworking), industrial arts (auto mechanics), home economics (clothing), agriculture, DECA or T\&I, speech, art, and chemistry. The only differences for the fall group are the omission of speech and the addition of biology. Again there were few differences between the spring and fall groups. In speech, the difference was 4 percent (spring, 12 percent and fall, 8 percent), and in biology it was 5 percent (spring, 5 percent and fall, 10 percent) for the "least interesting" category. The extreme reactions to the subjects that have been historically biased toward males or females show this bias may still exist since the question asks for their present interest in the subjects even though they might not have had an opportunity to study them. The purpose was to gain some insight about their preferences which might be used as a guide in choosing future ISU/UMA offerings. Since in the spring group 83 percent were women and in the fall group 85 percent were women, the strong interest in home economics related areas probably reflects the interests of the women as do the percent of individuals "very uninterested" in industrial arts (woodworking), industrial arts (auto mechanics), and agriculture. The only subject selected as "very interesting" by 40 percent or more of the participants in both the spring and fall groups was home economics (family relations).

Their overall attitude toward their high school experience was favorable, however, to statements relating to opportunities for students to become well-acquainted, ease in making friends, and size of classes, the UMA/ISU students in both groups checked the word "always" on a scale of

1 to 5 that included 1-never, 2-almost never, 3-about half the time, 4-almost always, and 5-always. To statements relating to comments about teachers, as "were interested and concerned," "tended to be fair," "did a good job of teaching content," and "graded fairly," the rating of "almost always" was higher than the rating of "always." The spring group in general rated most statements higher than did the fall group and particularly in statements relating to: number of extra-curricular activities, ease of making friends, administration placing the welfare of the student first, children from poor families getting along alright, and teachers doing a good job of teaching, including teachers not showing favoritism. There was only one statement which was rated lower in the spring group and that was "teachers were interested and concerned." In general, ratings were more positive than negative, that is, their high school experience was enjoyable.

Of the spring group, 83 percent rated it enjoyable "almost always" or "always" and 81 percent of the fall group. Since the majority enjoyed their high school education and in retrospect evaluated it "above average" in the areas included in the questionnaire, they might also have adjusted quite readily to another type of formal educational institution--that is, their choice in electing to take a course "at home" was not because they might have had an unpleasant high school experience and, therefore, avoided taking an "on-campus" class. Also, since around 80 percent indicated they enjoyed their high school education, they probably looked forward to "taking a class again" or at least did not dread it. However, "about half the time" was chosen as the answer in from about 10 percent to approximately

30 percent of the statements evaluating aspects of their high school education, and for these students high school may not have been that pleasant.

Work
To the question "How many hours per week do you work? (include a second job or regular overtime)," 35 percent of the spring group either did not reply or marked "Does not apply." In this questionnaire, the student was told to simply move on to the next question if a question or whole section did not apply, and for this reason it is assumed that those "not replying" to this particular question could be grouped with the "Does not apply" group for a total of 35 percent for spring and 34 percent for the fall group. It is also assumed that these are the individuals who were full-time students either in a high school or another institution or were full-time homemakers or retired. For those who did reply to this question, the percentages for indicating the number of hours they worked are shown in Table 17. The largest groups were those working from 31-40, 41-50, and the 35 percent (spring) and 34 percent (fall) whom it is assumed did not work at a regularly scheduled job outside the home.

Table 17. Number of hours employed


When asked how many years they had worked at their present jobs, 23 percent in both groups indicated categories from 5 to over 20 years. In the 1- to 5-year category was 36 percent for spring and 39 percent for fall. A total of 36 percent spring and 39 percent fall either omitted the question or explained they were homemakers either not working outside the home or with just occasional part-time jobs or retired.

Their satisfaction with their job was indicated in Table 18.

Table 18. Rate of job satisfaction for UMA/ISU 1976 students

| Very satisfied <br> Spring <br> $\%$ | Fall <br> $\%$ | Spring <br> $\%$ | Fall <br> $\%$ | Spring <br> $\%$ | Fall <br> $\%$ | Spring <br> $\%$ | Fall <br> $\%$ | Spring <br> $\%$ | Fall <br> $\%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 22 | 20 | 28 | 23 | 9 | 8 | 6 | 8 | 34 | 31 |

Approximately 50 percent were either satisfied or very satisfied with their jobs, and just 15 percent in the spring and 15 percent in the fall were either neutral or actually dissatisfied, therefore, the major reason for enrolling in a course probably was not to seek other employment. From comments of the students on the UMA/ISU Questionnaire (Appendix C) and in telephone conversations with some, a reason for enrolling in the Accounting course and to some extent in the Psychology course was to improve their skills for their present job. For some in Accounting, this was keeping books for their husband's business, and as one student stated, "During the time she was enrolled in the course her 'work' suffered." One Psychology student was working with disturbed children and believed the course might be helpful.

Leisure time
In this section of the questionnaire, practically all varieties of leisure time activities were included, and a comprehensive picture is created of the recreational activities in which these individuals engage. Again the comparisons are given for the spring and fall groups.

The types of newspapers and magazines they indicated that they read "regularly" are included in Table 19. The category of other was listed by 14 percent of the spring group and 15 percent of the fall group. The daily and weekly newspapers rate highly, with the daily being read the most. Since some communities do not have a weekly newspaper, this might account for the lower percentages in this category.

Table 19. Publications read regularly

| Daily newspapers |  | Local weekly newspapers |  | News/business magazines |  | Professional journals |  | Special int. magazines |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spring | Fall | Spring | Fall | Spring | Fall | Spring | Fall | Spring | Fall |
| \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |
| 91 | 88 | 66 | 72 | 47 | 50 | 32 | 32 | 82 | 80 |

In the choice of magazines, the special interest types are the most widely read, and as the question in the questionnaire indicated, this would include such publications as sports, fashion, and gardening magazines. The news and business magazines ranked next, and the career or professionallyoriented magazines or journals received just a third of the choices. Since all of the categories could have been checked by all participants (that is, they were not asked to check the ones they most preferred but just to check
all they read regularly), it is evident that their choices are the daily newspaper and the special interest magazines.

The number of hours they spend watching television per week according to their estimates is shown in Table 20.

Practically none of this group are "nonwatchers," and the majority watch from 4 to 11 hours a week. From this response, it could be concluded that television is a popular form of recreation. The types of programs preferred are listed in Table 21.

The students were encouraged to check all of the types of programs they preferred, and in some cases just one category was checked, in others several. News broadcasts are the most popular with situation comedy, music and variety shows, and the serious talk shows next in popularity. These choices indicate that these individuals want to be informed about events in the world around them (choice of news report and serious talk shows and adult education programs) and also want to relax through viewing the lighter type of show for just entertainment. The choices may also have been greatly influenced by the percent of females responding (approximately 85 percent). Whether females in general would choose television shows similar to these two groups of students would be interesting to compare, also the spouses' choices might be an interesting comparison.

Of particular interest is the high rating given adult education programs, and it would be interesting to pursue this further by asking what type of adult education programs they prefer and which they watch on a regular basis. Their preference and/or interest in adult education might have been an influencing factor in their participation in the UMA/ISU program.

Table 20. Time spent viewing television

| None |  | $3 \mathrm{hrs}$. or less |  | 4-7 hours |  | 8-11 hours |  | 12-15 hours |  | 16-19 hours |  | 20-23 hours |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spring <br> \% | $\begin{gathered} \text { Fa11 } \\ \hline \end{gathered}$ | Spring \% | $\begin{gathered} \text { Fall } \\ \% \end{gathered}$ | Spring $\%$ | $\begin{gathered} \text { Fall } \\ \% \end{gathered}$ | $\begin{gathered} \text { Spring } \\ \% \end{gathered}$ | $\begin{gathered} \text { Fa11 } \\ \% \end{gathered}$ | $\begin{gathered} \text { Spring } \\ \% \end{gathered}$ | $\begin{gathered} \text { Fall } \\ \% \end{gathered}$ | $\begin{gathered} \text { Spring } \\ \% \end{gathered}$ | $\begin{gathered} \text { Fall } \\ \% \end{gathered}$ | $\begin{gathered} \text { Spring } \\ \% \end{gathered}$ | $\underset{\%}{\text { Fal1 }}$ |
| . 7 | 1.6 | 21 | 20 | 24 | 24 | 25 | 25 | 13 | 15 | 8 | 7 | 9 | 8 |

Table 21. Television programs preferred

|  | Spring <br> $\%$ | Fall <br> $\%$ |
| :--- | :---: | :---: |
| Sports programs |  |  |
| News reports | 33 | 28 |
| Drama/plays | 78 | 86 |
| Detective, mystery and western series | 47 | 57 |
| Situation comedy, comedy series | 42 | 44 |
| Religious programs | 70 | 60 |
| Music and variety shows | 22 | 24 |
| Serious talks, discussions, interviews, | 62 | 59 |
| including documentaries | 60 | 64 |
| Adult education programs | 57 | 60 |
| Quizzes and games | 29 | 17 |

The leisure time activities participated in "frequently" by these students, listed from most frequent participation to least frequent, are included in Table 22.

It is evident that reading is the most popular leisure time activity, however, viewing television was not included in the above activities, and this omission may have affected the order of the above, that is, viewing television might have been listed ahead of some of the other activities. Since television viewing was definitely a popular pastime with many of the students as indicated by them, this must be considered when reviewing the order of participation in this above list.

In comparing the spring and fall groups, the slight decrease in the older students in the fall group might account for the larger percent of participation by the spring group in the arts and handicrafts type of activity and conversely the lower rate of participation by the spring group in church and community activities. It is often the older individuals with

Table 22. Leisure time activities

| Activity | Frequent participation |  |
| :---: | :---: | :---: |
|  | Spring | Fal1 |
|  | \% | \% |
| Reading newspapers, magazines, and journals | 78 | 82 |
| Arts and handicrafts, painting, refinishing furniture, woodworking, sewing, photography, etc. | 48 | 41 |
| Visiting with friends, relatives | 45 | 51 |
| Participating in church and community activities (other than sports) | 39 | 47 |
| Reading fiction and nonfiction books | 36 | 45 |
| Outdoor activities: hiking, hunting, swimming, golf, camping | 24 | 33 |
| Attending movies, concerts, plays, sports events, etc. | 22 | 22 |
| ```Taking special interest classes (i.e., cooking, woodworking, tennis, etc.)``` | 11 | 13 |
| Indoor activities: chess, poker, ping-pong | 9 | 8 |
| Participating in plays, concerts, sports events | 7 | 4 |

grown children who have time for arts and crafts, and it is the younger individuals with young and teenage children who are involved in church and community activities due to the children's involvement. The spring group also participated less in outdoor activities: hiking, hunting, swimming, etc.

When asked if participation in the UMA course would affect the amount of time they would be able to spend with family members, they replied as indicated in Table 23.

This again reflects the slight difference in the age groups between the spring and fall groups. The fall group is composed of more individuals with young children at home, and it seems generally busier people.

Table 23. Effect of UMA course on "time" for family

| Probably no effect |  | Might reduce it a little bit |  | Probably will reduce it a lot |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Spring | Fall | Spring | Fall | Spring | Fall |
| \% | \% | \% | \% | \% | \% |
| 43 | 36 | 44 | 58 | 7 | 5 |

## Resources

The extent of the resources to which the students had access might have been a contributing factor to the attitudes they had toward the program and their performance in the program. They were asked what effect taking the course might have on them financially, on available time, space, reaction of family, friends and employers, and as they began the course, their major concerns.

Finding the money to pay for the tuition and materials was "reasonably easy" or "no problem" for both groups, however, the spring group was a bit more positive about this not being a problem. Asked if the course would involve them in any additional expense, the majority were not concerned. The two areas that they checked as very significant or somewhat significant included the cost of books and materials and traveling for a total of 52 percent for the spring group and 68 percent for the fall group. It seems the fall group is either more concerned about having enough money to finance the course or actually has less money to spend in this way.

Their major source for financing the UMA course was varied, but spouse's income was listed most frequently followed by full- and/or parttime work (Table 24).

Table 24. Financial sources for UMA course (major source)

| Source | Spring <br> $\%$ | Fall <br> $\%$ |
| :--- | :---: | :---: |
| Full and/or part-time work | 32 | 40 |
| Savings | 15 | 17 |
| Parental aid | 5 | 2 |
| Employer support | 9 | 8 |
| Spouse's income | 45 | 47 |
| Grants/scholarships | 1 | 4 |
| Loans | 1 | 1 |
| Other | 6 | 1 |

Full- or part-time work was a greater source for financing the UMA in the fall group than in the spring group, which might indicate that a larger percent of these students worked outside the home, and when asked about the hours they worked earlier in this questionnaire, there was a slight increase in the percent working part-time in the fall group.

Having a variety of media equipment available as record players, audio tape recorders (small cassette type), and slide projector/viewers was not a problem to the majority of students with the exception of the slide projector/viewer which was owned by just over 40 percent in both groups. In addition, the 85 percent of the fall group and 88 percent of the spring group had typewriters, and approximately 99 percent had telephones and television sets.

Many of the students planned to make special arrangements to enable them to take the UMA course (Table 25).

The students seemed to be very aware of the necessity of providing some time in their schedule for studying, and the necessity of rearranging

Table 25. Special arrangements to take course

| Arrangements | Spring <br> $\%$ | Fall <br> $\%$ |
| :--- | ---: | ---: |
| Rearrange working hours/duties | 25 | 38 |
| Reorganize time to allow for studying | 81 | 88 |
| Arrange for child/babysitting | 11 | 12 |
| Arrange to record missed programs | 20 | 23 |
| Turn one room into study/quiet room | 12 | 20 |
| Special arrangements to watch TV/bought TV | 12 | 21 |
| Other arrangements | 5 | 5 |

or reorganizing their working hours and daily schedules is apparently more necessary for the fall group. This would indicate that this group tends to have busier or more complicated schedules.

In addition to the UMA course, other courses were available to them, but in the majority of situations it would require them to commute to the classes. Since the very small amount of travel involved in taking the UMA course was expressed as some concern, even a short distance on a frequent basis might have been a hardship for these individuals (Table 26).

The questions "How many of these or are any of these available within 40 miles" were not asked, and therefore, since the largest percent of individuals in the categories was 74 percent (spring group in reference to a community college), it is not known if the other 25 percent had a college or courses offered at a center within 40 miles of their home.

Since correspondence courses are available to all individuals, at least to high school graduates and that includes practically all of these UMA students, the percentages listed reveal their lack of information of the availability of this type of course.

Table 26. "Other" college level education available to the UMA/ISU 1976 students

| Institutions | $\underset{\%}{\text { Spring }}$ | $\underset{\%}{\mathrm{Fall}}$ |
| :---: | :---: | :---: |
| College level courses offered for employees where I work | 8 | 4 |
| College level courses offered at a learning center like a library, extension office, or public school within 40 miles of my home | 44 | 47 |
| College level course offered at a community college within 40 miles | 74 | 71 |
| A private two- or four-year college within 40 miles | 44 | 62 |
| A university within 40 miles | 39 | 47 |
| Correspondence courses | 64 | 60 |

A very important decision for the success of the courses is the times chosen for the broadcasting of the video component of the courses. The students were asked to state their most convenient times and most inconvenient times for viewing the broadcasts.

The two groups differed in some instances in selecting their most convenient and inconvenient times. For the spring group, the most convenient times during the week included before $8: 00 \mathrm{a} . \mathrm{m}$. ( 80 percent) and between $7: 30$ to $10: 30$ ( $40+$ percent). For the fall group, the most convenient time was before $8: 00$ (51 percent), between 7:30 and 10:30 (40+ percent), and between $1: 00$ and $4: 00$ p.m. (39 percent).

The most inconvenient times for the spring group included almost all of the times listed with the exception of before 8:00 a.m. and 7:30 to 10:30 p.m. (45 percent) with $12: 00$ to $1: 00$ as most inconvenient (81 percent). The 7:30 to 10:30 time was convenient for about 44 percent and inconvenient for about the same percentage for the spring group. The fall
group found 12:00 to 1:00 and 5:00 to 6:30 as their most inconvenient times (63 percent for both time periods) and 9:00 to 12:00 noon and 4:00 to 5:00 as next in inconvenience (53+ percent).

The fall group seemed to be much more varied in their preferences than the spring group, that is, it would be more difficult to find times that would please the majority in the fall group.

The weekends presented more difficult scheduling since the choices spread out much more evenly. Finding a time that would please a large percentage would be almost impossible, and the solution might be to present repeats of the programs at various times and thus try to satisfy as many as possible.

When asked about their major concerns in planning for studying with UMA, the fall and spring groups were almost identical, and their major concerns included: Academic and learning problems--starting to study again, new methods, concentration, memory, etc. ( 60 percent). This was followed quite closely by self-discipline--getting down to regular work (49 percent) and domestic interruptions and demands ( 45 percent). Keeping pace (35 percent) and work pressures and responsibilities (32 percent) were also concerns. They were not very concerned about the lack of personal contact that would be possible with teachers (spring, 21 percent and fall, 18 percent) and lack of personal contact with other students (spring, 9 percent and fall, 15 percent).

The students seemed to be apprehensive about attempting a college level course, wondering if they could meet the demands and be successful. In a sense, it was a test of themselves, and they were placing themselves in the vulnerable position of facing possible failure. This takes courage
and is probably one of the first prerequisites for making a decision to become involved in such a "personal" endeavor.

As further evidence of being concerned and about the time the course would require 54 percent believed it would require some effort on their part to keep up the necessary pace, 25 percent said it would require substantial effort, and 12 percent in the spring group and 9 percent in the fall group were concerned that they might not be able to do all the things planned for the course.

The majority had strong support from their family ( 60 percent), and an additional 21 percent had family that were somewhat encouraging; the rest were neutral (about 10 percent), and only 5 percent in the spring group and 2 percent in the fall group had family that were somewhat dis-couraging--none were strongly discouraging. If this was the situation, the potential students probably would decide not to enroll. Some employers were also encouraging (approximately 20 percent) and about 8 percent somewhat encouraging with about 10 percent neutral. Only 1 percent spring and 2 percent of the fall employers were somewhat discouraging.

Evidently the students discussed enrolling with friends because over 50 percent of their friends were strongly or somewhat encouraging and 16 percent neutral.

Goals
From a list of goals the students might be pursuing, those receiving the largest percent of choices in the "Very important" category are shown in Table 27.

Table 27. Immediate and long-range goals of UMA/ISU students

| Goal | Spring <br> $\%$ | Fall <br> $\%$ |
| :--- | :--- | :--- |
| Simply to learn <br> To attain specific skills that will be useful on <br> the job | 69 | 75 |
| To increase my confidence to undertake learning | 63 | 64 |
| projects | 49 | 48 |
| To improve a better person or citizen |  |  |
| To satisfy my curiosity about a particular topic |  |  |
| To become a better friend, spouse, or parent |  |  |

The remaining items were below 40 percent for the "Very important" category. The fall group was higher in the "Simply to learn" category and in the "To satisfy my curiosity about a particular topic." This curiosity about a topic was especially evident in the comments and reactions to the course Psychology. It seems many enrolled because it had a certain mystic, and they wanted to know more about the whole study of psychology. Many seemed to be surprised and/or disappointed with the course content, and this may have accounted for the high drop-out rate in the course and some of the adverse criticism.

The high percentage checking "To attain specific skills that will be useful on the job" could be accounted for in part by the larger enrollments in the course Accounting. Since such a large percentage of the students were enrolled in Accounting, it is interesting that so many also had as a goal "Simply to learn."

Another goal for some of the students was to attain a degree at some future date. A total of 35 percent of the spring group and 33 percent of
the fall group have such aspirations, and 7 percent of the spring group and 10 percent of the fall group hope to acquire a master's degree; 2 percent of the spring and 1 percent of the fall group hope for a Ph.D. degree. Not all have such dreams, however, as 24 percent of the spring group and 20 percent of the fall group are not planning on seeking a degree.

## Enrollment

The way in which the students learned about the UMA/ISU courses is indicated in Table 28.

Table 28. Sources of information about UMA/ISU 1976 courses

| Information sources | Spring <br> $\%$ | Fall <br> $\%$ |
| :--- | :---: | :---: |
| From a news article in a newspaper | 50 | 58 |
| From a newspaper advertisement | 30 | 21 |
| From reading a UMA brochure | 25 | 31 |
| From a television advertisement | 17 | 13 |
| From a friend or family member | 11 | 9 |
| Other | 15 | 11 |

There were other sources of information as television and radio advertisements and programs, from employers, high school counselors, etc., but the percentages were all less than 10 percent for any of these sources, however, they all helped to recruit students, and diverse efforts probably need to be continued. The article in a newspaper was the most effective, and since 99 percent read daily newspapers and approximately 75 percent
read weekly newspapers, this information would reach most homes. Since the main choice for leisure time activity is reading for this group, a news article should continue to be one of the most effective means for information and promotion.

The reasons the students gave for deciding to enroll in the UMA course(s) give insight that helps to explain why they chose this form of education over a more conventional form (Table 29).

Table 29. Reasons for enrolling with UMA

|  |  | Not important |  | Somewhat important |  | Very important |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\overline{\text { Spring }}$ | Fall | $\frac{\text { Spring }}{\text { Spring }}$ | Fall | $\frac{\text { Spring }}{\text { Spren }}$ | Fall |
| 228. The good reputation of Iowa |  |  |  |  |  |  |  |
|  | State | 19 | 14 | 31 | 31 | 45 | 41 |
| 229. | I have friends at UMA | 31 | 58 | 3 | 3 | 0 | 1 |
| 230. | Another UMA student recommended it. | 85 | 54 | 5 | 4 | . 7 | 1 |
| 231. | The independence allowed by UMA | 23 | 8 | 16 | 17 | 53 | 57 |
| 232. | My employer suggested I take UMA courses | 81 | 53 | 6 | 4 | 2 | 2 |
| 233. | I can work as well as study with UMA | 33 | 15 | 15 |  | 43 | 54 |
| 234. | A counselor recommended UMA | 85 | 53 | 1 | 2 | 3 | 4 |
| 235. | A member of my family suggested I enroll | 66 | 44 | 9 | 10 | 15 | 8 |
|  | I wanted to live at home while attending college | 25 | 13 | 9 | 6 | 57 | 58 |
| 237. | Other | 9 | 5 | 0 | 0 | 5 | 12 |

The independence allowed and being able to live at home which permits working and studying are major reasons. The reputation of Iowa State possibly helped them to have faith in these courses and influenced their decisions to try this informal approach to learning. It succeeded in attracting some who had never continued their education beyond high school and fany who had not taken a formal college level course for over five years.

The percentages given throughout this section are based on the total enrollments in each of the two groups, that is all students in all classes offered spring, 1976, are combined into one group called the spring group, and all students enrolled in all of the classes offered fall, 1976, are combined into a group and this group is called the fall group. Percentages for each group are given in most instances and particularly where there were differences between the two groups.

There is much more information than has been alluded to in the description of these data, and it is included in Appendix D. The reader is welcome to peruse that for the inferences they are looking for.

## Introduction

This section consists of discussions of the significant differences between courses based on the following variables: sex, the scales from the Strong-Campbell Interest Inventory, the factors from the Student Information Questionnaire, the factors from the UMA/ISU Student Questionnaire, and the Nelson-Denny Reading Test-Vocabulary Section.

Correlations between variables were then discussed (all correlations greater than . 39 were discussed and correlations less than .39 were occasionally discussed). The intercorrelations included in this discussion are:

Sex with all other variables
Strong-Campbell scores with the factors from the Student Information Questionnaire and the UMA/ISU Questionnaire

Factors identified in the Student Information Questionnaire with factors identified in the UMA/ISU Questionnaire

Intercorrelations within instruments

Sex
In terms of sex composition, the individuals who enrolled in these various courses spring and fall, 1976, were not different.

Strong-Campbell Interest Inventory Scales
There were eight Strong-Campbell Scales selected for use in this study: Academic Orientation, Introvert-Extrovert, and the six profile scales. The only Strong-Campbell Interest Inventory Scale that showed significant differences between the 1976 ISU/UMA courses was the scale named "Conventional" ( $F=5.440$; . 01 level for $\mathrm{F}_{224}^{4}=3.32$ ). The high end of this scale, according to Holland, describes people who prefer well-ordered environments and like systematic verbal and numerical activities; are usually conforming and prefer subordinate roles; are effective at wellstructured tasks but avoid ambiguous situations and problems involving interpersonal relationships or physical skills; describe themselves as conscientious, efficient, obedient, calm, orderly, and practical; identify with power; and value material possessions and status (Campbell, 1974).

The means for the courses are shown in Table 30.

Table 30. Means of group differences for Strong-Campbell Interest Inventory Scale: Conventional

| Accounting I <br> N 134 | Consumer <br> Experience <br> N 22 | Psychology <br> Today <br> N 32 | Adams <br> Chronicles <br> N 19 | Writing for <br> a Reason <br> N 22 |
| :---: | :---: | :---: | :---: | :---: |
| 59.85 | 59.00 | 53.19 | 52.74 | 55.41 |

As indicated by the means for the five courses, the individuals enrolled in Accounting I and Consumer Experience are very "Conventional," those enrolled in Psychology Today and Adams Chronicles are relatively "Unconventional," and the students enrolled in Writing for a Reason tend toward the middle.

Student Information Questionnaire
The nine factors scored that were derived from the analysis of the Student Information Questionnaire included (most factor names abbreviated): 1. "Personal" Improvement, 2. Evaluation of High School, 3. To Increase Interest and Awareness, 4. Interest in Humanities, 5. Interest in Home Ec., Art, and Religion, 6. Stress-Course Related, 7. Education, 8. Interest in "Physical" Activities, 9. Involvement--Work/Social. In addition to the nine factors, three additional items from the questionnaire were added, and these related to: No. 10. Marital Status, 11. Learned about UMA through Newspaper Ad, 12. Learned about UMA through Newspaper Article. From this total of 12 variables, three showed significant differences between the

UMA/ISU courses: Factor 1 ( $F=3.919$ ), Factor 3 ( $F=4.667$ ), and Factor 7 $(F=4.589)$.

These factors that resulted in significant group differences from the factor analysis of the Student Information Questionnaire are presented in Table 31.

Table 31. Means for group differences for factors from Student Information Questionnaire

| Course | Factor1 <br> $(3.919)$ <br> Accounting I (N 134)Factor 3 <br> $(4.667)$ | Factor <br> $(4.589)$ |  |
| :--- | :---: | :---: | :---: |
| Consumer Experience (N 22) | 20.72 | 9.46 | 9.37 |
| Psychology Today (N 32) | 22.73 | 8.27 | 11.23 |
| Adams Chronicles (N 19) | 24.10 | 8.49 | 7.78 |
| Writing for a Reason (N 22) | 20.79 | 7.21 | 10.26 |

$a_{F}$ value of factor. The . 01 level for $F_{224}^{4}$ is 3.32.

The three factors do not correlate highly (11 and 13, .22; 11 and 17 , -. 21; and 13 and $17, .09$, therefore, the groups differ in the ways described by each factor. In Factor 1 all items scored pertained to the individual's goals of improving himself/herself "personally." On a threepoint scale which ranged from "Not important" to "Very important," the means for most of the items were near or beyond 2.00. When asked "How important is it that you achieve the following goals by studying with UMA?," the responses checked by the students included such statements as "To become a better person or citizen" (mean 2.25), "To become a better friend,
spouse, or parent" (2.15), "To attain specific skills that will be useful on a job," (1.92), "To use leisure time creatively," (2.05), and "To increase my confidence to undertake learning projects" (2.36).

The students enrolled in the Psychology Today course had the highest mean score on this factor which would indicate that these students were primarily interested in the very personal type of goals. They wanted to improve their contribution toward family, friends, and community, and their reason for taking Psychology was evidently an attempt to achieve these goals. The means for Writing for a Reason were very close to those of Psychology indicating these individuals shared the same or very similar goals. Consumer Experience was also comparatively high.

The two courses that showed the most extreme differences from the three previously listed were Accounting I and Adams Chronicles. Since Accounting is a specific skill that is required for a position as an accountant (whether for personal or vocational reasons), the students electing to enroll in it probably had only vocationally oriented goals. That is, they did not take the course to improve themselves personally but to improve their job skills for better performance on the job. Adams Chronicles was a history course and, as in Accounting, the individual probably elected to enroll in it to gain knowledge because of interest in the content--not to improve himself/herself as a better parent, spouse, friend.

Factor 3 was named "Personal Goal of Increasing Scope of Interests and Awareness," and the items that loaded highly on this factor related to the "world beyond" the individual's immediate environment and current interests. Items included such goals as "To increase my awareness of different
philosophies, cultures, and way of life (mean 2.19 on three-point scale from "Not important" to "Very important"), "To become involved in political and social concerns" (mean 2.57), "To improve my professional status" (mean 2.13), and "To discover my vocational interests" (means 2.10). These items include goals the individual wants for herself/himself--not for the sake of becoming a better parent, citizen, etc. The individual is saying he/she wants to "grow," culturally, socially, politically, vocationally. For example, the goal of "discovering vocational interests" would account for the high mean for Accounting I.

The courses Consumer Experience, Psychology Today, and Adams Chronicles all have a specific type of content, and each course would serve to satisfy in some way the various goals included in this factor. The goals 'To increase my awareness of different philosophies, cultures, and way of life" and "To become involved in political and social concerns" might explain why these individuals enrolled in Psychology Today, Adams Chronicles, and Consumer Experience. The courses Psychology Today and Adams Chronicles would probably appeal to persons with both of these goals, and Consumer Experience would be interesting to individuals with the goal of becoming involved in political and social concerns.

Writing for a Reason was a noncredit course, and the objective of the course was to help individuals improve their writing skills. The students enrolled in it had goals that differed significantly from students in the other three courses in relation to the goal of increasing scope of interests and awareness.

Factor 7 is "Education," and it reflects the socio-economic indexes of the parents of the individual and also the background and current status of
the student. Based on the means of the items included in this factor, the mother's education was generally terminated at high school, the fathers in most cases graduated from high school, but the mean was lower for the fathers (a mean of 3 would indicate graduation from high school, mean for mothers was 2.94 , for fathers, 2.80). The average education for the students was trade or business or technical school or one to three years college. The standard deviation for the students was 1.34 , for father, 1.77, and for the mothers, 1.58 .

Based on the educational background of the student and his parents, the enrollments in the courses were significantly different. The course Consumer Experience was most highly influenced by the educational background, followed closely by Adams Chronicles. Writing for a Reason and Psychology Today were at the other extreme with Accounting I in the middle.

## UMA/ISU Student Questionnaire

The 15 factors scored that were derived from the analysis of the UMA/ISU Student Questionnaire included (most factor names abbreviated): 1. Impact of Course, 2. Evaluation of Video, 3. Evaluation of Course Structure, 4. Education-Conventional Mode, 5. Education-Open Learning Mode, 6. Availability of Faculty, 7. Fairness of Tests, 8. Course and Components, 9. Stress Relating to Family, 10. Family Involvement-Benefit to Family, 11. Family Involvement/Support from, 12. Vocational Vs. Personal Development Motivation, 13. Vocational Orientation, 14. Stress Engendered by Involvement in Course Relating to Individual, 15. Cost. Of these 15 fac tors, 7 resulted in significant group differences. These seven included Factors 2, 3, 6, 10, 12, 13, and 14. These are presented in Table 32.

Table 32. Means of group differences for factors from the UMA/ISU Student Questionnaire

| Course | $\begin{gathered} \text { Factor } \\ 2 \\ (24.47) \end{gathered}$ | $\begin{gathered} \text { Factor } \\ 3 \\ (3.714) \end{gathered}$ | $\begin{gathered} \text { Factor } \\ 6 \\ (4.754) \end{gathered}$ | $\begin{gathered} \text { Factor } \\ 10 \\ (5.354) \end{gathered}$ | $\begin{gathered} \text { Factor } \\ 12 \\ (5.184) \end{gathered}$ | $\begin{gathered} \text { Factor } \\ 13 \\ (4.932) \end{gathered}$ | $\begin{aligned} & \text { Factor } \\ & 14 \\ & (4.856) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accounting | -1.98 | 1.83 | 2.69 | -1.95 | -0.76 | 1.06 | -2.99 |
| Consumer |  |  |  |  |  |  |  |
| Experience | 4.01 | -0.34 | 1.09 | 1.37 | 0.59 | -2.25 | 0.20 |
| Psychology | 2.12 | 6.27 | 3.07 | 1.26 | 0.47 | -1.03 | -2.10 |
| Adams Chronicles | 4.95 | 4.64 | 2.64 | 0.66 |  |  | 3.34 |
| Chronicles | 4.95 | 4.64 | 2.64 |  | 1.47 | -3.30 | 3.34 |
| Writing for a Reason | 5.56 | 5.32 | 8.10 | 1.82 | -3.08 | 0.17 | -4.00 |

Of the seven factors which resulted in significant group differences, there was a fairly high correlation (.4516) between two of the factors, 10 and 13. The correlations between all other combinations of factors were less than . 30 for two exceptions. The correlations between factors 2 and 10 which were . 3182 and between factors 6 and 14 which were . 2989 or . 30 .

Factor 2 is a general evaluation of the video component of the course and includes items which indicate that the video was a valuable part of the course, that the video programs were interesting to watch and that the quality was excellent. The means for the items that loaded on this factor show a great deal of variation. For the item "The video programs were a valuable part of the course," the greatest satisfaction was shown by the students in Writing for a Reason (mean 1.55) followed by Adams Chronicles (1.36) and Consumer Experience (1.33). Psychology Today, spring, was .43
and fall was .19. The mean for the combined Accounting courses (spring and fall) was -.55. The range for the mean was a possible -2.33 to +2.33 . This is identically reflected in the means between courses for Factor 2. Statements made by many of the Accounting students reflected a dissatisfaction with the humor and light vein of the video programs. Situations were acted out that were meant to supplement the course content and help to explain and apply it, however, the type of student who enrolled in Accounting seemed to prefer the "Talking Professor" type of program in which the video would explain the method to use in working problems and review specific course content. They felt they were wasting time being entertained while gaining knowledge.

The video programs for Adams Chronicles were basically historical drama, a delightful way to learn history. The Consumer Experience programs and Writing for a Reason were quite factual and explained the concept, however, the Consumer Experience programs were somewhat entertaining. The type of student enrolling was probably not as vocationally oriented and was not trying to learn a specific skill for a job.

The Psychology course had factual, difficult tests, and many students explained that they would have preferred the video program to have been more exacting and factual, relating specifically to textbook material--that is, an aid in studying for the type of tests given.

Factor 3 was "Evaluation of the Course Structure," and items which loaded highly on this factor related to specific ways in which the courses could have been more structured as including a letter explaining each component of the course, audio cassette tapes explaining study methods, a meeting of all students in the area with the instructor present, periodic
calls from the faculty, etc. In examining the means for the various items in this factor, it was very evident that the students in Consumer Education did not feel the need for additional structure. Since this was one of the most successful courses from the standpoint of course completion and favorable comments from students, they evidently were satisfied with the make up of the course and felt they made satisfactory progress without the need of additional faculty contact or explanatory letters, tapes, etc. It might also be that this nongraded, noncredit course resulted in less criticism.

The reverse reaction was given by the students enrolled in Psychology. The course content was not what many of the students had expected; the tests were quite numerous and from the students' perspective quite difficult. The drop-out rate was highest for Psychology, and this may account for the reaction of the students to the structure--they did not progress as satisfactorily as in some of the other courses and may have felt frustrated. Many of the students who enrolled in Psychology did not do so to gain specific skills for a job but for personal reasons--to improve themselves, to learn, and in some cases were curious about the content of a course in the area of Psychology.

From personal contacts and written comments of the students, it was learned that the majority of Accounting students wanted to gain a specific skill and since the course was quite structured, did not feel the need for a great deal of additional direction. Comments from students on the instruments praised the learning guides and cassettes that were a part of the course. Thus this relatively low mean may reflect more that instructor contact and other means of implementing structure were not needed rather than not present.

There was a moderate amount of disagreement among students, however, in all the courses, and this might be due as much to the type of students enrolled as to the course itself.

Factor 6 was "Availability of Faculty" (Reaction to Faculty or "Assisting" Personne1). In reviewing the group means for this variable, it is evident that the students in the course Writing for a Reason (mean 8.10) believed that the faculty was very available and helpful and welcomed the calls and questions from students. The mean for the course Psychology (3.07) was considerably lower than Writing for a Reason, and the means for the courses Accounting (2.69) and Adams Chronicles (2.64) were almost identical but slightly lower than the mean for Psychology. The mean for the course Consumex Experience (1.09) was very definitely the lowest of all courses.

There may be many contributing factors for the very positive reaction of the students in Writing for a Reason. The course was noncredit, nongraded, at least no grade was registered so none would appear on a student's permanent record. The students' papers were evaluated but from the vantage point of assisting or working with the student to help him improve his writing skills. The students' fees for this course were identical to the fees paid by students enrolled in courses for credit which indicates that these students in Writing for a Reason were taking the course for the main purpose of gaining writing skills. They wanted to learn, and because they were not intimidated by the threat of a "low" grade (even "failing" would have had no effect on their permanent record), they may have felt more free to contact faculty. In personal conversation with the faculty, it was learned that students made very frequent calls, and as the course
progressed the faculty person expressed increased interest and amazement at the zeal and dedication of his students. He stated that he enjoyed working with them and watching their progress very much. This attitude may have been conveyed through the phone conversations with the students.

The students in Psychology felt the faculty welcomed their calls and was helpful in answering their questions; they even enjoyed talking to the faculty over the phone. The rating for the spring group was higher than the fall group but in general favorable. Many of the Psychology students enrolled "simply to learn" and were concerned about their grade, but it was not of primary importance to them. They had many questions and felt free to ask them. In fact, they even felt free to voice complaints they may have had about course components. In a personal interview and through a questionnaire, it was learned that the faculty person who answered most of the students' calls was at first apprehensive about working with these "older students" but became very appreciative and interested in them as the courses progressed and seemed very receptive to their calls. He also felt the course was a rigorous course that he knew demanded much from the students, and he was sympathetic to their problems.

The means for the courses Accounting and Adams Chronicles were almost identical in reaction to faculty (Factor 6). The courses and the students enrolled in the courses, however, were very different. Adams Chronicles was a history course, and the students enrolled in this course were interested in gaining the knowledge in the course and probably enrolled for recreational purposes, that is, from answers to items in the questionnaire they were not taking the course to improve themselves vocationally or to become a better parent, spouse, friend, etc. They took the course to grow
personally, to become more aware, to increase their own general education. These people also seemed to be least pressured for time and had many resources. They did not feel that the faculty welcomed their calls or were exceedingly helpful in answering their questions and did not particularly enjoy talking to the faculty over the phone, but they were the type of people who felt free to ask questions and to voice complaints--that is, they seemed to have a great deal of self-confidence and probably, due to their goals and the nature of the course, did not need to contact faculty a great deal.

The individuals enrolled in Accounting I were very vocationally oriented and felt free to call the faculty and felt the faculty welcomed their calls, however, they did not as a group feel as at ease in talking to faculty and did not seem to enjoy talking to faculty as much as those in Psychology and especially Writing for a Reason. This may be due to the type of student enrolled in Accounting. Most wanted to acquire the specific skill of Accounting, and most had not enrolled in a college level course prior to this experience and most were not aspiring for a degree and did not plan to take more courses, at least not immediately. As a group they may have felt more alienated in reference to the "college" connotation conveyed by the title "college faculty." In a group meeting of Accounting students and faculty, the students seemed to be pleased to be able to meet the faculty and become better acquainted. As the evening progressed, the students became more relaxed and began asking many more questions that were of importance to them and that they had hesitated to call faculty about. They initially tended to be a bit in awe of the college faculty. The
college faculty present made great strides in helping the students to dispel this feeling.

Students in Consumer Education were predominantly women and predominantly homemakers, that is, without outside full-time employment. Their goal in taking the course was to gain knowledge that would help them to be better parents, spouses, citizens, etc. . The students in this course as in Accounting were in awe of "college faculty" and did not feel as free to ask faculty questions and did not enjoy talking to the faculty. In a personal interview with the faculty, it was learned that the faculty did not entirely understand or approve of this type of learning for college credit and that the department did not value the course very highly. There tended to be a slight undertone of negative feeling. This, however, is not meant as adverse criticism of the faculty. The students indicated that the faculty seemed to welcome their calls and that the faculty was helpful.

The means were positive for all courses for statements about the faculty welcoming telephone calls and also for statements about the faculty being helpful in answering the students' questions, however, the means tended to vary a great deal for the various courses. The students' reaction to one statement that may help to explain the low mean for the course Consumer Education is the statement "The faculty seemed genuinely concerned with my progress in the course." The means for the courses varied as follows: Consumer Experience, .09; Psychology, spring, .78; Adams Chronicles, .64; Psychology, fall, 1.08; Writing for a Reason, 1.67; and Accounting, spring and fall, .37.

There was also one very interesting reaction that differed considerably from course to course--the freedom the students felt about relating
any complaint to faculty. In the Consumer Experience course, the students were very reticent (mean -.17) and in Adams Chronicles the mean was .65, but in Writing for a Reason, it was 1.19. The other three courses were about the same, averaging in the 30 s or low 40s. Since Consumer Experience was a successful course based on course completion and favorable comments from students, hesitance about contacting faculty must not have been a deterring factor, at least not for the type of student enrolled spring, 1976.

Factor 10 is "Family Involvement--Benefit to Family." The course Accounting I scores the lowest on this factor with a mean of -1.946 . Since the students in Accounting I indicated on the questionnaires and in personal contact that they wanted to acquire the skill that was a part of the course and at least, consciously, did not believe they were enrolling for the main purpose of benefiting their family. This may have been a secondary purpose, but, if present, this goal did not surface in response to the instruments.

Adams Chronicles with a low score (.65), but not as low as that of Accounting, also indicates that the students who enrolled in this course were not primarily interested in self-improvement for the sake of their spouse and children. Again it may have been a contingent benefit but not an expressed one.

Consumer Experience and Psychology had the next highest means (1.37 and 1.36), and from the responses of the students, it was very apparent that the majority enrolled to gain knowledge that would help them to be better family members. They expressed the opinion that through acquiring the knowledge, or at least in increasing their awareness in these two areas
of study, they might gain some insights that would help them to perform their role of mother, spouse, and community member better. In participation in community affairs (school and political), their main gaol was to help their families through helping to improve community conditions.

The highest mean (1.82) for Writing for a Reason is interesting since their response to many items indicated they enrolled to "learn specific writing skil1," however, to the item "As a result of taking this course, I believe I can be a better parent," the means for Writing for a Reason were comparatively high and were as follows for the courses: Consumer Experience (.17); Psychology, spring (.36); Adams Chronicles (.02); Psychology, fall (.44); Writing for a Reason (.38); and Accounting I (-0.48). From comparing the means from these courses, it is easy to see that in addition to some of the students' specifically course related goals, they also wanted to gain knowledge and/or expertise that would help them to be better parents. Apparently this was much less true for the course Adams Chronicles and negative for Accounting I. In Writing for a Reason, it is very possible that the more recent criticisms of our schools in failing to teach the children to write acceptably alerted the parents to this possible deficiency in their children. It may be logical to assume that the students who enrolled in Writing for a Reason also hoped to be able to help their children attain adequate writing skills.

Factors 10 and 13 correlate at the .4516 level. They are alike in that the individuals responding to the items in both factors wished to improve themselves, however, they are very different in the way in which the individuals wish to improve themselves and the overall purpose for this goal. Factor 10 is almost identical to Factor 1 in the Student Information

Questionnaire which has been discussed previously in this section. Items included in this factor include "knowledge I have gained will help me to be a better family member," "as a result of taking this course, I belleve I can be a better 'spouse,'" "my spouse enjoyed studying and learning with me," and in specific reference to children--"I believe I can be a better parent" and "I find it easier to communicate with my children as a result of taking this course." There was also an item which referred to becoming a more interesting companion and friend.

This factor differs from Factor $I$ in the Student Information Questionnaire in that it does not include any items relating to "vocational improvement," and in Factor I there was slight reference to the vocational aspect of self-improvement, thus the underlying concept for this factor is more purely "personally" oriented. This possibly accounts for the extreme difference in the course Accounting (mean -1.95) as compared to the other courses. Those enrolled in it were interested in acquiring specific job skills and were very little if at all concerned about self-improvement to become a better family member, etc. This also explains the difference between Factor 10 and Factor 13 regardless of the high correlation. In Factor 13 the self-improvement was completely vocationally oriented.

Factor 12 is "Vocational Vs. Personal Development Motivation." Items in this factor include "I took this course simply to learn," "knowledge more important than grade," and "took the course for Iowa State academic credit." In reviewing the means for the various items, it is apparent that the persons enrolled in Adams Chronicles differ considerably in their goals for taking the course. These students took the course simply to learn but also were very interested in obtaining Iowa State University credit and,
therefore, were also very concerned about the grade they would receive in the course.

Those enrolled in Psychology were also interested in gaining Iowa State academic credit but not to the extent of the students in Adams Chronicles, and to them the knowledge gained was much more important than the grade. There was some difference between the spring and fall Psychology students in that the spring group seemed more interested in just the knowledge to be gained than the fall group. The fall group was a bit more interested in gaining academic credit, and again the grade was more important than for the spring group.

The Accounting group of students by contrast was primarily interested in gaining the knowledge, were not very interested in gaining Iowa State University credit--that is, it evidently was not a primary goal for enrolling, but the grade they would receive was important, however, not as important as the grade seemed to be to the students in all other courses with the exception of Writing for a Reason.

Writing for a Reason, since it was a noncredit course, was elected by students for the knowledge they could gain. The credit and grade were of much less importance. By comparison to the goals of gaining credit or a grade, their main reason for enrolling could be described "simply to learn."

Factor 13 is "Vocational Orientation." The course Accounting I with a mean of 1.06 scored the highest in comparison to the other courses in this group. Since it was the course that was based on a specific skill and since this skill is marketable and useful in an individual's personal life
in helping to maintain accurate business records, the score accurately reflects the goals of the individuals enrolled in the course.

The next highest score "Writing for a Reason" was a course designed to improve the writing skills of individuals. It was not just a general writing course but endeavored to assist individuals to improve specific kinds of writing skills, as for example, business letters, business reports, etc., and included were general writing skills that could be applied to a variety of purposes. In this context it was vocational and would assist a person in a position that required writing. For example, a school administrator, a religious leader, a general office worker, and individuals with other types of backgrounds enrolled in the course. It even included persons who were interested in improving their personal letter writing as well as "attempting the novel" they had always been wanting to write. From this standpoint, it was "vocational" and explains the rather high mean in comparison to the other courses.

Individuals enrolled in Psychology, the course with the third highest mean ( -1.03 ), for reasons that were not primarily vocational, however, a few students elected the course with the hope it would help them in their current positions. These individuals were employed in institutions for the mentally disabled and/or elderly. On the instruments several individuals explained how they believed the course helped them gain insight in relation to the attitudes and actions of some of their patients. For these individuals, the goal for enrolling in the course was vocational. This was also true for some employed as educators.

In the course Consumer Experience, as has been previously explained, there were predominantly homemakers who wanted the information to he1p them
become more informed consumers. Their ultimate goal was to help their families through their increased efficiency as skillful purchasers of the necessary items to run a household as productively as possible.

The very low score for Adams Chronicles (-3.30) emphasizes that the students enrolled in this course were not interested in using the knowledge gained for vocational purposes. They wanted the knowledge, were interested in the subject or curious, had the time and energy to spend indulging this goal, and, therefore, enrolled in the course. The content of the course was well-advertised which helped them to know the type of material that would be included in the course.

The name Vocational Orientation describes all the items very adequately, and in reviewing the means for the item "My primary purpose for taking this course was to gain job skills," the course Accounting I is the only course with a positive mean and this was .47 with a standard deviation of 1.47 . The differences were greatest on this item in the factor, however, the trends throughout the items all emphasize that the course Accounting $I$ was chosen for vocationally related reasons.

An interesting development in relation to responses to items in this factor is the underlying vocational goal for enrolling in the course "Writing for a Reason." Their primary purpose for taking the course was not to improve "job skills," but there seems to be some hope on the part of the students that knowledge gained in the course will help them vocationally. The same type of goal seems to be present in the students enrolling in Psychology Today. Possibly they believe that as a result of knowledge gained in the course they will be better employees. In response to the item "This course has helped me to be a better employee," the responses
were positive and equaled those to Writing for a Reason. The responses to only Accounting were slightly higher.

Conversely, the courses Adams Chronicles and Consumer Experience, and in that order, were definitely not chosen for vocational advancement.

In Factor 14, "Stress Engendered by Involvement in the Course Relating to the Individual," this title refers to the amount of stress involved, and a high score means very little stress caused by the course and a low or negative score is interpreted as a great deal of stress. The course Adams Chronicles has the highest score indicating there was very little stress associated with taking the course for the average individual enrolled. Consumer Experience was next high but in comparison to Adams Chronicles quite a lot lower, that is, there was some degree of stress associated with involvement in the course.

Accounting and Psychology, and in that order, had negative scores indicating these courses caused considerable stress to the individual, and Writing for a Reason was the most stressful.

The items in this factor relate to the stress caused by involvement in the course. The items refer to the domestic interruptions and demands, the work pressures and responsibilities, and lack of stamina and energy and such related problems as difficulty in studying for tests.

The courses differ considerably in the amount of stress caused by the course to the individual, and the reasons are probably very diverse. In the course Writing for a Reason, the mean was higher (more stress) than for other courses for the items relating to domestic interruptions and demands that interfered with amount of time needed for the course (mean .71). Accounting was next with a mean of .49 . For the item about work pressures
and responsibilities inteferring, Writing for a Reason and Accounting were highest indicating more stress (. 76 and .90). A logical interpretation of these scores is that individuals in Accounting were more pressured by outside job pressures and responsibilities than home responsibilities, but those in Writing for a Reason were equally pressured by both. The students in Adams Chronicles had very little stress originating from these sources (mean -.21).

In relating to amount of energy and stamina, those in the fall Psychology course (-40), Adams Chronicles (mean -33), and Consumer Experience (mean -29) did not find this a problem, however, those in Writing for a Reason found it of some concern (mean .35). The spring Psychology students and those in Accounting were in agreement in being quite neutral (means . 09 and .01) .

The students in Adams Chronicles and Accounting did not find studying for tests difficult. In the course Adams Chronicles, the stress was on papers and not tests for evaluation, and those in Accounting I wanted to acquire a skill and needed to have a check on their progress in acquiring the skills, therefore, tests were necessary for their self-evaluation. By contrast, the students in Psychology found studying for the tests quite difficult, and there were many adverse comments on the type of tests given in the course.

The individuals in Accounting found the pace of the course very fast (mean 1.30); those in Adams Chronicles and Consumer Experience did not agree that the pace was too fast (-.99 and -.83 ). Students in the fall Psychology course also did not mind the pace and differed from the spring
group (fall, mean -. 10; spring, .23). Writing for a Reason students reacted to the pace as did the spring Psychology students (.26).

Nelson-Denny Reading Test, Vocabulary Section, Part I
The groups did not differ with respect to the Nelson-Denny Test scores.

Intercorrelations between Variables
In this section intercorrelations will be investigated. All correlations between variables greater than .39 will be discussed, and some correlations less than . 39 will be included. The variables included are as follows:

Identification of variables intercorrelated (adjusted for group differences, variables based on N ㅡ 224 with the exception of variable 38 which is based on 160)

Variables:

1. Course (1. Accounting, 2. Consumer Experience, 3. Psychology,
2. Adams Chronicles, 5. Writing for a Reason)
3. Sex
4. AOR (Academic Orientation Scale on the Strong-Campbell Interest Inventory
5. I.E. (Introvert-Extrovert Scale on the Strong-Campbell Interest Inventory)

Scales 5 through 10 are the General Occupation Theme Scales from the Strong-Campbell Interest Inventory.
5. Realistic
6. Investigative
7. Artistic
8. Social
9. Enterprising
10. Conventional

Factors 1-9 from ISU Student Information Questionnaire; 10, 11, and 12 are additional items.
11. Factor 1 Person Centered Vocational/Practical Goals
12. Factor 2 Evaluation of High School Attended
13. Factor 3 Personal Goal of Increasing Scope of Interests and Awareness
14. Factor 4 Interest in Humanities
15. Factor 5 Interest in Home Economics, Art and Church Related Activities
16. Factor 6 Stress Engendered by Involvement in the Course Relating to the Individual
17. Factor 7 Influence on Engaging in Continuing Education
18. Factor 8 Interest in Physically Oriented Activities
19. Factor 9 Degree of Involvement, Work/Social
20. Factor 10 Marital Status
21. Factor 11 Learned about UMA through Newspaper Advertisement
22. Factor 12 Learned about UMA through Newspaper Article

Factors 23-15 from UMA/ISU Student Questionnaire
23. Factor 1 Impact of the Course on the Students
24. Factor 2 Evaluation of the Video Component of the Course
25. Factor 3 Evaluation of the Course Structure
26. Factor 4 Obtaining an Education through the Conventional Mode
27. Factor 5 Obtaining an Education through Open Learning Mode
28. Factor 6 Availability of Faculty (Reaction to Faculty or "Assisting Personnel')
29. Factor 7 Fairness of Tests
30. Factor 8 Evaluation of Course and Components
31. Factor 9 Stress Engendered by Involvement in the Course Relating to Family
32. Factor 10 Family Involvement--Benefit to Family
33. Factor 11 Family Involvement and/or Support for Student
34. Factor 12 Vocational Vs. Personal Development Motivation
35. Factor 13 Vocational Orientation
36. Factor 14 Stress Engendered by Involvement in the Course Relating to the Individual
37. Factor 15 Cost of Course
38. Ne1son-Denny Reading Test, Part I, Vocabulary Section (this variable was based on responses for data on all the intercorrelations, see Appendix D )

In this section the following intercorrelations will be investigated:

1. Sex with all other variables
2. Strong-Campbell scores with the factors from the Student Information Questionnaire and UMA/ISU Student Questionnaire
3. Factors identified in the Student Information Questionnaire with factors identified in the UMA/ISU Student Questionnaire
4. Intercorrelations within instruments

Correlations between Sex and all other variables:
The variable Sex correlates with:
Variable 5 (-.535) Realistic scale on the Strong-Campbell Interest Inventory

Variable 15 (.541) Factor 5 from the Student Information Questionnaire --Interest in Home Economics, Art, and Church Related Activities Variable 18 (-.496) Factor 8 from the Student Information Question-naire--Interest in Physically Oriented Activities

In all the above variables that correlate with Sex, the stereotype of vocations and extra-curricular activities in which males or females are traditionally engaged is emphasized. The Realistic Scale on the StrongCampbell describes people who are robust, rugged, practical, and physically strong; somewhat uncomfortable in social settings; have good motor coordination and skills but lack verbal and interpersonal skills; usually perceive themselves as mechanically and athletically inclined, etc. It definitely includes the "physically oriented interests and activities" and describes the "typical" male.

Correlations between Strong-Campbell Scales and factors from Student Information Questionnaire and UMA/ISU Student Questionnaire

AOR Scale (Academic Orientation Scale) from the Strong-Campbell Interest Inventory This scale correlates at . 55 with the factor "Interest in the Humanities" (Factor 4 from the Student Information Questionnaire). Those scoring high on this scale tend to be individuals who enjoy reading, and according to Campbell (1974) the scale is an indication of the degree of academic orientation of the respondent. High scores will be found among people who are well-educated or intend to become so. Since the correlation
is positive, it would indicate that those interested in the humanities tend to fit this description.
I.E. Scale (the Introvert/Extrovert Scale) of the Strong-Campbell Interest Inventory This scale reflects the person's interest in being alone as opposed to working closely with other people. High scores (extreme is 60) are earned by introverts, people who would rather work with things or ideas; low scores (extreme is 40 ) are earned by extroverts, people who enjoy working with others, especially in social service settings. This variable correlates -.40 with variable 14 , Interest in Humanities. Thus introverts are not interested in the humanities as much as extroverts.

For the I.E. Scale, there was also an interesting but somewhat lower negative correlation ( $r=-23$ ) but significant with variable 26 "Obtaining an Education through the Conventional Mode. Introverts tend to prefer the unconventional mode.

The correlation of the I.E. Scale ( $\mathrm{r}=-.22$ ) with variable 19 gives some additional insight. Variable 19 is Factor 9 in the ISU Student Questionnaire and relates to the degree of involvement the individual engages in whether it be extra-curricular activities or work outside the home. Introverts tend to have not engaged in extra-curricular activities.

Realistic Scale from the Strong-Campbell Interest Inventory This scale correlated highly ( $r=.67$ ) with "Interest in Physically Oriented Activities" (variable 18, Factor 8 in the ISU Student Questionnaire). Since those who score high on the Realistic Scale tend to be interested in the outdoor physical type activities, the high correlation with Factor 8 would be expected because both the scale and the factor describe individuals interested in the same type of activities. There is also a negative
correlation with "Interest in Home Economics, Art, and Church Related Activities" (variable 15, Factor 5 in the ISU Student Questionnaire). The individuals described in this factor would be quite different and with predominantly stereotyped female interests while the converse situation is true in reference to the Realistic Scale and "Interest in Physically Oriented Activities" described above.

Investigative Scale from the Strong-Campbell Interest Inventory This scale correlates with "Interest in the Humanities" (variable 14, Factor 14 in the ISU Student Questionnaire) at $r=.37$ and with variable 18 at $r=.28$ which is "Interest in Physically Oriented Activities" (Factor 8 in the ISU Student Questionnaire). This demonstrates two quite different areas in which an individual could exercise his inclination to be "curious." These individuals tend to be analytical, introspective, taskoriented, and have a need to understand the physical world.

Artistic Scale from the Strong-Campbel1 Interest Inventory This scale correlates very highly $(r=.47)$ with "Interest in Humanities" (variable 14 from the ISU Student Questionnaire). Since the "humanities" include the arts, this high correlation would be anticipated, and individuals interested in the humanities courses would be expected to score highly on this Strong-Campbell Scale.

There is also an interesting correlation between "Artistic" and "Education" (variable 17 on the ISU Student Questionnaire). This indicates that the more an individual fits the description of "Artistic" on the Strong-Campbell Scale, the higher the educational:level of the parents, spouse, and individual himself/herself.

Social Scale on the Strong-Campbell Interest Inventory This correlates ( $\mathrm{r}=.33$ ) with "Interest in the Humanities" (variable 14, Factor 14 on the ISU Student Questionnaire). These individuals are described as sociable, responsible, humanistic, religious, like to work in groups, be central in groups, etc.

The Social Scale correlates ( $\mathrm{r}=.26$ ) with "Interest in Home Economics, Art, and Church Related Activities" (variable 15, Factor 5 in the ISU Student Questionnaire).

Enterprising Scale from the Strong-Campbell Interest Inventory The correlation between this scale and "Degree of Involvement, Work/Social" is -25 (variable 19, Factor 9 from the ISU Student Questionnaire). Since the "Enterprising" individual according to the Strong-Campbell Scales is the type of person that has verbal skills, likes to sell, dominate, and lead and has a strong drive to attain organizational goals or economic aims, he/she is much like the person described in Factor 9 who managed to find extra jobs while in high school, is a leader in the community, etc., that is, the type of person who likes to become involved.

Conventional Scale from the Strong-Campbell Interest Inventory This scale correlates ( $\mathrm{r}=20$ ) with "Learned about UMA through Newspaper Advertisement" (variable 21, Factor 11, ISU Student Questionnaire) and with "Availability of Faculty--Reaction to Faculty or 'Assisting Personnel'" ( $\mathrm{r}=.22$ ) (variable 28, Factor 6, UMA/ISU Student Questionnaire) and with "Vocational Orientation" (r = .23) (variable 35, Factor 13 from UMA/ISU Student Questionnaire).

Since the means for the course Accounting I (59.85) and Consumer Experience (59.00) were the highest for this scale and Adams Chronicles was
the lowest (52.74), this scale and the factors with which it correlates describes individuals who are conventional and practice what is generally categorized as conventional activities. From the items included in Factor 11, it would include reading newspapers and learning about new products, practices, etc., through the newspaper as they did.

In reviewing the means for the Accounting, and Consumer Education students toward the faculty, it might be concluded that they had the stereotyped reaction to "faculty" in that they believed the faculty welcomed their calls, was helpful in answering their questions, and yet they did not enjoy talking to faculty over the phone or feel as at ease in talking to faculty or feel that the faculty was genuinely interested in their progress in the course as did the students in the other courses. A picture of a quite distant, more unapproachable yet knowledgeable "professor" seems to have permeated their reaction to the "faculty." This, of course, may have been the actual situation, but conversely it may have been their attitude that tended to bias their interpretation of some of their reactions to the faculty.

The third correlation with the Conventional Scale was "Vocational Orientation." Again there is a very strong similarity between the description of those who score high on the Conventional Scale and the "vocationally" oriented which would include individuals interested in a course such as Accounting.

Correlations between factors from the ISU Student Questionnaire and factors from the UMA/ISU Questionnaire

Factor 1, Person Centered Vocational/Practical Goals (variable II, ISU Student Questionnaire) This factor correlates ( $\mathrm{r}=.30$ ) with
"Evaluation of the Course Structure" (variable 25, Factor 3, UMA/ISU Questionnaire). This correlation indicates that people who have person centered vocational/practical goals want more course structure, more contact with faculty (within the constraints of their available time), and more specific directions to guide them in the courses. Their primary goals are to improve themselves either for personal reasons, possibly to grow socially, emotionally, etc., and to gain knowledge that they may use in their everyday living whether it be in the home, community, or out on a job. They are generally busy, involved people who did not want to feel they are wasting time, therefore want to accomplish their goals as quickly and as efficiently as possible. It is evident that they believe "more structure" in a course will help them to achieve this objective.

Conversely, those who enroll "simply to learn" do not need or often want a course quite as structured. They want more freedom to gain from the course whatever it is they may feel they need or want. They often may ask for assistance from an instructor, but the guidance they seek is to aid them in gaining their specific goals from the course--not necessarily the instructor's objectives for the course.

Factor 2, Evaluation of High School Attended (variable 12, ISU Student Questionnaire) This factor correlates ( $\mathrm{r}=.20$ ) with "Fairness of Tests" (variable 29, Factor 7, UMA/ISU Student Questionnaire). The conclusion that can probably be drawn here (based on items which loaded highly on the factor) is that individuals who enjoyed their high school and evaluated their tests in high school as "fair" in addition to their teachers, administrators, etc., also tend to have a similar attitude toward the fairness of the tests in the UMA/ISU courses.

Factor 3, Personal Goal of Increasing Scope of Interests and Awareness (variable 13, ISU Student Information Questionnaire) This factor correlates with "Evaluation of Course Structure" ( $\mathrm{r}=.23$ ) (variable 25, Factor 3, UMA/ISU Student Questionnaire). This correlation indicates that people who took the course for personal goals of increasing scope of interest and awareness tended to evaluate highly the course structure. Conversely, if their primary goal for taking the course is not to increase their personal goal of increasing scope of interest and awareness, they tended to evaluate the course structure relatively lowly.

A review of the content of items which loaded on Factor 3 might lend insight to the correlation between these two factors. The goals were personal, and the individuals wanted to increase the scope of their "interest" and "awareness." The "scope" in this factor includes the following: increasing an interest in different philosophies, cultures, and ways of life; becoming involved in political and social concerns; improving professional status; and discovering vocational interests.

Factor 3, Personal Goal of Increasing Scope of Interests and Awareness This factor also correlated with "Vocational Orientation" ( $\mathrm{r}=.37$ ) (variable 35, Factor 13 from the UMA/ISU Questionnaire). The personal goal of acquiring a vocational skill is evidenced in both factors, and the correlation between these two factors tends to emphasize the importance of the goal of acquiring knowledge of their vocational interests. Since many of these students were women and were either unemployed or employed on a parttime basis, one of their goals in enrolling in a UMA course may have been to gain information about the "scope of vocational opportunities" which might be available to them with or without additional training.

Factor 4, Interest in Humanities (variable 14 from the ISU Student Questionnaire) This factor correlates ( $r=.22$ ) with "Obtaining an Education through the Conventional Mode." From comments of students on the instruments and the way they scored items, it could be concluded that students interested in the humanities as an area of study also preferred more contact with instructors and closer relationship with other students. These preferences may have accounted for the correlation between these two factors.

Factor 5, Interest in Home Economics, Art, and Church Related Activities (variable 15, ISU Student Questionnaire) This factor correlated ( $r=.20$ ) with "Stress Engendered by Involvement in the Course Relating to Family" (variable 31, Factor IX, UMS/ISU Questionnaire). The probable interpretation for this correlation is that people with feminine interests tend to perceive more stress relating to family by involvement in a course. The individuals with interest in Home Economics Art and Church Related Activities may also be quite involved in projects and organizations relating to these areas and may also have many family and home responsibilities. These all may result in commitments that require time and energy and the added involvement of taking a course, even on a rather flexible schedule, would probably result in stress--making the decisions for optimum allocation of time and other resources might also cause added stress.

Factor 5, Interest in Home Economics, Art, and Church Related Activities (variable 15, ISU Student Questionnaire) This factor also correlates ( $r=.21$ ) with "Obtaining an Education through Open Learning Mode" (variable 27, Factor 5, UMA/ISU Student Questionnaire). The inference that could be made to account for the correlation between these two variables is
that individuals interested in the area of home economics were primarily women and were interested in their families and communities and at this point in their life had a commitment to their families and due to their families being a part of the community and being affected by it, also had community commitments. It is, therefore, these types of individuals who are enabled to continue their education through an "open learning" mode that permits them to try to gain the skills and knowledge they feel they want and/or need and still fulfill their family and community obligations. Factor 6, Stress Engendered by Involvement in the Course Relating to the Individual (variable 16, ISU Student Questionnaire). This factor correlates ( $\mathrm{r}=.25$ ) with Stress Engendered by Involvement in the Course Relating to the Individual (variable 36, Factor 14 in UMA/ISU Student Questionnaire). Due to a variation in the items in the factor, there were some differences in comparisons to courses in relation to amount of stress caused the individual. In interpreting the scores, it should be noted that in variable 16 a low score means the individual encountered less stress while in variable 36 a low score means a high degree of stress.

Intercorrelations with instruments: The Strong-Campbell Interest Inventory, the ISU Student Questionnaire, and the UMA/ISU Student Questionnaire Intercorrelations between instruments are rather difficult to interpret for two reasons: First, an instrument is given to a subject at one place and at one time, therefore, response set would pervade all the scales from one instrument more so than they would pervade scales from one instrument to another. Where the two instruments are given at different places, different times, and different situations, this would not generally be a problem. Secondly, the whole instrument was factor analyzed, and the
scales were put together from the factors in such a way that the scales would correlate as lowly as possible. That is, an attempt was made to avoid items that loaded on more than one scale very highly and to select the items not only on the basis of their high factor loadings but also on the basis of the fact that they loaded on only one factor. If items loaded on two factors highly, they were generally discarded. However, the use of the data in this way is exploitive of the data, and as a result it would be expected that factors would correlate higher in a second sample than they correlated in this sample. These then are two sources of ambiguity that occur when the correlations within an instrument are examined.

The situations that result in the ambiguities that occur and affect the correlations of factors within instruments do not exist for between instrument correlations. The reasons for this are: First, the instruments are administered to the subjects at different places at different times in different situations so the response set variable is not going to be as pervasive and secondly, each instrument was factor analyzed separately without any reference being made from one instrument to another so the correlations between scales derived from different instruments should be relatively unbiased--that is, they should be the same when a second sample is examined.

For these reasons it is not very profitable to consider in detail the possible meanings of all the correlations within the instruments. These correlations are presented in Appendix $D$, and the reader may peruse these data, however, the reader is reminded that these correlations are not always unambiguously interpretive. In addition, these correlations are relatively unimportant and are not predictive since the responses to any
one individual instrument were given in the same time frame. These correlations within instruments may have value, however, as an aid in interpreting group differences in the sense that if there are two factors that correlate fairly highly and if the groups differ in the same way with respect to both factors which are highly correlated, then probably the reasoning for these differences is the same for both factors. That is, what the factors measure in common other than what they measure uniquely.

There were several significant correlations within each instrument, and as stated previously, these are given in Appendix $D$ for the convenience of interested readers.

## SUMMARY AND RECOMMENDATIONS

There are several changes in the United States that have implications for the future directions of adult education: a 32 percent increase in young adults between the ages of 25 to 34 ; a decline of 11 percent in children five and under; an increase of from 12 to 50 percent of young adults who complete from 15 to 21 years of formal schooling; and the growth in the numbers of part-time students. Between 1972 and 1974, the full-time student population grew by 6 percent, and the part-time student population grew by 39 percent (0'Hara, 1975).

In response to the growing need to serve this ever-expanding group of adults, many communities have established "open learning systems." Through this approach education is taken to the individual, and much of the new technology is becoming a vital force in this new experiment in trying to assist the adults in receiving the education they want and/or need.

The University of Mid-America is one form of distance education which might, in its present format or with modifications, be a model for future distance education. It is a consortium consisting of ten member universities in seven states: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. Iowa joined the consortium in 1975, and the first courses were offered in February, 1976. Since that time a group of courses has been offered twice a year, every spring and fall, on the semester basis.

The success of the program depends on many factors, but probably most important is a satisfied group of students. Without students there can be
no program, and one approach to seeking ways to succeed in serving the students is to implement a continuous program of evaluation and research.

The present study is an attempt to gather and analyze data relating to selected aspects of the UMA/ISU program in Iowa which might provide guidelines for future planning. There were two main objectives of the study: 1. To obtain attitudes and reactions of the learners toward the experience of enrolling in a UMA course at Iowa State University including: the learner's evaluation of the course and its components; the learner's views of the value of the experience to himself/herself; and the learner's views of the impact of the experience on his life style, family, and selfidentity and 2. To identify learner characteristics which tended to correlate with a successful experience as viewed by the learner and as measured by satisfactory completion of the course.

The population of the study included all of the students who enrolled in the spring and fall, 1976, classes and actually began study in the course(s). The total enrolled in all courses for spring, 1976, was 188, and for fall, 1976, was 195.

For the spring group, 17 students dropped immediately, that is, without beginning study in the course and received complete refunds for tuition and materials. Of this same group, 16 individuals enrolled in two courses, and one individual enrolled in three courses; thus a total of 154 individuals were enrolled.

For the fall group, of the 195 original enrollments, 4 individuals dropped immediately and 19 were enrolled in two courses, for a total of 172 enrolled individuals.

Due to the few students who failed to return their questionnaires (four students in the spring group and three students in the fall), the reported percents are based on these figures ( 150 spring, 168 fall).

Data were collected from the Iowa State University Registration Forms, the Student Information Questionnaire (administered at the very beginning of the course or sent with the course materials), the Strong-Campbell Interest Inventory (sent to the spring students about the middle of the term and with information about upcoming fall courses included in the packet, but included with the course materials at the beginning of the course for the fall students), the UMA/ISU Student Questionnaire sent at or near the end of the course, and the Nelson-Denny Reading Test, Part $I$, Vocabulary Section (administered at the learning centers).

Response rate for questionnaires for all "enrolled" students (this does not include the students who enrolled and dropped immediately) was approximately 99 percent for the Student Information Questionnaire, 94 percent for the Strong-Campbell Interest Inventory, 86 percent for the UMA/ISU Student Questionnaire, and 69 percent for the Nelson-Denny Reading Test, Part I, Vocabulary Section (this instrument was administered at the learning centers at the time students took tests, and not all students took their test at learning centers, also the course Writing for a Reason did not include tests that were administered at a learning center).

Raw frequencies were obtained for responses to each item in the Student Information Questionnaire administered to the spring and fall, 1976, enrollees. This provided a comprehensive view of the respondents. A comparison of the spring and fall students showed that the two groups differed in respect to "age," and this difference in turn affected the trend of
responses in the various areas of information included in this first questionnaire (education, work, leisure time, resources, goals, and sources of information about UMA as well as reasons for enrolling).

The modal age range for the two groups was around 40 with the number of students in the age groups decreasing in both directions from 40 up and 40 down. In the fall group, there was a larger percent of the students in the 20 to 40 age group and a smaller percent of the students in the "less than 20 age group" and "over 40 age group." As a whole the fall group was a slightly younger group of students due to the slight decrease in the older student.

The females predominated with 83 percent female in the spring and 85 percent female in the fall. The majority were married, 86 percent in the spring group and 81 percent in the fall group. Slightly more in the spring group had grown children (37 percent as compared to 30 percent for the fall group). The percent having young children was identical at 37 percent.

This was a stable group of Iowans, over 50 percent had not lived in any other state but Iowa, and 64 percent of the spring group had lived at their present address six years or longer; for the fall group it was slightly less, 58 percent. The majority ( $70+$ percent) of the students lived on a farm or in a town under 10,000 . The incomes for the two groups tended to vary with 50 percent of the spring group having incomes from $\$ 10,000$ to $\$ 30,000$ and 43 percent of the fall group in this range. The fall group also had a larger percent of individuals with incomes below $\$ 10,000$ (47 percent), and for the spring group this was only 37 percent.

The smaller number of "older" students in the fall group may have accounted for these differences.

The educational level for the father, mother, spouse, and student is slightly higher overall for the fall group of students. The majority of the parents of the students fall in the high school graduate category with the exception of the fathers of the spring group where the majority discontinued their formal education at the 8 th grade or less. The number of students and spouses with an education beyond high school is impressive: spouse, 42 percent for the spring and 51 percent for the fall group; student, 57 percent for the spring and 65 percent for the fall group. This is also a group of students with good scholastic records: just 5 percent reported being in the lower half of their high school graduating class and 30 percent reported being in the upper 5 percent. The courses in which these students were most interested (a " 5 " on a 1-5 scale), whether or not they had studied them, included history (.31), home economics (food and nutrition (.34), clothing (.39), and family relations (.42), with family relations the most popular choice), bookkeeping and accounting (.35), and sociology or psychology (.33). The subjects that were checked as most uninteresting (a " 1 " on the $1-5$ scale) included: foreign language (.18), industrial arts (woodworking (.25), auto mechanics (.45)), home economics (clothing (.13)), agriculture (.28), DECA or T\&I (.21), speech (.12), art (.13), and chemistry (.20). Since this was a predominantly female group, some of the omissions and some of those chosen as most interesting probably reflect stereotyped female interests. The inclusion of home economics (clothing) on the least interesting list may reflect the block vote of the 15+ percent male students, and its inclusion on the most interesting list
may reflect the predominance of females enrolled. If this is the correct interpretation, this particular group of males was more interested in food and nutrition and especially family relations than clothing in the areas of home economics included in the questionnaire.

About one-half of these students did not work full time outside the home. Approximately 35 percent did not work at regularly scheduled jobs outside the home, 16 percent worked less than 30 hours, 15 percent worked 30 to 40 hours, 18 percent worked 41 to 50 hours, and 12 percent worked more than 50 hours. Of the 65 percent who did work outside the home, 23 percent had been in their jobs for five years or longer and 36 percent from one to five years, and about 50 percent were satisfied or very satisfied with their jobs and since 34 percent of the respondents checked "did not apply" indicating they did not work outside their home, a total of about 84 percent either did not work or worked and were satisfied. Of those responding just 9 percent were "neutral" and 8 percent dissatisfied.

The leisure time activities for this group varied, but all indicated that one of their major leisure time activities was reading and the types of publications read included daily newspapers (about 90 percent), weekly newspapers (about 70 percent), and special interest magazines (as sports, fashions, gardening, etc.). These students were also avid television viewers with approximately 40 percent spending from 8 to 15 hours a week "watching" their favorite programs. About 16 percent spent from 16 to 23 hours a week, and about 40 percent spent less than 7 hours a week. Their favorite programs included: (the categories receiving over 50 percent of the choices, choices listed from most popular to least popular--as an individual could check more than one category, this is just an indication of
viewing preferences) news reports, situation comedy, comedy series, music and variety shows, serious talks, discussions, interviews, including documentaries, and adult education programs.

In addition to reading and viewing television, they indicated their major leisure time activities included: participating in craft related activities, visiting friends and relatives, and engaging in church activities.

These students were very aware of the time that taking a course might require, and they were willing to make special sacrifices if necessary to provide for "study time." Having the time and opportunity to view the video component of the course over television was considered necessary, and the times the students indicated as most convenient should be important guides for those who make the decisions for airing the programs. There were important differences between the spring and fall groups. For the spring group, before 8:00 a.m. was most convenient for 80 percent of the students, however, only 51 percent of the fall group agreed with this choice. The second most convenient viewing time was between 7:30 and 10:30 p.m. (for about 40 percent of each group). The fall group also chose from 1:00 to 4:00 p.m. as convenient ( 39 percent).

The major concerns these students had in trying to succeed in the UMA/ISU course included: academic and learning problems such as starting to study again, new methods, concentration, memory, etc. (60 percent); self-discipline, getting down to regular work (49 percent); domestic interruptions and demands ( 45 percent); keeping pace ( 35 percent); and work pressures and responsibilities (32 percent). The lack of personal contact with teachers or other students did not seem to be a concern to them when
they responded to the Student Information Questionnaire at the beginning of the course (some responded before they began to work with the course).

In over 60 percent of the responses, the students indicated that their families were very encouraging, and another 21 percent said their family was somewhat encouraging. About 20 percent of employers were also encouraging with another 8 percent somewhat encouraging. Ten percent were neutral and 2 percent were discouraging.

The goals of these students, listed in decreasing order, included: Simply to learn (69 percent); To attain specific skills that will be useful on the job ( 63 percent); To increase my confidence to undertake learning projects ( 49 percent); To become a better person or citizen ( 46 percent); To improve my self-image (44 percent); To satisfy my curiosity about a particular topic ( 43 percent); and To become a better friend, spouse, or parent ( 42 percent). Other goals checked by a smaller percent of the groups included "to attain a degree at some future date," and one student aspired to attaining a master's degree and one a Ph.D. degree.

The majority received their information about the UMA/ISU course through a news article in a newspaper followed by a newspaper advertisement and reading a UMA brochure, Others learned about the course from a television advertisement or from a friend or family member.

The reasons the students gave for enrolling in a UMA/ISU course included:

I wanted to live at home while attending college (57 percent = Very Important)

The independence allowed by UMA (53 percent = Very Important)

I can work as well as study with UMA (43 percent = Very Important) The good reputation of Iowa State ( 43 percent $=$ Very Important) The reader is reminded that the above figures were based on all of the students who enrolled in the program and did not drop out immediately (e.g., before beginning work in the course or courses). That is, therefore, a composite picture of the combined spring and fall students, a total of 150 student in the spring group and 168 in the fall group. This questionnaire was responded to in the majority of cases either before the student began actually studying in the course or after a few weeks of working with the course or courses.

Many of the answers might have been influenced by the difference in the numbers of students enrolled in the various courses and the sex and background of the students.

On the basis of the frequency count on the responses to all items in the Student Information Questionnaire, a decision was made to include selected items for a factor analysis of the instrument. As a result of the factor analysis, nine factors were identified and included the following:

Factor I Person Centered Vocational/Practical Goals

Factor II Evaluation of High School Attended

Factor III Personal Goal of Increasing Scope of Interests and Awareness Factor IV Interest in Humanities

Factor V Interest in Home Economics, Art, and Church Related Activities Factor VI Stress Engendered by Involvement in the Course Relating to the Individual

Factor VII Education

Factor VIII Interest in Physically Oriented Activities
Factor IX Degree of Involvement, Work/Social

The UMA/ISU Student Questionnaire was divided on the basis of courses. The questionnaires for the spring and fall, 1976, offerings for Accounting I were combined, and the questionnaires for the remaining courses were combined. These courses included Psychology Today and Consumer Experience for spring, 1976, and Psychology Today, Adams Chronicles, and Writing for a Reason for the fall, 1976, offerings. The decision was made to combine these courses since there were insufficient numbers for a separate factor analysis for each course.

As a result of these two separate factor analyses, two sets of factors were derived, 10 factors for group one and 15 factors for group two. In comparing the two groups of factors, five factors in each group shared identical items, that is, items that loaded on the factor in the first group also loaded on identical factors in the second group. In other cases, some factors shared several items or a limited number of items. The factors from the two groups were reviewed and regrouped. Factors selected for scoring were items that weighted most heavily on the factors. A total of 15 factors was selected for scoring:

Factor I Impact of the Course on the Students

Factor II Evaluation of the Video Component of the Course

Factor III Evaluation of the Course Structure

Factor IV Obtaining an Education through the Conventional Mode
Factor V Obtaining an Education through Open Learning Mode
Factor VI Availability of Faculty (Reaction to Faculty or "Assisting" Personnel)

Factor VII Fairness of Tests
Factor VIII Evaluation of Course and Components

Factor IX Stress Engendered by Involvement in the Course Relating to Family

Factor X Family Involvement--Benefit to Family
Factor XI Family Involvement and/or Support for Student

Factor XII Vocational Vs. Personal Development Motivation
Factor XIII Vocational Orientation

Factor XIV Stress Engendered by Involvement in the Course Relating to the Individual

Factor XV Cost of Course
To identify any differences between the groups of students enrolled in the various courses, a one-way univariate analysis of variance was performed by course for the scales identified in the three instruments, and an F test was used to detect course differences. For each course (Accounting spring and fall together, all others separate), a correlation matrix was run on the identified scales in the three instruments, the information from the Nelson-Denny Test, and other demographic variables. The resulting correlation matrices were examined for high correlations, and a correlation matrix was formed by pooling within courses. This matrix was examined for high correlations.

Course differences were found in relation to one scale in the StrongCampbell Interest Inventory, three factors in the ISU Student Questionnaire, and seven factors in the UMA/ISU Student Questionnaire. In terms of sex composition, the individuals who enrolled in these various courses spring and fall, 1976, were not different.

A brief description of the variables in which the group differed and the ratings of the groups on each variable follow. In the Strong-Campbell Interest Inventory, there were differences between courses on just one of the factors, the Conventional Scale. According to the manual (Campbell, 1974), individuals scoring high on this scale prefer well-ordered environments and like systematic verbal and numerical activities; are usually conforming and prefer subordinate roles; are effective at well-structured tasks but avoid ambiguous situations and problems involving interpersonal relationships or physical skills; describe themselves as conscientious, efficient, obedient, calm, orderly, and practical and value material possessions. (For a more complete description, consult Campbel1, 1974). The groups scoring highest on this scale included Accounting I and next Consumer Experience. Those scoring the lowest were Adams Chronicles and next to the lowest Psychology Today with Writing for a Reason in the middle.

In the Student Information Questionnaire, there were course differences in relation to three factors. In Factor I, "Person Centered Vocational/Practical Goals," the items that loaded most highly stressed the goals of becoming a better person or citizen, a better friend, spouse, or parent, to attain specific skills that would be useful on the job, use leisure time creatively, etc. In this factor Psychology Today scored the highest, Writing for a Reason next, followed by Consumer Experience and Accounting I, and Adams Chronicles was lowest.

On Factor III, "Personal Goal of Increasing Scope of Interests and Awareness," the items indicated that these individuals were looking beyond their present horizons and wanted to expand their knowledge, and they were wanting this growth for themselves. On this factor Accounting I was
highest, Consumer Experience, Psychology Today, and Adams Chronicles were much alike, and Writing for a Reason was lowest.

On Factor VII, "Education," the items reflect the socio-economic indexes of the parents of the individuals and the background and current status of the student. Consumer Experience scored the highest on this factor followed by Adams Chronicles. Accounting I was in the middle of all the groups, and Writing for a Reason was at the bottom with Psychology Today almost as low.

On the factors in the UMA/ISU Student Questionnaire, there were very pronounced differences between groups on seven of the 15 factors. The differences that were identified are described briefly. Factor II, "Evaluation of the Video Component of the Course," included items that described the video component of the program as a valuable part of the course. Writing for a Reason scored highest, followed closely by Adams Chronicles. Students in Consumer Experience were a bit lower in their evaluation but quite positive. Psychology was lower than the courses listed but still within the positive range while Accounting was very negative.

Factor III, "Evaluation of the Course Structure," included items which asked if the participants wanted more structure, as a letter explaining each component of the course, meetings with the instructors, etc. Psychology rated this highest indicating the wish and/or need for more structure, Writing for a Reason was next, also wanting additional structure and/or faculty contact, Adams Chronicles was a bit lower but still in the high range. At the other end of the continuum was Consumer Experience with a negative rating--possibly the amount of structure they had was too much.

Accounting was positive but a low positive, and they indicated the amount of structure was about right.

Factor VI, "Availability of Faculty" (Reaction to Faculty or "Assisting Personne1"); Writing for a Reason rated this very high. They seemed to need and profit by additional faculty contact, or it might have been the reaction of the faculty to these students which increased their rating. Psychology was quite a bit lower but rated next on this factor followed closely by Accounting I and Adams Chronicles. Consumer Experience was at the very bottom.

Factor X, "Family Involvement--Benefit to Family"; this factor refers more to improvement of the self than of direct benefit to the family, and on this, Writing for a Reason scored highest. Since this is the group with the lowest educational background, it might be possible that the students wished to improve their writing skills to be able to help their family, and especially since there has been so much publicity about "Johnny can't read" and now more recently, "Johnny can't write"--as criticism of our educational system. Consumer Experience ranked next high, and these were predominantly women with high educational backgrounds who wanted to improve their knowledge as consumers and evidently for the benefit of their families. Psychology rated next, and again many were women and with young children. They were searching for answers to be better parents, spouses, etc. Adams Chronicles rated lower, and Accounting I was definitely negative. These individuals (in Accounting I), as is becoming ever more evident, enrolled to just acquire a skill that was personally useful and/or marketable.

Factor XII, "Vocational Vs. Personal Development Motivation." Again there were great differences between groups. The individuals in Adams Chronicles were interested in the personal development aspect--they wanted to increase their knowledge and awareness in the area of history. The students in Psychology and Consumer Experience seemed to have mixed reasons for enrolling in the courses--they wanted the knowledge and were somewhat interested in the college credit. The students in Accounting were much more interested in the knowledge and/or skill they would acquire than the grade given or college credit. Since Writing for a Reason was noncredit and in a sense nongraded, the knowledge was the important aspect of the course. Their only goal was to improve their writing skills, and they had their own personal reasons for wanting to gain these skills.

Factor XIII, "Vocational Orientation." Since Accounting I was the course that could be described as the most vocational of all of the courses offered, it is to be expected that it would receive the highest score, and it did. Writing for a Reason was much lower but still had a positive score, indicating some students wanted to improve their writing skills for vocational purposes but not the majority of the students in that course. Adams Chronicles, as would be expected, based on course content, had the lowest score, and it was quite negative. Consumer Experience also had a negative score but a bit less negative than Adams Chronicles, and Psychology was also negative, but a bit higher than Consumer Experience.

Factor XIV, "Stress Engendered by Involvement in the Course Relating to the Individual." The students in Adams Chronicles experienced the least stress followed by Consumer Experience. The spread between the two scores, however, is quite large indicating that the students in Consumer Experience
did experience some stress and quite a bit more than the students in Adams Chronicles. The students in Psychology had a negative score indicating the stress was quite great, and it was even more severe for the students in Accounting. The students in Writing for a Reason experienced the most stress of all. Since the educational background was lowest for this group, this might have had an effect.

From this abbreviated review of the differences between groups revealed through the use of the three instruments, the ISU Student Questionnaire, the UMA/ISU Student Questionnaire, and the Strong-Campbell Interest Inventory, it is very evident that the students who elect to enroll in the various courses do not conform to the "composite" picture of the UMA/ISU student portrayed by the scores from the ISU Student Questionnaire.

In place of one overall "composite" picture, there are much more specific and useful detailed descriptions of the individuals enrolled in each course based on the information gained through the use of the three instruments. A brief review incorporating this information pertaining to the characteristics and goals of the typical student enrolled in each of these courses and their reactions to the course components is included in Appendix F. This could serve as a guide to administrators, course producers, coordinators, faculty, and study center personnel.

In addition to this information of the students is the information gained from the intercorrelations between Sex and all other variables; the Strong-Campbell Interest Inventory Scores with the factors from the Student Information Questionnaire and the UMA/ISU Student Questionnaire; and the factors identified in the ISU Student Questionnaire with the factors
identified in the UMA/ISU Student Questionnaire. In interpreting these correlations, one should keep in mind that they represent relationships among variables within courses and do not reflect course differences. Only statistically significant ( $P<.01$ ) correlations are included. (Intercorrelations within instruments have not been included, and the reasoning for this decision has been previously explained.)

The correlations between Sex and all other variables were not especially interesting, but it did conform the current stereotypes of male and female descriptions, occupations, and interests.

The Academic Orientation Scale (AOR) correlated very highly with "Interest in the Humanities," and since Campbell (1974) describes students high on this scale as interested in reading and as generally well-educated, it would be expected that a student scoring high on this scale would enjoy and possibly excel in courses relating to the humanities.

The AOR scale also correlated highly with Introvert/Extrovert, and since this variable correlated negatively with variable 14 , "Interest in the Humanities," it indicates that introverts are not as interested in the humanities as are extroverts $(\mathrm{r}=-40)$. (Introverts tend to prefer working alone rather than with people.) It is possible that those with a predominant interest in the humanities prefer working with and discussing ideas with people. At least based on this correlation, that would be the conclusion.

There was also an interesting correlation ( $r=-23$ ) between the Introvert/Extrovert Scale and "Obtaining an Education through the Conventional Mode" which means that introverts tend to prefer the unconventional mode of education--or rather the type of education offered through UMA/ISU.

Another very interesting correlation with the Introvert/Extrovert scale is the "Degree of Involvement, Work/Social" and includes preferring to work with people and joining organizations, becoming involved in social concerns from a "joining groups" approach. From this score, it is evident that the introvert prefers not to become involved in this type of situation or activities. From these descriptions the introvert would probably be a very good type of person to recruit for a UMA/ISU course where he could work within his home. He would probably not feel deprived by the reduced faculty or student contact.

The Realistic Scale of the Strong-Campbell correlated highly with "Interest in Physically Oriented Activities," and it correlated negatively with "interest in Home Economics, Art, and Church Related Activities." These again enforced ihe existing stereotype of males and females.

The Investigative Scale correlated highly with "Interest in the Humanities" and "Interest in Physically Oriented Activities." While these two factors are in a sense quite opposite, they have the one common construct, "the need to know and explore" which is so present in the humanities and often present in the physical type of explorations. This correlation would also be useful in counseling students wanting guidance about courses in which to enroll.

The Artistic Scale from the Strong-Campbell correlated with "Interest in the Humanities"--since the humanities also include the arts, and the arts and history and philosophy are often so closely related, this is also a useful scale to use for helping students to understand their interests. The additional correlation of the Artistic Scale with "Education" indicates that the more an individual fits the description of "Artistic" on the

Strong-Campbell, the higher the educational level of his parents, spouse, and the individual himself/herself tends to be-wthat is, the factor "education" has grouped the education of the parents, spouse, and the individual together.

The Social Scale also correlated with "Interest in the Humanities," again emphasizing the desire and/or need of students in this area of study to have more social contacts. This message is so strong that educators interested in nontraditional study and the open learning program like UMA/ISU should tend to consider ways in which they could increase contacts with their students in courses relating to the humanities-and at the same time provide them with the advantages of studying in their own homes with very little commuting.

The Social Scale also correlates with Interest in Home Economics, Art, and Church Related Activities. This in a sense is telling two things--that individuals interested in being homemakers and in home economics related activities, art, and church related activities also tend to be "social" individuals. It also provides guidance for educators in the home economics related areas of study. These individuals may be homebound, but they do want to continue their education and would probably appreciate as much personal contact as is feasible considering restraints of transportation and home responsibilities.

The Enterprising Scale from the Strong-Campbell Interest Inventory correlated (.25) with "Degree of Involvement, Work/Social." This score again indicates that an individual scoring highly on this scale wishes to become involved and is a "social" individual, that is, more of an extrovert than an introvert.

The Conventional Scale correlated with "Vocational Orientation" and four other factors ("Learned about UMA through Newspaper Advertisement," "Obtaining an Education through Open Learning Mode," "Availability of Faculty," and "Stress Engendered by Involvement in Course Relating to Individual"), but the important one for guidance in the UMA/ISU program is the correlation with "Vocational Orientation"--that is, if an individual scores highly on this scale he may also be interested in "vocational" subjects relating to his special interests.

The correlations between the factors of the two instruments, ISU Student Questionnaire and UMA/ISU Student Questionnaire, are also very informative and interesting. Since these factors have been discussed previously, these will not be reviewed again, however, a list of the statistically significant ( $\mathrm{P}<.01$ ) correlations between factors from the two questionnaires is as follows:

Factor I (Scale 1) ISU Student Questionnaire Person Centered Vocational/ Practical Goals
correlated with: (UMA/ISU Student Questionnaire)
Factor I (Scale 1) (.19) Impact of Course on the Students
Factor III (Scale 3) (.30) Evaluation of the Course Structure
Factor X (Scale 10) (.27) Family Involvement--Benefit to Family
Factor XII (Scale 12) (.18) Vocational Vs. Personal Development Motivation

Factor II (Scale 2) ISU Student Questionnaire Evaluation of High School Attended
correlated with: (UMA/ISU Student Questionnaire)
Factor I (Scale 1) (.18) Impact of the Course on the Students

Factor VII (Scale 7) (.20) Fairness of Tests
Factor XIV (Sca1e 14) (.19) Stress Engendered by Involvement in the Course Relating to the Individual

Factor III (Scale 3) ISU Student Questionnaire Personal Goal of Increasing Scope and Awareness
correlated with: (UMA/ISU Student Questionnaire)
Factor III (Scale 3) (.23) Evaluation of the Course Structure
Factor IV (Scale 4) (.31) Obtaining an Education through the Conventional Mode

Factor XII (Scale 12) (.19) Vocational Vs. Personal Development Motivation

Factor XIII (Scale 13) (.37) Vocational Orientation
Factor IV (Scale 4) ISU Student Questionnaire Interest in Humanities correlated with : (UMA/ISU Student Questionnaire)

Factor IV (Scale 4) (.21) Obtaining an Education through the Conventional Mode

Factor XV (Scale 15) (-.20) Cost of Course
Factor V (Scale 5) ISU Student Questionnaire Interest in Home Economics, Art, and Church Related Activities
correlated with: (UMS/ISU Student Questionnaire)
Factor V (Scale 5) (.21) Obtaining an Education through Open Learning Mode

Factor IX (Scale 9) (.20) Stress Engendered by Involvement in the Course Relating to Family

Factor VI (Scale 6) ISU Student Questionnaire Stress Engendered by Involvement in the Course Relating to Individual
correlated with: (USM/ISU Student Questionnaire)
Factor XIV (Scale 14) (.25) Stress Engendered by Involvement in the Course Relating to the Individual

Factor VII (Scale 7) ISU Student Questionnaire Influence on Engaging in Continuing Education correlated with: (UMS/ISU Student Questionnaire) Factor III (Scale 3) (.18) Evaluation of the Course Structure Factor VIII (Scale 8) ISU Student Questionnaire Interest in Physically Oriented Activities correlated with: (UMA/ISU Student Questionnaire) no factors from this questionnaire

Factor IX (Scale 9) ISU Student Questionnaire Degree of Involvement, Work/ Social
correlated with: (UMA/ISU Student Questionnaire)
Factor XIV (Scale 14) (-.18) Stress Engendered by Involvement in the Course Relating to the Individual

Item X (Scale 10) Marital Status correlated with: (UMS/ISU Student Questionnaire) no factors from this questionnaire

Item XI (Scale 11) Learned about UMA through Newspaper Advertisement correlated with: (UMA/ISU Student Questionnaire)

Factor XIV (Scale 14) (.18) Stress Engendered by Involvement in the Course Relating to the Individual

## Item XII (Scale 12) Learned about UMA through Newspaper Article correlated with: (UMA/ISU Student Questionnaire) <br> no factors from this questionnaire

There are several limitations for the present study. One minor limitation is that the sample sizes for all of the courses were not large enough for a separate factor analysis of each course.

Major limitations include: The variability examined is confined to the courses offered and, therefore, one thing that can only be speculated about is the kinds of variability that did not exist in the present courses because these types of courses may not have attracted certain kinds of students. For example, courses were not included in the areas of engineering, mathematics, or physics. Thus, it is not possible to discuss how these data would apply to recruiting students with interests in these kinds of courses. However, it is definitely possible to look at courses like accounting, psychology, and the other courses included in the study and comment on things conditional to these specific courses, and to attempt to suggest ways in which they might be modified, based on the findings. When a new course is offered (one not included in the present study), it is only possible to speculate about the characteristics, goals, difficulties, objections, etc., that these students might have. It is emphasized that inferences are limited to only the types of courses examined in this study and the students who choose to enroll in these courses.

Another limitation is related to the two types of feedback that can be acquired from students, the short-term feedback and the long-run feedback. A course may seem satisfying to a student at the time he takes it or in the period immediately following the course, however, over a longer span of
time the student may realize the course did not satisfy his/her long-range goals and, therefore, the course had not been effective. In addition to the short-term feedback, it is, therefore, necessary to obtain information from the students in from one to five years to determine if, in retrospect, the student believes the course met his/her objectives. Immediate reaction might be based on the students' esthetic evaluation rather than on the utility of the course.

As new courses are introduced and as courses are modified, the instruments used would need to be reviewed for possible additions or deletions of items. Whenever situations change, the process needs to be repeated. It is desirable to maintain a continuous flow of feedback for use in planning for change. Evaluation is a dynamic process.

In summary, an overall composite picture of the students enrolled in the spring and fall, 1976, UMS/ISU courses was given as a result of the analysis of the ISU Student Questionnaire. This information is useful in that the institution is informed about the type of individual that is being reached through the program and with this knowledge can try to provide for their needs. The use of just this type of questionnaire, however, results in a distorted view in that it may be assumed that all of the students in each class are comparatively alike and, therefore, need the same treatment and react to instructors, materials, and the general format of the course or courses in much the same manner.

The additional information gained through the use of the StrongCampbel1 Interest Inventory and the UMA/ISU Student Questionnaire gave information on course and individual differences that could be used to
advantage in plaming each type of course to fit more adequately the wants and needs of the type of student who chooses to enroll in a course.

The correlations resulting from the intercorrelations from the three instruments, and particularly the Strong-Campbell Interest Inventory and the UMA/ISU Student Questionnaire, gave valuable information that could be used to advantage in counseling with students interested in enrolling in UMA/ISU courses. The information gained from the use of these two instruments could also be used as foundation information in constructing a course or training sessions for instructors (faculty or mentors) and learning center personnel who will have some contact with the students. From information gained through the instruments and from personal interviews with faculty and students, it is evident that the more an individual is informed about the needs and characteristics of the adult student, the more he/she tends to enjoy working with them and it follows, the greater will be his/ her success in conveying this message to the student.

The UMA/ISU Student Questionnaire has been revised on the basis of the factor analysis and the information gained through this research project. The revised version is included in Appendix D, and it is the wish of the researcher that the instrument will be used and further revisions made on the basis of additional research.

The UMA/ISU program has served many Iowa students and given them an opportunity to continue their education in a way that was possible for them. This program is in a sense a recruiting program for the higher educational institutions of all. varieties in the state of Iowa since many of those who have enrolled in the UMA/ISU program would probably not have continued their education without this opportunity. With this beginning many
have been given the incentive and the desire to continue taking post-high school courses at some time in their future--maybe next semester, maybe in a few years--but the desire is there. For the adult student, the statement "I can't enroll now," or "I can't finish this course now but plan to in the future" is not an excuse but a statement of fact. The pressures of time, responsibilities, commitments, and finances are ever present realities with which he/she must cope. The adult student population is growing, and the educational institutions need to continue to explore more unique and better ways of serving them.

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## ACKNOWLEDGMENTS

I am indebted to the many individuals, literally worldwide, who contributed information used in this study. I requested and received literature from individuals engaged in adult learning in several foreign countries and throughout the United States. The bibliography includes the names of many who so willingly shared their materials. I especially thank the personnel at the University of Mid-America who shared materials and ideas.

At Iowa State University so many individuals helped to make this study not only possible but interesting and very rewarding. A partial list includes:

Dean Charles E. Donhowe for his support and cooperation throughout the study and contribution of funds for computer analysis.

Dr. Robert $K$. Kern for his assistance and guidance at the beginning of the project.

Emilia I. Nordtvedt for her contributions throughout the project. Without her help the study would have been very difficult, if not impossible.

Beverly Degenhardt for her time and cooperation in the many tasks involved in the study--she never said no to a request and was so ready to help.

The instructors in the courses and the learning center personnel for their willingness to share their insights and knowledge gained through working with the students.

Dr. Bud J. Meador for the programming assistance he gave with the analysis of data.

Leigh Ihnen for his cooperation and patience in working with the data.
Dr. Leroy Wolins for the way in which he contributed his time and expertise (so generously and graciously) in assisting with the planning and directing of the statistical analysis of the study.

Dr. George Kizer and Dr. Roger Lawrence who served as co-committee chairmen for their very competent guidance and support, and a special thanks to Dr. Kizer for assuming the full burden during Dr. Lawrence's leave of absence.

Dr. Ruth P. Hughes, Head of Home Ziconomics Education and committee member, for her encouragement and continued support, and I am especially grateful for her initial approval and positive attitude toward my plans to continue with graduate study.

Dr. Ray I. Bryan and Dr. Trevor G. Howe for their willingness to serve as committee members and their interest, support, and guidance.

LaDena Bishop for her very pleasant cooperation in giving suggestions and direction and helping to make it possible to meet the deadlines.

I also wish to thank Carla Jacobson for her cooperation in typing this dissertation under circumstances which were often difficult due to pressures of time and for her valuable suggestions.

To my family, a very special thank you for the assistance you have all given me in so many ways throughout this study.

To Learning Center Personnel:
Enclosed in the packet are two instruments to be used with each student enrolled in a UMA-ISU course. I will try to explain your responsibility in their use, and if $I$ do not cover all the questions you might have, please call Emilia Nordtvedt.

First, the Ne1son Denny Reading Test.
Please ask each student to take the vocabulary test either before or after he takes the test for the course in which he is enrolled. That is, combine this vocabulary test with the next test a student comes to the center to take. This may be his final test in the course or one of the tests preceding the final test, just whatever test he comes to the center to take.

The directions for this are as follows:
Give the test booklet and the answer sheet to the studeht.
Have the student fill out the information on the answer sheet.
Ask the student to turn to the page that has "Part I. Vocabulary Test" printed in red at the top of the page.

First explain to the student that he will be taking only the vocabulary portion of the reading test and that it will take 10 minutes and that it must be very accurately timed.

Ask the student to read the "Directions to Students."
Ask him to complete the practice exercises and explain how the answer sheet is to be used.

1. A No. 2 pencil (with soft lead--any pencil will work except those specifying that they contain hard lead).
2. Be sure they have the test questions lined up with the correct numbers on the answer sheet and remind them they complete the first full length vertical column on the answer sheet for page 1 on the vocabulary test.

Page 2 of the vocabulary is answered in column two of the answer sheet, and it helps if the student slides the answer sheet under the booklet so column two is easily available close to the questions on page 2. Follow the same procedure for pages 3 and 4.

Check your time. Have the student turn to page 1 with "Vocabulary Test" printed in red letters at the top of the page. When the student begins, begin timing him. At the end of 10 minutes, the student must stop and hand the test booket and answer sheet to you.

Explain to him either before or after that you do not have the answers and that they will be sent to a testing service to be scored. If they want their scores, we will send them to you. Otherwise we will not as it is to be used just for the research project to help those planning for future offerings and services. Please also explain this to the student. Thank you.

Now the Student End of Course Questionnaire.
Please read the directions given to the student so you will be able to help answer any questions. If you need answers to any questions you may have, please call Emilia Nordtvedt.

Explain to the student that he may answer the questionnaire at the center and then put it into the envelope, seal it, and then give it to you to mail. (You may mail it in bulk mailing with other mail you have to send to the University.) Or he may take it home, answer it there, and mail it.

However, encourage him to return it as soon as possible. It is very important to the overall evaluation of the program and necessary for future planning.

Please explain to the students the questionnaire will require approximately one-half hour to complete.

Address reply to:
Open Learning Courses
1115 Curtiss Hall
Telephone 515-294-4750

Dear UMA-ISU Student,
Thank you for your excellent cooperation during your initial involvement with the University of Mid-America--Iowa State University prograin (UMA-ISU). Almost $100 \%$ of you returned the questionnaires, which conveys a message to everyone involved that UMA-ISU students are an above average representation of Iowa's adult population.

As a special service to you we are offering the opportunity for you to discover more about your work-study interests. The Strong-Campbell Interest Inventory is one of the most widely used questionnaires to help people identify their vocational interests. Your questionnaire (Strong-Campbell Interest Inventory) will help you to identify: first, the general over-all trend of your interests; second, vocational areas in the world of work that seem most attractive to you; and third, the degree of similarity between your responses and the characteristic responses of men and women satisfactorily employed in a large number of different occupations. To summarize, it will help you to better understand the type of work, or area of employment in which you might be the most satisfied and therefore perform the best.

- Taking this inventory at a vocational counseling center would cost you approximately $\$ 25.00$. We are providing this service to you, our first UMA-ISU students, free of charge, as a way of saying thank you. The information gained through the use of the inventories is also valuable to personnel responsible for future plans for UMA-ISU.

In responding to the inventory it is important to know that there are no wrong or right answers or no choices that are rated higher or lower than others, just as there are no areas of work that are more desirable or less desirable. Also there is a great diversity of jobs in any one area. To find satisfaction in one's work, it is helpful to find the "niche" that relates best to ones area of special interests. EVEN IF YOU ARE COMPLETELY UNINTERESTED IN SEEKING EMPLOYMENT, WE believe it will be interesting and of value to you to learn more about YOURSELF.

Please take 15 minutes of your time now to respond to this inventory and return it in the enclosed envelope. It is important that this inventory not be folded. You will be sent an $11^{\prime \prime} \times 17^{\prime \prime}$ profile sheet which will explain in great detail your vocational interests. This profile sheet will be self-explanatory, but if you want help in interpreting it, additional information will be available to you on a half-hour video tape at your learning center. We suggest that you make an appointment at your learning center to view this tape as it has a wealth of information we feel you will find informative and useful. The tape features Dr. Donald G. Zytowski, a specialist in the area of vocational counseling, and particularly in the use of the Strong Vocational Interest Inventory.

Best wishes to you in your future endeavors, and we hope additional courses with UMA-ISU will continue to be a part of your long-term plan.

Cordially,


Emilia Nordtvedt
UMA Iowa Coordinator


July 15, 1976

# University Extension 

Address reply to:
Open Learning Courses
IIIS Curtiss Hall
Telephone 515-294.4750
In addition to satisfactorily completing the UMA-ISU course (or courses) in which you were enrolled, most of you have also completed and returned the various research instruments we have requested. Thank you for your excellent cooperation.

There are several instruments, however, that have not been returned and since they can so easily be mislaid, and time is scarce, we are asking that you check yourself using the following list:


Questionaire included with the original materials
(consists of four pages - short answer)


Strong-Campbell Interest Inventory (a 2 page $8 \frac{1}{2} \times 11$ booklet in which you responded to questions relating to your vocational likes and dislikes by blocking in circles with a number 2 lead pencil.) Those returned have been sent for scoring and you will be receiving your profile soon. We will send another group of late returns within a week so get your returns to us within the next few days. Remember it takes only about 20 minutes to respond to the inventory.

End of course questionaire (consisted of 2 white pages \& 3 colored pages - short answers using a 1-99 scale) This was given to most of you when you took your final test, however, in a few centers this was not done. A copy is included for those of you who have not returned this questionaire. If you have completed one like this, ignore this copy, otherwise please return as soon as possilbe. It will take about $\frac{1}{2}$ hour and improvements $\&$ revisions in the second offering by UMA depend on your responses.

$\square$
Nelson-Denny Reading Inventory. (A short word identification inventory - requires 10 minutes.) In most centers you were asked to respond to this when you took your final exam. If you have not taken it, we would be very appreciative if you would call your center person and arrange a time when you can take it. It is timed and takes only 10 minutes.

You do not need to return this letter - it is just to help you in checking through the research instruments to which you have responded.

Appreciatively,


Emilia Nordtvedt


July 23, 1976

Dear UMA-ISU Student,
Enclosed is the profile which interprets the results of the StrongCampbell Interest Inventory. To help you interpret this profile: first, consult the small $2 \frac{7}{2} \times 4$ " "box" at the top center of the profile. This shows how your "likes" and "dislikes" compare to people satisfactorily employed in these areas. The numbers show how your score compares with men and women in these areas of employment and the written description is your score compared with only your sex. (See the second colum on the reverse side for an explanation of the "general occupational theme.") Second, directly beneath the "general occupational themes" is the groups of "basic interest scales". (See the third column half way down on the reverse side) These indicate how consistently you marked "like" or "dislike" to activities relating to these areas of interest. Third, now consult the "occupational scales" found along the right \& left side of your profile. These are the scales which shows how your "likes" and "dislikes" compare to people employed in these specific occupations. (See the bottom of the third column and fourth column; reverse side.)

We also suggest that you arrange with your learning center to view the video tape made by Dr. Donald Zytowski. In this tape Dr. Zytowski helps to guide you through the profile and explains the meaning of your results. He also gives additional information and valuable resources that are interesting and helpful. This tape is about 20 minutes in length and we believe it is very worthwhile.

If you have any questions please call the UMA office.
Thank you for taking the Strong-Campbell Interest Inventory. We hope the information you have gained is both interesting and helpful to you.

Sincerely,

Emilia Nordtvedt
UMA Iowa Coordinator


Dear UMA-ISU Students:
Congratuations! You were one of the first groups in Iowa to participate in the new open learning adventure. We hope it was a rewarding experience for you, and that this was the "beginning" of your continued involvement in future offerings of UMA-ISU courses.

To insure the best possible service to our students in the future, we need your help. Your ideas and opinions are very valuable to us as a basis for making changes. In an effort to find out your attitudes and get your suggestions about the UMA learning experience in which you participated, we have asked you to respond to several questionnaires. Most of you have returned these, but if you have not had an opportunity to respond to and return these, please do so.

This check list is for your convenience in checking to see if you have returned all the questionnaires.

$\square$
Questionaire included with the original materials (consists of four pages - short answer)Strong-Campbell Interest Inventory (a 2 page $8 \frac{1}{2} \times 11$ booklet in which you responded to questions relating to your vocational likes and dislikes by blocking in circles with a number 2 lead pencil.) Those returned have been sent for scoring and you will be receiving your profile soon. We will send another group of late returns within a week so get your returns to us within the next few days. Remember it takes only about 20 minutes to respond to the inventory.

In addition to this above list we would appreciate your continued cooper-• ation by responding to the enclosed questionnaire and returning it in the enclosed self-addressed, stamped envelope. Your response to this questionnaire is of the greatest importance to the evaluation of the overall program.

You will be receiving information about the Fall courses soon and I hope you will decide to continue your adventure in learning with us.

Thank you!
Appreciatively,

## Emilia Noidtredt

Emilia Nordtvedt
UMA Iowa Coordinator

# 382 <br> Iowa State University of Science and Technology 

Ames, Iowa 50011


University Extension

Address reply to:
Open Leaning Courses
1115 Curtiss Hall
Telephone 515-294-4750

July 29, 1976

## Dear UMA-ISU Former Student,

As an initial enrollee in the UMA-ISU program, your ideas and suggestions are very important to us. We are planning the Fall courses and would like to make changes based on information from our former students. Since you had some experiences with the course in which you enrolled, please respond to the enclosed questionnaire. (If you have not responded to the initial questionnaire which was enclosed in the original packet of materials it is also enclosed.) This is a very new, innovative way of offering college level courses to adults and we want it to be the most rewarding experience possible. Therefore, your reactions are especially valuable to us.

Just one more favor - several weeks ago you received the Strong Vocational Interest Inventory from us. It was sent in a $9 \times 11 \frac{1}{2}$ manila envelope. The inventory is printed in a booklet form, and consists of questions about your "likes" and "dislikes" - you were asked to blacken in the little circles with a number 2 lead pencil. Please take 15 minutes of your time and also respond to this. If you can't find it please call toll-free 1-800-262-3804 and we will send another one. Some of you have responded to the inventory and we thank you. You will be receiving your profile soon.

Thank you for your cooperation. It has been a pleasure to serve you, and we hope you will decide to enroll with UMA-ISU courses again this fall. We will be sending a brochure real soon describing the fall offerings. Again thank you for helping us by responding to these questionnaires.


Emilia Nordtvedt
UMA Iowa Coordinator

# 383 <br> Iowa State University of Science and Technology <br> Ames, Iowa 50011 <br> University Extension <br> Address reply to: <br> Open Learning Courses <br> IllS Curtiss Hall <br> Telephone 515-294. 4750 

August 20, 1976

Dear UMA-ISU Student:
It is almost "Back-to-School" time. We hope that you are anticipating the new UMA offerings, and will join us this fall when classes begin again "on-the-air".

Thank you for the excellent cooperation you have given us throughout our first venture last spring--and now we need your help again. A few weeks ago you were sent a questionnaire in which you were asked to rate your reactions to the over-all experience using a $1-99$ scale. The questionnaire consisted of two white pages and three colored pages. Your reactions are of the greatest importance to us and this is true whether you dropped the course after one or two weeks, one or two months, audited the course, or completed it more or less on time.

We need this information and ONLY YOU CAN GIVE IT TO US. Please take 20-30 minutes to complete and return the questionnaire NOW (please). Thank you.


Emilia Nordtvedt UMA Iowa Coordinator

University Extension

Address reply to:
Open Learning Courses
IH1S Curtiss Hall
Telephone 515-294-4.570

October 19, 1976

Dear
We very much appreciate your sending us the questionnaire. Enclosed is a Strong Campbell Interest Inventory which should also have been included in your materials. This inventory will help you to better understand the type of work, or area of employment in which you might be the most satisfied. The information gained through the use of the inventories is also extremely valuable to the people responsible for future plans for UMA-ISU.

We would appreciate it if you would fill this out and send it in as soon as possible. Even if you are completely uninterested in seeking employment, we believe it will be interesting and of value to you to learn more about yourself.

## Sincerely,

Emilia Nordtvedt
UMA Iowa Coordinator
EN:bjd

385<br>Iowa State University of Scimce and Tctanolosy<br>\section*{University Extension}<br>\section*{Address reply to:} Open Learning Courses $111 S$ Curtiss Hall Têlephone 515-2944750

ABOUT THE TWO QUESTIONNAIRES ENCLOSED:

1. As a special service to you we are offering the opportunity for you to discover more about your work-study interests. The Strong-Campbell Interest Inventory is one of the most widely used questionnaires to help people identify their vocational interests. Your questionnaire (StrongCampbell Interest Inventory) will help you to identify: first, the general over-all trend of your interests; second, vocational areas in the world of work that seem most attractive to you; and third, the degree of similarity between your responses and the characteristic responses of men and women satisfactorily employed in a large number of different occupations. To summarize, it will help you to better understand the type of work, or area of employment in which you might be the most satisfied and therefore perform the best.

Taking this inventory at a vocational counseling center would cost you approximately $\$ 25.00$. We are providing this service to you, our UMA-ISU students, free of charge, as a way of saying thank you. The information gained through the use of the inventories is also valuable to the people responsible for future plans for UMA-ISU.

In responding to the inventory it is important to know that there are no wrong or right answers or no choices that are rated higher or lower than others, just as there are no areas of work that are more desirable or less desirable. Also there is a great diversity of jobs in any one area. To find satisfaction in one's work, it is helpful to find the "niche" that relates best to one's area of special interests. EVEN IF YOU ARE COMPLETELY UNINTERESTED IN SEEKING EMPLOYMENT, WE BELIEVE IT WILL BE INTERESTING AND OF VALUE TO YOU TO LEARN MORE ABOUT YOURSELF.

Please take 15 minutes of your time now to respond to this inventory and return it in the enclosed envelope along with the other questionnaire. It is important that this inventory not be folded.

Later you will be sent an $11^{\prime \prime} \times 17^{\prime \prime}$ profile sheet which will explain in great detail your vocational interests. This profile sheet will be self-explanatory, but if you want help in interpreting it, additional information will be available to you on a half-hour video tape at your Learning Center. We suggest that you make an appointment at your Learning Center to view this tape as it has a wealth of information we feel you will find informative and useful. The tape features Dr . Donald G. Zytowski, a specialist in the area of vocational counseling, and particularly in the use of the Strong Vocational Interest Inventory.
2. The other questionnaire is our "beginning of the course" research survey. Because $99 \%$ of last term's students returned this questionnaire, we made significant changes in the way the courses are offered and you are the beneficiary of these changes. Please cooperate with our efforts to improve the program for future students by filling out this form -it takes only about half an hour -- and returning it together with the Inventory in the enclosed large brown envelope, which is pre-addressed and stamped.

Your answers on these guestionnaires will not affect your grade in any way.

Best wishes to you in your future endeavors, and we hope additional courses with UMA-ISU will continue to be a part of your long-term plan.

Cordially,
Smilia Nordtredt
Emilia Nordtvedt UMA Iowa Coordinator

APPENDIX B. INSTRUMENTS

## Unversity Extension

Whninstration 4 Hfiers
Gurtiss lall
Telephone 515.294.4576,

## Dear ISU Student:

Iowa State University (ISU) is presenting courses Erom the University of Mid-America (UMA), a non-traditional program designed to provide learning experiences for people in their own homes. As our first students, you and your friends and neighbors will be participating in a unique educational situation. The students and the courses are not encompassed by the boundaries of a college campus. At the same time, you and other students will not have day-to-day personal contact with an instructor. These are advantages and limitations of UMA course offerings.

In order to provide you with an opportunity to tell us about your experience with UMA courses, we will be in touch with you several times throughout the course. This questionnaire is the first of our questions to you.

For the first experimental year of UMA courses in Iowa, we will be asking all students to complete the Student Information Questionnaire. We realize this is a long form, and it may ask you a few personal questions. We request your cooperation in filling out and returning the questionnaire. If it is not possible for you to complete an item, please go on to the next item. ALL YOUR RESPONSES WILL BE HELD IN STRICTEST CONFIDENCE. Under NO circumstances will individual responses be reported to anyone. This information will be used only for research and evaluation purposes relating to decisions about the future of policies relating to UMA course offerings at Iowa State University.

Your responses will tell us a great deal about those taking UMA courses in Iowa. We need this information in order to make UMA course offerings more relevant and useful to its students. It will help our staff to reach more effectively its goal to serve the educational needs of the Iowa Community.

If you have any questions or comments, please jeel free to call us or write your comments at the end of this form. We appreciate your help; thank you.

Cordially,

Charles E. Donhowe
Dean, University Extension

IF YOU CANNOT COMPLETE A QUESTION, LEAVE IT OUT AND GO ON TO THE NEXT QUESTION
I. GENERAL INFORMATION

1. UMA course in which you are enrolled
2. Do you receive WOI television programs clearly? No $\qquad$ Yes $\qquad$
3. Are you one of the UMA students in western Iowa who will not be viewing the course presentations on WOI television? No $\qquad$ Yes $\qquad$
4. Name
Last First Middle
5. Social security number $\qquad$
6. Present address $\qquad$
$\qquad$
7. Marital and family status:

8. Have you ever served on active duty in the United States Armed Forces? Yes, am serving now ( ) No () Yes, but not serving now ( )
9. How many years in total have you resided in Iowa? (Mark one)
Less than 1 year ( ) 6-10 years () 1-5 years ( ) 11 or more years ()
10. How many years have you resided at your present address? (Mark one)

| Less than 1 year () |  |
| :--- | :--- |
| $1-5$ years | $6-10$ years |
| 11 or more years ( ) |  |

11. How uany states have you resided in (include Iowa)?
12. How many countries have you resided in (other than U.S.)?
13. How many times have you moved in the last 10 years?
14. Which best describes the community in which you presently live?
Farm or ranch ( ) Town (10,000-50,000)() Town (under 2,000) ( ) City (50,000 or
Town (2,000-10,000) ( ) $\left.\begin{array}{c}\text { over }\end{array}\right)$

What is the highest level of education attained by your parents or guardians and spouse?

|  | Fa | Mothe | Spouso |
| :---: | :---: | :---: | :---: |
| 8 th grade or less | ( ) | ( ) | ( ) |
| Some high school but did not graduate | ( ) | ( ) | ( |
| High school graduate | ( ) | () | ( ) |
| Trade, business or technical school diploma | ( ) | ( ) | ( ) |
| 1-3 years of college | ( ) | ( ) | ( ) |
| College graduate | ( ) | ( | ( ) |
| Graduate study or professional degree | ( ) | ( ) | ( |

16. What was your total income last year? Consider annual income from all sources before taxes.
(Check one)
Less than \$1,000
\$1,001-\$4,000
$\$ 7,001-\$ 10,000 \quad()$
\$10,001-\$15,000

| $\$ 15,001-\$ 20,000$ | $(\quad)$ |
| :--- | :--- |
| $\$ 20,001-\$ 30,000$ | $(\quad)$ |
| $\$ 30,001-\$ 40,000$ | $(\quad)$ |
| $\$ 40,000+$ | $(\quad)$ |

II. EDUCATION

This section covers your previous education to guide and assist our students more effectively. It is important for us to know what kind of educational background our students have.
17. What is the highest level of education you have completed? (Check one)
llth grade or less
18. How many years has it been since you last participated in a formal educational experience? Within past year ( ) Between 3-5 years Between l-2 years ago () ago ( ) 5 years or more ago () Please describe briefly the last formal educational experience you participated in.
19. Why did you stop your formal education at this time?
20. At the time I graduated (or quit) high school, my age was: (Check one)

| 15 or younger | $()$, | 18 |
| :--- | :--- | :--- |
| 16 | () | 19 or older () |

21. My scholastic standing when I graduate from (or quit) high school was: (Check one)
Lower half of my class
22. The largest number of part-time jobs that $I$ held at any one time during my last year in high school was: (Check one)

| None () | 2 |
| :--- | :--- |
| 1 | 3 or more () |

Upper $30 \%$ but not upper $15 \%$
Upper $15 \%$ but not upper $5 \%$
Upper $5 \%$ of my class

3 or more ()
23. During the last year I was in high school, the average number of hours a week $I$ spent on parttime paid jobs outside my home was: (Check one)

| None | () | 10 to 20 |
| :--- | :--- | :--- | :--- |
| Less than 5 | () | ( ) |
| 5 to 10 | ( ) |  |

24. During the last year I was in high school, the average number of hours a week I spent working for my family at home was: (Check one)

| None | $()$, | 10 to 20 | ( ) |
| :--- | :--- | :--- | :--- |
| Less than 5 | () | More than 20 |  |
| 5 to 10 | () |  |  |

25. In high school I participated in:

Occa-
sion- Fre-
Never Rarely ally quently
Plays, debate, etc. $\quad(),()()$,
Sports

School newspaper or yearbook, etc.
Science projects
Arts, crafts
Woodworking
Mechanical projects, electronics
Student council
Cheer leading


School sponsored department clubs
Music activities
$\qquad$ $\begin{array}{llll}() & () & () & () \\ ( & ( & () & () \\ ( & ()\end{array}$
26. Indicate your interest in these school subjects 390 even though you may not have studied them.
(Circle your response using a scale of 1 to 5 as follows: l-very uninteresting, 2 -rather uninteresting, 3 -average, 4 -sort of interesting and 5 -very interesting)
History courses......................... 1
English composition courses......... $\frac{1}{1}-2-3-4 \quad 5 \quad 3$
English literature.................... $\frac{1}{1} 3,45$

Industrial arts (woodworking)
Industrial arts (auto mechanics)... $\frac{1}{2}, 3,4,5$
Home economics (food and nutrition) $1 \begin{array}{lllll}1 & 2 & 3 & 4 & 5\end{array}$
Home economics (clothing)........... $\begin{aligned} & 1 \\ & 2\end{aligned}, 3,4,5$
Home economics (family relations).. $\begin{array}{llllll}1 & 2 & 3 & 4 & 5\end{array}$
Government. ............................. 1
Agriculture................................ 1
Work related as DECA or T\&I. $\qquad$
Bookkeeping or accounting.
Speech...........................................
Physical education.
$\ldots . . . . .$.

| Art...................................................... | $\frac{3}{2}$ |
| :--- | :--- |
| Sociology or | 4 |

Biology................................... | 1 |
| :--- |

Chemistry................................. $\frac{1}{1}-\frac{2}{2}-\frac{3}{3}-\frac{5}{4}$
Economics.................................... $\frac{1}{1}-\frac{2}{2}-\frac{3}{3}-4 \quad 5$

longest period of time. (Circle your respons using a scale of 1 to 5 as follows: 1 -never, 2-almost never, 3-about half the time, 4-almost always and 5-always
There was an opportunity for stu-
dents to become well acquainted...1 $22_{1} \quad 3 \quad 4 \quad 5$
Teachers were interested and con-
cerned...........................
The number of extra curricular
activities was adequate............. 1

Teachers tended to be fair............. 1 | 1 | 3 | 4 |
| :--- | :--- | :--- |

Size of classes was about right
for the classes taught............. $1 \begin{array}{lllll}1 & 2 & 3 & 4 & 5\end{array}$

The students made friends easily..... 1 | 1 | 2 | 3 |
| :--- | :--- | :--- |

Number of elective courses was
adequate. . . . . . . . . . . . . . . . . . . . . . . . . $\frac{1}{1}-2 \quad 2 \quad-\frac{3}{3} \quad 4 \quad 4 \quad 5$
The administration placed the wel-
fare of students first when
establishing school policy......... 1

Teachers showed favoritism............ 1 | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- |

The teachers did a good job of
teaching the subject matter
content of courses in which I
was enrolled............................... 2
Students from poor families got
along alright........................ 1
The teachers graded fairly............. 1
My high school experience was
enjoyable.

.1 | 1 | $3 \quad 5$ |
| :--- | :--- | :--- |

## III. WORK

This section covers your present job, if you are now working, and the demands it makes on your time. We need to know more about our students' careers since many UMA students are probably planning to use their courses for career advancement or career changes.
28. How many hours per week do you work? (Include a second job or regular overtime)

29. How many years have you worked at your present job?
30. Please rank your satisfaction with your present job.
$\begin{array}{ll}\text { Very satisfied ( ) Neutral } \\ \text { Satisfied } & \text { Somewhat dissatisfied () }\end{array}$
31. If family ties, money, training or ability did not affect your decision, what kind of job would you most like to have?

## IV. LEISURE TIME

32. What types of newspapers and magazines do you
read regularly? (Check all that apply)
Daily newspapers
Local weekly newspapers
News and business magazines
Career or professionally-oriented magazines and journals
Special interest magazines (i.e., sports, fashions, gardening, etc.)
Other $\qquad$
33. Estimate the number of hours you watched television in the past week?

| None | () | $12-15$ hours $\quad()$ |
| :--- | :--- | :--- |
| 3 hours or less |  |  |
| $4-7$ hours | () | $16-19$ hours $\quad()$ |
| $8-11$ hours | () | $20-23$ hours $\quad()$ |

34. What types of television programs do you prefer?
(Check all that apply)

| Sports programs | ( ) |
| :---: | :---: |
| News reports | ( |
| Drama/plays | ( |
| Detective, mystery and western series | ( |
| Situation comedy, comedy series | ( |
| Religious programs | ( |
| Music and variety shows | ( ) |
| Serious talks, discussions, interviews, including documentaries | ( ) |
| Adult education programs |  |
| Quizzes and games |  |

35. What is your favorite television program?
36. What are your main leisure time activities and interests? Mark approximately how often you participated in these activities during the last year.
Never Rare ally quently

Reading newspapers, magazines and journals
Reading fiction and nonfiction books
( ) ( ) ( ) ( )
( ) ( ) ( ) ( )
Indoor activities: chess, poker, pingpong ( ) ( ) ( ) ( )
Outdoor activities: hiking, hunting, swimming, golf, camping ( ) ( ) ( ) ( )
AtLending movies, concerts, plays, sports events, etc. ( ) ( ) ( ) ( )
Participating in plays, concerts, sports events painting, refinishing furniture, woodworking, sewing, photography, etc. Traveling
Visiting with friends,
relatives
Participating in church
()()()()

Arts and handicrafts, and community activities (other than sports)
Taking special interest
classes (i.e., cooking, woodworking, tennis, etc.) ( ) ( ) ( ) ( )
37. Please list all voluntary programs or civic organizations in which you have participated in the past few years. (e.g., fire department, church activity or auxiliary groups, school board, little league)

Program or Organization

If you held an office, please name it below.

38. To what extent will your participation in this UMA course affect the amount of time you will be spending with family members. Probably no affect
Might reduce it a little bit Probably will reduce it a lot
( ) ( ) ( ) ( ) ) ( ) (
V. RESOURCES

The foilowing questions ask about the resources (time, money, space, etc.) you have. How do you think the resources or lack of them will affect your success with UMA courses? These questions are designed to provide information to help us in planning future UMA courses.
39. Finding the money to pay for tuition and materials for a UMA course is:
A severe hardship
Quite difficult $\quad\left(\begin{array}{l}\text { Reasonably easy } \\ \text { No problem }\end{array}\right.$
40. Apart from tuition, do you think taking the course is likely to involve you in any significant, additional expenses? (Please respond to each item)

|  | $\begin{aligned} & \text { Very } \\ & \text { signif- } \\ & \text { icant } \end{aligned}$ | ```Some- what signif- icant``` | $\begin{aligned} & \text { Not } \\ & \text { signif- } \\ & \text { icant } \end{aligned}$ | Not certain |
| :---: | :---: | :---: | :---: | :---: |
| Loss of overtime | ( ) | ( ) | ( ) | ( ) |
| Stopping or reducing paid part-time work |  | () | ( ) | ( ) |
| Cost of babysitting | () | () | () | ( ) |
| Cost of books and materials | ( ) | ( ) | ( ) | ( ) |
| Traveling | ( ) | ( ) | ( ) | ( ) |
| Other | ( ) | ( ) | ( ) |  |

41. What are your sources of financing for your UMA course? (Please respond to each item)

Major Minor Not a
source source source
Full and/or part-time work
Savings
Parental aid
Employer support
Spouse's income Grants/scholarships Loans
Other

| () | () | () |
| :--- | :--- | :--- |
| () | () | () |
| () | () | () |
| () | () | () |
| () | () | () |
| () | () | () |

42. Which of these do you own or have easy access to? (Check all that apply)

| Transportation | ( ) | Slide projector/ |  |
| :---: | :---: | :---: | :---: |
| Record player |  | viewer | ( ) |
| Tape recorder |  | Typewriter | ( ) |
| (cassette type) | ( ) | Telephone | ( ) |
| Tape recorder |  | Television | ( ) |
| (reel to reel) | ( ) | None of these | ( ) |

43. Do you plan to make any special arrangements to enable you to take a UMA course? (Check all that 392 apply)
Rearrange working hours/duties
Reorganize time to allow for studying
Arrange for child/babysitting
Arrange to record missed programs Turn one room into study/quiet room Special arrangements to watch TV/bought TV Other arrangements (write in)
44. In addition to the UMA course in which you have enrolled, which of the following are available to you?
College level courses offered for employees where I work
( )
College level courses offered at a learning center like a library, extension office or public school within 40 miles of my home
College level course offered at a community

$$
\text { college within } 40 \text { miles }
$$

private two- or four-year college within 40 miles
A university within 40 miles
Correspondence courses
45. What are the most convenient days and times for you to watch television broadcasts and which would you, as far as you can say, find decidedly inconvenient.
Weekdays: Convenient Inconvenient
Do not mind what time ()

| Before 8:00 a.m. | ( ) | ( |
| :---: | :---: | :---: |
| 8:00 a.m. -9:00 a.m. | ( ) |  |
| 9:00 a.m.-12:00 noon | ( ) |  |
| 12:00 noon-1:00 p.m. | ( ) | ) |
| 1:00 p.m.-4:00 p.m. | ( ) | ( ) |
| 4:00 p.m. -5:00 p.m. | ( ) | ( ) |
| 5:00 p.m. -6:30 p.m. | ( ) | ( ) |
| 6:30 p.m. $-7: 30 \mathrm{p} . \mathrm{m}$. | ( ) | ( ) |
| 7:30 p.m. 9 9:30 p.m. | ( ) | ( ) |
| 9:30 p.m. -10:30 p.m. | ( ) | ( ) |
| 10:30 p.m. or later | ( ) | ( ) |

Weekends:
Do not mind what time ( )

| Before 8:00 a.m. | ( ) | ( |
| :---: | :---: | :---: |
| 8:00 a.m.-9:00 a.m. | ( ) | ( |
| 9:00 a.m.-12:00 noon | ( ) | ( |
| 12:00 noon-1:00 p.m. | ( ) | ( |
| 1:00 p.m. 4 :00 p.m. | ( ) | ( |
| 4:00 p.m.-5:00 p.m. |  | ( |
| 5:00 p.m. -6:30 p.m. | ( ) | ( |
| 6:30 p.m. 7 7:30 p.m. | ( ) | ( ) |
| 7:30 p.m. -9:30 p.m. | () | ( ) |
| 9:30 p.m. $-10: 30 \mathrm{p} . \mathrm{m}$. | ( ) | ( ) |
| 10:30 p.m. or later | () | ( ) |

46. List the greatest concern you have in studying with UMA.
47. In your planning for studying with UMA, which of the following are major concerns for you?

Work pressures and responsibilities

Major or none know

Domestic interruptions and demands

to regular work
academis and learning problems: starting to study again, new methods, concentration, memory, etc.
Program pace, keeping up with the UMA schedule
Lack of time
Lack of necessary extra energy Personal disability
Obtaining books and materials other $\qquad$

| () | () | () |
| :--- | :--- | :--- |
| () | () | () |
| () | () | () |
| () | () | () |
| () | () | () |

48. Do you have space available at home where you can study quietly if you wish? (Check one)
Yes, at all times
Yes, in daytime only
Yes, but only after children have gone to bed
No, plan to study at public library
No, plan to study at work
No, plan to study at Learning Center ()
No, don't know yet where I will study Other plans
49. Given your other responsibilities (job, marriage, family, etc.), how difficult do you think it will be for you to "keep up" with the UMA course(s)? (Check one)

50. How do your family, friends and employer feel about your enrollment in UMA? (Check one for each group)

Strongly encouraging
Somewhat encouraging
Neutral
Somewhat discouraging
Strongly discouraging Don't know

| Family | Friend | Employer |
| :---: | :---: | :---: |
| () | () | () |
| () | () | () |
| () | () | () |
| () | () | () |
| () | () | () |

What are your immediate and long-range goals for yourself? Please consider these questions carefully since your answers will be used as guides to future roles UMA might play in helping its students.
51. How important is it that you achieve the following goals by studying with UMA? (Please respond to each item)

| Not impor tant | Somewhat important | $\begin{gathered} \text { Very } \\ \text { impor- } \\ \text { tant } \end{gathered}$ |
| :---: | :---: | :---: |
| ( ) | ( ) | ( |
| ( ) | ( ) | ( ) |
| ( ) | ( ) | ( ) |

To increase my awareness of different philosophies, cultures and ways of life
To improve my chances of making more money
To obtain a degree which is required for my present or future job
To learn how to participate effectively as a citizen in my community
To develop an understanding and an appreciation of science and technology
To improve my self-image
Simply, to learn
To improve my professional status
To increase my confidence to undertake learning projects
To use leisure time creatively
To satisfy my curiosity about a particular topic
To become a better person or citizen
To become a better friend, spouse or parent
To get to know other adults with interests similar to mine
Other $\qquad$
52. Which one of the goals in question 51 is the most important to you?
53. If you are working toward a degree, what is the highest academic degree you hope to obtain? (Check one)
None ()

Associate degree (A.A. or equivalent) ()
Bachelor's degree (B.A., B.S., etc.) ()
Master's degree (M.A., M.S., etc.)
()

Doctor of philosophy or education (Ph.D. or Ed.D.)
Medical degree (M.D., D.D.S., etc.)
Law degree (L.L.B., J.D.)
Theological degree
Other
()
()
54. If you have enrolled to acquire college level credit for another purpose, please list.

In order to plan future courses and reach new students, we need to know more about how you found out about UMA and why you chose to take a UMA course.
55. Is anyone else in your family presently registered as a student in UMA?

| Husband/wife | $()$, | Brother/sister |
| :--- | :--- | :--- |
| Mother/father ( ) |  |  |
| Son/daughter | $()$, | Other relatives () |

56. How did you find out about UMA? (Check as many as are applicable)
From a UMA student ( )

From someone who works for IMA
From someone who works for another college
or university
From a newspaper advertisement
From a newspaper advertisement ()
From a news article in a newspaper
From a television advertisement
From a television program
From a radio advertisement
From a radio program
From reading a UMA brochure
From a UMA poster
( )
From a high school or college counselor From my employer
()

From a friend or family member ( ) Other
58. Which of the information in question 57 affected your enrollment the MOST?

Please write any comments you may have
57. Please indicate the importance of the following influences on your enrolling with UMA.

|  | Not important | what <br> impor- <br> tant | Very important |
| :---: | :---: | :---: | :---: |
| The good reputation of Iowa State |  |  | ( ) |
| I have friends at UMA | ( ) |  | ( ) |
| Another UMA student recommended it | ( ) | ( ) | ( ) |
| The independence allowed by UMA | ( ) | ( ) | ( ) |
| My employer suggested I take UMA courses | ( ) | ( ) | ( ) |
| I can work as well as study with UMA |  |  | ( |
| A counselor recommended UMA | ( ) | ( ) | ( ) |
| A member of my family suggested I enroll | ( ) | ( ) | ( ) |
| I wanted to live at home while attending college | ( ) | ( ) |  |
| Other | ( ) | ( ) |  |

Please Mail This Questionnaire to:
UMA
Extension Courses and Conferences
Scheman Building
Iowa State University
Ames, Iowa 50010
in the enclosed envelope before your course work begins, if possible

# STRONG-CAMPBELL INTEREST INVENTORY 

EDWARD K. STRONG, JR.

(1884-1963)

DAVID P. CAiMPBELL


#### Abstract

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## MARKING INSTRUCTIONS

1. Please fill in your name and if required, identification number on this booklet. Follow the instructions carefully.
2. Interpretation of the Theme Scales is not possible unless the sex of the examinee is recorded.
3. Use any soft, black lead pencil. Make a heavy, dark mark.
4. If you make a mistake, or change your mind, please erase carefully and thoroughly.
5. This booklet will be processed by automatic equipment. To avoid errors, please keep it free from wrinkles and stray marks.
6. Please try to answer each question. Work quickly; first impressions usually give the best results with this inventory.


This inventory is used to help you understand your work interests in a general way, and to show you some kinds of work you might be comfortable in. The following pages list many jobs, activities, school subjects, and so forth, and you are asked to show your liking or disliking for each. Your answers will be compared with the answers given by people already working in a wide range of jobs, and your scores will show how similar your interests are to the interests of these people. But this is not a test of your abilities; it is an inventory of your interests. Your scores will be presented to you later, on a special sheet called a profile, with information on how to understand the scores.

## FOR PROCESSING

Return to
NATIONAL COMPUTER SYSTEMS

## 4401 West 76th Street

Minneapolis, Minnesota 55435

Many occupations are listed below. For each of them, show how you feel about doing that work.


Don't worry about whether you would be good at that job or about your lack of training. Forget about how much money you could make or whether you could get ahead. Think only about whether you would like to do that work.

Work fast. Answer every one.

1. (ㄴ)(1) () Actor/Actress
2. () (1) () Advertising executive
3. (ㄴ)(1)(D) Architect
4. (ㄴ)(1) () Art museum director
5. (ㄴ)(1) () Art teacher
6. (ㄴ)(1)() Artist
7. (1) (1)
(D) Artist's model
8. (ㄴ)(1) (ㅁ) Astronomer
9. (L)(1)(D) Athletic director
10. (ㄴ)(()) Auctioneer
11. (ㄴ)(ㅁ) Author of children's books
12. (ㄴ)(1) (D) Author of novels
13. (L)(1)(D) Author of technical books
14. (ㄴ)(1)() Auto mechanic
15. (ㄴ)(() (D) Auto racer
16. (ㄴ)(1) (ㅁ) Auto sales
17. (ㄴ)(ㅁ) Bank teller
18. ()(1)(ㅁ) Beauty and haircare consultant
19. (ㄴ)(1) (D) Biologist
20. (ㄴ)(1)() Bookkeeper
21. (ㄴ)(1) () Building contractor
22. (ㄴ)(1) (D) Business teacher
23. (ㄴ)(1) (D) Buyer of merchandise
24. (ㄴ) (1) (D) Carpenter
25. (ㄴ)(1) () Cartoonist
26. (ㄴ)(1)(D) Cashier in bank
27. (ㄴ)(1) (ㅁ) Chemist
28. (ㄴ)(1) () Children's clothes designer
29. (ㄴ)(1)(D) Church worker
30. () (1) (D) City or state employee
31. (ㄴ)(1)(D) City planner
32. (ㄴ)(1) (ㅁ) Civil engineer
33. (ㄴ) (1) (D) College professor
34. (ㄴ)(1) (D) Computer operator
35. (ㄴ)(1) (D) Corporation lawyer
36. (L)(1) (ㅁ). Costume designer
37. (1)(1) (D) Courtroom stenographer
38. (L) (1) (D) Criminal lawyer
39. (ㄴ)(1) (ㅁ) Dancing teacher
40. (ㄴ) (1) (D) Dental assistant
41. (ㄴ)(1)(D) Dentist
42. (ㄴ)(1) (D) Designer, electronic equipment
43. (ㄴ)(1)(ㅁ) Dietitian

| 44. (1) (1)(1) | Draftsman |
| :---: | :---: |
| 45. (1)(1)() | Dressmaker/Tailor |
| 46. (1) (1)() | Editor |
| 47. (1)(1)(D) | Electrical engineer |
| 48. (ㄴ)(1)(D) | Electronics technician |
| 49. (1)(1)(1) | Elementary school teacher |
| 50. (1) (1)() | Employment manager |
| 51. (1)(1)(1) | Factory manager |
| 52. (ㄴ)(1)(1) | Farmer |
| 53. (1)(1)() | Fashion model |
| 54. (1)(1)(D) | Florist |
| 55. (1)(1)() | Foreign correspondent |
| 56. (ㄴ)(1)() | Foreign service officer |
| 57. (1)(1)() | Free-lance writer |
| 58. (L)(1)(0) | Governor of a state |
| 59. (1)(1)(1) | High school teacher |
| 60. (1) (1)() | Home economics teacher |
| 61. (1)(1)(1) | Hospital records clerk |
| 62. (1)(1)() | Housekeeper |
| 63. (1)(1)(0) | Hotel manager |
| 64. (ㄴ)(1)(1) | Illustrator |
| 65. (1) (1)(1) | Income tax accountant |
| 66. ()()(1) | Interior decorator |
| 67. (1)(1)() | Inventor |
| 68. (1)(1)(0) | Jet pilot |
| 69. (1) (1)() | Judge |
| 70. (1)(1)(1) | Labor arbitrator |
| 71. ()()(1) | Laboratory technician |
| 72. (1)(1)(D) | Landscape gardener |
| 73. (1) (1) (D) | Librarian |
| 74. (1)(1)(0) | Life insurance agent |
| 75. (1)(1)() | Machine shop supervisor |
| 76. (1)(1)(1) | Machinist |
| 77. (ㄴ)(1)(0) | Manager, Chamber of Commerce |
| 78. (1)(1)(1) | Manager, child care center |
| 79. (1)(1) | Manager, women's style shop |
| 80. (1)(1)(1) | Manufacturer |
| 81. (1) (1) (D) | Mechanical engineer |
| 82. (L)(1)(0) | Military officer |
| 83. (1)(1)(1) | Minister, priest or rabbi |
| 84. (1)(1)(1) | Musician |
| 85. (1) (1) (D) | Newspaper reporter |
| 86. (2) (1) (1) | Nurse |
| 87. (ㄴ)(1) (0) | Nurse's aide/Orderly |

88. 니(1)(ㅁ) Office clerk
89. (ㄴ)(1)() Office manager
90. (ㄴ)(1) Opera singer
91. () (1)() Orchestra conductor
92. (ㄴ)(1)() Pharmacist
93. (L)(1) () Photographer
94. (ㄴ)(1) () Physician
95. (L)(1)() Playground director
96. (ㄴ)(1) (ㅁ) Poet
97. (L)(1)(D) Police officer
98. (ㄴ)(1)(D) Politician
99. (ㄴ)(1)() Private secretary
100. (ㄴ)(1)() Professional athlete
101. (ㄴ)(1)(D) Professional dancer
102. (ㄴ)(1)(D) Professional gambler
103. (ㄴ)(1)(ㅁ) Psychologist
104. (ㄴ)(1) () Public relations director
105. (ㄴ)(1)() Rancher
106. (ㄴ)(1) () Realtor
107. (ㄴ) (1)(D) Receptionist
108. (ㄴ)(1)() Retailer
109. (ㄴ)(B) () Sales manager
110. (ㄴ)(1) () School principal
111. (L) (1) () Scientific illustrator
112. (ㄴ)(1)(D) Scientific research worker
113. (ㄴ)(1)() Sculptor
114. (L)(1) (D) Secret service agent
115. (ㄴ)(1) (D) Social worker
116. (ㄴ)(1)(D) Specialty salesperson
117. (ㄴ) (1) (D) Sports reporter
118. (L)(1)(D) Statistician
119. (ㄴ) (1) () Flight attendant
120. (L)(1)(D) Stockbroker
121. (ㄴ)(1)(ㅁ) Surgeon
122. (ㄴ)(1) () Toolmaker
123. (ㄴ)(1)(D) Traveling salesperson
124. (ㄴ)(1)() Travel bureau manager
125. (L) (1)(ㅁ) Typist
126. (L) (1) (D) TV announcer
127. (ㄴ)(1)(D) Vocational counselor
128. (ㄴ)(1) () Waiter/Waitress
129. (ㄴ)(1)(D) Wholesaler
130. (ㄴ)(1)(ㅁ) $X$-Ray technician
131. (L)(1)(D) YMCA/YWCA staff member

PART II. SCHOOL SUBJECTS
Show as before your inierest in these school subjects, even though you may not have studied them.
132. (ㄴ)(1)(D) Agriculture
133. (ㄴ)(1)(D) Algebra
134. (L) (1) () Arithmetic
135. () (1) () Ancient languages (Latin, Sanskrit, etc.)
136. (L) (1) (D) Art
137. (ㄴ)(1)() Bible history
138. () (1)(ㅁ) Bookkeeping
139. () (1)(D) Botany
140. (L) (1) (D) Calculus
141. (ㄴ) (1) () Chemistry
142. (ㄴ)(1)(ㅁ) Civics (government)
143. (ㄴ) (1) (0) Dramatics
144. (ㄴ) (1) () Economics
145. (L)(1)(D) English composition
146. (ㄴ)(1) () Geometry
147. (ㄴ)(1) () Home economics
148. (ㄴ)(1)(D) Industrial arts
149. (ㄴ) (1) () Journalism
150. (L)(1)(D) Literature
151. (ㄴ)(1) () Mathematics
152. (ㄴ) (1)(D) Mechanical drawing
153. (L) (1) () Military drill
154. (ㄴ)(1)() Modern languages (French, German, etc.)
155. (ㄴ) (1) () Nature study
156. (ㄴ)(()) Penmanship
157. (ㄴ)(()() Philosophy
158. (ㄴ) (1)(D) Physical education
159. (ㄴ)(1) (D) Physics
160. (ㄴ) (1) () Physiology
161. (ㄴ) (1)() Political science
162. (L)(1)(D) Psychology
163. (ㄴ) (1) (D) Public speaking
164. (ㄴ)(1)(D) Sociology
165. (ㄴ) (1)(ㅁ) Statistics
166. (ㄴ)(1)(ㅁ) Typewriting
167. (ㄴ) (1)() Zoology

## PART III. ACTIVITIES

Show your interests as before. Give the first answer that comes to mind.
168. (ㄴ) (1)() Making a speech
169. (ㄴ) (1) () Doing research work
170. (ㄴ) (1)() Repairing a clock
171. (ㄴ) (1) Cooking
172. (ㄴ)(1)(D) Operating machinery
173. (ㄴ) (1)(D) Writing reports
174. (ㄴ)(1)(ㅁ) Discussions of politics
175. (L)(1) () Taping a sprained ankle.
176. (ㄴ) (1)(D) Adjusting a carburetor
177. (ㄴ)(1)() Going to church
178. (ㄴ)(1)() Heading a civic improvement program
179. (ㄴ)(1)() Raising flowers and vegetables
180. (ㄴ)(1)() Interviewing job applicants
181. (ㄴ) (1) () Teaching children
182. (ㄴ)(() (ㅁ) Teaching adults
183. (ㄴ)(1)() Meeting and directing people
184. (ㄴ) (1)() Taking responsibility
185. (ㄴ)(() (D) Sewing
186. (ㄴ)(() () Making statistical charts
187. (ㄴ) (1) (D) Operating office machines
188. (ㄴ)(1)() Giving first aid assistance
189. (ㄴ)(1)() Decorating a room with flowers
190. (ㄴ)(1)() Interviewing prospects in selling
191. (ㄴ)(1)() Drilling soldiers
192. (ㄴ) (1)(D) Pursuing bandits in a sheriff's posse
193. (ㄴ)(1)() Watching an open-heart operation
194. (ㄴ)(1)() Checking typewritten material for errors
195. (ㄴ)(1)() Repairing electrical wiring
196. (ㄴ)(()) Organizing cabinets and closets
197. (ㄴ)(1)() Adjusting difficulties of others
198. (ㄴ)(1)(D) Starting a conversation with a stranger
199. (ㄴ)(1) (D) Cabinetmaking
200. (ㄴ)(1) () Being a forest ranger
201. (L)(1)() Bargaining ("swapping")
202. (ㄴ)(1) () Looking at things in a clothing store
203. (ㄴ)(1)() Buying merchandise for a store
204. (ㄴ)(1)(D) Displaying merchandise in a store
205. (ㄴ)(1)(D) Competitive activities
206. (ㄴ)(1) (D) Regular hours for work
207. (ㄴ)(1)(D) Continually changing activities
208. (ㄴ)(1)() Interviewing clients
209. (ㄴ)(1) (D) Arguments
210. (ㄴ)(1) (D) Developing business systems
211. (ㄴ)(1)() Doing your own laundry work
212. (ㄴ)(1) (D) Saving money
213. (ㄴ)(1) (D) Contributing to charities
214. (ㄴ)(1)(D) Raising money for charity
215. (ㄴ)(1)(b) Expressing judgments publicly, regardless of what others say
216. (ㄴ)(1)(D) Climbing along the edge of a steep cliff
217. (ㄴ)(1) Living in the city
218. (ㄴ)(1)() Discussing the purpose of life

## PART IV. AMUSENIENTS

Show in the same way how you feel about these ways of having fun. Work rapidly. Do not think over various possibilities. Record your first feeling of liking, indifference, or disliking.
219. (ㄴ)(1)(ㅁ) Golf
220. (ㄴ)(1)() Fishing
221. (L)(1)() Jazz or rock concerts
222. (ㄴ)(1)(ㅇ) Looking at things in a hardware store
223. (ㄴ)(1)() Boxing
224. (ㄴ)(1) () Poker
225. (ㄴ) (1) () Bridge
226. (ㄴ)(1)(ㄷ) Solving mechanical puzzles
227. (ㄴ)(1)() Planning a large party
228. (ㄴ)(1)() Religious music
229. (ㄴ)(1)(ㅁ) Drilling in a military company
230. (1)(1)() Amusement parks
231. (ㄴ)(1)() Conventions
232. (ㄴ)(1)(ㅁ) Formal dress affairs
233. (L)(1)(D) Electioneering for office
234. (ㄴ)(1)() Art galieries
235. (ㄴ)(1)() Leading a scout troop
236. (ㄴ)(1)(ㄹ) Writing a one-act play
237. (ㄴ)(1)() Symphony concerts
238. (1)(1)() Night clubs
239. (ㄴ)(1)() Church young people's groups
240. (L)(1)() Sports pages in newspaper
241. (ㄴ)(1)(ㄷ) Poetry
242. (ㄴ) (1)(ㅁ) Skiing
243. (ㄴ) (1)(ㅁ) Business magazines
244. (ㄴ)(1)() Popular mechanics magazines
245. (1)(1)() Reading the Bible
246. (ㄴ)(1)() Magazines about art and music
247. (ㄴ)(1)(ㄷ) Building a radio or stereo set
248. (ㄴ)(1)() Attending lectures
249. (ㄴ) (1) (D) Family pages in newspapers
250. (ㄴ)(1)() Performing scientific experiments
251. (ㄴ)(1)() Camping
252. (ㄴ)(1)() Playing chess
253. (ㄴ)(1)(D) Preparing dinner for guests
254. (ㄴ)(1)(D) Entertaining others
255. ()(1)(D) Trying new cooking recipes
256. (ㄴ)(1)(D) Being the first to wear the latest fashion
257. (ㄴ)(1)(D) Organizing a play

Part V. Types of People. People tend to choose jobs where they can work with individuals they enjoy. Please indicate here your feelings about having day-to-day contact with the following types, of people. Work fast - don't think of specific examples - give the first impression that comes to mind.
258. ()(1)() Highway construction
259. (C) (1)(D) High school students
260. (ㄴ) (1) (D) Military officers 261. () (1)(D) Artistic persons
262. (ㄴ) (1)(D) Foreigners
263. (ㄴ) (1) Ballet dancers
264. (1)(1)(D) Nonconformists
265. (1) (1) (D) People who assume leadership

| 266. (1) (1) | Religious people |
| :---: | :---: |
| 267. (1) (1)(D) | Aggressive people |
| 268. (L) (1)( | Physically sick people |
| 269. (1) (1) | Babies |
| 270. (L) (1) (1) | Very old people |
| 271. (ㄴ)(1)(D) | Emotional people |
| 272. (ㄴ) (1)(ㅁ) | People who have made fortunes in business |
| 73. (L) (1) | Thrifty people |
| 274. (L)(1)(D) | Musical geniuses |

266. (L) (1) () Religious people
267. (ㄴ) (1) Aggressive people
268. (ㄴ)(1) Physically sick people
269. (ㄴ) (1) Babies
270. (L) (1) (0) Very old people
(ㄴ) Emotional people fortunes in business
271. (ㄴ) (1) (b) Thrifty people
272. (ㄴ)(() Musical geniuses
273. (ㄴ)(1)(D) Outspoken people with new ideas
274. (ㄴ) (1) Fashionably dressed people
275. (ㄴ)(() () Prominent business leaders
276. (ㄴ)(1)(D) Athletic persons
277. (ㄴ)(1) (D) People who daydream a lot
278. (ㄴ)(1) (D) Outstanding scientists
279. (ㄴ)(1)(D) People who live dangerously

Part VI. Preference Between Two Activities. Here are several pairs of activities or occupations. Show which one of each pair you like better; if you prefer the one on the left, mark in the space labeled " $L$ "; if you prefer the item on the right, mark in the space labeled " $R$ ". If you like both the same, or if you can't decide, mark in the space labeled " $=$ ". Work rapidly. Make one mark for each pair.

301 . . . . . . . . . . . . . . . . . . . .Going to a play
302 . . . . . . . . . . . . . . . . . . . . . . . Teacher

303 . . Experimenting with new grooming preparations
304 . . . . . . . . Being married to a research scientist
305 . . . . . .Working in a large corporation with little chance of being president before age 55
306 . . . . . . . Working in an import-export business
307 .Music and art events
. Reading a book
Appraising real estate
310 . . . . . . . . . . . . . . Having a few close friends
311 . . . . Work in which you move from place to place
(ㄴ)() (8) Going to a dance
(ㄴ)()(B) Salesperson
(ㄴ) ©(®) Experimenting with new office equipment
(ㄴ)(®) Being married to a sales executive
(ㄴ) $\Theta$ (®) Working for yourself in a small business
(ㄴ)(®) Working in a research laboratory
(ㄴ)(ㄹ) (8) Athletic events
(ㄴ) () (B) Watching TV or going to a movie
(ㄴ)() (B) Repairing and restoring antiques
(1)()(B) Having many acquaintances
(ㄴ)()(B) Work where you live in one place

Part VII. Your Characteristics. Show here what kind of person you are. If the item describes you, mark in the space labeled (Yes); if the item does not describe you, mark in the space labeled (No); if you cannot decide, mark in the space labeled (?). (Be frank in pointing out your weak points, because these are as important as your strong points in choosing a career.)
312. (1)()(N) Usually start activities of my group
313. (ㄱ)(ㄱ)(ㅅ) Have more than my share of novel ideas
314. (ㅗ()(N) Win friends easily
315. (ㄷ)(2)(N) Make decisions immediately, not after considerable thought
316. (ㄴ)(3)(1) Prefer working alone rather than on committees
317. (1) (7) (1) Have mechanical ingenuity (inventiveness)
318. (Y)(ㄱ)(1) Am concerned about philosophical problems such as religion, meaning of life, etc.
319. ©(®) Can prepare successful advertisements
320. ()(7) (1) Stimulate the ambitions of my associates
321. (ㄷ)(ㄱ) (®) Can write a concise, well-organized report
322. (©)(3) Enjoy tinkering with small hand tools
323. ©(() Can smooth out tangles and disagreements between people
324. ()(7)(1) Put drive into an organization
325. (ㄷ()(A) Have patience when teaching others




# THE <br> NELSON-DENNY READING TEST 

VOCABULARY• COMPREMENSION • PATE

## JAMES I. BROWN, Ph.D. PROFESSOR OF RHETORIC

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The second world-view of nineteenth-century Europe emphasized the fundarnental character of time and saw all reality - natural, biological, social - as part of an unending, developmental flux. Men who pursued this vision of reality did not look for absolute, universal laws such as those proposed by physicists and chemists, but sought to comprehend patterns of evolutionary innovation in particular circumstances and under given conditions. Such men believed that reality, in whichever of its manifestations especially interested them, was capable of seizing upon unique strategic moments when some new possibility had opened to create what had never been created before - thereby, perchance, preempting the ground and inhibiting, or at least obstructing, any later efforts to do still better.

The German philosopher, Georg Wilhelm Friedrich Hegel (d. 1831) pioneered the effort to view all reality as a process of unending change. Subsequently, geologists, biologists, archaeologists and historians combined to open before men's startled eyes a vista of terrestrial history unimaginably vast by comparison with anything previously dreamed of. Geologic eons, organic evolution (first clearly proposed by Charles Darwin in 1859), and human history all seemed to belong together. Even the unchanging stars were presently brought within the scope of this evolutionary view.
33. Men with this vision of reality were looking for
A. absolutes.
B. universal laws.
C. exceptions to the usual.
D. evolutionary patterns.
$E$. changeless vistas.
34. The focal point of the world view described in the passage is
A. space.
B. matter.
C. universal law.
D. time.
E. history.
35. From the discussion of "the unchanging stars," you would infer that after Hegel it was thought
A. stars do not change.
B. some stars do not change.
C. stars also change.
D. stars are not typical phenomena.
E. stars are too distant for accurate analysis.
36. This selection is mainly about
A. science.
B. evolution.
C. astronomy.
D. reality.
E. cultural change.

STOP
End of test. If time permits, you may recheck this section of the test. Do not go back to the Vocabulary Test.

## PART I. VOCABULARY TEST

## Directions to Students

A. Do not turn this page of the test booklet until directed to do so.
B. During the test, do not make marks of any kind in this test booklet.
C. This test on vocabulary is timed separately from Part II. Comprehension Test and Reading Rate. During the time allowed for the Vocabulary Test, you are to work only on it. Do not go on to Part II until told to do so.
D. Now listen to the examiner for an explanation of how you are to mark your answers.
E. To make sure you know how to take the test, complete the three practice exercises below:

## PRACTICE EXERCISES

1. A chef makes A. bricks B. dishes C. clothes D. food E. statues . . . . . . . . . . . . . . . . . 1 . Which word best completes the opening statement? Yes, food is the best answer. Look at the space D to see how you are to mark your answer.
2. To repair is to A. destroy B. finish C. fix D. work E. show . . . . . . . . . . . . . . . . . . . . . 2 . Mark the space for the answer you think is correct. You should have marked space $\mathbf{C}$, since fix is the correct answer.
3. Mathematics refers to A. letters B. numbers C. machines D. plants E. stars ........... 3 . What is the letter of the best answer? Mark the space lettered the same as the answer you think is correct. You should have marked space B; numbers is the correct answer.
F. Listen to the rest of the instructions and wait for the signal to begin.

The most striking seventeenth-century architectural production, Versailles, is a symmetrical tour de force. It is built around a central axis which divides building, gardens, and grounds into two vast symmetrical complexes then continues northward into the heart of Paris. An air view of Versailles reveals how the central axis dominates the entire setting, how the side roads lead into it at equal angles, and how even the bosquets (woods) are clipped to form symmetrical shapes on either side of the axis. Overriding and compelling, the axis forces the spectator to stand in line with it in order to get a proper view of the spectacle as a whole. In the Spanish Escorial, a similar symmetrical complex, the chapel occupied the center of the axis; in Versailles the king's bedchamber occupied that center, and was a testimony to the absolute authority of Louis XIV. A front view of Versailles reveals the overriding importance of the gardens of Andre Le Nôtre. Set up around the central axis in an area of unprecedented breadth they counterbalance lawns, pools, canals, fountains, and sculpted bosquets with quiet grace and absolute precision. Three is the controlling number at Versailles, and the building itself is an exercise in threes.
25. The center of the axis at Versailles was
A. the chapel.
B. the grand ballroom.
C. the King's study.
D. the Queen's bedchamber.
E. the King's bedchamber.
26. The dominant quality of Versailles is apparently
A. richness.
B. vastness.
C. symmetry.
D. fusion of garden and building.
E. grace.
27. This selection is primarily about
A. Versailles.
B. architecture.
C. seventeenth-century styles.
D. gardens.
E. the King's authority.
28. Versailles is located
A. south of Paris.
B. east of Paris.
C. in a suburb of Paris.
D. in the heart of Paris.
E. on the outskirts of Paris.

## VII

The reasons why fashions move in cycles lie deep in human nature. Consequently, they are applicable to all kinds of commodities and to all industries. Some of us are innovators - always interested in change. We want to be different, we are bored with certain styles, or we find a chance for self-assertion in a new style. Or we may want style changes for deeper psychological reasons. Perhaps wearing a new style will attract attention which the individual wants and is unable to get in any other socially approved way. Perhaps the acceptance of a new style is an effort to forget past defeats and disappointments; if this seems far-fetched, let the reader notice the effect on his spirits of a complete change of clothing at the end of a day of hard work and disappointment.

The foregoing reasons why new styles come into existence also partially explain why these styles are gradually accepted by a large number of people. That is, many people welcome change as a relief from boredom with existing styles, as a defense mechanism, and - in early stages of the fashion cycle - as a means of differentiating themselves from others. Once a fashion cycle is under way, man's desire to imitate and to conform (to "go with the crowd") hastens the upswing.

1. Illegible writing is: A. unreadable B. illiterate C.irregular D. secret E. restrained ..... 1.
2. To cope is to: A. compare B. copy C. cling D. contend E. assist ..... 2.
3. Irresistible means: A. helpful B. incompatible C. compelling D. irrelevant E. indecisive ..... 3.
4. To be inconsistent is to be: A. erratic B. improper C. vain D. uneasy E. normal ..... 4.
5. One who is sedate is: A. quiet B. sentimental C. worldly D.busy E. methodical ..... 5.
6. Concocted means: A. agreed B. compared C. devised D. seasoned E. drank ..... 6.
7. Colleagues are: A. friends B. workers C. college students D. teachers E. associates ..... 7.
8. Taut means: A.tense B. ridiculed C. awkward D. wise E. lanky ..... 8.
9. A belligerent person is: A. proud $\quad$ B. uncomfortable C.hostile $\quad$ D. strong E. hospitable ..... 9.
10. Pending means: A. closing B. waiting C. forgiving D. waving E. preparing ..... 10.
11. To induce is to: A. order B. supply C.try D. persuade E. indicate ..... 11.
12. Incompatible means: A. unprepared B. indifferent C. not in agreement D. unfit E. useless ..... 12.
13. To refurbish is to: A. treat $B$. freshen $C$. cease D. admire E. create ..... 13.
14. Gargantuan means: A. ugly B. wild C. huge D. decorated E.vulgar ..... 14.
15. An obnoxious person is: A. unpleasant B. tricky C. dangerous D. wild E. stubborn ..... 15.
16. To deteriorate is to: A. take away B. replace C. kill D. grow worse E. develop ..... 16.
17. Closely correlated means: A. fitted B. related C. packed D. held E. combined ..... 17.
18. Imperative means: A. apathetic B. perfect C. urgent D. light E. not plausible ..... 18.
19. To query is to: A. hunt B. catch C. question D. separate E. trap ..... 19.
20. A vindictive act is: A. hopeful B. salable C. funny D. predictive E. spiteful ..... 20.
21. Traumas are: A. traps B. duties C. shocks D. commands E. tricks ..... 21.
22. Compilation means: A. courtesy B. competition C. gathering together D. discussion E. cutting out ..... 22.
23. To endeavor is to: A. begin B. enter C. try D. limit E. encourage ..... 23.
24. A novice is a: A. detail B. beginner C. fiction writer D. student E. sickness ..... 24.
25. To squander is to: A. squeeze out B. crush C. crouch D. use wastefully E. suppress ..... 25.

Nothing brings a prince more prestige than great campaigns and striking demonstrations of his personal abilities. In our own time we have Ferdinand of Aragon, the present king of Spain. He can be regarded as a new prince, because from being a weak king he has risen to being, for fame and glory, the first king of Christendom. If you study his achievements, you will find that they were all magnificent and some of them unparalleled. At the start of his reign he attacked Granada; and this campaign laid the foundation of his power. First, he embarked on it undistracted, and without fear of interference; he used it to engage the energies of the barons of Castile who, as they were giving their minds to the war, had no mind for causing trouble at home. In this way, without their realizing what was happening, he increased his standing and his control over them. He was able to sustain his armies with money from the Church and the people, and, by means of that long war, to lay a good foundation for his standing army, which has subsequently won him renown. Thus he has always planned and completed great projects.

## V

The concept of almost unlimited time in earth history is a necessary outgrowth of the application of the principle that "the present is the key to the past." For example, geologists know that mountains as high as the modern Rockies once towered over what are now the low uplands of northern Wisconsin, Michigan, and Minnesota. But only the roots are left. The great peaks have long since disappeared. Geologists explain that the ancient mountains were destroyed by rain and running water, wind and creeping glaciers, landslides and slowly moving rubble, and that these processes acted essentially as they do now.

Think of what this explanation means. We know from firsthand observation that streams, glaciers, and winds have some effect on the surface of the earth. But can such feeble forces level whole mountain ranges? Instinct and common sense tell us that they cannot. But this is where the factor of time comes into the picture. True, the small, almost immeasurable amount of erosion during one lifetime has little effect. But multiplied by thousands and millions of lifetimes, it becomes clear that mountains can be destroyed. Time makes possible what seems impossible.
17. Money for the king's military operation came from
A. the nobility.
B. the Church.
C. piracy.
D. seizure of foreign investments.
E. conquests.
18. The king increased his control of the barons by
A. starting a military operation.
B. giving them a role in government.
C. establishing a tax-sharing program.
D. entertaining them at court.
E. making large land grants to them.
19. The king was said to have a
A. professional army.
B. nondescript army.
C. standing army.
D. volunteer army.
E. conscripted army.
20. In this passage, war is considered to be
A. an economic stimulus.
B. a waste of resources.
C. an evil.
D. an end in itself.
E. a means toward an end.

V
21. Specific mention was made of
A. Michigan.
B. lowa.
C. North Dakota.
D. Manitoba.
E. Montana.
22. Major attention was given to
A. natural laws.
B. glaciers.
C. wind and water erosion.
D. observation.
E. time.
23. Mention of the vanished mountains was primarily
A. to show how different America once was.
B. to indicate how strong the forces of nature are.
C. to emphasize the importance of time.
D. to stress the relevance of geology.
E. to show glacial action.
24. Most emphasis is on
A. time.
B. change.
C. natural processes.
D. observation.
E. erosion.

## VOCABULARY TEST(Cont.)

26. Cardinal means: A.fundamental B. heart-shaped C. mode D. harmful E. calculated ..... 26.
27. Meticulously means: A. hurriedly B. decisively C. carefully D. truly E. quite lovely ..... 27.
28. To stipulate is to: A. dot B. splash C. blame D. estimate E. specify ..... 28.
29. Opportune means: A. assumed B. fitting C. weighty D. approaching E. new ..... 29.
30. To eradicate is to: A. inform $B$. raise C. deviate D. raid E. eliminate ..... 30.
31. Tenacious means: A. tempting B. temporary C. moderate D. persistent E. quiet ..... 31.
32. Well-feigned is: A. well-timed B. friendly C. well-pretended D. tired E. well-fed ..... 32.
33. Foibles are: A. leaves B. pages C. people D. followers E. faults ..... 33.
34. To be vanquished is to be: A. missing $B$. stung $C$. conquered D. lifeless E. valued ..... 34.
35. A stereotype figure is: A. vivid $\quad$ B. natural $\quad$ C. ideal $\quad$ D. conventional $\quad$ E. individual ..... 35.
36. Incessantly means: A. frequently B. scarcely C. constantly D. innocently E. clearly ..... 36.
37. A laudable endeavor is: A. praiseworthy B. laughable C.helpful D.harmful E. original ..... 37.
38. Fervor refers to: A. search B. intensity C. charm D. fete E. sickness ..... 38.
39. Malignity refers to something: A. harmful B. sad C. pliable D. contagious E. mechanical ..... 39.
40. Stint means: A. stench B. pain C. color D. pour E. small amount ..... 40.
41. To connote is to: A. compete $B$. suggest $C$. decide D. finish $E$.join ..... 41.
42. A grimace is a: A. facial contortion $\quad$ B. threat $C$. glance $\quad$ D. song E. vocal outcry ..... 42.
43. Perpetuation refers to: A.perplexity B. continuation C.prejudice D. impact E.confusion ..... 43.
44. A fervent wish is: A. frequent $\quad$ B. futile $C$. ridiculous D. unenthusiastic E. intense ..... 44.
45. A dubicus enterprise is: A.twofold B. precise C. old D. involved E. questionable ..... 45.
46. An integral part is: A. essential B. compact C. numerical D. definite E. small ..... 46.
47. To intimidate is to: A.hint $B$. suffer $C$. frighten $D$. share $E$. intrude ..... 47.
48. To contrive is to: A. agree B. weigh C. devise D. deny E. check ..... 48.
49. Disconsolate means: A. inconvenient $\quad$ B. assisted C. smug D. dejected E. discarded ..... 49.
50. An inconsequential step means: A. trivial $\quad$ B. inconsistent $\quad$ C. gradual $\quad$ D. bothersome $\quad$ E. unbelievable ..... 50.

At first, in the planets-to-be, particles were collected merely at random, but as each mass grew larger, other particles began to be attracted by the gravity of the central mass. The whirling dust and forming spheres continued to revolve around the sun until finally each planet had swept its own path clean, picking up loose matter like a giant snowball. The orbit nearest the sun was swept clean by Mercury, the next by Venus, the third by Earth, the fourth by Mars, and so on out to Pluto.

This theory of how the planets were formed differs from the one generally accepted a little more than a decade ago. At that time, it was thought by most astronomers that the planets formed as the result of a wandering star passing too close to the sun and sucking chunks of matter out of its fiery mass. The decline of this theory, on the basis of new evidence and new calculation by physicists, geologists, and astronomers, has important implications for the question of whether life exists on other planets. In the vastness of the universe, it is highly unlikely that one star will enter the gravitational field of another, forming a planet like Earth.

Sounds are measured in units called decibels. One decibel is the slightest sound that can be heard by someone with good hearing. A reading of about 80 decibels is the loudest comfortable level for the average person. Noise begins to irritate at 80 to 85 decibels.

Each day the average city dweller in the U.S. is assaulted by many sounds louder than 80 decibels. A powerful motorcycle roars by at 115 decibels. A jet plane at close range registers 150.

Doctors are learning more about the effects of noise all the time. Experiments by Dr. Lester W. Sontag, director of the Fels Research Institute in Yellow Springs, Ohio, showed that violent noise, such as sonic booms, may cause permanent damage to unborn babies.

Dr. Samuel Rosen, a New York hearing specialist, describes what happens when a sudden noise strikes the ear: "The heart beats rapidly, the blood vessels constrict, the pupils dilate, and the stomach, esophagus, and intestines are seized by spasms... You may forgive noise; your body never will."
"People tolerate noise because they don't realize something can be done about it," says Robert Baron, who organized Citizens for a Quiet City in New York. Listen, think and act.
9. Which planet orbits nearest to the sun?
A. Jupiter
B. Mars
C. Mercury
D. Pluto
E. Neptune
10. Which planet was not mentioned specifically?
A. Jupiter
B. Mars
C. Venus
D. Mercury
E. Pluto
11. How many major theories were discussed?
A. One
B. Two
C. Three
D. Four
E. None
12. This selection deals largely with
A. how planets are formed.
B. how the solar system came into being.
C. the orbital behavior of planets.
D. the way stars became planets.
E. the presence of life on the planets.

## III

13. Mention was made of experimental work done by Dr.
A. Fels.
B. Sontag.
C. Rosenbloom.
D. Bacon.
E. Roberts.
14. A powerful motorcycle roars by at what decibel level?
A. 95
B. 115
C. 125
D. 140
E. 150
15. The quoted statement about the effects of a sudden noise, made by a New York hearing specialist, was intended to show how
A. slowly the body recovers.
B. severely the body is affected.
C. permanent the effects are.
D. important the decibel level is.
E. subtly the body is altered.
16. The chief purpose of this passage is to
A. explain how noise intensity is measured.
B. describe typical noises in terms of decibels.
C. show how the body is affected.
D. indicate the average level of noise tolerance.
E. describe the city noise environment.

Do not stod here. Turn to nage 7
51. Oblivious means: A. unpleasant B. gloomy C. outdated D. unmindful E. courtecus ..... 51.
52. To delete is to: A. debase B. rewrite C. erase D. define E. consider ..... 52.
53. A symposium is a: A. concert B. symbol C. close friend D. meeting E. church ..... 53.
54. Vistas are: A. histories B. views C. entry permits D. clumps E. dreams ..... 54.
55. To affront means to: A. affect B. add C. cverthrow D. aid E. offend ..... 55.
56. The gist of something is its: A. aim B. courage C. application D. essence E.value ..... 56.
57. Sporadic activity is: A. weird B. spontaneous C. scattered D. unique E.continual ..... 57.
58. Fostered means: A.trimmed B. promoted C. fooled D. hindered E. opened ..... 58.
59. A supercilious person is: A. educated B. rich C.proud D. graceful E. miserable ..... 59.
60. A spry person is: A. nimble B. fanciful C. thin D. tall E.flighty ..... 60.
61. Guises refer to: A. claims B.guides C. rules D. appearances E.creeds ..... 61.
62. To rebuke means to: A. reprove B. repulse C. represent D. ask E. order ..... 62.
63. A colloquy is a: A. breakdown B. plot C.church service D. conversation E. course ..... 63.
64. An unmitigated bore is: A. frank B. unhappy C. absolute D. helpless E. insignificant ..... 64.
65. Insuperable problems are: A. inadequate B. insurmountable C. unknown D. critical E. challenging ..... 65.
66. To bolster is to: A. fasten B. run away C. support D. brag E. build ..... 66.
67. Vagrant means: A. empty B. striking C. wayward D. vague E. active ..... 67.
68. A blithe spirit is: A. beautiful B. unknown C. earnest D. merry E. reactionary ..... 68.
69. A coalescing is a: A. blending $B$. melting $C$. burning $D$. turning $\quad$ E. screening ..... 69.
70. Adversely is: A. favorably $\quad$ B. harmfully $\quad$ C. faithfully $\quad$ D. proudly $\quad$ E. daringly ..... 70.
71. To inhibit is to: A. attend B. live C. retain D. restrain E. dissolve ..... 71.
72. A virtuoso is: A. righteous B. noble C. practical D. skilled E. manly ..... 72.
73. Deftly means: A. eagerly B. skillfully C. shortly D. quietly E. desperately ..... 73.
74. Glaucoma affects the: A. liver B. nose C. tonsils D. heart E. eyes ..... 74.
75. To ostracize is to: A. disagree B. leave C. appeal D. curse E. exclude ..... 75.

Like Horace, Virgil was possibly drawn from his studies into battle. The struggle, then at its height, was between Caesar and Pompey. Certainly, his pitiful pictures of the dead on the battlefields of Pharsalia could well have been made by one who had fought under the triumphant standards of Caesar. It is possible also that he saw rather stormy service on the Adriatic Sea with Mark Antony. There are signs that some detested bully of an officer made camp life, none too pleasant at best, quite unendurable for the poet who was never blessed with vigorous health. And the winter of 49 B.C., severe enough to leave even Caesar shaken, may well have shattered Virgil. At any rate, if he served for a time, he returned soon to his books. From the outset, his heart could but little rejoice in the struggle which was making brother fight brother and draining Italy of her best blood.

After his withdrawal from the war, some contend, Virgil made a single and unsuccessful appearance as lawyer before the Roman court of law. This is of considerable interest when we reflect that the orators in his great poem, the Aeneid, are all fluent but dreary fellows. We hear of him in Rome, a tall, dark, gaunt man, suffering much in his stomach, throat, and head, sometimes spitting blood; in food and drink most cautious - even at the abundant board of his patron Maecenas, to whom, with such happy results, he had presented his friend Horace. Like Horace, he, too, seems to have lost his lands in the wars, but the poems he had now begun to write made him known and honoured, and other lands were given to him, so that he had enough money to live comfortably. Some scholars detect in one of Horace's satires a reference to Virgil as he might have been just then - a person with a rural haircut, an ungraceful toga, and untied shoelaces. However, it is equally possible that Horace had himself in mind. It was just the sort of thing he liked to do - caricaturing his whimsies and his hayseed locks and his flapping coat.

We can picture the two poets on a now famous journey they took with Maecenas, going to Brundisium. There are Horace with his black eyewash (a lotion for his weak eyes), and Virgil with his black headache, both of them snoring while Maecenas and his company hopped about after the tennis balls. And there was a voyage to Athens which Horace celebrated in another poem. But the two followed their separate ways. Both had a passion for philosophy and a passion for the country in common, but each took his solitude and often his social life in his own fashion.

The first poems Virgil wrote were about the earth and the farmers and the shepherds and the simple things of their life. These poems he called Eclogues. They took the outward form of the pastorals of Theocritus and the other Greek poets of the Alexandrian school. In them Virgil sang the radiance of the seasons, the tenderness of Italian landscapes, the charm of Italian friendships. All of April and the delicate tintings of the wild flowers and the glossy-leafed orchards and his own deep love of home and his tranquil memories and his longing for peace in a troubled world and the melancholy beauty of love - all these things went into the Eclogues. They were different from the Greek pastorals (aside from language) - using the beauty of the earth only as an introduction to a romantic understanding of the larger life beyond the glades and meadows. And with what exquisitely chosen phrases, with what fullness and rhythm and force the new poet sang! Rhyme Virgil never used, and his metre was different from ours.

1. Reference was made to what game?
A. Chess
B. Quoits
C. Tennis
D. Skittles
E. Baccarat
2. Specific reference was made to
A. Marcus Aurelius.
B. Pliny.
C. Mark Antony.
D. Hercules.
E. Plotinus.
3. Virgil and Horace apparently visited
A. Achaea.
B. Athens.
C. Pharos.
D. Messina.
E. Adrian.
4. It was said that Virgil did not use
A. blank verse.
B. hyme.
C. personification.
D. metre.
E. the heroic couplet.
5. This passage is mainly about
A. poetry.

B Virgil.
C. nature.
D. history.
E. Eclogues.
6. In discussing the two poets, most emphasis was placed on their
A. similarities.
B. differences.
C. friendship.
D. patriotism.
E. attitude toward war.
7. This passage is primarily
A. historic.
B. analytic.
C. biographic.
D. satiric.
E. eulogistic.
8. You would infer from the reference to the orators in Virgil's Aeneid that Virgil himself would be best described as what kind of speaker?
A. Dull
B. Lively
C. Inspiring
D. Commonplace
E. Original

Do not stop here. Turn to page 6.

## VOCABULARY TEST(Cont.)

76. To curry favor is to: A. desire $\quad$ B. expect $C$. cut off D. cultivate E. resist ..... 76.
77. Interminably means: A. endlessly B. periodically C.gradually D. indefinitely E. completely ..... 77.
78. Compensation is: A. profit B. compliance C. discount D. remuneration E. increase ..... 78.
79. Evocative means: A. professional B. difficult C. abstract D. calling forth E. sending ..... 79.
80. To extricate is to: A. squander B. form C. leave D. complicate E. free ..... 80.
81. To placate is to: A. welcome B. rebuff C. prepare D. appease E. arouse ..... 81.
82. To augment is to: A. audit B. try C. anticipate D. enlarge E. predict ..... 82.
83. Indignantly means: A. solemnly B.indifferently C. carelessly D. angrily E. quickly ..... 83.
84. Optimum means: A. happy B. helpful C. sunny D. best E. optional ..... 84.
85. Indelibly means: A. tactlessly B. indecisively C. tirelessly D. permanently E. improperly ..... 85.
86. Consensus means: A. survey B. poll C. control D. consequence E. agreement ..... 86.
87. Derogatory remarks are: A. dangerous B. disordered C. playful D. strong E. disparaging ..... 87.
88. A chronic condition is: A. habitual B. timely C. changing D. medical E.impassive ..... 88.
89. Solace refers to: A. solitude B. solution C. heat D. solidity E. comfort ..... 89.
90. Plaintively means: A. playfully B. at length C. sorrowfully D. bravely E. slowly ..... 90.
91. A covert threat is: A. veiled B. rare C. new D. severe E. immediate ..... 91.
92. An inexorable stand is: A. unrelenting B. unexpected C. impossible D. commendable E. indifferent ..... 92.
93. Veritable means: A. valuable B. helpful C. skilled D. true E.springlike ..... 93.
94. Rapport refers to: A. scarcity B. surplus C. rumor D. harmony E. swiftness ..... 94.
95. To desist is to: A. lose hope B. avoid C. push D. oppose E. cease ..... 95.
96. A vociferous man is: A. fashionable B. thoughtful C. tender D. clamorous E. angry ..... 96.
97. Initiative refers to: A. trend B. restraint C. brain power D. business E. enterprise ..... 97.
98. Pretentious means: A. imaginary $\quad$ B. sensuous C. unpleasant D. vague E. showy ..... 98.
99. Boon refers to a: A. tool B. sound C. structure D. favor E. fate ..... 99.
100. Profundity refers to: A. depth B. pleasure C. length D. strength E. contempt ..... 100.

## PART II. COMPREHENSION TEST <br> AND READING RATE

## Directions to Students

A. Do not turn this page of the test booklet until directed to do so.
B. There are eight selections in this part of the test. Read a selection through completely; then answer the questions to the right of it. When you have completed one selection, go immediately to the next. Keep working until you have completed all eight selections or until you are told to stop. To answer a question, you may, if you wish, look back at the material you have read. But do not puzzle too long over any one question. After a reasonable effort, go on to the next question.
C. Now listen carefully to the examiner for an explanation of how you are to mark your answers.
D. You will have 20 minutes to work on this part of the test. The first minute will be used to determine your reading rate. When the examiner tells you to begin, turn this page and start immediately to read the selection on page 5. At the end of one minute the examiner will call "Mark." Now your examiner will explain how to mark your reading rate.
E. Wait for the signal to turn this page.

MAKE NO MARKS ON THIS TEST BOOKLET


## Dear ISU Student:

Congratulations! You are one of the first group of students to complete a Univereity of Mid-America (LPA) course offered through Iows State University (ISU). We have tried to make this a rewarding learning experience.

For the benefit of future students (and we hope you plan to be one of them), we have prepared a questionnaire which provides a way for you to express your reaction to this first experience with the UMA-ISU course (or coursea).

The ratings received from all of the $s t u d e n t s$ will be compiled, and the information will be used as a guide in planning future course offerings and procedures. The. individual questionnaires will not be shared with the faculty or anyone other than the central research otaff at Iowa State University and the University of Mid-America in Lincoln, Nebraska, where the data will be coded for the computer. After the coding, which is necessary for the analysis of the data, the individual questionnaires will be destroyed.

Since the compiled information will be used as a guide in future planning for the UA-ISU course offerings and procedures, please be as candid as possible in your responses. A very prompt reply will be appreciated. Your participation and excellent cooperation have made these firgt offerings possible. We all thanis you and hope you plan to continue as a UMA-ISU atudent.

## Appreciatively,

Chalu $\varepsilon$ Dombure
Charles E. Donhowe
Dean, University Extension

1. ISU-IMA course which I completed
2. Approximate number of hours I spent watching the video component of the course (either by television or at the learning center)
3. Approximate number of video programs $I$ missed seeing

Did you go to the learning center to monitor the programs you miseed?
4. Average number of hours $I$ spent studying this course per week (excluding video component)
5. Name of learning center and person $I$ had contact with $\qquad$ center
learning center person
6. Number of times $I$ had contact with the learning center (by phone) $\qquad$ for what reason( 8 ) $\qquad$ (visited center $\qquad$ times) for what reason? $\qquad$

How could the learning center and ite staff have been more helpful to you?
7. Name of faculty I had contact with for this course

Number of times I talked with the faculty person (in person) $\qquad$ (by phone)
8. I had concact with other students enrolled in the course (other than family member) approximately - times a week or $\qquad$ timen during the time $I$ was taking the course.
9. Would you be interested in taking another UMA-ISU course? $\qquad$ - If yes, what kind of course? (an, for example. English, Sociology, Algebra, etc.)
10. Your name

Lest
First
Middle
Social Security Number $\qquad$
$\qquad$ - $\quad 414$

## Dixactione

1. It would be greacly appreciated if you would complete the questionnaire within one week and return it in self-addressed envelope, or you may complete it at the learning center. If you do the latter, place your questionnaire into the envelope provided and seal it before giving to learning center personnel.
2. The information you give will be completely confidential. Under no circumstances will the facuity or learning center personne: or any other Iowa State University employee have accese to the Information except the research personncl. It is linportant that you be as accurate in your reactions as ponsible.
3. Please use the scale below in expressing your reactions to the atatementa included in this questionnaire.


If you strongly disagree with the statement given, place a 1 in the blank. If you disagree but believe it isn't a "Strong" disagreement, choose a number between 1 and 50, registering the extent to which you disagree with the statement.

If you strongly agree, place a 99 in the blank, however, if you agree but do not believe that you "Strongly Agree," choose number between 50 and 99 to show the extent to which you agree with the statement.

If you do not agree or disagree, that is are completely neutral about a statement, use the number 50.
If the terms "Strongly Disagree" and "Strongly Agree" do not quite describe how you feel about a statement, you may apply the terms "Strongly yes for me" or "Strongly no for me" or ouch terms as "Definitely true for me" or "Definitely false for me." This approach may make it easier for you when trying to rate
 RATINGS.

If the otatement does not apply in your situation, place 50 in the anawer blank. (Example: If the statement asks about your spouse's reactions to you taking the course and you do not have a spouse, use the 50 ).

If you are enrolled in two or more courses, please answer the questionnaire for each course in which you are enrolled and the special group of general questions which do not pertain to apecific course.

Thank you for your time and cooperation.
If you have any quastions, please call the UMA-ISU toll free number and ask to speak to Emilla Nordtvedt, URA coordinator.
The extent to which I disagree or agree with the statement
When responding to the statements below, use the following scale
Strongiy Disagree

1. The audio tape cassettes were a valuable part of the course.
2. I felt at ease calling the learning center for information.
3. I have received benefits other than those I originally anticipated from taking a UMA course.
4. Finding time to study was difficult.
5. My family has given me extra help and suppozt throughout the time $I$ have been enrolled in the course.
6. I know what services are provided by the learning center.
7. I would like to take courses which would help me become more aware of problems in the world today.
8. I find it difficult to study for tests.
9. I plan to take more courses from UMA-ISU.
10. My family is favorable toward my enrolling in future courses.
11. The learning center personnel were available when I needed them.
12. I plan to enroll in a community college or a four-year institution for additional courses.
13. My children felt a bit neglected at times due to the amount of time $I$ had to spend atudying.
14. I understand the functions of the learning center.
15. I plan to enroll in a community college or four-year institution to begin work toward a degree.
16. I would be interested in having someone explain how I might be able to obtain special expertise in an area of study or a degree by taking courses from UMA and a variety of other sources, as for example off campus courses from a four-year institution, a community college, andor correspondence courses.
17. I belleve I will remember longer what $I$ have learned in this course than in courses $I$ have taken in a regular class situation.
18. The learning center personnel were cooperative about trying to meet my needs.
19. I appreciate having an opportunity to express how I feel about this overall experience.
20. I would like to work toward a degree.
21. The learning center staff play a very small part in the overall UMA-ISU program.
22. I don't learn as easily as I did back in high school.
23. I liked the feeling of being a student.
24. The learning center personnel made an effort to find answers to my questions.
25. I want to take additional courses which would heip to upgrade my qualifications for a job and/ or promotion.
26. The learning center personnel seemed to welcome my telephone calls.
27. I wish UMA-ISU would offer more courses for personal enrichment.
The extent to which I disagree or agree with the statement
When responding to the statements below, wse the following scale
Strongly Disagree


| The extent to which I disagree or agree with the statement <br> When responding to the statements below, use the following scale <br> Strongly Disagree |
| :--- | :--- |

$\qquad$ 56. There was a ciose reiationsinip between the text and the television component.
57. The majority of "directions" given in the text and study gildes was clear and helpful.
58. Domestic interruptions and demands have interfered with the amount of time I felt I naeded to spend on the course.
59. I gained personal satisfaction through taking this course.
60. The course was worth the money I spent to take it.
61. I would have preferred having more contact with other students.
62. I took the UMA course because I wanted to learn while at home instead of the required attendance at a college.
63. The overall experience of taking this course has had a positive influence on our family life.
64. Too much reading wes required for the course.
65. As a result of taking this course, I feel $I$ can be a more interesting companion and friend
66. Taking this course has given me valuable insight relating to this area of study.
67. The faculty seemed to welcome my telephone calls.
68. The cost of books and materials is too high.
69. The teots were fair.
70. I enjoyed the course except for the tests.
71. I have discussed this course with my spouse at least once a week.
72. As a result of taking this course, I have become more interasted in the subject and would like to take additional courses in this area.
3. As a result of taking this course, I believe I can be a better "spouse."
74. An introductory audio tape explaining each component of the course would have been helpful.
75. The most I could do was try to pass the tests; learning all of the material seomed too much.
76. I find it easier to commnicate with my children as a result of taking this course.
77. A review of basic atudy skilis at the beginning of the course would have been helpful.
78. I enjoyed reading the text.
79. If a student knows the material included in the text, she/he would do well on the tests.
80. I felt the faculty was very competent.
81. I feel the knowledge I acquired will help we to be better citizen.
82. The video programs were a valuable part of the course.
83. I took this course simply to learn.
84. Knowledge I have gained will help me be a better family member.
85. The knowledge $I$ gained in thia course is much more important to me than the grade I received.
86. Reriodic calle from faculty would have sexved to motivate my studying.



```
The extent to which I disagree or agree with the etatement
When responding to the atacements below, use the following acale
                                    419
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$\qquad$ 114. The main benefits $I$ have received from taking this course ware not my original purpose for enrolling.
115. As a result of caking this course, I believe $I$ can be a better parent.
116. The overall effect of this course on my life has been desirable.
117. I would have enjoyed more contact with faculty.
118. A letter explaining the purpose of each component of the course would be helpful.
119. I would have used supplementary "readings" (articles and/or other texts) if they had been available at the learning center.
120. The cost for tuition is too high.
121. Members of my household (other than apouse) watched the video programs.
122. The overall work load for this course was too heavy for the amount of credit given.
123. The video programs did not follow the text.
124. I feel I now know the material covered in the text.
125. The pace of the course was too fast for the time $I$ had to spend on it.
126. I believe that the difficulty level of this course was equal to or greater than a course comparable to it on a college campus.

127. This course has helped me to be a better employee.
128. It would have been helpful to have a meeting of all students enrolled in the area and the instructor at the beginning of the course to discuss expectations and an over-view of the course.
129. The need for quiet study time for this course interfered with the family's activities.
130. As a resuit of taking this course, I have made some new friends.
131. I would like to be given the opportunity of taking comparable forms of an examination until I reached the grade level $I$ wanted to attain in the course.
132. The video programs were interesting to watch.
133. The tests adequately sampled the material covered in the course.
134. The video programs offered at 7-7:30 a.m. Interfered with duties I needed to perform (for my family or other purpose).
135. The "quality" of the text and materials was high.
136. I feel confident to try to seek employment relating to the akills I acquired in this course.
137. Disciplining myself to atudy for a test was difficult.
138. My spouse feels the course was worth the money I spent to take it.
139. I would recomend this course to my friends.
140. The UMA courses provided me with a sense of accomplishment.
141. As a result of taking this coursa, I had much leas time to apend with my family.
142. I found it helpful to discuss the course materisl uith a member (or members) of my household.

143. I would have preferred doing a "project" of aome kind inetead of taking tests for my grade in the course.
_144. I prefer continuing with UM-ISU courses rather than taking a course on a campus.
$\qquad$ 145. I received adequate feedback from the tests about the content of the questions $I$ got wrong, that is, "why my answer was wrong."
146. The faculty was helpful in answering the questions $I$ asked.
_ 147. I disliked the way the video programs eold me what I should do.
148. I worried about taking the tests.
$\qquad$ 149. Hy primary purpose for taking this course was to gain job skills.
150. I enjoyed talking with faculty over the teiephone.
151. An audio cassette tape explaining study methods to use in the course would have been helpful.
152. Involvement with this course has made me feel that $I$ can do college level work.
153. The subject matter content of the course was about what $I$ had expected it to be.
154. The video programs were easy to understand.
155. The faculty seemed genuinely concerned with my progress in the course.
156. I was able to develop effective study techniques as the course progressed.
157. This experience has been a valuable aupplement to my previous education.
158. Through taking this course I have gained new knowledge that will help me to enjoy life more.
159. I disliked some of the actors in the video programe.
160. My original purpose for taking this course has been fulfilled.
161. The text was easy to understand.
162. A mixture of projects and tests is better than just teats on which to base a student's grade.
163. Oversil this was a good course.
164. My family admires me for taking this course.
165. My primary interest in taking the course was to gain Iowa State University academic credit.
166. Taking the UMA-ISU course required a aubstantial effort on my part.
167. The text was a valuable part of the course.
168. Studying for this courge has helped me to better understand my children's study habits and problems.
169. I would suggest that the first test count less than later tests toward the grade in the course.
170. The way the course was presented fit my particular neede.
171. What would you like to have us change about the whole experience co improve it? (ve need your specific suggestions)
172. What do you think should remain as it is?
173. What was your goal or reason for taking the course?
174. Did the UMA experience change the direction of any goals you had prior to taking the course? If "yes," please explain
175. Did you have a reason or goal for taking the course that was not fulfilled? $\qquad$ - If "yes" please explain
176. What are your future goale?

Any other comments?

Thank you so very much for your cooperation. The changes that will be made will be based as much as possible on the information gained from these questionnaires and suggestions you have given to personnel involved, Best wishes and we hope we can serve you again in the future.

## FACULTY BACKGROUND AND OPINEON QUESTIONNAIRE 422

This questionnaire is intended for all instructional staff nembers associated with ISU-UMA courses in Iowe this year. Only the reseascher involved will see your responses. Naturally, we hope that you will reapond to every question, but there may be some questions not appropriate to your course or role, and you may want Eo indicate them by writing "N.A." or oome other explanctory note in the margin.

We especialily invite examples of your experiences with this particular UNA course and suggeations that might be helpful to another university offering this course for the first time. Some of the questions specifically ask for such comments. Add others in the margins or on the last page.

1. Which University of Mid-Americs - ISU courses do you work with?
$1 \quad$ Accounting I
2 Consumer Education
$3 \_$Psychology
2. What is the title of your position with the course (lecturer, tutor, coordinator, etc.)?
3. Briefly describe the activities and reaponsibilities you have and anticipate in this position.
4. What is your university appointment? (Mark one ticle in the appropriate column.)

Full-time Part-time
1 Administrator
2 Lecturer
3 Instructor
4 Assistant Professor
5 Associate Professor
6 Professor
7 Visiting Professor
or Scholar
8 Teaching Assistant
or Fellow
9 Other (What?
5. About what proportion of a full-time position are you expected to spend on the UMA course?


1/3 time
1/4 time Other (What?
6. Are you doing other work in addition to the UMA course this year?

```
1___yes, research at this university
2-yes, teaching at this university
3__yes, administrator at this university
4_yes, teaching or research at another
    college or university
5___yes, nonuniversity employment
6_____raduace student in addition to work
        with the UMA
7__no, this is my only employment
8__other (Please describe:
7. In a general way, we would like to know how you anticipate spending your time on the UMA course and how this compares to the way you usually spend your time when you teach regular introductory college courses in your discipline. Please estimate the percentage of time you anticipate you will spend in each type of function listed below. The total in each column should equal \(100 \%\). (Omit the regular course column if you haven't had experience teaching a regular introductory course in your diacipline.)

Percent of time in:
a)
\begin{tabular}{|c|c|c|}
\hline Course Punction & \begin{tabular}{l}
UMA course \\
I am teaching
\end{tabular} & Regular Univ. course I have taught \\
\hline Classroom or smallgroup teaching & . & \\
\hline Conferring with individual students & & \\
\hline Preparing academic materials and lectures & & \\
\hline Paper grading and related activities & & \\
\hline Administration of the course & & - \\
\hline
\end{tabular}
b) Estimated total
number of hours you plan to spend per week on each type of course
c) Teaching load credits covered in this time estimate
d) For you, how do you estimate the time demands of the UMA course will compare with the time demands of a regular course with similar teaching load credit?

1 much heavier demands in the UMA course
\(\qquad\) somewhat heavier demands
3 about the game work load. somewhat lighter demands
5 much lighter demande
8. About how many students do you estimate will consult with you (in person or by phone) about the course in an average week?
\(1 \_\)none
\(2-1-4\)
\(3-5-8\)
\(4-9-12\)
\(5 \quad\)\begin{tabular}{l}
\(13-16\) \\
6 \\
7 \\
\hline
\end{tabular}\(\quad 17-20\)
more than 20
9. Rate each of the following possible student problems in terms of whether, in your opinion, atudente in a UMA course are more or less likely to have the problem than are atudents in regular introductory courses in the same subject aress. (If you have never worked with regular lower division undergraduates, check here \(\qquad\) and go on to question 10.)
Failure to submit work when due
Anxiety about what is expected
Trouble understanding written material
Tendency to procrastinate; trouble getting
started in the early weeks
Trouble picking up skills or filling in areas
that were weak at the beginning
Concern about progress in the course
Interference from home and job responsibilities
Inadequate study habits
Boredom with the material
Loss of motivation or drive before the end of
the course
Not knowing how to do the assignments
Trouble finding a suitable place to study
IVot having anyone to talk to about the course
Reluctant to consult with the instructor
Other (Write in
10. In your opinion, how useful or helpful will each of the components of the course be to studenta? Mark one answer for each of the components listed.
Unit booklets
Other books used in the course
TV films
Notes on TV and radio programs
Self-asessment questions
Corrected computer-marked assignments
Corrected tutor-marked assignments
Tutor's comments on tutor-marked assignments
"Live" lectures or demonstrations
11. Indicate the extent to which you feel each of the foilowing may be potential course problems.
\begin{tabular}{|c|c|c|c|}
\hline & \begin{tabular}{l}
(1) \\
Not a groblem
\end{tabular} & \begin{tabular}{l}
(2) \\
Somewhat of a problem
\end{tabular} & \begin{tabular}{l}
(3) \\
Serious problem
\end{tabular} \\
\hline Procedures for dietributing materials to atudenta & & - & \\
\hline Procedures for submitting and returning sesignmante & & & \\
\hline Procedure for arriving at a final grade for each a tudent & & & \\
\hline Work load of the teachers/cutors & & & \\
\hline Quality of the printed materials & & & \\
\hline Qualicy of the TV tapes & & & \\
\hline Availability of the printed materials & & & - \\
\hline General operation of the study center(s) & & - & \\
\hline Overall coordination of the course & & & - \\
\hline Motivation of the students & & & \\
\hline Conflicting job demands on faculty time & & & \\
\hline Adequacy of study center facilities & & & \\
\hline Ability of the students & & & - \\
\hline Maintaining the pace of the course & & & \\
\hline Adequacy of counseling help in study centers & & & - \\
\hline Conflicting job and/or home demands on student time & & - & - \\
\hline Other (Write in: & & & \\
\hline
\end{tabular}
12. To what extend do you agree with each of the following atatements?
The course tries to cover too much in the time available
Students should have the option to omit some units
Supplementary lectures are essential for success of the course
As it stands now, the course is given too little academic
credit
Once this course is established on a campus, most of the
teaching/tutoring can be done by graduate students
This UMA course should be open to any student who wants to
attempt it
The pace of the course seems to be too fast
The television programs realiy aren't essential to the course
The uma printed materials are appropriate for use in regular
undergraduate courses
There will not be enough student-faculty contact
others at the university (noninvolved faculty colleagues, etc,
have responded very positively to the introduction of this
course
disagree
13. We would like for you to eatimate the effect of this course on your attitudes, intergate, and practices. please indicate your beat judgment of the course effect for you in each of the following areas.
\begin{tabular}{|c|c|c|c|c|c|}
\hline & & nges the & \[
\begin{aligned}
& \text { recog } \\
& \text { ining }
\end{aligned}
\] & \[
\begin{aligned}
& n \\
& \text { y }
\end{aligned}
\] & \\
\hline & \begin{tabular}{l}
(1) \\
Much \\
more \\
now
\end{tabular} & \begin{tabular}{l}
(2) \\
Some \\
more \\
now
\end{tabular} & \begin{tabular}{l}
(3) \\
About the same
\end{tabular} & \begin{tabular}{l}
(4) \\
Some \\
leas \\
now
\end{tabular} & \begin{tabular}{l}
(5) \\
Much \\
less \\
now
\end{tabular} \\
\hline Interest in working with students who are studying independently & & & & & \\
\hline Interest in preparing or helping to prepare materials for a new off-campus etudy course & & & & & \\
\hline The feeling that a really good course must have regular class meetings and lectures by a professor & & & & & \\
\hline Skepticism about the content of the course & & & & & \\
\hline Concern about the American middle-class "cultural blas" in the UMA course materials & & & & & \\
\hline Interest in nontraditional modes of learning & & & & & \\
\hline The feeling that UMA-type courses are appropriate in the regular college curriculum & & & & & \\
\hline The feeling that being a UMA course tutor is quite different from being a classroom teacher & & & & & \\
\hline Interest in working with older undergraduates & & & & & \\
\hline Skepticism about the background and abilities of the students & & & & & \\
\hline Concern that the content of the course is too difficult for most nontraditional students & & & & & \\
\hline Concern about the faculty effort necessary for the successful conduct of the course & & & & & \\
\hline An uneasy feeling that UMA may not succeed at Iowa State University & & & & & \\
\hline
\end{tabular}
14. Would you like to work with a UMA course again next year?
\begin{tabular}{|c|}
\hline \multirow[t]{4}{*}{} \\
\hline \\
\hline \\
\hline \\
\hline
\end{tabular}
15. In your opinion, will the student who completes this course be prepared to enter more advanced courses in your discipline?
\[
\text { 1_ yes } 2 \text { ______ } \text { no don't know }
\]

Please add any qualification or elaboration you would like to make to this judgment.

The next four questions ask you to comment on your faculty role in relation to the UMA. We hope that you will choose to respond to them. However, if you would rather not take time to write your comants, we can talk about these questions in the interview euggested near the end of this questionnaire. Check here \(\qquad\) if you prefar to diecuss queetions 18-21, and skip to item 22.
16. D1d you have to change your approach to students in the UMA course as compared with dealing with otudents in other courses you have taught or worked with?


If yes, please describe briefiy the changes you found you needed to make. Why were they necessary?
17. Did the UMA course require a different "teacher style," or couid you approach the material, preparations, tests, etc., pretty much like you do for any other course?

1 ___totally different
2 some difference

3 ___few or no differences
4 ___don't know; first teaching experience

If you found that some changes were called for, please describe two or three of them and the alternative procedures that seemed to work best for yous.
18. Now that you have begun working with this course, describe briefly your perception of the education, experience, and personal qualities needed to be a good instructor in this course.
19. If you were advising enother university just preparing to give the course for the first time, what recommendetions would you make for the best possible briefing or preparation of instructors prior to the beginning of the courpe?

For in-service work with instructors during the year?

25. Please use this space to make any additional comments or suggestions that you think might be helpful to the evaluation effort.

What do you see at dhafarancer betwean being a UnA instructor and an on-cange undergraduate instructor?
I. Student Related
A. Eyateation of student's vorix
(on basis of sasta only?) (written reporta on each itudent?)
B. Councaling individual students more-1ena time spent? areas of concern: his fears and anxieties, future plans
C. Diatence from learners telephone communications - superior to appointment arrangement with on-campus studenta? disadvantages advantages -
D. Do you anticipate a difference in the way an adult student will react to "taking a course" as com* pared to campus atudenta? If so, what?
B. Do you anticipate difficulties with the self-pacing aspects of the course. That 1s, students not completing units as a group? Motivating students to coaplete.
II. Course Related
A. What do you see as your role in reference to any of the packaged materials, as for axample:
1. Changing course objectives
2. Designing additional learning activities
3. Clarifying directions
4. Clarifying technical terms
5. Restructuring given tests, adding or eliminating tests
6. Designing alternate methods of evaluating students
B. Do you believe it might be feasible and/or desirable to organize amall discussion groups and be available by phone to these groups? (or be present?)
C. Do you belleve there might be an advantage in having the participants meat as a group for a one-day seminar?
III. University Related
A. What is your interpretation of the purposes of the UMA progrem?
B. What do you see as adyentages or dipadvantiges of this program?
C. What do you see as the getiftudes of other ISU faculty toward this program?
1. Do they know about it?
2. What seems to be the extent of their information?
3. Do they seem pro or con toward it or noncoumittal?
4. Any reaction to you as a member of the UMA team?
D. How do you feel about your involvement?
1. "Chosen" - an honor?
2. A victim - added burden? dead end assignment? or beginning of new opportunity?
3. Work load - too heavy? frustrating? exciting? challenging?
E. Do you anticipate visiting learning centers? How often? Mission there?
F. How much time do you anticipate spending on this course, based on hours per week? How do you anticipate this amount of time will be allocated?
1. Work on course materials, studying them, additions, clarifications, changes
2. Communicating with students
a. Telephone
b. Letters
c. Visits by student to office, campus, appointments
d. Visits with students at centers
e. Grading papers, writing comments, etc.

APPENDIX C. STUDENT RESPONSES TO OPEN ENDED QUESTIONS ON UMA/ISU STUDENT QUESTIONNAIRE, SPRING, 1976

IO WA STATE UNIVERSITY
of Science and Technology
date August 27, 1976

\author{
ro Tom Hannum \\ Dan Ekstrom \\ Ken Elvik \\ L. C. Bokemeier \\ Clair Keller
}

\author{
George McJimsey \\ Hamilton Cravens \\ James Beatty \\ Zora Devrnja \\ Dale Ross
}
from Emilia Nordtvedt
UMA Iowa Coordinator

Here are written comments our UMA students of last Spring gave on the questionnaires they filled out at the end of the course. We think they're fascinating and might help you see what these adults are like.

I hope you can read these over as soon as possible, so we can discuss them at a meeting of all the UMA Fall course mentors, old and new. This meeting I think would be quite useful if we can discuss the program and some of the joys and problems of teaching adults in a distance-learning format. I'11 be trying (!) to schedule this meeting after September 1 , when everyone is back.

I hope that at the meeting we can also discuss what kinds of information, orientation, or support you feel would be useful to yourselves during the term and to faculty members who join our efforts in future terms. We're just getting this aspect of the program underway and there are lots of exciting possibilities.

\section*{ACCOUNTING I QUESTIONNAIRE}
Q. 171: What would you like to have us change about the whole experience to improve it?

Student Number
Response

42 To find out what questions you missed on tests so you can review material where you are weak. To have teacher \& student discussions of the subject would be impossible but very helpful.
8. The video portion more fit the course, then it's efforts to entertain.
50. (If you want humor -- use a few clever remarks rather \(\frac{1}{2}\) of show time!) Have the TV shows be more helpful -- actually explaining situations. I feel Accounting II should follow right away. Provide more answers to end of chapter questions -- why do them if no way to check if right??
92. More tapes, they helped the most. Also, I think if we were sent a copy of the tests and correct answers after we have taken them it would be beneficial so we could see where we made our mistakes. It would help, also, if the learning center could have more copies of the solutions of question at the end of chapters, or at least make available to us a copy to take home and work on in our leisure.
43. The first test could cover 3 chapters instead of 6 making 1 more test necessary.
57. The cassettes were not much more helpful than a written explanation, but more expensive. I did not think they were worth the extra cost. The Accounting TV program was mostly "silly" but I watched the Psychology \& Consumer Experience programs even though I did not take the courses. I enjoyed them much more.
4. it was OK
96. Even though I felt the video component was not particularly helpful in the material it presented, it probably was the motivation needed to get started with the more serious aspects -- text, etc. -- of the course. I objected to the video portion because I felt it treated the student -- me -- as though I were a first grader, just starting the proce of learning.
94. If there are repeat of video programs, the one could be at a different time of day -say 7:00 am and one at 8:00 pm.
93. I thought some of the tests did not cover what was indicated previously.
12. Better TV Instruction less fun stuff. Accounting really would be better in a class I guess with more discussion available I guess -- sometimes hard to grasp on you own -wish I could have been to the instruction class at Fort Dodge but missed it because of a death in family.
91. Overal1, I thought the course was very good, except the video programs, which I thought were lousy. They would just start to present some good information \& then they would get carried away with much to much silliness ---- I doubt if I'11 ever watch Wild Wild West again.
90. Change the TV programs -- Give a more detailed explaination of what the course is about before enrolling, like advance knowledge of books used etc.
89. I think the \(T V\) programs as they were were almost a total wasteof time. Even a lecture that explained specific points would be better.
11. 1) Faculty members themselves present video programs in a classroom manner, 2) 非128 of this questionnaire is good idea. 3) All anwers to text questions available to each

\section*{432}
student rather then only at Learning Center.
87. A meeting with the professors toward the beginning of the class would be helpful -even hefore the first test -- it would also allow us to meet other class members. The television program was entertaining, but lacking somewhat in content. I felt toward the end that it was not worth the time to watch.
84. A better TV program is needed. Also more learning centers -- not so much for tests as for answers to the text questions.
9. A course like Consumer Experience could have a more complete text. The video programs cover toomuch material in too short a time. The Video Programs could be earlier --(6:30-7:00)
79. No response
77. I think the place of taking tests should be changed -- The extension office in this county is certainly not an ideal test taking situation, and it is not the extension personnel's fault. They are not equiped for this situation. Also I enrolled late and did not receive my books etc. for two weeks after the video program began. I felt pushed to catch up most of the time.
73. I feel that there is a certain amount of time wasted in the video presentation; also that the Study guide, \& Check points need a review for errors.
72. Change video program!
65. It was so hard to get your calls through to your instructor when you needed help and there was such a time lapse, I soon gave up and struggled on my own. When Mr. Bokemeier did get my calls, his help was very valuable and easy to understand.
60. Have the video programs taught by professional accountants and/or professors--not by professional actors. The(work) books contained a number of errors, they should be more thoroughly proofed. Many copies of the problem manual (of the text) \(\therefore\) nuld be available at the centers. The exam procefdure under which one cannot determine one's errors and learn from them is defective, one needs the written question in front of one to see one's errors.
54. 1. The course was a little too advanced for beginners.
2. More frequent testing. Probably after each two chapters.
3. More time on each chapter before each test.
53. Felt that the video programs were too superficial. The "checkpoints" were not adequate for testing knowledge of the material covered. I felt that the test did not cover what seemed to be emphasized in the text and the study guides. There is not enough feedback. Would like copies of questions missed on tests so could learn correct answers.
49. The course material was presented backwards. Material for the first three chapters, then the last four chapters, then do the chapter for tests 2 and 3 the same. Didn't get that much from text, too wordy and not enough to the point--tapes were great! Study guides and checkpoints were adol.
48. It might be easier for some if you were to broadcast the TV program once in the morning about 7 or 7:30 one day of the week and the second time at 4 or 4:30. Also it would be helpful to include more explanation with the checkpoints.
3. Improvement in the handling of the feedback sheet on tests. When I took the first test they were checked at the learning center and I received the student feedback sheet the next day. If a person had any questions about the test they were still fresh in your mind. Later the tests were sent somewhere else to be checked and it was a week or more before I would receive the feedback sheet. I never did receive one from Exam 4--only the grade from Mr. Bokemeier.
46. Some faculty should work at night once a week, it' 11 be much easier for students to reach. Make appointments is of troublesome in working hours. Student learning time basis is off hour while the faculty is on an on-hour basis--to me, talking through the telephone with faculty is a long process. Of course, any boss wouldn't like to have employees talk by telephone for the employees own purpose.
44. Should have more detailed video programs one per day for each week of course with different material in each program rather than two programs with the same material.
41. I felt the video portion was a waste of time, Many more courses, it would seem to me, could be offered if the television portion was eliminated.
40. Video presentation was too childish and I could not become interested. Solutions to the problems should be provided so you can figure out where you have made an error.
39. Test questions more specific.
36. Be able to retake tests to improve grade or some sort of assignment to redeem yourself. I felt very frustrated after four years of college, that there was no way to improve my grade. I have never taken a course that my grade was based purely on four test grades. There definitely needs to be extra projects.
35. A better audio-visual presentation. The answers to test questions missed so we don't have to go to the learning center to find out.
32. Not so much reading material and more directive work.
29. I learned from the TV programs--but thought they could ihave been much more informative. At times they seemed a waste of time:
26. More complete answers to questions in text would be helpful. My studying was carried on during hours when I'm sure faculty would have been unavailable and often needed the assurance that text problems were being done correctly.
23. Test review sessions at which students could examine their test errors and be able to directly relate where they had problems. Also one or two sessions with instructors to cover the more complicated areas to be sure students are progressing in the right direction.
22. The video segment was more like a presentation for Jr. High students than for adult students. I felt that it could have been more informative.
21. I would like to know the questions \(I\) missed on the tests so as \(I\) may get back on the right track.
20. Allow the student to look over the test after he knows what he missed.
19. Improve the video programs -- be more specific things covered and not so much goofing around.
18. I felt a lot of the questions in the tests were very catchy and wouldn't apply or confront a person in the job as an accountint. I also recommend allowing each student to purchase or use a Solutions Manual for the questions in the text. This helped me a great deal in areas where I had difficulty.
7. The video portion should be more formal.
30. Stop the TV part or put some detail in it instead of fun and games
31. The TV programs were silly. I would prefer that someone lecture as in a classroom. There isn't anything about accounting that is meant to be funny or entertaining. I gave up watching altogether about halfway through as I couldn't stand it.
34. No response
66. Suggest the video relate to sections of the text so that it would be easier to follow. I wasted some time in trying to decide what part of text I was supposed to relate to.
76. Although the brochures said "The courses are fashioned to fit the life style of the non-tradional student.", maybe I'm the most non-traditional student. My enrollment was accepted in early June, but about 2 weeks later was informed that If I didn't complete it by June 30th I'd autnmatically fail. Only by efforts on my part, was this edict changed, I was not notified of same, I had to call again to find out my standing. In general - some frustrating experiences this first time.
95. No response

ACCOUNTING I QUESTIONNAIRE
Q. 172: What do you think should remain as it is?

Student Number
Response
18. The time the program is given on TV - the number of workbooks \& cassettes, etc.
19. The audio cassettes were very helpful.
20. Almost everything.
21. Checkpoints, and tests (with exception of explanation of missed questions), text, cassettes, study guides.
22. The text was fine. The audio-assisted problems were helpful.
23. Text, audio cassettes and all study material except video excellent.
26. Cassettes were excellent as were TV programs.
29. Liked the availability of the faculty via the toll free phone. Don't think this could be improved on.
32. Text book.
35. All other except what was mentioned
36. The text, study guide \& checkpoints \& tapes
39. .not sure
40. Cassettes are quite helpful
41. I felt the rest of the course was well developed and excellent for home study.
44. Study guide, text, tapes, and checkpoints.
46. No response.
3. I like the time it appears on TV. I like the freedom it offers -- work at your own pace and then take the exams when you feel you are ready.
48. The audio cassettes helped tremendously in understanding difficult parts of each lesson.
49. Tapes, study guide, checkpoints.
53. The text was good, Study Guides very helpfud.
54. The overall format was great. The study guide was excellent. The text maybe a little bit deep for beginners.
60. Mr. Bokemeier's enthusiasm and encouragement.
65. The audio tapes were very helpful because they explained things. I wish there had been tapes for the questions in the text.
72. All but vido program.
73. I think that all other components and systems are generally good.
77. The text, study guide, tapes, video programs were excellent. I didn't enjoy the tests, but they seem to be a necessary evil.
79. Cassettes were very helpful to me.
9. Humor in the video programs was good.
84. No response
87. The material was excellent except for the mistakes in the checkpoint book. All personnel were very helpful and cooperative.
11. 1) Audio cassettes good checking understanding tool
2) Checkpoints workbook good.
89. All but TV and time -- expecially haveing tests close together.
90. Study guide and tapes and checkpoints.
91. Everything except the TV.
12. No comment.
93. TV program was excellent. Cassettes were good. Study guide \& checkpoints are good.
94. Cassettes tapes -- proved very valuable to me. If I didn't understand the portion -I could replay it.
96. The audio cassettes were a most helpful aid in understanding the text material. The text is direct and to the point -- excellent in getting the material across to the students easy access to a learning center was important, which made the testing easier.
4. the whole thing
57. The text, study guides and other study materials, with the exception the cassettes, I do not necessarily want them omitted but if kept in they should provide more additiona information not easily explained by the printed work'.
43. The course as a whole is excellent particularily the cassettes which were of tremendous help.
92. Most of it, except more tapes.
50. Tapes are very good -- but could be used in the more difficult situations.
8. The audio tapes were very helpful. The work books provided good practice, and helped in retaining the matter.
42. TV program, Text, study guide \& other materials seemed adequate. The cassette tapes were very good.
95. No response
76. The Study Guides, Text, Audio assisted Problems and check list.
66. Have the video actors relate to actual businass transactions without all the time wasted in getting to the point.
34. No response 437
31. I like the tapes. Although I haven't completed the course, I was able to learn from the text and the tapes. The study guide was helpful too.
30. Tapes
7. The rest of it.

\title{
ACCOUNTING I QUESTIONNAIRE
}

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Q. 173: What was your goal or reason for taking the course?

Student Number
Response
,
41. To add to number of credits I have at Iowa State and help me in the field of Accounting My work is in Accounting.
8. Many years ago, I started taking accounting at a college, but never had the opportunity to follow thru with raising a family, The time seemed right with most of my children grown.
50. To learn -- and be an aid in finding employment should desire to do so.
92. I want to get a bookkeeping job. I also wanted to see if \(I\) were capable of doing it.
42. To gain accounting knowledge as a background to my parttime work of income tax writing.
57. 1) To prove I could still do college work. 2) I do our farm bookkeeping \& tax. work and felt the course would help there. 3) to possibly aid in securing part-time employment.
4. credit hours
96. Self-enrichment while receiving the credits which could later be applied toward a degret
94. Understand more of the accounting process and how it related to people.
93. Self esteem -- expexience in case I should ever go back to work -- something to keep . me busy.
12. See if I could still sțudy to accomplish this task -. just wanted to mo- have thought of going to school after kids are away from home.
91. To help me in my present job.
90. To increase my span of thought away from pain which \(I\) suffer constantly.
89. Get ISU credit, substitute for H.S. book keeping course I was unable to take.
11. 1) To increase my understanding of the financial reports our accountant gives us conserning our service station business. 2) to find out what college level work is like and if \(I\) could handle it. 3) to secure some college credit if in future I decide to try for a degree.
87. I've had an interest in accounting since working as a Bookkeeper severl yrs ago and was curious to see if the interest remained after a closer look. I have been somewhat unhappy with my current career choice of teaching.
84. No response
9. To acquire college credit without having to on campus.
79. Help in budgeting duty at my office and home.
77. I wanted to learn more about accounting as I felt it would be helpful to our family's business. It was! Also I really wanted to see if I could cope with a college course again with the idea that I might return to college to earn a degree.
73. I wished to improve my job opportunities and perhaps eventually be able to work toward self-employment in this area.
72. To obtain college credit.
65. To gain job skills that would enable me to qualify for a better job in a field \(I\) enjoy.
60. To become acquainted with the discipline
54. To understand the accounting process better. A CPA does our monthly accounting but I wished to comprehend more fully.
53. Wanted to learn more about the work my husband does----this course did help, But if he had not been available to help and point out thing I didn't understand I would have been in trouble. I wanted to be able to understand the problems he faces and talk to him intelligently about his work.
49. Academic credit for undergraduate completion.
48. To learn what accounting was all about and to prove to myself \(I\) can yet study and comprehend a subject.
3. To learn more of accounting. I did know the bookkeeping part before. I wanted to learn more of accounting to make the farm records I keep more meaningful to us.
46. gaining degree
44. To gain some ingight into business financial statements.
41. I presently keep my husbands books for his farming operation, felt it might be of some help. Also, if the need would ever arise for me to become the wage earner in our family, I would probably go back to school for a degree in accounting. I currently have credits for \(2 \frac{1}{2}\) years at ISU in Home Ec. Applied Art.
40. To learn something about accounting.
39. To find out if I would like doing this for a career.
36. Better understanding of my present job and to understant the terminology of letters, statements, surveys, etc. I had to type.
35. I needed extra credit to keep my teaching certificate valid and this course also was of interest to me.
\$2. To secure employment.
29. To help me in keeping books fon our own business.
36. To improve my capability in keeping records for our own business.
23. Self-improvement so that \(I\) am better equipped to do my job.
22. To review and increase my accounting knowledge.
21. To receive some college credit at ISU--to try out a home study course.
20. To learn accounting.
19. Gaining some college credit while at home.
18. To keep my mind active and from becoming stagnant, to improve myself, to do a better job of bookwork for my hus band's business.
7. For credit
30. To see if I could learn at my age
31. I do the bookkeeping for our farming operation and I wanted to develop a better understanding of the balance sheet and some of the procedures that we use.
34. No response
66. To learn about accounting and further my abilities to improve as an individual and give series thought to going on for a possible degree.
76. Curiosity, self satifaction, had wanted to take Accounging courses for some time.
95. I was interested inseeing what it would be like to take a course via TV. I had that experience but found I did not have the time to devote to the class what with my change in personal plans.

\section*{ACCOUNTING I QUESTIONNAIRE \\ 441}
Q. 174: Did the UMA experience change the direction of any goals you had prior to taking the course? If yes, please explain.

Student number
Response
18. No
19. no
20. no
21. no
22. no
23. no
26. no
29. no
\(\therefore\) 32. Yes, I decided I wasn \({ }^{\circ}\) t suited.
35. no
36. no
39. Yes, I won't be an accountant now
40. No
41. no
44. Yes, Would not be able to become a CPA.
46. no
3. no
48. Yes, I would be interested in taking more courses similar to this one.
49. no
53. No
54. no
60. no response
65. no
72. no
73. yes, I have become interested in the possibility of obtaining a degree by adding to the one year of college \(I\) have had.
77. No
79. Yes, It was more in accumulating what you spend, not budgeting for it.
9. no
84. no
87. no
11. no
89. Yes, I was thinking of an accounting career, but changed my mind after seme contack with the subject
90. No
91. no
12. no response
93. yes, was going to go to ICC at Eagle Grove.
94. No
96. Yes, I have become more encouraged to continue efforts toward a college degree.
4. no
57. Yes, Only slightly, I am more sure now I would fike to finish to get my degree but I still not sure how.

92. no
50. no
8. no
42. no
95. No response
76. No
66. Not yet
34. No response
31. No
30. No
7. No
Q. 175: Did you have a reason or goal for taking the course that was not fulfilled? If yes, please explain.

Student number
Response
42. No
8. Yes, because I didn't complete the course.
50. no
92. no
43. no
57. no
4. no
96. no
94. no
93. no
12. no response
91. no
90. no
89. Yes, to get high school credit.
11. no
87. no
84. no
9. no
79. yes, same as above
77. no
73. no
72. no
65. no
60. no
54. no
53. yes, I just didn't learn enough'
49. no
48. no'
3. no
46. no response
44. no
41. neurtal--but parts were not as directly related to a farm operation-corporation as might have been helpful to me as an individual.
40. no
39. no
36. yes, I was very disappointed in my grade and no chance to improve it
35. no
32. yes, get a better job
29. no
26. no
23. no
22. no
21. no
20. no
19. no
18. yes, To be a better bookkeeper for my husband's small business. As it turned out I was so busy with my accounting course, my bookkeeping for him suffered.
7. No
30. No
31. No
34. No response
66. Yes, I would have liked to have been able to relate more to actual business procedures.
76. No
95. No response
Q. 176: What are your future goals?

Student number
Response

E*
18. I would like to take the remainder of the textbook in another course and would like information on when this course will be given, and if things in the course will be similar to Accounting I.
19. Continuing to pick up some oollege credits hopefully at home.
20. Learn more accounting.
21. Take accounting II and try to staxt a bookkeeping business of my own.
22. To further my knowledge of accounting aspecially tax accounting.
23. no response
26. I would like to continue earning college credits and maybe eventually attain a degree
29. Have none
32. None in this area
35. I still need 3 more credit hours to renew my certificate so I would like to take another UMA course.
36. To take more courses to renew my teacher certificates.
39. not sure
40. undecided
41. I am interested in gaining more credits toward a college degree and more profieciency in accounting.
44. Change of jobs to possible ownership of business.
46. business administration, management
3. I plan to enroll in more UMA ISU courses. I am not working toward any certain goal at this time--just finding new aresa of interest.
48. I would like to eventually work in an accounting department for a moderate bized firm
49. Teacher and perhaps teach nursing. I am a Radiologic Technologist at present
53. Would like to further pursue this area as I did become rather interested in it-would eventually like to get a degree when family responsibilities will allow it.
54. Unknown at this point.
60. ??
65. To take Accounting II so I will have the required hours in Accounting to qualify for a much better position.
72. To take additional courses for college credits.
73. I hope to take further courses through UMA and where possible courses by correspondence
77. I am still undecided about going back to college fulltime, but I certainly enjoyed expanding my 隹ind with this new knowledge.
79. Take more UMA courses along the Business Education line if possible.
9. I would like to work toward a degree if \(I\) can continue mystudies at home. It will take a longer time, but it will be worth it.
84. Working up to a higher position where I work.
87. To hopefully take the second sememster of this course and then decide if \(I\) want to continue working toward a degree in accounting.
11. I waild like to become an Interior DEcorator. I need to obtain information concerning requirements in training. I jplan to take an on-campus course in the next year.
89. College
90. Nothing for further education until my present health improves.
91. Stay in the accounting field
12. No response
93. Will take Ačcounting II if UMA offers it or maybe at Iowa Central at Eagle Grove or Ft. Dodge.
94. Work at some accounting job-maybe parttime to begin
96. Undecided--perhaps a degree--but more importantly \(I\) would like to learn more about a variety of subjects.
4. graduate from University of Iowa in May, 1977
57. I would like to go on to get a degree by some combination of credits. \(I_{f}\) I could have rated question l6as one thousand, I would Thave. I would be willifg to come to Ames to discuss this if it is possible at some time in the future. During the summer I am now taking a correspondence course from UNI on "Religions of the World".
43. To continue with more accounting education.
92. Perhaps take the 2nd part of accounting I. However, if I get a job, I may not lhave time or energy to do it.
50. Maybe seek employement=-Take ACcounting II if possible.
8. To take Business and Management courses to qualify myself for a Management postion.
42. To take additional TV courses, if offered from Iowa State. Really would like to get a degree but with obstacles of age, and full time employment I realize it is impossible.
95. No response
76. Maybe Accounting II - If I can again do it at my own time and speed.
66. Unknown at this time. Financial conditions and time available will have a great effect on my future practices.
34. No response
31. I don't have any plans at this time to take any more courses as \(I\) already have a college degree.
30. No response
7. To take more courses.
Q. Any other comments?

Students Number
42. No response
8. No response
50. Maybe seek employment - Take Accounting II if possible
92. I felt insecure about calling the faculty. This wasn't their fault -- I'm a little introverted in some way.
42. No response
57. Yes, I wish a learning center would be established closer so \(I\) could use it and possibly have contact with other students. I had none. The nearest learning Center is 80 miles away and I took tests at the local extension office.
4. No response
96. The instructors were most helpful and easy to talk to on the phone.
94. No response
93. No response
12. Enjoyed the study, work and all -- Will try other courses if available -- took all .3 courses and that was too much but still enjoyed it.
91. I hadn't had any bookkeeping in high school and therefore found the course was a little more difficult than anticipated.
90. No response
89. No response
11. No response
87. An answer book for the end-of-chapter questions in the textbook would be most helpfu1.
84. No response
9. I have really enjoyed the opportunity to participate in this experiment. Taking college courses for credit and working toward a degree has been my life goal but the opportunity never arose until the UNA-ISU program. I hope this fall I can continue with more courses \(I\) will need in working towards a degree. Thanks alot!
79. The fact I did not contact faculty at any time was my own fault. The one tinie we met in Des Moines with them was interesting. My time was my down fall. With 3 children 6-12 years old in sports, etc. and very active in church work etc. I did not have time to study as well as work in an office \(40-50\) hours a week. Life on the farm also gave me too much yard work, etc. these last few months. It was extremely difficult for me.
77. Thanks, I hope you'll continue with courses, as I plan to enroll if you do.
73. I was very pleased with the courses. I felt that the presentation was very good and that all those involved from instructors to personel on campus and in the learning centers seemed genuinely interested in the success of the course and even more in contributing to the success of the individual students.
72. No response
65. No response
60. I believe video programs have the potential for providing a great learning experience -- unfortunately, I thought the way Accounting I was presented, provided some laughs, but little else. It would be beneficial to have more personal contact with the faculty.
54. I need to continue with this text and study guide.
53. No response
49. No response
48. On the whole, this course was truly a rewarding experience. By haveing exams every so often, you were forced to keep up with your lesson. I felt this was better than other correspondence courses for this reason.
3. I really like this way of going to college!
46. No response
44. No response
41. As indicated at the informational meeting that \(I\) attended, it seemed that most courses that would be offered would be on a beginning level of courses. As i already have \(2 \frac{3}{2}\) years of college credit I wonder how many courses will be offered at a level of any significant toward my degree. It was also indicated that only one course beyond Accounting I will be offered in this area. I would be very interested in a number of other Accounting courses, or courses required for graduation in accounting such as economics, statistics, etc.
40. No response
39. It was a super hard course.
36. No response
35. I do hope thits type of courses will continue.
32. I didn't think the course was worth the money. Should be able to get text books at less amount, If credit isn't desired.
29. Enjoyed the course and am very glad I took it. Certainly hope I can do it again next year.
26. Enjoyed the course immensely.
23. No response
22. I think this is a very important program \& \(I\) would like to see it continue.
21. UMA is to be commended for a "first job" well done.
20. Your questionnaires are too long.
19. No response
18. I never sat down to study that I didn't enjoy it. I had never taken bookkeeping or accounting before and felt those that were taking it as a refreser course probably lowered our grade. I feit I learned a lot, but expected to get better grades on my tests, because I really felt I knew the material when I went to take my test.
7. No response
30. No respanse
31. My answers to this questionnaire will not be too helpful as I did not use the learning center or faculty help.
34. Because of illness I could not finish the course so \(I\) do not feel I could do justice to the questionnaire. I did feel the tapes were a valuable part of the course. I did find the text hard to understand at times but being out of school for so long didn't help.
66. I plan to watch the rebroadcast of this course in the fall to see if the videos improve to determine if \(I\) continue in any courses. Also am interested in basic courses such as algebra and english.
76. Yes, instructors need to recognize that they are working with NON-tradtional students., and not completely in an academic college world. A1l students don't have same goals for taking courses and instructors need to have more flexibility in time available to students, especially if student is at or willing to come to a learning center for video tape review and tests. Several of my comments relative to instructors were scored "50". This is because I've had no contact with them, thus not able to form a positive or negative response. Was told they would not be available for consultation after June 30th. If this was changed, I want not informed of the change and accepted this edict, but continued with my study.
95. No response

Question 非 171. What would you like to have us change about the whole experience to improve it? (we need your specific suggestions)
10. No response
17. No response
33. No response
38. It was just too difficult for someone not in the habit of studying. Maybe go a little slower.
63. Nothing
88. Re: Accounting I; the teaching package was unnecessarily complicated and cumbersom. Physical space to stydy is a consideration. The TV Show was awful. A traditional approach is better.
25. The video programs really didn't help that much. They should have given a better outline as to what should be studied.
28. I suggest that the tests be reviewed as a group with the faculty. The TV program is of Sesame Street level I thought my 8 yr . old son was more interested in it than I.
58. No response.
75. Continue the fine work, Offer more courses.
91. I thought the course was very good except for the video portion, which I felt was of no help at all.

Question \(⿰ ⿰ 三 丨 ⿰ 丨 三 ⿻ ⿻ 一 𠃋 十 一 ~ 172 . ~ W h a t ~ d o ~ y o u ~ t h i n k ~ s h o u l d ~ r e m a i n ~ a s ~ i t ~ i s ? ~\)
10．I liked seeing the video program twice．Once before studying the text and again after reading it．

17．No response
33．No response
38．No response
63．I thought it was all good
88．Nothing ．．．．．i
91．No response
75．Every part of Accounting I pleased me．
58．The repeat of the program again the same week．
28．No response
25．The Audio tapes were good help．

ACCOUNTING
Question 非173. What was your goal or reason for taking the course?
10. I do the book work for my husband's construction business and wanted to karn something about accounting.
17. No response
33. I was hoping for help with my accounting work as city clerk in a small Iowa city but found it really did not apply to my work. Dropped the course for this reason - still want to complete it but have found the time required to be nearly impossible.
63. To better enable me to keep books and to prepare for income tax records, etc.
88. Post grad. credit, additional skills to relate to my formal employment and personal business
25. To learn more things to keep my mind active.
28. I am not able to attend campus - would like to receive some accounting courses
58. To improve my knowledge of accounting. My husband is an accountant.
75. To update the knowledge I already have and reasure myself in the field which I am presently pursuing.
91. Make my job easier and possibly to get more money

\section*{ACCOUNTING}

Question 非174. Did the UMA experience change the direction of any goals you had prior to taking the course?
10. No
17. No respoase

33: No Yes. Struggle to get through
63. No
88. No
91. No
75. No
58. No
28. No
25. Yes, I think I'd rather go in a different direction than accounting

\section*{ACCOUNTING}

Question 175. Did you have a reason or goal for taking the course that was not fulfilled? if "yes", please explain
10. No
17. No response
33. Yes. As above, Di.d not really apply to my job
38. No
63. NO.
88. No
25. No
28. No
58. No
75. No
91. No

\section*{ACCOUNTING}

Question \(\# 176\). What are your future goals?
10. I plan to continue to audit some of the courses you will offer. Some day I would like to work toward a Masters Degree
17. No response
33. No response
38. No response
63. No respomse
88. Masters Degree in Education
91. I would like to take more courses if the cost doenn't prohibit it.
75. More knowledge
58. To take Accounting II when it is offered
28. No response
25. Maybe to take some more courses as time and money permit.

\section*{ACCOUNTING}

Any other comments?
10. No response
17. No response
33. Sorry to be so slow in completing this
38. No response
63. No response
88. No response
25. I think take College courses via TV and the mail could make it easier for a lot of people to get college credits. I think it is harder than it would be in a Cass room type of schooling.
28. I did not feel free to contact the instructors which did not help but this was no fault of theirs.
58. No rsponse.
75. I do hope more people will discover the opportunity to take advantage of what you are offering to further their education.
91. I thought the course was a little more advanced than \(I\) had expected but as it worked out it seemed to be just waht I needed.
Q. 171: What would you like to have us change about the whole experience to improve it?

Student
Number
Response
11. Number 128 of this questionnaire is a good idea. (128. It would have been helpful to have a meeting of all students enrolled in the area and the instructor at the beginning of the course to discuss expectations and an over-view of the course.)
116. Nothing in particular
3. I think it would help to meet the instructor and other students in the area near the beginning of the course -- I think it would make telephone calling alittle easier. More information about questions missed on tests.
4. It was ok the way it was except \(I\) felt the test were a little picky on items -pulling exact quotes from the text.
121. Perhaps one teacher I did not feel two teachers added anything. I started watching Accounting I but hated the comedy and stopped watching. Also an address to write instead of call - I'm on a party line.
120. Feedback from tests and papers. Need to have some idea of questions missed on tests. Have only received information back on first test. So wonder how I am doing. Have no idea what i missed on the test, should have more instruction about how the written assignment should be submitted.
12. Really enjoyed it. Next time I will take less courses at a time and enjoy it more. So I can consentrate on one course and do better. Took all three and with family problems that came up it was hard.
119. The written outline of the TV programs be more specific, test grades be told after each test. Delete the newspaper type test.
118. (Being a farm wife) Scheduleing a course to begin in the early winter months and be completed before spring work.
115. To be able to get feed back on tests without going to the center as \(I\) didn't feel it was worth the drive but was curious what was missed and the correct answer.
114. Nothing
110. Feedback of test results without having to go to area office to see the tests--I didn't have time or take time to do this.
109. More faculty contact by phone after exams and quicker feedback. I knew how many I missed, but not "what" I missed. Important to know what was missed so as to prosper from one"s errors. Also show same program twice during a week so if you missed a program you wouldn't have to drive to learning center to make it up. Second
showing could be anytime or anyday.
108. I learned much from this course that can be used everyday. I would have liked to have had my test and project grades returned sooner. We are now finished with the course and still haven't received my grade from the 2nd test. The test questions weren't always clear and I didn't feel they were over the most important facts or over the things that should have been remembered for the future. But, I'm no teacher and I realize your staff is busy.

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107. Have faculty meet with those taking the course - so student can meet faculty member and others taking course. Faculty member could go over course materials, purpose; etc. and discuss study skills before the course starts.
104. Mixture of test and projects. One essay (or two) of each segment to see how well you understand the material. Example, I know the difference between a govemment \(H\) and \(E\) bond but \(I\) 'm not sure \(I\) answered the questions about them correctly.
102. Information on where to obtain some of the reports and surveys mentioned in suggested sources of information.
101. I don't think test of multiple choice or true false answers are a true indication of how much a student has learned - correct guesses don't mean you know the material. I think a combination of multiple choice and essay would be a better way of testing. Also, I don't feel it is fair to put in trick questions. This. won't show what a person has learned but only that a trick word has caused him: to miss a question
97. Auto sales segment. Deal was to be made as cash then work on trade in - very unfair to dealer. More could run entire session on estate planning. We could use lots of help on this.
113. No response
Q. 172: What do you think should remain as it is?

Student
Number
Respoinse
97. Using video tapes -- useful to go to center to review.
101. For the most part I think the course was good and attempts were made to make it easy for most people to take a course.
102. All the rest of the material.
104. I thought the TV presentation was excellent and moved along with out dragging -- easy to underttand.
108. No response
107. Everything else.
109. Program time 7 am Texts were good although TV program guide had numerous spelling errors and misunderstanding in them. Sometime hard to get a hold of the instructor. Wats line busy all the time.
110. Video tape programs, textbooks and other helps.
114. Everything
115. Everything else was fine.
118. Learning Center testing
119. Two basic texts TV programs flexibility of testing dates and times.
12. No response
120. Lenght of course seemd about right
121. Purhaps a means of barrowing books related if they were wanted. I could get them but not as easy as I mould have liked.
4. The whole thing
3. I liked the time of the TV program 7-7:30 am. Also the flexibility of this type of college work - really appeals to me.
116. General concept was good.
11. TV component is good
113. No response
Q. 173: What was your goal or reason for taking the course?

Student
11. 1) To become a better consumer 2) To find out what college level work is like and if I could handle it 3) To secure some college credit if in the future \(I\) decide to work toward a degree.
116. To prepare myself for possible advancement in my present field of employment.
3. In reading the bnochure on these courses I felt Consumer Experience would give me know ledge that I could use every day and. I feel it really has.
4. To get hours of credit.
521. Gain new ideas.
120. Knowledge to use in every day life.
12. To learn and see if \(I\) could take courses at my age after so long out of school.
119. To take a course that was interesting to me while also fulfilling part of my credits necessary to renew my teaching certificate.
718. 1. Gain college credits. 2. Personal gratification(as to gain confidence in studying again).
115. For learning and for college credit. To keep up taching certificate.
114. Obtaining college credit to apply toward renewing teaching certificate in an interesting course.
110. 1. Interesting topic 2. To get additional credit for keeping my teaching certificate up to date.
109. 1. Renew my teaching certificate. 2. Fun 3. Information
707. To learn and see how \(I\) would do on a college level course and learn more about a particular subject.
108. To add more credits as \(I\) am seeking a degree in business.
104. It was a way to add a 3 hour elective credit without driving hours in the winter.
162. To test my ability to study and retain information at my age (69). I think my memory has improved.
101. Personal satisfaction
97. Member of consumers group. A11 knowledge useful.
113. To gain credits for advanced degree
Q. 174: Did the UMA experience change the direction of any goals you had prior to taking the course? If yes, please explain.

Student
Number
Response
97. No
101. No
102. No
104. No
108. No
107. No
, 009 . Yes-- Reinforced my interest in family environment college at ISU.
110. No
114. No
115. No
118. No
119. \(\cdot\) No
12. I really learned a lot--wish I had had this course years ago.
120. No
121. No
4. SNo
3. No
116. No
11. sNo
113. No response
Q. 175: Did you have a reason or goal for taking the course that was not fulfilled? If yes, please explain.

Student number Response
11. No
116. No
3. No
4. No
121. No
120. No
12. No response
119. No
118. No
115. No
114. No
110. No
109. Somewhat, wish it had spent more time on investments (stocks, bonds, etc.)
107. No
108. No
104. No
102. No
101. No
97. Yes, Needed more Information on where to go for 'help.
113. No response

\section*{CONSUMER EXPERIENCE QUESTIONNAIRE}

> Q. 176: What are your future goals?
97. No response

10k. I would enjoy taking more courses--not necessarily towards a degree--but again for personal satisfaction and learning.
102. To continue studying whatever and however possible.
104. To finish at Buena Vista
108. My goal presently is to graduate from Ellsworth Commity College, raise my family and then maybe later go on for a four-year degree.
107. Probably more college courses, possibly UMA if courses offered interest me. Maybe some job related courses. Since I enjoy studying, I' 11 probably take one course a semester. Other goals are uncertain right now.
109. Continue to take UMA courses for fun. I've been accepted into graduate school at ISU. If course work at ISU looks interesting and falls at a convenient, may take courses on campus.
110. Teaching school(Höme Economics) at the present time and 1976-77.
114. Continue as a hourswife and mother and possible return to teaching in 5 to 10 years.
115. I'm not sure--maybe substitute teach or teach full time when my children are all. in school.
118. Eventually to receive a degree.
119. To earn enough credits to renew my teaching certificate.
12. May try to get more credits toward a degree after kids are out on their own.
120. No response
121. No response
4. : No response
3. My first reason for taking these courses is to improve myself. SEcond is to gain knowledge in several areas so I would know more of \(!\) what area I would want to work toward a degree in.
116. Advancement in the field of purchasing as related to my present employment.
11. I want to take an on campus course in the next year and compare UMA-ISU with on campus. I would like to become an interior decorator.
113. Noresponse
11. I need to obtain information concerning training requirements
116. No response
3. I enjoyed this consumer experience course very much and felt I learned much from it. I was a little upset over the last test--felt there were questions in it that were never convered by the material. In talking with Mrs. Lapan about it she said there was a consumer directory supposed to be to each student of the course. I never received a copy and therefore, didn't know anything about these questions.
4. No response
121. Having a teacher answer questions on \(T V\) in response to questions called in would be great. It would be patterned after "Dimension Five".
120. No response
12. No response
119. This questionnaire is awfully dong and involed
118. No response
115.. I enjoyed the course. It would be nice to find out my final grade shortly after finishing the course.
114. No response
110. The course was very worthwhile land practical--I just didn't have time to study the text as I should have due to my job responsibilities.
109. Continue to offer more TVcourses. Very easy and helpful in attaining college credit for \({ }^{\text {? }}\) us: " Country Folk" who would otherwise have to commute.
107. I enjoyed taking Consumer E perience-- it's a very practical course. I want my four lchildren to take it--my oldest through UMA if it's available in Iowa City any my others in their senior lyear at ISU. It's very convenient to take in one's own home as long as it's early in the day before jobs and other committments interfere.
108. No response
104. No response
102. Would it be possible for a si申ut in to take the tests at home? I would have enjoyed it more, had I not been the only enrollee in Emmet County. I taped the video (audio portion) programs, and found the rassettes very helpful in studying \& reviewing.
101. The first time \(I\) called to talk with the faculty member, my call was not returned until the next day because I called on her day off. I would like to have been informed of this when I called. The second time my call was not returned until the next day and I was a little upset because I had waited the entire day before for the call to be returned. It's very irritating when there are things to be done and you can't do them because you are waiting for a call that doesn't come.
97. No response.
113. I am very sorry I cannot answer all the questions. I think the courses very good for undergraduates. I had had 60 years of buying and selling so \(I\) could not get the results that a younger person. I would say the material offered, if I could have had it years ago, would have saved me from making many of the mistakes in buying and selling that I have made over the years. What I watched after I dropped the course, I found very interesting and as I have said before I think it all very much worth while for a young person.

Question 非 171. What would you like to have us change about the whole experience to improve it? (we need your specific suggestions)
100. I needed some direct contact with teachers and students to understand the reauirements of the course
111. The last third was pretty heavy. But maybe only for me. Perhaps others were more knowledgeable about it

Question 非 .172 What do you think should remain as it is?
100. The tayes were suitable
111. No response

Question \#173. What was your goal or reason for taking the course?
100. Being a better consumer and to help me understand the phases of investment and estate planning
111. To renew certificate reeded - 2 hours

Question 174. Did the UMA experience change the direstion of any goals you had prior to taking the course?
100. No
111. Hopefully my daughter, son and daughter-in-1aw will read my books and lister to my tapes

Question 175. Did you have a reason or goal for taking the course that was not fulfilled? if "yes" please explain.
100. Yes. To have a learning experience
111. Hopefully \(I\) at least receive a \(C\) so \(I\) can renew my Certificate。 \(I\) don't know my grades for last 2 tests. First one was an A, Faper At

Question 176. What are your future goals?
100. Use this course knowledge to be aware of my business habits and to control my future investments and purchases
111. No response

Any other comments.
100. I feel I learned so much from this Consumers Ex. Course. However the tests were technical and didn't illustrate the learning obtained.
The practical experinece obtained certainly wasn't shown by the few choice questic on the test. The one project I completed was also asking me to compare prices to a city store. Frankly we feel a local store benefits us more than the city grocery store could help us in a small city. The cost of driving to a city out weighs the pennies saved. I don't feel the grade is fair - to knowledge gained. I took the course for credit so \(I\) would study more diligently.
111. No response
Q. 171: What would you like to have us change about the whole esperience to improve It?
123. Graded Projects instead of tests, (writings, Sumations etc)
149. No response
170. Returning tests so one knows the specific questions and areas that questions were missed on.
166. I was hesitant to call instructor and had no real need to, but would have appreciated receiving a call. Would have liked to have met other students also.
12. Maybe some person to person discussion somewhere along the way -- talking it over with even family members sometimes clarify things.
157. The paper with the numbers of the questions you got wrong and the chapters they were out of didn't help me, because I had forgotten what the question was and it wasn't on there; so \(I\) had no way of knowing what specific area in the chapter \(I\) fell down in.
155. The video programs would have helped me much more if they had been a lecture type. Much of the half hour was wasted on important things - Actors trying to be "cute"
154. I enjoyed the course very much as it stands. Some freedom in choosing the time when I could take the exams was a great help to me. I probably would have enjoyed knowing which particular questions I missed in the exams.
152. Less tests - perhaps some projects also. Sometimes the questions on the tests were confusing as to how they were stated!
153. Do you think its necessary to study the physiological aspect. I didn't really, and I found it kind of hard to understand. I was more interested in getting to know about the psychological parts.
148. The person that gives the tests should be given the authority to show the test to the student after the students' test has been corrected so the student can read the questions they answered incorrectly immediately.
147. I believe I have learned many interesting things. I was really frustrated by the tests. Multiple choice tests seem to be difficult for me. I read too much into the question or answer. I did very poorly on the first test, then I lost some confidence, and became very nervous when taking the other tests.
146. I felt the video tapes could have pertained more to each weeks lesson by concentrating more on high lights of the lesson. I would have liked a week inbetween units just to study for test. - was pushing to be ready for the next lesson or unit.
140. I would have liked to know which test questions I missed without calling the faculty.
137. The question for the tests need to be more relevant to the text. Have the students meet with the instructor at the beginning of each essignment.
136. Having projects along with tests - having more contact with faculty
135. I think the text spent too much time on several

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2. The learning center was 50 miles from my home - wish it had been closer. Information about courses could have been out sooner - my books, etc. came to me after classes began.
129. Contact with faculty and other students to discuss the material - possibly 2 or 3 times throughout the course.
128. 1) I couldn't get the TV program very good - the ones I saw weren't any help. 2) I would like to have taken the tests closer to home - I had to drive 100 mi . each way.
127. I enjoyed the television programs but they were a disappointment in helping with the tests or meaning of words.
7. . No response

8 Much mare instructor contact. some way should be made for projects to illustrate the materail in the text would be most helpful.
131. Make tapes and materials closer to students. Divide course in half as it is pretty complicated for part time students.
164. No response
Q. 172: What do you think should remain as it is?
127. Most of the program worked well for me.
128. I liked almost everything about the course. I would like to have had the faculty call me. I never called them, I. would like to know the questions I missed. I would like to know how many were taking the course.
129. Everything I can think of at the moment except the above mentioned.
2. Overall I enjoyed the two courses I took -- it worked out fairly well for my schedule. Am glad you allowed us an additional month to complete courses.
135. No response
136. the text, the tests, haveing the television programs
137. No response
140. I enjoyed the video programs and the newspaper articles. Also being able to take the tests when my schedule allowed for it was valuable.
146. I liked the program over all.
147. I definitely like the \(T V\) time for the video tapes. I was able to watch the tapes before going to work. The tests given in the evening was great, too, because I did , not have to lose time off from work. Hope you can keep these courses for the future!
148. No response
153. Keyword guides, practice tests, newspapers
152. I liked the newspaper articles.
154. 1) The freedom of choosing a time for exams (within a certain time) 2) The evaluative system (tests instead of projects) . 3) The faculty advisement of grades and other reports via letter.
155. Length of reading assignments
157. No response
12. I like early program on TV -- I've tried channel. 5 and Fort Dodge. Fort Dodge at 12:30 I find \(I\) sometimes forget time and miss part of it.at 7:00 I'm fresh and ready for program - few interruptions.
166. Study Guide was very good. Sample tests were excellent preparation TV programs stimulated interest and kept me on schedule, but did not really explain text. I liked convenience of taking tests when I was ready.
170. The learning center's availability - The phone call system
149. No response
123. The basic written study material - the texts were good
164. Yes.
131. The cost of materials and tuition also the course it self.
8. Video portion of the course was good.
7. No response

\title{
PSYCHOLOGY TODAY QUESTIONNAIRE
}
Q. 173: What was your goal or reason for taking the course?
123. To be more informed on certain areas
149. No response
170. To see if I could do it.
166. To learn something about Psychology. Needed a challenge - a growing experience
12. To see if I could still handle study courses -- I've always wanted to go to college -raising a large family of college graduates whetted my appetite for more learning (after kids are through, may try it)
157. I wanted to extent my present knowledge in that area and to fulfill a subject requirement for my freshman year.
155. To work toward a degree
154. Credit to renew my teaching certificate.
152. For personal accomplishment -- also to see if. I could really study and learn again after 20 years away from a classroom -- as well as wanting to gain more knowledge in the subject.
153. I thought it would be a creative way of spending my spare time. If I should decide to go back to college than at least I will have some credits earned.
148. Since I have a small baby it is difficult for me to be on campus so the UMA courses provided me with the best of two worlds -- not only could I he home with my baby but I couldcontinue going to college.
147. I had hoped to learn a lot from this course. I am an activity director for a nursing home, we have 200 patients. I believe, I have learned a great deal. I hope I can understand more fully their emotions, motivation, behavior patterns.
146. I needed hours in a Psychology course. - working towards a degree.
140. Personal satisfaction -- I graduated from a school of nursing over 20 years ago and wan not sure of my capabilities. Personal enrichment, also.
137. To improve my knowledge of psychology and to prove to myself that I can still learn something new and different.
136. Because I thought this course would help me out for I have to take psychology later in college. I also wanted the credit -- its something to work for. I doubt if I use the credit ( so I wan't have to take psychology in college) because in the career of nursing, psychology is important.
135. Increase in knowledge. I have always gotanalong better with machines, theople, and ducea an interesting way to spend my time.
2. I'm hoping to get a start on my college education -- with my family \& job responsibiliti \& my husband farming the UMA courses seem to be the only way for me right now. It also gave me the opportunity to take some courses I wasn't familiar with.

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129. to see if \(I\) could actually do it (for personal satisfaction) -- to simply learn-I want more education -- college credit is a good deal, too.
128. I wanted to take a college course -- this is the first one I've taken. I wanted to see how good I could do.
127. To get college credits. To see if I could still "study" and "learn".
7. for credit
8. To learn more about people.
131. I need college credit for employment. I thought the course would benefit me for a job. in Social Service or Public Relations.
164. I always wanted a college degree, I now have the time and the money to get it.

\title{
Q. 174: Did the UMA experience change the direction of any goals you had prior to taking the course? If "yes", please explain.
}

\section*{Student Number}

Response
127. No
128. No
129. Yes, I completed this course satisfactorily, so I hope to continue my education further
2. Yes, Now I'm considering accounting - I really enjoyed that - would not have considered that before.
135. No
136. No
137. No
140. No
146. No
147. No
148. No response
153. No
152. No
154. No
155. No
157. No
12. I now know I enjoy to study -- May try more later
166. Not certain
170. Yes, \(I\) now believe \(I\) will work on a lond range course of college education as \(I\) have always hoped to do
149. No response
123. No
164. No response
131. No
8. No
7. No
Q. 175: Did you have a reason or goal for taking the course that was not fulfilled? If "yes" please explain

Student Number
Response
123. Yes, I didn't perform well on tests. I couldn't schedule my time properly because of work load on job that wasn't anticipated.
149. No :response
170. No
166. No
12. No
157. No
155. No response
154. No
152. No
153. No
148. No
147. . No
146. No
140. No
137. Yes, I have a theory that Religion \& Psychology has a common foundation and this course neither proved it or disproved it.
136. No
135. No response
2. No
129. No
128. No
127. No
7. No
8. Yes, do to the fact I had to drop the course.
131. No
164. No response
Q. 176: What are your future goals?

Student Number

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Response
127. To get more college sredits
128. To take more courses -- earn more credits. Would like to be a regular student some day.
129. More education with the purpose being an interesting \& challenging career of some kind It's rather a big asset, but I do lean toward the Psych courses and would like to pursue it further.
2. To some day acquire a college degree and go into a profession. I do not want to be a secretary all my life.
135. I am not a typical student. I am 75 yrs old. My answer may be quite different from younger students. Also I live alone.
136. I plan on attending Grand View College in Des Moines and go into nursing for four years, this fall.
137. No response
140. No specific plans
146. Continuing picking up hours for a degree
147. I would like to take more Psychology courses. I some day would like to get a degree from ISU. This would help me a great deal in my work and also in Social Work.
148. My ultimate goal is to get a Bachelors Degree and I' 11 take any UMA courses which will help me attain this goal.
153. save money, get a different job, but as far as permanent jobs -- I really haven't decided yet.
152. I might be interested in taking another course at a later date -- preferably thru the winter months. Spring is just too busy to allow adequate time for study.
154. To continue teaching a few more years on my renewed certificate and then retire.
155. No response
157. I wish to continue taking college classes either on or off campus and to eventually receive a degree.
12. May take more courses if they are offered
166. Not certain
170. More classes
149. No response
123. Study "people" courses
164. I want a college degree, and a job an interesting job. I am middle age, my children are grown, also I am a widow, I need something to do with my time I am not a club lady or a sports lady so \(I\) want something to do.
131. I want to finish this course this winter for college credit. I nned to sit down with a counceler and find out what further education \(I\) should have for Public Relations or a Social Worker I want to make at least \(\$ 12,000\) a year. I feel I have a lot to offer in Public Related fields.
8. No response
7. To take more JMA courses
123. There could have been some way for students to show \& use prior knowledge (life experiences) within the course.
149. No response
170. No response
166. Thank you for making opportunity available
12. This kind of study, judging from my own childrens experience in college, requires more study on my part more discipline. Also I find I am unable to do justice to \(\underline{3}\) courses next time will go slower -- Too many unexpected family crisis interfere.
157. Twice when \(I\) was taking tests at my learning center \(I\) found it quite difficult to concentrate due to noise from conferences of some sore being held.
155. I feel that UMA course credit should be allowed in your major field of study.
154. This independent type of study is highly desirable to me.
152. I would like to have done better "grade wise" but demands of my family -- and community seemed too much to find time to study adequately.
153. A couple of times I thought I knew the material well \& somehow there would be questions .on the test that didn't even seem close to something I studied. Perhaps I just didn't study enough if none of the other students had trouble.
148. No response
147. No response
146. Enjoyed the course very much - Thank you for making it possible.
140. Would like to see my grade \& where I stood in comparison with other students.
137. It is my understanding that what we call psychology began with the scholors of ancient Greece and not with Professor Freud. Is there any course I could take that would confirm this opinion.
136. I'm glad I enrolled \& I enjoyed it. I was hard to keep up with this course and all the high school courses I was taking too.
135. I am not a typical student. I am 75 yrs old. My answer may be quite different from younger students. A1so I live alone. I am uncertain about the learning center = You may have meet the Area Office at Fort Dodge. I had little contact beyond giving me test:
2. Am glad these courses were offered
129. No response
128. I have enjoyed taking this course more than anything I've done for a long time.
127. No response
7. No response 485
8. No response
131. No response
164. No response

Question 171. What would you like to have us change about the whole experience to improve it? (we need your specific suggestions)
10. No response
126. After each test, it would be appreciated if you'd send a review of the incorrect answers we gave, giving the correct ones, of course.
134. I fould it very hard to study with out the give and take of classes. The TV programs were interesting but of absolutely No help to me.
143. \(1:\) Slow down the pace - more time allowed on each unit. 2 . meeting with faculty and students in area before starting the course to set tone of the course and perhaps a group meeting later to discuss problems
150. When an introductory course is offered, it should be on that level. This introductory course was not, as it was far too dificult for an inntroductory course. I took more advanced psychology course and earned B grades. I worked harder on this one and could only get \(D\). It seemed unfair.
158. Nothing
163. A pronunciation key for the more technical words would have been helpful
168. No response
167. Since \(I\) did not take as much as the first test \(I\) am in no position to give suggestions.

PSYCHOLOGY
Question 172. What do you think should remain as it is?
10. The list of key concepts in the study guide was good
126. Everything else was fine with me
134. I really don' \(t\) know. This is a whole new way of life for me and I don't really know what should be changed or kept
143. Text materials good
150. Keep the learning centers. Keep having audio tapes at learning centers, but have good ones. The ones for Psychology Today were rated by me as being very poor in quality
158. The time
163. The opportunity to be able to change testing dates. The study guide with key concepts was very good. It explained itself
168. No response
167. Definitely the video programs -- but a later hour in the morning could be more convenient or approx. 9:00 in the evenings.

PSYCHOLOGY
Question 173. What was your goal or reason for taking the course?
10. Basically, it was offered. I had taken an introductory course in psychology my sophomore year in college and was interested to see what was new since then.
126. Increase my knowledge of people, and to see how i'd do in a learning situation like this
134. To broaden my thinking and to see if I could study and carry college work. I've never attended school since I graduated from High School in 1945. I'm interested in both the subjects I took and the ones you will be offering this fall
143. As a foster mother who works with problem children and recently a retarded child, I hoped it would enlighten me and help me be more aware of some of the "whys"
150. To earn credit that I could transer to another university in which I was enrolled at the time I took this course. I did not get credit as I was getting a D which can't be transferred. I am unhappy as I took courses from Iowa State University before (check my records at your registrar's office) and I received B grades. I took Psychology of Adjustment 非46 and Developmental Psychology 非230 and from the State University of Iowa I took Educational Psychology and Social Psychology. In all of these I earned a B grade. Last fall I took a television course from the University of Nebraska. It was entitled Characteristics of Learning Disabilities and I received an A for a grade. This course was a very good one. Psychology of Today, was not the first television course I took. I can't see how the Psychology of Tay course could ever be an introductory course
- It was misleading to say it was introductory.
158. To understand people of all ages better and be a better parent
163. To see if I was capable of doing college level work and if I could arrange my time and work to take courses
168. No response
167. I would like to be a list prepared should I suddenly find myself having to be my sole provider.

Question 非174. Did the UMA experience change the direction of any goals you had prior to taking the course? If "yes." Please explain.
10. No
126. Yes I!m encouraged to continue
134. No.
143. Nò
150. No response
158. No
163. Yes. It has given me the incentive and confidance to continue my education
168. No response
167. No

PSYCHOLOGY
Question 非 175. Did you have a reason or gaal for taking the course that was not fulfilled? if "yes" please explain。
10. No
126. No
134. Yes To see if \(I\) was capable of carrying a college course and making a satisfactory grade
143. Yes To complete course and after all that work and 22 rs. finally have 4 college credits
150. Yes. Explained above. Course was too difficult, wanted a passing grade to transfer and got a D instead.
158. No.
163. No.
168. No response
167. Yes, To be self supporting should that need be.

\section*{PSYCHOLOGY}

Qrestion 非 176. What are your future goals?
10. To continue to audit some of the courses you will offer.
126. I would like to be helpful to people in their problems of how to live their lives. I think the answer lies in their needs being met for the whole person, spiritual, intellectual and physical. In my opinion, psychologists should open themselves to the real inner healing possible through knowing how to apply Christian teachings to actual life. I would suggest they study some case hsi tories in the Charismatic movement. Suggested reading:
Dr. Wm. Reid "Surgery of the Soul"
Morton Kelsey "Encounter with God"
Carl Jung "Man and His Symbols"
Francis Mc Nutt, O.P. "Healing"
Jay E. Adams "The Christian Counselors' Manual"
134. If nothing else, I'11 take classes lke Continuing Education without grades
143. To finish the course if offered again and maybe take some more
150. I don't know. I had planned to complete enough heurs for a degree, but \(I\) am discouraged now.
158. Working with chiidren in either a pre-school or such
163. At the present time \(I\) plan to attend Indian Hills Community College and then transfer to a university
168. No respanse
167. Still the same as my answer to question 173. Also would like to be able to receive an average or slightly higher grade on these tests.

Any other comments?
10. No response
126. No response.
134. It is very hard to study. Tests are very hard for me. Day to day work is easier. The T V programs were of no help to me what so ever except they were interesting. It seemed to me everyone I talked to was as hard pressed as I was to finish the course. in the time allowed. It first seemed that interruptions which you had no control over ate into your time unmercifully. Most of them were like me family had always had a good share of my time and church activites and other things were planned around them. My children got a real charge out of my worrying over tests. They teased me a good but but they knew I'd always been sympathic to them so it was all in fun. You soon find out what your kids face.
143. No
150. The course was unfair and I paid out money for which I got nothing in return, except the hard work I put into it trying to earn a C grade and failed to do so.
158. I taped each program myself so \(I\) could use the tape during the week and \(I\) was unable to get to the learing center.
163. Completing the course gave me a sense of fulfillment
168. No response
167. I would so much want to begin and finish this course--so I am going to try to read through Psychology Today during this month of September. If I am able to complete one reading of the text book then I believe I' 11 be able to make another try at the course. Thanks!

APPENDIX D. STATISTICAL DATA

University Exitension

Cimthe 1tall


\section*{Dear ISU Student:}

Iowa State University (ISU) is presenting courses from the University of Mid-America (UMA), a non-traditional program designed to provide learning experiences for people in their own homes. As our first students, you and your friends and neighbors will be participating in a unique educational situation. The students and the courses are not encompassed by the boundaries of a college campus. At the same time, you and other students will not have day-to-day personal contact with an instructor. These are advantages and limitations of UMA course . offerings.

In order to provide you with an opportunity to tell us about your experience with UMA courses, we will be in touch with you several times throughout the course. This questionnaire is the first of our questions to you.

For the first experimental year of UMA courses in Iowa, we will be asking all students to complete the Student Information Questionnaire. We realize this is a long form, and it may ask you a few personal questions. We request your cooperation in filling out and returning the questionnaire. If it is not possible for you to complete an item, please go on to the next item. ALL YOUR RESPONSES WILL BE HELD IN STRICTEST CONFIDENCE. Under NO circumstances will individual responses be reported to anyone. This information will be used only for research and evaluation purposes relating to decisions about the future of policies relating to UMA course offerings at Iowa State University.

Your responses will tell us a great deal about those taking UMA courses in lowa. We need this information in order to make UMA course offerings more relevant and useful to its students. It will help our staff to reach more effectively its goal to serve the educational needs of the Lowa Community.

If you have any questions or comments, please leel. free to call us or write your comments at the end of this Form. We appreciate your help; thank you.
Code
Factar o (1-9)
Factor<odding
Nean O
Stamdard deviation
Cordially,

Charles E. Donhowe
Dean, University Extension

IF YOU CANNOT COMPLETE A QUESTION, LEAVE IT OUT AND GO ON TO THE NEXT QUESTION
I. GENERAL INFORMATION
1. UMA course in which you are enrolled \(-42(1.09 \%\)

3. Are you one of the UMA students in western Iowa who will not be viewing the course presentations on WOI television? No \(\qquad\) Yes \(\qquad\)
4. Name
Last First Middle
5. Social security number \(\qquad\)
6. Present address

8. Have you ever served on active duty in the United States Armed Forces?
Yes, am serving now
No ( )
Yes, but not serving now ( )
9. How many yoars in total have you resided in lowar (Mark onc)
\begin{tabular}{ll} 
Less than 1 year ( ) \\
\(1-5\) years & \((10\) years \\
11 or more years
\end{tabular}

How many years have you resided at your present address? (Mark one)
Less than 1 year ( ) 6-10 years () 495
15. What is the highest level of education attafard by your parents or guardians


South pride ar less
Some high school but did graduate
High school graduate \(\begin{array}{lll}1 \% & (5) & (19) \\ 305-25 & (71)\end{array}\)


Trade, business or technical school diploma
l-3 years of college
( ) ( ) ( )
College graduate
Graduate study or profess sional degree
() ( ) ( )

What was your total income last year? Consider annual income from all sources before taxes. (Check one)
\begin{tabular}{llll} 
Less than \(\$ 1,000\) & \((\quad)\) & \(\$ 15,001-\$ 20,000\) & \((\quad)\) \\
\(\$ 1,001-\$ 4,000\) & \((\quad)\) & \(\$ 20,001-\$ 30,000\) & () \\
\(\$ 4,001-\$ 7,000\) & \((\quad)\) & \(\$ 30,001-\$ 40,000\) & () \\
\(\$ 7,001-\$ 10,000\) & \((\quad)\) & \(\$ 40,000+\) & \((\quad)\)
\end{tabular}
II. EDUCATION

This section covers your previous education to guide and assist our students more effectively. It is important for us to know what kind of educational background our students have. 9 (3.37) 1.38 (7) -45
17. What is the highest level of education you have completed? (Check one)
lith grade or less


High school graduate ( )
Trade, business or technical school diploma
1-3 years college
College graduate (4 years)
Graduate study
10 (3.17) \%/16 (7) 41
18. How many years has it been since you last participated in a formal educational experience? Within past year ( ) Between 3-5 years Between 1-2 years \(\qquad\) ago
( ) 5 years or more ago (


Please describe briefly the last formal educt-
tonal experience you participated in.
19. Why did you stop your formal education at this time?
20. At tire time I graduated (or quit) high school, my age was: (Check one)
\begin{tabular}{ll}
15 or younger () & 18 \\
16 & 19 or older ()
\end{tabular}

17
( )
9 or older ( )
\(12(3.70) 1.14(4)-24\)
2K. My scholastic standing when -1 graduate from (or quit) high school was: (Check one) Lower half of my class
( )
Upper half but not upper \(30 \%\)
( )
Upper \(30 \%\) but not upper \(15 \%\)
()

Upper 15\% but not upper 5\%
( )
Upper 5\% of my class
()
\(13(1.51) \cdot 60(5) 61\)
32. The largest number of part-time jobs that 1 held
at any one time during my last year in high
school was: (Check one)
\begin{tabular}{ll} 
None () & 2 or more () \\
1 & ()
\end{tabular}
23. During the last year I was in high school, the

14 average number of hours a week I spent on parttime paid jobs outside my home was: (Check one)
\begin{tabular}{lll} 
None \\
Less than \(5 .()\) & 10 to 20 & ( )
\end{tabular}
24. During the last year I was in high school, the

15 average number of hours a week I spent working for my family at home was: (Check one)
O None () 10 to 20 ()

5 to 10 ()
25. In high school 1 participated in:

Occas:-
sion- Fro-
Never Rarely ally quently
Plays, debate, etc.
Sports
\(\left(\begin{array}{llll}() & () & () & ()\end{array}\right.\)
School newspaper or yearbook, etc.
Science projects
Arts, crafts
Woodworking
( ) ( ) ( ) ( )
()\(()()\),

Mechanical projects, electronics
( ) ( ) ( ) ( )
Student council
( ) ( ) ( ) ( )
Cheer leading ( ) ( ) ( ) ( )
School sponsored department clubs
\begin{tabular}{llll}
() & () & () & ()
\end{tabular}

Music activities
\(\qquad\) \(\begin{array}{llll}() & (,) & () & ()\end{array}\)
26. Indicate your intereat in these school sublect: even though you may not have studied them. (Cirele your response using a seale of 1 to 5 a. follows: 1-very uninteresting, 2 -rather uninter esting, 3 -average, 4 -sort of interesting and 5-very interesting)
History courses......... (3.62. \(1401 \quad 2 \quad 3\)

English literature..... W. \(64.141 \times \frac{1}{1}-2-3-4-5 / 8(4)-58\)
 Industrial arts (woodworking(4.7). A1 2
Industrial arts (auto mechanics) \(1:(0) 2.274-52180 \% 5\)
How, ecofitincs (food and nutrition) 1




27. Dencerbe the high school you atended for the longest period of time. (Circle your response using a seale of 1 to 5 as follows: 1 -never,
2-almost never, 3 -about half the time, 4-ahmest always and 5-always
There was an opportunity for stu- 4.30. \&7
dents to become well acquainted... \(1 \begin{array}{llllll}2 & 3 & 5 & 5 & 38 \Theta\end{array}\) Teachers were interested and con-
cerned.............................. 4, \(4, ~ 8, ~\)
\(48(6) 6\)
The number of extra curricular activities was adequate
Teachers tended to be fair \((\mathbb{K} \cdot \rho)\).
Size of classes was about

 Number of elective coursac,
adequate.............. \((3,312\) Examinations were fair.... \(\mathbb{C}(8): 79-\frac{2}{2}-3 \quad 5 \quad 543(2) 6\) The administration placed the wel\begin{tabular}{l} 
fare of students first when \\
establishing school polic 30.189 \\
\hline
\end{tabular} eachers showed favoritism \(2640.48=1\) The teachers did a good job of teaching the subject matter content of courses in Int I was enrolled........ 3. \(0.6 .6 .67 .1 \quad 2 \quad 3 \quad 4 \quad 548(2) 5 \%\)


 \(2 \quad 3 \quad 4 \quad 55 \%\) (2) 6
III. WORK

This section covers your present job, if you are now working, and the demands it makes on your time. We need to know more about our students' careers since many UMA students are probably planning to use their courses for career advancement or career changes. (3.6) 2.32 (2) 34
28. How many hours per week do you work? (Include a second job or regular overtime)
\begin{tabular}{llll} 
Does not apply & \(()\), & \(21-30\) hours \\
10 hours or less & \(()\), & \(31-40\) hours \\
Between 11 and 20 & \(()\), \\
hours & \(41-50\) hours & \(()\), \\
& Over 50 hours & \(()\),
\end{tabular}
29. How many years have you worked at your present job?
30. Please rank your satisfaction with your present job.
Very satisfied ( ) Neutral
Satisfied
Somewhat dissatisfied ( )
31. If family ties, money, training or ability did not affect your decision, what kind of job would you most like to have?
IV. LEISURE TIME
32. What types of newspapers and magazines do you read regularly? (Check all that apply)
Daily newspapers ()
Local weekly newspapers \(\quad 63.46\) News and business magazines -47.50 54 Carcer or professionally-oriented magazines and journals \(\quad 30\). 4655() 0 Special interest magazines (i.e., sports, fashions, gardening, etc.)
()

\section*{Other}

St- (3.50) 1.54 (7)-24
3\%. Estimate the number of hours you watched television in the past week?
\begin{tabular}{ll} 
None & \(12-15\) hours \(\quad()\) \\
3 hours or less () & \(16-19\) hours () \\
\(4-7\) hours & \(20-23\) hours ()
\end{tabular}
4-7 hour
34. What types of television programs do you prefer?
(Check all that apply)
\(\begin{array}{ll}\text { Sports programs } & -30 \\ \text { News reports } & 46\end{array}\) Drami/plays (52). 50 Detective, mystery and western series 48.50 Situation comedy, comedy serics Religious programs
Music and variety shows

including documentaries
Adult education programs Quizzes and games

35. What is your favorite television program?
\(\qquad\)

36．What are your main leisure time activities and interests？Mark approximately how often you 497 participated in these activities during the la：；： year．
eading newspapers， magazines and journals
Reading fiction and nonfiction books
Indoor activities： chess，poker，ping－ pong
Outdoor activities： hiking，hunting， swimming，golf， camping
Never Rare ally quenty \begin{tabular}{l} 
rca－ \\
sion－Fret
\end{tabular}
（ ）（ ）（ ）（ ）
（ ）（ 8.49 .85\() 65 \otimes-40\)
case list all voluntary proprimis or civic organizations in whitely you have participated in the past few years＇．（e．g．，fire department， church activity or auxiliary groups，school board， little league）
1 －yes Program or Organization
\(0-70\)（3）－j4（63），48
75 はhいづ山K。
76 Seicial－Cimenamity Service
（9） 24 （165） 48
（ ） 2.22 .9866 （8） 27
（ ）（2．43）．82）67（8） 36

At lending movies，con－ certs，plays，sports events，etc．
（ ）2．93）．70） 68 （8） 28
Participating in plays， concerts，sports events
Arts and handicrafts， painting，refinish－
ing furniture，wood－ working，sewing， photography，etc．
Traveling
38．To what extent will your participation in this

Visiting with friends， relatives
Participating in church and community activ－ ities（other than sports）
Taking special interest classes（ie．，cook－ ing，woodworking， tennis，etc．）
 （ ）（ \(8,2,8,8\) ） \(7035-467010\) course affect the amount of time you will be
（ ）（1．250） .89 ） \(69(3640\)

\section*{V．RESOURCES}

The following questions ask about the resources（time，money，space，etc．）you have． How do you think the resources or lack of then will affect your success with UMA courses？ These questions are designed to provide informa－ tion to help us in planning future UNA courses．
\(79(3 \times 0) \cdot 71(6)-27\)
．39．＇Finding the money to pay for tuition and mater－ all for a UNA course is：
\(\begin{array}{ll}\text { A severe hardship } & (,) \\ \text { Quite difficult } & \text { Reasonably easy（ ）} \\ \text { No problem }\end{array}\)
40．Apart from tuition，do you think taking the course is likely to involve you in any signifi－ cant，additional expenses？（Please respond to each item）


41．What are your sources of financing for your UMA course？（Please respond to each item）

Major Minor Not a
source source source
Full and／or part－time work Savings
Parental aid
Employer support
Spouse＇s income
Grants／scholarships
Loans
other


42．Which of these do you own or have easy access to？ （Check all that apply）

43. Do you plan to make any special arrangements to enable you to take a IMA course? (Check all that apply)
Rearrange working hours/duties
Reorganize time to allow for studying
Arrange for child/habysitting
Arrange to record missed programs
Turn one room into study/quiet room Special arrangements to watch TV/bought TV Other arrangements (write in)
44. In addition to the UMA course in which you have enrolled, which of the following are available to you?
College level courses offered for employees. where I work ( )
College level courses offered at a learning center like a library, extension office or public school within 40 miles of my home
College level course offered at a community college within 40 miles
private two- or four-year 40 miles
A university within 40 miles
Correspondence courses


Correspondence courses
5. What are the most convenient days and times for you to watch television broadcasts and which would you, as far as you can say, find decidedly inconvenient.
Weekdays:
Do not mind what time ()


Weekends:
Do not mind what time ( )

46. List the greatest concern you have in studying with UMA.
47. In your planning lot studying with UM A, which ot the following are major concerns for you?

\section*{Minor Dunt}

Major or none know
Work pressures and responsibilities

48. Do you have space available at home where you can ; 870 (1) 29 study quietly if you wish? (Check one)
\(880-27\) Yes, at all times
()
'Yes, in daytime only
Yes, but only after children have gone to bed
No, plan to study at public library
No, plan to study at work
No, plan to study at Learning Center
No, don't know yet where I will study other plans
49. Given your other responsibilities (job, marriage,
family, etc.), how difficult do you think it will
98 be for you to "keep up" with the UMA course (s)?
(Check one)
32 I can do what I have to do rather easily
( )
Taking a UMA course.(s) will require some effort
Taking a UMA course (s) will require a very substantial effort
I am concerned I may not be able to do all the things planned
( ) Other \(\qquad\)
50. How do your family, friends and employer feel
about your enrollment in IMA? (Check of for each or group)

Strongly encouraging
Somewhat encouraging
Neutral
Somewhat discouraging
Strongly discouraging
Dort know


What ate your immediate and long-range goals Eor yoursclf? Please consider these questions carefully since your answers will be used as guides to future roles UMA might play in helping: its students.
51. How important is it that you achieve the following goals by studying, with UMA? (Please respond to each item)

52. Which one of the goals in question 51 is the mosit important to you?
53. If you are working toward a degree, what is the highest academic degree you hope to obtain? (Check one)
None (.)
Associate degree (A.A. or equivalent) ()
Bachelor's degree (B.A., B.S., etc.) ( )
Master's degree (M.A., M.S., etc.) ()
- Doctor of philosophy or education (Ph.D. or Ėd.D.)
Medical degree (M.D., D.D.S., etc.)
Law degree (L.L.B., J.D.)
Theological degree
Other \(\qquad\)
54. If you have enrolled to acquire college level credit for another purpose, please list.

In order to plan future courses and reach now 500 students, we need to know more about how you Lound out about UMA and why you chose to take : UMA course.
55. Is anyone else in your family prosently registered as a student in UMA?
\(\begin{array}{ll}\text { Husband/wife () Brother/sister () } \\ \text { Mother/father ( ) } & \text { Other relatives () }\end{array}\) Son/daughter ()
56. How did you find out about UMA? (Check as many as are applicable)
From a UMA student ()
From someone who works for UMA
From someone who works for another college
120 Ften univgrsity newspaper advertisement
121 Froma news article in a newspaper
From a television advertisement
From a television program
From a radio advertisement
From a radio program
From reading a uMA brochure
From a UMA poster
From a high school or college counselor
From my employer
Froma friend or family member
Other
57. Please indicate the importance of the following influences on your enrolling with UMA.

Some-
\begin{tabular}{ccc} 
Not what & Very \\
impor- impor- impor- \\
tant & tant tant
\end{tabular}

The good reputation of Iowa State
I have friends at UMA
Another UMA student recom-
122 Thequnded it UMA
My employer suggested I take UMA courses
I can work as well as study with UMA
A counselor recommended UMA
A member of my family suggested I enroll
I wanted to live at home while attending college Other
\(\left(\begin{array}{ll}() & ()\end{array}\right.\)
( ) ( ) ( )
( ) ( ) ( )
( ) ( ) ( )
()\(\quad() \quad()\)
( ) ( ) ( )
()\(\quad() \quad()\)
58. Which of the information in question 57 affected your enrollment the MOST?

Please Mail This Questionnaire to:
UMA
Extension Courses and Conferences
Scheman Building
Iowa State University
Ames, Iowa 50010
in the enclosed envelope before your course work begins, if possible

\section*{UnIversity Extension}


\section*{Dear ISU Student:}

Iowa State University. (ISU) is presenting courses from the University of Mid-America (UNA), a non-traditonal program designed to provide learning experiences for people in their own homes. As our first. students, you and your friends and neighbors will be participating in a unique educational situation. The students and the courses are not encompassed by the boundaries of a college campus. At the same time, you and other students will not have day-to-day personal contact with an instructor. These are advantages and limitations of um a course of firings.

In order to provide you with an opportunity to tell us about your experience with UMA courses, we will be in touch with you several times throughout the course. This questionnaire is the first of our questions to you.

For the first experimental year of UMA courses in Iowa, we will be asking all students to complete the Student Information Questionnaire: We realize this is a long form, and it may ask you a few personal questions. We request your cooperation in filling out and returning the questionnaire. If it is not possible for you to complete an item, please go on to the next item. ALL YOUR RESPONSES WILL BE HELD IN STRICTEST CONFIDENCE. Under NO circumstances will individual responses be reported to anyone. This information will be used only for research and evaluation purposes relating to decisions about the future of policies relating to . WM A course offerings at Iowa State University.

Your responses will tell us a great deal about those taking duma courses in low. We need this information in order to make UMA course offerings more relevant and useful to its students. It will help our staff to reach more effectively its goal to serve the educational needs of the Iowa Community.

If you have any questions or comments, please feel free to call us or write your comments at the end of this form. We appreciate your help; thank you.
\[
\begin{aligned}
& 0=100 \\
& 1=\text { yes } \quad \text { A/I SPring } 1976 \text { craters }
\end{aligned}
\]

Charles E. Donhowe
Dean, University Extension!
All dater are given as percent
IF YOU CANNOT COMPLETE A QUESTION, LEAVE IT OUT AND GO ON TO THE NEXT QUESTION
I. GENERAL INFORMATION
1. UMA course in which you are enrolled
2. Do you receive WOI television programs clearly? No you receive wot televisict. Yes S.
23. Are you one of the UMA students in western Iowa who will not be viewing the course presentations on WOO television? No 8
4. Name \(\qquad\)
5. Social security number \(\qquad\)
6. Present address \(\qquad\)
37.

48. Have you ever served on active duty in the United States Armed Forces? Yes, an serving now. 6.67 Yes, but not serving now
59. How many years in total have you resided in Iowa? (Mark one)
Less than 1 year ( ) 2. 6-10 years ( ). 67
\(1-5\) years ( ) d. \(6 \% 11\) or more years () 94.6
6010. How many years have you resided at your present address? (Mark one)

11. How many states have you resided in (include

12. How many countries have you resided in (other than u.s.)? 0,\(9 ; ; 4,4 ;-2,2 ; 3 ; 2\)

9
13. How many times have you moved in the last 10 years? 0,\(46 ; 1,21 ; 2,11 ; 3,9 ; 40\) ornue 11
14. Which best describes the community in which you presently live?
Farm or ranch ( 23.9 Town (10,000-50,000) (j19)
Town (under 2,000) (1i) City (50,000 or Town (2,000-10,000) (94) over)
15. What is the highest level of education attained
by your parents or guardians and spouse?
\begin{tabular}{|c|c|c|c|}
\hline 8th grade or less & (3) & (29) & (2) \\
\hline Sone high school but did not graduate & (i/) & (13) & (7) \\
\hline High school graduate & (3) & (33) & (3) \\
\hline Trade, business or technical school diploma & (4) & (5) & (3) \\
\hline 1-3 years of college & (7) & (if) & (13) \\
\hline College graduate. & (5) & (/2) & (1/6) \\
\hline Graduate study or professional degree & (5) & (/) & (9) \\
\hline
\end{tabular}
16. What was your total income last year? Consider
(Check one)
Less than \(\$ 1,000\)

\$7,001-\$10,000
\(\$ 10,001-\$ 15,000\)
\(\begin{array}{llll}\$ 1,001-\$ 4,000 & (\boldsymbol{7}) & \$ 15,001-\$ 20,000 \\ \$ 20,001-\$ 30,000\end{array}\)
\(\$ 4,001-\$ 7,000 \quad\) (9) \(\$ 30,001-\$ 40,000 \quad\) (5)
\(\$ 40,000+\)
II. EDUCATION

This section covers your previous education to guide and assist our students more effectively. It is important for us to know what kind of educational background our students have.
/517. What is the highest level of education you have completed? (Check one)
11th grade or less (2) High school graduate
Trade, business or technical school diploma
1-3 years college
College graduate ( 4 years)
Graduate study
18. How many years has it been since you last participated in a formal educational experience?
Within past year ( 27 ) Between \(3-5\) years Between l-2 years ago
(11)
ago (6) 5 years or more ago (56)
Please describe briefly the last formal educational experience you participated in.
19. Why did you stop your formal education at this time? Marvinge 16, wrrt) /b, Flimess 2 , Hlad Chiderar 8 morime 3, Graduated 20, oeqer 23
20. At the time I graduated (or quit) high school, my age was: (Check one)
\begin{tabular}{lll}
15 or younger & \((4)\) & 18 \\
16 & \((13)\) & 19 or oider \\
17 & \((4 / 5)\) \\
15 & \((5)\)
\end{tabular}

14 21. My scholastic standing when I graduated from (or quit) high school was: (Check one)
Lower half of my class
(5)

Upper half but not upper 30\%
(18)

Upper \(30 \%\) but not upper 15\%
Hpper \(15 \%\) but not upper \(5 \%\)
(22)

Upper 5\% of my class
22. The largest number of part-time jobs that \(I\) held at any one time during my last year in high school was: (Check one)
\begin{tabular}{lll} 
None (1) \\
1 & \((53)\) & 2
\end{tabular}
26. Indicate your interest fir these sehool siblifects even though you may nat have atidled them. (Circle your response using; a sciald of 1 t.0 5 n
tollows: l-very ininteresilng, 2 esting, 3-average, 4-sort of ints.
- 5-very interesting)

History courses....
.- English composition courses.
English literature
Foreign languages.

Industrial arts (auto mechanics). Home economics (food and nutritic Home economics (clothing)........ Governnent. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Work related as DECA or T\&I...
; Bookkeeping or accounting........
| Speech...................................
Physical education............................................................................
Sociology or psychology
Biology \(\qquad\)
Chemistry............................. 301223012113
Economics............................. . . . 717131291455
.
Typing

27. Wesurfbe the hifh achool youl attended for the lonpest perfod of ther (Cipele your respmine Hafty; \(n\) sealer of 1 to 5 ne follow: : l-never, 2-almost never, 3-about hall the time, 4-almost always and 5-always
There was an opportunity for stin- \(-1.0 \therefore|3.14| 5\) dents to becone well acquainted......
Teachers were interested and concerned.
The number of extra curricular activities was adequate.
Teachers tended to be fair..... ize of classes was about right for the classes taught........ The students made friends easily
Number of elective courses was adcquate

The administration placed the welfare of students first when establishing school policy......../
Teachers showed favoritism..........//
The teachers did a good job of teaching the subject matter content of courses in which I was enrolled.
Students from poor families got along alright....................
The teachers graded fairly.......... 7 .
My high school experience was enjoyable.
III. WORK

This section covers your present job, if you are now working, and the demands it inakes on your time. We need to know more about our students' careers since many UMA students are probably planning to use their courses for carecr advancement or career changes.
\(7 /\) 28. . How many hours per week do you work? (Include a \(7 \boldsymbol{7} 30\). Please rank your satisfaction with your present
second job or regular overtime)
Does not apply
10 hours or less
Between 11 and 20
\begin{tabular}{lll}
\((24)\) & \(21-30\) hours & \((8)\) \\
\((6)\) & \(31-40\) hours & \((15)\) \\
\((6)\) & \(41-50\) hours & \((17)\) \\
& Over 50 hours & \((12) / / / 31\)
\end{tabular}
job.
Very satisfied ( \((C)\) Neutral (y)
Satisfied (G) Somewhat dissatisfied (b) hours (b) Over 50 hours (12) \(/ \not / F 31\).
If family ties, money, training or ability did not affect your decision, what kind of job would you
IV. LEISURE TIME
32. What types of newspapers and magazines do you read regularly? (Check all that apply)
Daily newspapers
Local weekly newspapers
News and business magazines
Career or professionally-oriented magazines and journals
Special interest magazincs (i.e., sports, fashions, gardening, etc.) Other
33. Estimate the number of hours you watched television in the past weck?
\begin{tabular}{llll} 
None & \((.7)\) & \(12-15\) hours & \((19)\) \\
3 hours or less & \((21)\) & \(16-19\) hours & \((8)\) \\
\(4-7\) hours & \((2,1)\) & \(20-23\) hours \((9)\) \\
\(8-11\) hours & \((2)\) &. &
\end{tabular}
34. What types of television programs do you prefer?
(Check all that apply)
Sports programs ( 5 ( 8 2
(ij) \(8=\)
(91) 75
(\%) 10
(47)77
(33) 75
(92) 77
\((1,1) 90\)
81

News reports
nrama/plags
Detoctive, mystery and western series
Situation comedy, comedy series
Religious prograns
Music and variety shows
Scrious talks, discussions, interviews, including documentaries
Adult education programs
Quizzes and games
35. What is your favorite television program?

\section*{M4sic=5}


SPoy!s:3

Daytime
T10


36．What are your main luisure tille activities and intezests？Mark approximately how often you participated in these activities during the last year．

Reading news papers， magazines and journals
Reading liction and nonfiction books
Indoor activities： chess，poker，ping－ pong
Outloor activities： hiking，hunting， swimming，golf， camping
A！tending movies，con－ certs，plays，sports cuents，etc．
Participating in plays， concerts，sports events
Arts and handicrafts， painting，refinish－ ing furniture，wood－ working，sewing， photography，etc．
Traveling
Visiting with friends， relatives
Participating in church and community activ－ ities（other than sports）
Taking special interest classes（i．e．，cook－ ing，woodworking， tennis，etc．）
（5）（15）（30）（4，\％）＂F
（5）（20）\((5 ; 4)(18) / \sigma^{3}\)
（1）（4）（48）

Occa－
sion－Fre－
Never Rare ally quentiy
（55）（25）（8）
（7） 7
Occa－
sion－Fre－
Never Rare ally quentiy
\begin{tabular}{|c|c|c|c|c|}
\hline （只） & （2） & （18） & （78） & 43 \\
\hline （5） & （17） & （40） & （36） & Gip \\
\hline （24） & （28） & （33） & （9） & 95 \\
\hline （5） & （21） & （ \(4 \%\) ） & （z4） & F6 \\
\hline （2） & （z3） & （51） & （20） & \(\because\) \\
\hline （55） & （25） & （8） & （7） & 8 \\
\hline
\end{tabular}504 organizations in which you have participated in the past few years．（e．g．，fire department， church activity or auxiliary groups，school board． little league）

Progran or Organization


If you held an office， please name it below．
\[
10.557
\]

38．To what extent will your participation in this
UMA course affect the amount of time you，will be
107 spending with family members．
Probably no affect
Might reduce it a little bit
\((44)\)
\((7)\)
v．RESOURCES
The following questions ask about the resources（time，money，space，etc．）you have． How do you think the resources or lack of them will affect your success with UMA courses？ These questions are designed to provide informa－ tion to help us in planning future UMA courses．

39．Finding the money to pay for tuition and materi－ als for a UMA course is：
\begin{tabular}{llll} 
A severe hardship（1） & Reasonably easy & \((44)\) \\
Quite difficult & （13） & No problem & \(\mathbf{S q})\)
\end{tabular}

40．Apart from tuition，do you think taking the course is likely to involve you in any signifi－ cant，additional expenses？（Please respond to each item）
\begin{tabular}{|c|c|c|c|c|}
\hline & Very & Some－ what & Not & Not \\
\hline & signif－ & signif－ & signif－ & ce \\
\hline & icant & icant & icant & tain \\
\hline Loss of overtime & （／） & （2） & （89） & （3）／／1／42 \\
\hline Stopping or reducing paid part－time work & （2） & （2） & （88） & （5） 1118 \\
\hline Cost of babysitting & （3） & （4） & （81） & （4） 113 \\
\hline Cost of books and materials & （3） & （23） & （65） & （7） \\
\hline Traveling & （5） & （21） & （ 65 ） & （5）／ \\
\hline Other & （3） & （2） & （78） & （2） \(1 \%\) \\
\hline
\end{tabular}

41．What are your sources of financing for your UMA course？（Please respond to each item）

Major Minor Not a source source source
Full and／or part－time work Savings
Parental aid Employer support Spouse＇s income Grants／scholarships Loans Other \(\qquad\)
\begin{tabular}{|c|c|c|c|}
\hline （32） & （G） & （5） & \％＇ \\
\hline （5） & （b） & （75） & 45 \\
\hline （5） & （1） & （e） & \(\therefore 3\) \\
\hline （9） & （3） & （8） & \％ \\
\hline （4，5） & （7） & （45） & 13. \\
\hline （1） & （3） & （92） & バ \\
\hline （l） & （1） & （95） & 123 \\
\hline （y） & （6） & （85） & 184 \\
\hline
\end{tabular}

Which of these do you own or have easy access to？ （Check all that apply）
\begin{tabular}{|c|c|c|}
\hline & （ct．）insslide projec & \\
\hline Record player & （87） 124 viewer & （4y）12\％ \\
\hline Tape recorder & Typewriter & （25） 15 \\
\hline （cassette type） & A－Telephone & （97） \\
\hline Tape recorder & Television & （97） 150 \\
\hline （reel to reel） & （ib）／6， & （．7） 33 \\
\hline
\end{tabular}

43．Do you plan to make any special artangements to \(4 \%\) ．In your plaming lor sthilying with tMA，which ol chable you to take a UMA course？（Check all thai 505 ipply）

Rearrange working hours／duties
Reorganize time to allow for studying Arrange for child／babysitting Arrange to record missed programs Turn one room into study／quiet room Special arrangements to watch TV／bought TV Other arrangements（write in）


44．In addition to the UMA course in which you have enrolled，which of the following are available to you？
College level courses offered for employees where I work
College level courses offered at a learning center like a library，extension office or public school within 40 miles of my home
College level course offered at a community college within 40 miles
A private two－or four－year college within 40 miles
A university within 40 miles
Correspondence courses

45．What are the most convenient days and times for you to watch television broadcasts and which would you，as far as you can say，find decidedly inconvenient．
Weekdays：Convenient Inconvenient Do not mind what time（13） 147
\begin{tabular}{|c|c|c|c|}
\hline Before 8：00 a．m． & （81） & （15） & 1＇S \\
\hline 8：00 a．m．－9：00 a．m． & （27） & （41） & 144 \\
\hline 9：00 a．m．－12：00 noon & （23） & （67） & 100 \\
\hline 12：00 noon－1：00 p．m． & （11） & （81） & 151 \\
\hline 1：00 p．m． 4 ：00 p．m． & （26） & （64） & 16 \\
\hline 4：00 p．m．－5：00 p．m． & （15） & （75） & 13. \\
\hline 5：00 p．m．\(-6: 30 \mathrm{p.m}\) ． & （21） & （71） & 人̇シ \\
\hline 6：30 p．m．－7：30 p．m． & （32） & （58） & 1.5 \\
\hline 7：30 p．m．－9：30 p．m． & （41） & （46） & 1020 \\
\hline 9：30 p．m．－10：30 p．m． & （44） & （43） & 137 \\
\hline 10： \(30 \mathrm{p} . \mathrm{m}\) ．or later & （2q） & （81） & 108 \\
\hline
\end{tabular}

Weekends：
Do not mind what time（22）is \(\%\)
\begin{tabular}{|c|c|c|c|}
\hline Before 8：00 a．m． & （44） & （40） & 165 \\
\hline 8：00 a．m．－9：00 a．m． & （36） & （52） & 1101 \\
\hline 9：00 a．m．－12：00 noon & （32） & （s） & 1サと \\
\hline 12：00 noon－1：00 p．m． & （24） & （64） & 163 \\
\hline 1：00 p．m． 4 －00 p．m． & （3y） & （53） & 仿す \\
\hline 4：00 p．m．－5：00 p．m． & （3；） & G＂y） & 105\％ \\
\hline 5：00 p．m．－6：30 p．m． & （25） & （6，2） & 166 \\
\hline 6： 30 p．m．－7：30 p．m． & （27） & （1） & 167 \\
\hline 7：30 p．m．－9：30 p．m． & （31） & （55） & 1＊5 \\
\hline 9：30 p．m．－10：30 p．m． & （3i） & （53） & 157 \\
\hline 10：30 p．m．or later & G0） & （57） & iti \\
\hline
\end{tabular}

Major or none know

49．Given your other responsibi－1ities（job，marriage family，ettc．），how difficult do you think it will
be for you to＂keep up＂with the UMA course（s）？
（Check one）
I can do what I have to do rather easily（／／）
Taking a UMA course（s）will require some（ك）
Taking a UMA course（s）will require a very substantial effort
study quietly if you wish？（Check one）
Yes，at all times
Yes，in daytime only
Yes，but only after children have gone to bed
No，plan to study at public library
Ne，plan to study at work
No，plan to study at Learning Center
No，don＇t know yet where I will study
Other plans
Work pressures and responsi－
bilities
Domestic interruptions and demands
Lack of personal contact with teachers
Lack of personal contact with other students
Self－discipline：getting down to regular work
\begin{tabular}{|c|c|c|c|}
\hline （33） & 65） & （7） & 87 \\
\hline 40） & （57） & （7） & 13i \\
\hline （21） & （51） & （2x） & \(17 \%\) \\
\hline （g） & （7） & （45） & 1 \\
\hline （4）（6） & （39） & （1／） & 16 \\
\hline
\end{tabular}

Academic and learning prob－
lems：starting to study
again，new methods，concen－ tration，memory，etc．
Program pace，keeping up with the UMA schedule
Lack of time
Lack of necessary extra energy
Personal disability
Obtaining books and materials
Other \(\qquad\)
\begin{tabular}{llll}
\(59)\) & \((30)\) & \((9)\) & 177 \\
\(33)\) & \((40)\) & \(22)\) & 175 \\
\((30)\) & \((55)\) & \((9)\) & 177 \\
\((20)\) & \((64)\) & \((11)\) & \(1=41\) \\
\((7)\) & \((83)\) & \((7)\) & 181 \\
\((75)\) & \(63)\) & \((17)\) & 59 \\
\((1)\) & \((17)\) & \((6)\) & 35
\end{tabular}

I am concerned I may not be able to do all

\section*{the things planned}

Other
（2）

50．How do your family，friends and employer feel about your enrollment in UMA？（Check one for each group）

Strongly encouraging Somewhat encouraging Neutral
Somewhat discouraging Strongly discouraging Don＇t know

136 i 137 itS
\begin{tabular}{ccc} 
Family & Friends & Employer \\
\((60)\) & \((20)\) & \((21)\) \\
\((91)\) & \((0-)\) & \((9)\) \\
\((9)\) & \((20)\) & \((11)\) \\
\((5)\) & \((17)\) & \((7)\) \\
\((0)\) & \((0)\) & \((0)\) \\
\((1)\) & \((24)\) & \((5)\)
\end{tabular}

46．List the greatest concern you have in studying with UMA．
\[
1711 . \text { Time } 23
\]

2．Developing study Nabits－Setf discipiene（lnck of）
3 Lack at Contact With insitructoci－chas room toturtioui 4．Warry absort being ale to osu，t

What are your immediate and lomp-range goals: for yourself? Please consider these questions carefully since your answers will be used as guides to future roles UNA might play in helping. its students.
51. How important is it that you achieve the following goals by studying with UMA? (Please respond to each item)
\begin{tabular}{cc} 
Not & \begin{tabular}{c} 
Some- \\
what \\
Very
\end{tabular} \\
imper- & imper- imper- \\
tank & tank cant
\end{tabular}

To increase my appreciation of art, music, literacure and other cultural expressions
To discover my vocational interests
To develop a new career
To become involved in social and political concerns
To attain specific skills that will be useful on a job
To increase my awareness of different philosphis, cultures and ways of life
To improve my chances of making more money
To obtain a degree which is required for my present or future job
To learn how to participate effectively as a citizen in my community
To develop an understanding and an appreciation of science and technology
To improve my self-image
Simply, to learn
To improve my professional status
To increase my confidence to undertake learning projects
To use leisure time acreatively
To satisfy my curiosity about a particular topic
To become a better person or citizen
To become a better friend, spouse or parent
To get to know other adults with interests similar to mine
other

52. Which one of the goals in question 51 is the most important to you?

If you are working toward a degree, what is the highest academic degree you hope to obtain? (Check one)

Associate degree (A.A. or equivalent)
Bachelor's degree (B.A., B.S., etc.)
Doctor of philosophy or education (Ph.D. or Ed.D.)
Medical degree (M.D., D.D.S., etc.)
aw degree (L.L.B., J.D.)
(10)
54. \(2 / 1 f\) you have enrolled to acquire college level credit for another purpose, please list.

2 Gain knoulidye
sivedge to wild future
\(60 b \operatorname{tain}^{6}\) a collage drgite
3 7

(3) 206

V1I ．I：NRODLMiNI
In order to plan lintare comeses and reach me 507
students，we beed in know more about how yous
found out about UNA and why you chose to take a un course．
\[
\because 35
\]

55．Is anyone else in your family presentily regis－ \(2 / 2\) tered as a．student in Unin？
\begin{tabular}{|c|c|c|c|}
\hline Mushand／ & （ 1 ） & Brocher／sister & （0） \\
\hline Muther／father & （1） & Other relatives & （3） \\
\hline Son／daughter & （ 1 ） & N＇on．Chocked & \(5 \cdot\) \\
\hline
\end{tabular}

58．Which of the information in question 57 afliceted your enrollment the NOST？

56．How did you find out about UMA？（Check as many as are applicable）
From a un seudent（．7） 213
From someune who works for UMA
（4）ご
From someone who works for another callege
or university

From a newspaper advertisement
From a news article in a newspaper
\[
\begin{aligned}
& (30) \\
& (50) \\
& \because 1
\end{aligned}
\]

From a television advertisement
From a television program
From a radio advertisement
From a radio program
From reading a UMA brochure
Frum a UNA poster
From a high school or college counselor From my employer
From a friend or family member
\[
r
\] Other \(\qquad\)
（17）ジ19
（3） 214
（3） 260
（4） \(2 i 1\)
（25） 227
（．ア） 223
（3）\(\angle 2 \boldsymbol{\%}\)
（5）2こ，
（11）2 2 （5） 267

57．Pltase indicate the importance of the following influences on your enrolling with UMA．

> Some-
\(\left.\begin{array}{cccc}\text { Not } & \begin{array}{c}\text { what }\end{array} & \begin{array}{c}\text { Very }\end{array} \\ \text { impor－} \\ \text { impor－} \\ \text { timpor－}\end{array}\right]\)

Please．Mail This Questionnaire to：
IMA
Extension Courses and Conferences
Scheman Building
Iowa State University
Ames，I owa 50010
in the enclosed envelope before your course work begins，if possible

University Extension
Thmmantatior ( Iffier
Curtis 1 h.11
Telephone 515.244-457

Dear ISU Student:
Iowa State University (ISU) is presenting courses from the University of Mid-America (RA), a non-traditonal program designed to provide learning experiences for people in their own homes. As our first students, you and your friends and neighbors will be participating in a unique educational situation. The students and the courses are not encompassed by the boundaries of a college campus. At the same time, you and other students will not have day-to-day personal contact with an instructor. These are advantages and limitations of UMA course offerings.

In order to provide you with an opportunity to tell us about your experience with UMA courses, we will be in touch with you several times throughout the course. This questionnaire is the first of our questions to you.

For the first experimental year of UMA courses in Iowa, we will be asking all students to complete the Student Information Questionnaire. We realize this is a long form, and it may ask you a few personal questions. We request your cooperation in filling out and returning the questionnaire. If it is not possible for you to conplete an item, please go on to the next item. ALL YOUR RESPONSES WILL BE HELD IN STRICTEST CONFIDENCE. Under NO circumstances will individual responses be reported to anyone. This information will be used only for research and evaluation purposes relating to decisions about the future of policies relating to um a course offerings at Iowa State University.

Your responses will tell us a great deal about those taking UMA courses in Iowa. We need this information in order to make UMA course offerings more relevant and useful to its students. It will help our staff to reach more effectively its goal to serve the educational needs of the Iowa Community.

If you have any questions or comments, please feel free to call us or write your comments ar the and of this form. We appreciate your help; thank you.

Cordially,

Charles E. Donhowe
Dean, University Extension
Alldath are given as Pervert


IF YOU CANNOT COMPLETE A QUESTION, LEAVE IT OUT AND GO ON TO THE NEXT QUESTION

\section*{I. GENERAL INFORMATION}
1. UMA course in which you are enrolled
2. Do you receive WOI television programs clearly? No 29 Yes 70
\(\qquad\)
Are you one of the LMA students in western Iowa who will not be viewing the course presentations on WOI television? No 78 Yes 17
4. Name
Last First Middle
5. Social security number
6. Present address \(\qquad\)

48. Have you ever served on active duty in the United States Armed Forces? Yes, am serving now Yes, but not serving now ( \(\mathcal{S}_{3}\) )
59. How many years in total have you resided in low?
(Mark one)
Less than 1 year ( ) et \(6-10\) years ( ) ir 1-5 years ( ) W. 11 or more years () \&b.

How many years have you resided at your present
address? (Mark one)
Less than 1 year ( ) / O \(6-10\) years ( ) , 7.3. \(1-5\) years ( \() .33,11\) or more years ( ).3.5.
\[
\begin{aligned}
& \text { auestidin are renumbered to } \\
& \text { cicincide with cidefor frefactuy analysis }
\end{aligned}
\]
11. Hon many states have you resided in (include T \(1: 1\) ): 1,\(53 ; 2,18 ; 3,9 ; 4,7 ; 5 ; 4,2 ; 7,2 ; 2,2 ; 111509\)
2. Llow many countries have you resided in (other thin U.S.)? 0,\(883 ; 1,9 ; 2,2 ; 3,6\)
13. How many times have you moved in the last 10

14. Which best describes the community in which you presently live?
Farm or ranch (3/) Town (10,000-50,000)(13)
Town (under 2,000) (15) City (50,000 or Town ( \(2,000-10,000\) ) ( 26 over) (if)

15

by your pillencs or ghardians and sponso?
Brh prade or lass
(2g) (21) (Z)
Some high school but did not sraduate
\begin{tabular}{lll}
\((16)\) & \((i 1)\) & \((5)\) \\
\((i 7)\) & \((40)\) & \((22)\) \\
\((y)\) & \((6)\) & \((8)\) \\
\((8)\) & \((12)\) & \((16)\) \\
\((7)\) & \((5)\) & \((15)\) \\
\((7)\) & \((3)\) & \((11)\)
\end{tabular}
16. What was your total income last year? Consider annual income from all sources before taxes. (Check one)
Less than \(\$ 1,000\) ( jD ) \(\$ 15,001-\$ 20,000\)
\begin{tabular}{lll}
\(\$ 1,001-\$ 4,000\) & (R) & \(\$ 15,001-\$ 20,000\) \\
\(\$ 4,001-\$ 30,000\)
\end{tabular}
\(\$ 4,001-\$ 7,000 \quad\) (c) \(\$ 30,001-\$ 40,000 \quad\) (j)
\(\$ 7,001-\$ 10 ; 000 \quad\) (q) \(\$ 40,000+\)
(b)
II. EDUCATION

This section covers your previous education to guide and assist our students more effectively. It is important for us to know what kind of educational background our students have.
7. What is the highest level of education you have completed? (Check one)
llth grade or less
(1)

High school graduate
Trade, business or technical school diploma 1-3 years college College graduate (4 years) Graduate study
18. How many years has it been since you last par-
\(t\) icipated in a formal educational experience?
Within past year (19) Between 3-5 years
Between 1-2 years ago
(12) 5 years or more ago (5) Please describe briefly the last formal educational experience you participated in.

7 19. Why did you stop your formal education at this
 Ho time 2 Grakuated /8 oftru 30
20. At the time 1 graduated (or quit) high school my age was: (Check one)
\begin{tabular}{lll}
15 or younger \(\left(\begin{array}{l}1 \\
16\end{array}\right.\) & 18 & 19 or older \(\left(\begin{array}{c}(43) \\
17\end{array}\right.\) \\
\((40)\) &
\end{tabular}
21. My scholastic standing when I graduate from (or quit) high school was: (Check one)
Lower half of my class
(5)

Upper half but not upper \(30 \%\)
( 14 )
Upper \(30 \%\) but not upper \(15 \%\)
(24)

Upper \(15 \%\) but not upper \(5 \%\)
(22)

Upper \(5 \%\) of my class
(31)
22. The largest number of part-time jobs that 1 held at any one time during my last year in high school was: (Check one)
None (2)
1
2
(49)
1 (48)
3 or more
(7)
26. Indicate your interest in these school subjects coven though you may not have studied them.
(Circle your response using a sedate of 1 to 5 as follows: l-very uninteresting, 2 -rather unintersting, 3 -average, 4 -sort of interesting, and.

27. Describe the high school you attended for the longest period of time. (Circle your response using: seal le of 1 to j as follows: f-nvere, 2-almost never, 3 -about half the time, 4-almost always and 5 -always

Teachers were interested and concorned...........................
The number of extra curricular activities was adequate.......
Teachers tended to be fair.........6.0, \(6 \frac{5}{2} \frac{16}{165} 516\)
Size of classes was about right

for the classes taught........ The students made friends easily Number of elective courses was adequate.
Examinations were fair \(\qquad\)
The administration placed the wefare of students first when establishing school policy...
 The teachers did a good job of teaching the subject matter content of courses in which I was enrolled.................... was enrolled......................
Students from poor families got along alright. The teachers graded fairly.......................... My high school experience was
enjoyable \(\qquad\)
\(\qquad\)
 The teachers graded fairly...
\(\qquad\)



\section*{fare of students first when}
\(\qquad\)
III. WORK

This section covers your present job, if you are now working, and the demands it makes on your time. We need to know more about our students' careers since many UMA students are probably planning to use their courses for career advancewent or career changes.

7/ 28. How many hours per week do you work? (Include a second job or regular overtime)
\begin{tabular}{llll} 
Does not apply & (23) & \(21-30\) hours & (8) \\
10 hours or less & \((4)\) & \(31-40\) hours & (/4) \\
Between 11 and 20 & & \(41-50\) hours & (20) \\
\(\quad\) hours & (8) & 0 over 50 hours & (/1)
\end{tabular}
7229. How many years have you worked at your present


\section*{73}
30. Please rank your satisfaction with your present job. Very satisfied ( 19 ) Neutral (8) Satisfied ( \(3 y\) ) Somewhat dissatisfied ( 8 )
If family tics, money, training or ability did not affect your decision, what kind of job would you most like to have? \(1=6, ~ T 2=8, \quad A, 3=7\) \(54=25\). \(5=13\). \(6,6=3\)

\section*{IV. LEISURE TIME}
32. What types of newspapers and magazines do you read regularly? (Check all that apply)
75 Daily newspapers
76 Local weekly newspapers
77 News and business magazines
\(7 \delta\) Career or professionally-oriented magazines
and journals
7.9 Special interest magazines (i.e., sports, fashions, gardening, etc.)
SoOther
33. Estimate the number of hours you watched televi-
\(\delta /\) sion in the past week?
\begin{tabular}{llll} 
None & \((-6)\) & \(12-15\) hours & (15) \\
3 hours or less & \((19)\) & \(16-19\) hours & \((6)\) \\
\(4-7\) hours & \((24)\) & \(20-23\) hours & \((8)\)
\end{tabular}

12-15 hours (15)
20-23 hours (8)
34. What types of television programs do you prefer? (Check all that apply)
8, Sports programs
83 News reports
84 Drama/plays
8:5 Detective, mystery and western series
§6Situation comedy, comedy series
\(\$ 7\) Religious programs
58 Music and variety shows
89 Serious talks, discussions, interviews,
including documentaries.
90 Adult education programs
\%/Quizzes and games
937 What is your favorite television program?

> music 2
> Evening. Policy, De tecturi Law o
> Evening Fomis (Naltors, mi: Moore) 30
> \(\begin{aligned} & \text { sports } 4 \\ & \text { Daytime Grin shows } 0\end{aligned}\)
> Drytine Drawn!
> Arewstric 17

36．What are your main leisure time activities and interests？Mark approximately how often you 511 participated fin thesc activities during the la：l year．
Never Rare ally quently
\begin{tabular}{lll}
（．6）（．6）（17）（80） \\
（4）\((15)(34)\) & \((45)\)
\end{tabular}
（25）（33）（30）
（8）
96 Outdoor activities： hiking，hunting， swimming，golf， camping
（5）
（20）（42）
（3i）
97 Artending movies，con－ certs，plays，sports events，etc．
（1）（23）（53）
（22）
95 Participating in plays， concerts，sports events
（52）（26）（12）（4）
© Arts and handicrafts， painting，refinish－ ing furniture，wood－ working，sewing， photography，etc．
／f Traveling
\(1 / \mathrm{f}\) Visiting with friends， relatives
（9）（11）（38）
（ \(4 /\) ）
（5）（15）（57）
（ 2 ）
（1）（3）（4．5）
（3\％）
fo 2 Participating in church and community activ－ ities（other than sports）
（ classes（i．e．，cook－ ing，woodworking， tennis，etc．）
103 Taking special interest
（25）（23）（36） （2）

37．Please list all voluntary programs or civic organizations in which you have participated in the past few years．（e．g．，fire department， chutch activity or auxiliary groups，school hoard， little league）

Program or Organization

\(105 \operatorname{set}+129\)
ノ世 \＆

If you held an office，
please name it below．
12． \(5 \%\)

ACo
38．To what extent will your participation in this UMA course affect the amount of time you will be spending with family members． Probably no affect
Might reduce it a little bit Probably will reduce it a lot

V．RESOURCES

The following questions ask about the resources（time，money，space，etc．）you have． How do you think the resources or lack of them will affect your success with UMA courses？ These questions are designed to provide informa－ tion to help us in planning future UMA courses．


41．What are your sources of financing for your INA course？（Please respond to each item）

Major Minor Not a
source source source
\begin{tabular}{|c|c|c|c|}
\hline 1／7 Full and／or part－time work & （4， 0 ） & （7） & （38） \\
\hline i／SSavings & （17） & （11） & （51） \\
\hline \(1 / \mathscr{F}\) Parental aid & （2） & （2） & （12） \\
\hline 124Employer support & （0） & （3） & （6．5） \\
\hline ／2／Spouse＇s income & （4．9） & （5） & （3i） \\
\hline i－2 2 Grants／scholarships & （x） & （2） & （10） \\
\hline 123 Loans & （1） & （3） & （ 70. \\
\hline ，H0ther & （1） & （1） & （2E） \\
\hline
\end{tabular}

42．Which of these do you own or have easy access to？ （Check all that apply）
－25Transportation（q（w）Slide projector／
；LGRecord player（ 85 ），viewer
127 Tape recorder
128Tape recorder
（reel to reel）
（81）JYelephone
／3xelevision
\((19) 13\) None of these \((, 6)\)

43．Do you plan to make any special arrangements to enahle you to take a UMA course？（Check all that ipply）
\(13 \nprec\) Reartange working hours／dutics
135 Reorganize time to allow for studying
136Arrange for child／babysitting
137 Arrange to record missed programs
150 Turn one room into study／quiet room
38 Special arrangements to watch TV／bought TV
140 other arrangements（write in）

44．In addition to the UMA course in which you have enrolled，which of the following are available to you？
14 College level courses offered for employees where I work
142 College level courses offered at a learning center like a library，extension office or public school within 40 miles of my home
143 College level course offered at a community college within 40 miles
144 A：private two－or four－year college within 40 miles
（して）
\(145^{-}\)A university within 40 miles
146 Correspondence courses．
45．What are the most convenient days and times for you to watch television broadcasts and which would you，as far as you can say，find．decidedly inconvenient． Weekdays： Convenient Inconvenient
147 Do not mind what time（／J）
\begin{tabular}{|c|c|c|}
\hline 1488 Before 8：00 a．m． & （5） & （32） \\
\hline \(14 \%\) 8：00 a．m．－9：00 a．m． & （33） & （44） \\
\hline 150 9：00 a．m．－12：00 noon & （25） & （53） \\
\hline 15／12：00 noon－1：00 p．m． & （14） & （6j） \\
\hline 152 1：00 p．m． \(4: 00 \mathrm{p.m}\) ． & （3E） & （40） \\
\hline 155 4：00 p．m．－5：00 p．m． & （22） & （54） \\
\hline 15¢5：00 p．m．－6：30 p．m． & （16） & （63） \\
\hline 1556：30 p．m．－7：30 p．m． & （31） & （46） \\
\hline 1567：30 p．m．－9：30 p．m． & （44） & （33） \\
\hline 15779：30 p．m．－10：30 p．m． & （43） & （35） \\
\hline \(158^{10: 30} \mathrm{p} \cdot \mathrm{m}\) ．or later & （27） & （48） \\
\hline
\end{tabular}

Weekends：
159 Do not mind what time（21）
\begin{tabular}{|c|c|c|}
\hline ／60Bcfure 8：00 a．m． & （31） & （37） \\
\hline ／6／8：00 a．m．－9：00 a．m． & （25） & （42） \\
\hline （620：00 a．m．－12：00 noon & （21） & （46） \\
\hline 163．12：00 noon－1：00 p．m． & （13） & （53） \\
\hline ／6ヶ1：00 p．m． 4 ：00 p．m． & （27） & （98） \\
\hline ／654：00 p．m．－5：00 p．m． & （4y） & （41） \\
\hline －665：00 p．m． 6 6：30 p．m． & （17） & （50） \\
\hline 167 6：30 p．m．－7：30 p．m． & （18） & （48） \\
\hline 1687：30 p．m．－9：30 p．m． & （ 22\()\) & （46） \\
\hline 1479：30 p．m．－10：30 p．m． & （21） & （49） \\
\hline ／7010：30 p．m．or later & （15） & （52） \\
\hline
\end{tabular}

17 46．List the greatest concern you have in studying with UMA．

47．In your planning for studying with \((M A\) ，which of

\section*{（38）}
（88） 172 Work pressures and responsi－ bilities
173 Domestic interruptions and demands
174 Lack of personal contact with teachers the following are major concerns for you？

175 Lack of personal contact with other students
176 Self－discipline：getting down to regular work
（32）（5y）（V）
\((45)(45) \quad(8)\)
（48）（48）（31）
（15）（5j）（25）
177 Academic and learning prob－
（48）（48）（7） lems：starting to study again，new methods，concen－ tration，memory，etc．
\begin{tabular}{lll}
\((40)\) & \((29)\) & \((9)\) \\
\((35)\) & \((36)\) & \((20\) \\
\((27)\) & \((54)\) & \((14)\) \\
\((18)\) & \((59)\) & \((23)\) \\
\((4)\) & \((78)\) & \((9)\) \\
\((4)\) & \((79)\) & \((44)\) \\
\((2)\) & \((4)\) & \((5)\)
\end{tabular}

Do you have space available at home where you can study quietly if you wish？（Check one）
Yes，at all times
（60）
Yes，in daytime only（／1）
Yes，but only after children have gone to bed（ \(/ 8\) ）
No，plan to study at public library
（2）
No，plan to study at work
（4）
No，plan to study at Learning Center
（0）
No，don＇t know yet where I will study
（2）
Other plans
49．Given your other responsibilities（job，marriage， family，et．c．），how difficult do you think it will be for you to＂keep up＂with the UMA course（s）？ （Check one）
I can do what I have to do rather easily（0）
Taking a UMA course（s）will require some effort
Taking a UMA course（s）will require a very substantial effort Other

50．How do your family，friends and employer feel about your enrollment in UMA？（Check one for each group）

Strongly encouraging Somewhat encouraging Neutral
Somewhat discouraging
Strongly discouraging Don＇t know
\begin{tabular}{ccc}
186 & 187 & 188 \\
Family & Friends & Employer \\
\((60)\) & \((27)\) & \((18)\) \\
\((21)\) & \((28)\) & \((7)\) \\
\((12)\) & \((16)\) & \((8)\) \\
\((2)\) & \((16)\) & \((2)\) \\
\((0)\) & \((0)\) & \((6)\) \\
\((4)\) & \((20)\) & \((20)\)
\end{tabular}


What are your immediate and long-range goals for yourself? Please consider these questions carefully since your answers will be used as guides to future roles \(u N A\) its students.
51. How important is it that you achieve the following goals by studying with UMA? (Please respond to each item)

187 To increase my appreciation of art, music, litertore and other cultural expressions
170 To discover my vocational interests
17 To develop a new career
172 . To become involved in social and political concerns
193 To attain specific skills that will be 'useful on a job
194 To increase my awareness of different philosphis, cultures and ways of life
17 To improve my chances of making more money
196 To obtain a degree which is required for my present or future job
187 To learn how to participate effectively as a citizen in my community
188 To develop an understanding and an appreciation of science and technology
177 To improve my self-image
200 Simply, to learn
2/ To improve my professional.
202 status
increase my confidence to undertake learning projects
243 To use leisure time acreatively
204 To satisfy my curiosity about a particular topic
205 To become a better person or citizen
206 To become a better friend, spouse or parent
207 To get to know other adults with interests similar to mine
268 other
\begin{tabular}{lll}
\((29)\) & \((30)\) & \((38)\) \\
\((14)\) & \((39)\) & \((48)\) \\
\((24)\) & \((37)\) & \((3 x)\)
\end{tabular}
(14) (37) (47)
(18) (40) (40)
( 28\()(34)(36)\)
\(\begin{array}{lll}(43) & (40) & (15) \\ (2) & (2) & (1)\end{array}\)
Some-
Not what Very
impor- imper- impor-
rant tanto tank
\begin{tabular}{lll}
\((25)\) & \((51)\) & \((21)\) \\
\((22)\) & \((40)\) & \((36)\)
\end{tabular}
52. Which one of the goals in question 51 is the most

247 important to you?
\[
\begin{aligned}
& \begin{array}{c}
24 \% \text { To attn spermic } 5 k \text { ills that } \\
\text { Will be usitul on a job }
\end{array} \\
& \text { 18\% } \mathrm{sim} \mathrm{~m} 7 \mathrm{y} \text { to levin } \\
& \begin{array}{l}
\text { (the vieminning items received firm o to } 5 \% \% \\
\text { of the coholes. }
\end{array}
\end{aligned}
\]

\section*{28}

If you are working toward a degree, what is the highest academic degree you hope to obtain? (Check one)
None
Associate degree (A.A. or equivalent)
Bachelor's degree (B.A., B.S., etc.)
Master's degree (M.A., M.S., etc.)
Doctor of philosophy or education (PhD. or Ed.D.)
Medical degree (M.D., D.D.S., etc.)
Law degree (L.L.B., J.D.)
Theological degree
Other \(\qquad\) (0)
\(-3 / 4\)
If you have enrolled to acquire college level credit for another purpose, please list.
1. Personal Sites Lection

2 Gain knurled.
3. Renin Certificate or kep it oik
\(4 \sqrt{0} 06\) regjuenment or get \(\times\) job or pinotioni
5: Aroduc tao nad future 2
6. Oótrin r Collie degree
7. To get credit hour on myrecold 2
VII. ENROL.LAENT

In ocder to plan lucure courses and roach new students, we need to know more about how you found out: about UNA and why you chose to take a UMA course.
55. Is anyone else in your family presently regis\(2 / 2\) tered as a student in UMA?
\begin{tabular}{llll} 
Husband/wife & \((0)\) & Brother/sister & \((0)\) \\
Mother/father & \((0)\) & Other relatives \((.6)\) \\
Son/daughter & \((0)\) & Aonc Checked & 5
\end{tabular}

\section*{238}
58. Which of the information in question 57 affected your enrollment the MOST?
56. How did you find out about UMA? (Check as many \(2 / 3-\) as are applicable)

C From a UMA student
(0)
? 14 From someone who works for UMA
215 From someone who works for another college or university
(4)

216 From a newspaper advertisement (2/)
217 From a news article in a newspaper (58)
\(\alpha^{2 / f}\) From a television advertisement ( \(\beta\) )
219 From a television program
720 From a radio advertisement
2.2 From a radio program

222 From reading a UMA brochure
27.5 From a UMA poster

Please write any comments you may have
254 From a high school or college counselor 225 From my employer
226 From a friend or family member
\(2=7\) Other
(11)
57. Please indicate the importance of the following influences on your enrolling with UMA.
Some -
Not what Very
impor- impor- impor-
tant tant tant
\begin{tabular}{|c|c|c|c|}
\hline State & (14) & (31) & (41) \\
\hline 227 I have friends at UMA & (58) & (3) & (1) \\
\hline 230 Another UMA student recommended it & (54) & (4) & (/) \\
\hline 231 The independence allowed by UNA & (8) & (1) & (50) \\
\hline 232 My employer suggested I take UMA courses & (43) & (4) & (2) \\
\hline 2.33 I can work as well as study with UMA & (15) & (g) & (5y) \\
\hline 234 A counselor recommended UMA
35 A member of my family sug- & (63) & (2) & (4) \\
\hline 3 gested I enroll & (sy) & (10) & (8) \\
\hline 2.36 I wanted to live at home while attending college & (13) & (6) & (3) \\
\hline  & (5) & (0) & (12) \\
\hline
\end{tabular}

Please Mail This Questiomaire to:
UMA
Extension Courses and Conferences
Scheman Building
Iowa State University
Ames, Iowa 50010
in the enclosed envelope before
your course work begins, if
possible

\section*{Factor Loadings, Means, and Standard Deviations for UMA/ISU Course Accounting I, Combined Spring and Fall, 1976, Offerings}

\section*{Factor I Impact of Course on the Students}
\begin{tabular}{ccc} 
Item & Fac. & Std. \\
no. & Item & load. Means dev.
\end{tabular}
140. The UMA courses proveded me with a sense of accomplishment.
\(88 \quad 1.17 \quad 1.20\)
157. This experience has been a valuable supplement to my previous education.
\(86 \quad 1.10 \quad 1.04\)
59. I gained personal satisfaction through taking this course.
\(85 \quad 1.16 \quad 1.20\)
163. Overall this was a good course.
\(85 \quad 1.22 \quad 1.03\)
139. I would recommend this course to my friends.
\(83 \quad 0.99 \quad 1.25\)
106. I feel the knowledge gained from this course will be very useful to me.
811.081 .06
116. The overall effect of this course on my life has been desirable.
\(81 \quad 0.76 \quad 1.04\)
55. Overall this course was very interesting to me.
\(80 \quad 1.14 \quad 1.18\)
42. I learned a great deal in this course.
\(80 \quad 1.12 \quad 1.11\)
60. The course was worth the month I spent to take it. \(79 \quad 1.07 \quad 1.30\)
112. I believe that I learned as much or more from this UMA/ISU course as I would have learned from a similar college level course offered on a college campus.
\(73 \quad 0.62 \quad 1.24\)
46. Taking this course has increased my confidence in my ability.
\(73 \quad 0.69 \quad 1.09\)
57. The majority of "directions" given in the text and study guides was clear and helpful.
\(69 \quad 1.19 \quad 0.90\)
170. The way the course was presented fit my particular needs.
\(69 \quad 0.69 \quad 1.16\)
100. In this course, I felt challenged to do my best work.
66. Taking this course has given me valuable insight elating to this area of study. ..... \(69 \quad 1.05\) ..... 0.88
72. As a result of taking this course, I have become more interested in the subject and would like to take additional courses in this area. \(68 \quad 0.75\) ..... 1.42
90. My personal goals have been advanced through tak-ing this course.67
138. My spouse feels the course was worth the money Ispent to take it.\(63 \quad 0.58 \quad 1.17\)
160. My original purpose for taking this course has been fulfilled. ..... 62 ..... 0.95 ..... 1.27
158. Through taking this course I have gained new knowledge that will help me to enjoy life more.620.321 .04
156. I was able to develop effective study techniques as the course progressed. ..... 62 ..... 0.62 ..... 0.98
136. I feel confident to try to seek employment relat- ing to the skills \(I\) acquired in this course.\(61 \quad 0.03\)1.29
152. Involvement with this course has made me feel thatI can do college level work.\(61 \quad 0.73 \quad 1.08\)
124. I feel I now know the material covered in the text ..... 60 ..... \(0.43 \quad 1.10\)
99. I feel better prepared for a job as a result of taking this course (even though the job might not relate directly to this course). ..... \(60 \quad 0.60\) ..... 1.22
88. The time I had to spend on the course was too great for the benefits gained.

\[
-59-0.70
\] ..... 1.25
92. In this course, I liked feeling responsible for my own learning. ..... 58
0.99 ..... 0.93
44. The illustrations in the course text were veryuseful.\(57 \quad 1.18\)0.93
153. The subject matter content of the course was about what I had expected it to be. ..... 56 ..... \(0.56 \quad 1.27\)
161. The text was easy to understand. ..... 56
0.76 ..... 0.99
45. I felt that the amount of memorization requiredfor the tests was about right.540.661.05
144. I prefer continuing with UMA/ISU courses rather than taking a course on a campus. ..... 52

\[
0.79
\]

\[
1.38
\] ..... 52 ..... 52
0.54 ..... 0.94
63. The overall experience of taking this course has had a positive influence on our family life. ..... \(51 \quad 0.31 \quad 1.02\)
75. The most I could do was try to pass the tests;learning all of the material seemed too much.
\[
\begin{array}{lll}
-50 & -0.53 & 1.29
\end{array}
\]
133. The tests adequately sampled the material covered in the course. ..... \(49 \quad 0.91 \quad 0.89\)
107. This whole experience has turned out to be an interesting topic of conversation with my friends. ..... 49 ..... 0.251 .15
105. My friends admire me for taking this course. ..... 47
53. Taking this course has improved my chances of mak- ing money. ..... \(\begin{array}{lll}47 & -0.19 & 1.25\end{array}\)
68. The cost of books and materials is too high. ..... \(\begin{array}{lll}-47 & -0.23 & 1.16\end{array}\)
127. This course has helped me to be a better employee. ..... 45 ..... \(0.36 \quad 0.99\)
51. This experience has helped me to begin developing a new career. ..... \(\begin{array}{lll}44 & -0.38 & 1.38\end{array}\)
123. The video programs did not follow the text. ..... \(\begin{array}{lll}-43 & -0.56 & 1.28\end{array}\)
37. There should be increased individual flexibility for course completion. ..... \(\begin{array}{lll}-42 & 0.01 & 1.31\end{array}\)
64. Too much reading was required for the course. ..... \(\begin{array}{lll}-40 & -0.63 & 1.19\end{array}\)
122. The overall work load for this course was too heavy for the amount of credit given. ..... \(\begin{array}{lll}-40 & -0.47 & 1.28\end{array}\)
114. The main benefits I have received from taking this course were not my original purpose for enrolling. ..... \(\begin{array}{lll}-40 & -0.58 & 1.08\end{array}\)
20. I would like to work toward a degree. ..... \(\begin{array}{lll}-36 & 0.69 & 1.45\end{array}\)
69. The tests were fair. ..... 35 ..... 0.851 .07
120. The cost for tuition is too high. ..... \(\begin{array}{lll}-34 & -0.24 & 1.20\end{array}\)
39. My original purpose for taking this course changedas I progressed in the course.\(-34 \quad-0.97\)1.45
10. My family is favorable toward my enrolling in future courses. ..... \(331.11 \quad 1.05\)16. I would be interested in having someone explainhow I might be able to obtain special expertise inan area of study or a degree by taking coursesfrom UMA and a variety of other sources, as forexample off-campus courses from a four-year insti-tution, a community college, and/or correspondencecourses.\(32 \quad 0.19 \quad 1.43\)
135. The "quality" of the text and materials was high. ..... \(28 \quad 1.02\) ..... 1.11
Factor II Evaluation of the Video Component of the Course
\begin{tabular}{|c|c|c|c|c|}
\hline \[
\begin{gathered}
\text { Item } \\
\text { no. }
\end{gathered}
\] & Item & Fac load & Means & Std. dev. \\
\hline 82. & The video programs were a valuable part of the course. & 89 & -0.55 & 1.39 \\
\hline 132. & The video programs were interesting to watch. & 89 & -0.44 & 1.49 \\
\hline 41. & The quality of the TV programs (or video component) was excellent. & 85 & -0.74 & 1.46 \\
\hline 89. & Watching the video programs was a waste of time. & -84 & 0.31 & 1.51 \\
\hline 54. & The video programs helped to clarify the material covered in the text(s). & 82 & -0.52 & 1.40 \\
\hline
\end{tabular}
108. The video programs were helpful in preparing for tests. ..... \(\begin{array}{lll}78 & -0.93 & 1.24\end{array}\)
159. I disliked some of the actors in the video pro- grams.

\[
\begin{array}{lll}
-68 & 0.05 & 1.59
\end{array}
\]
52. I disliked the humorous segments in the video pro- grams. ..... \(\begin{array}{lll}-66 & 0.19 & 1.64\end{array}\)
56. There was a close relationship between the text and the television component. ..... \(64 \quad 0.07 \quad 1.35\)
147. I disliked the way the video programs told me what
I should do. ..... \(-51 \quad-0.32 \quad 1.20\)
154. The video programs were easy to understand. ..... 33 ..... 0.90 ..... 1.26

Factor III Evaluation of Course Structure

Item Fac. Std
no. Item
118. A letter explaining the purpose of each component of the course would be helpful.
151. An audio cassette tape explaining study methods to use in the course would have been helpful.
74. An introductory audio tape explaining each component of the course would have been helpful.
128. It would have been helpful to have a meeting of all students enrolled in the area and the instructor at the beginning of the course to discuss expectations and an overview of the course.
86. Periodic calls from faculty would have served to motivate my studying.
109. There should be at least one phone conference between the student and the faculty during the course.
77. A review of basic study skills at the beginning of the course would have been helpful.
102. The material covered in the course was quite different than I had expected it to be.
131. I would like to be given the opportunity of taking comparable forms of an examination until I reached the grade level I wanted to attain in the course.
119. I would have used supplementary "readings" (articles and/or other texts) if they had been available at the learning center.
61. I would have preferred having more contact with other students.
117. I would have enjoyed more contact with faculty.
162. A mixture of projects and tests is better than just tests on which to base a student's grade.
94. In this course, I became so actively involved in learning on my own that I did not need faculty help.
\(\begin{array}{lll}48 & -0.02 & 1.35\end{array}\)

\(64 \quad 0.04 \quad 1.15\)
\(61 \quad 0.11 \quad 1.26\)
\(58 \quad 0.24 \quad 1.27\)
\(54 \quad 0.43 \quad 1.31\)
\(\begin{array}{lll}53 & -0.08 & 1.38\end{array}\)
\(53 \quad 0.71 \quad 1.17\)
\(\begin{array}{lll}49 & -0.03 & 1.34\end{array}\)
\(\begin{array}{lll}48 & -0.13 & 1.32\end{array}\)
\begin{tabular}{lll}
46 & -0.38 & 1.08
\end{tabular}
\(46 \quad 0.12 \quad 1.14\)
\(44 \quad 0.53 \quad 1.10\)
\(40 \quad 0.27 \quad 1.18\)
\(\begin{array}{lll}-41 & 0.38 & 1.22\end{array}\)
49. I would have liked more information about where I stood in comparison to other students.
\[
36 \quad 0.43
\]
143. I would have preferred doing a "project" of some kind instead of taking tests for my grade in the course.
\(\begin{array}{lll}35 & -0.52 & 1.29\end{array}\)
169. I would suggest that the first test count less than later tests toward the grade in the course. \(\begin{array}{llll}31 & -0.67 & 1.24\end{array}\)

Factor IV This Mode of Obtaining an Education Vs. Conventional Mode
\begin{tabular}{|c|c|c|c|c|}
\hline \[
\begin{gathered}
\text { Item } \\
\text { no. }
\end{gathered}
\] & Item & & . Means & Std. dev. \\
\hline & The audio tape cassettes were a valuable part of the course. & 74 & 0.74 & 1.10 \\
\hline 9. & I plan to take more courses from UMA/ISU. & 69 & -0.12 & 1.37 \\
\hline 31. & A course of this type allows each student to proceed completely at his or her own pace. & 50 & 0.08 & 1.43 \\
\hline & As a result of taking this course, I have become acquainted with other adults with interests similar to mine. & -50 & -0.38 & 1.62 \\
\hline & I plan to enroll in a community college or fouryear institution to begin work toward a degree. & -49 & 0.00 & 1.49 \\
\hline & The tests in this course are similar to those given in other courses offered for college credit on a college campus. & 47 & -0.05 & 1,26 \\
\hline 3. & I have received benefits other than those I originally anticipated from taking a UMA course. & 46 & 0.28 & 0.75 \\
\hline & I know what services are provided by the learning center. & 46 & 0.42 & 1.05 \\
\hline & My family has given me extra help and support throughout the time I have been enrolled in the course. & 45 & 0.30 & 0.87 \\
\hline \[
12 .
\] & I plan to enroll in a community college or a fouryear institution for additional courses. & -42 & -0.09 & 1.41 \\
\hline & The learning center personnel made an effort to find answers to my questions. & 40 & 0,16 & 1.30 \\
\hline
\end{tabular}
4. Finding time to study was difficult. ..... \(40 \quad 0.41 \quad 0.89\)
36. I did not need more faculty contact for satisfac- tory progress in the course. ..... \(39-0.11 \quad 1.31\)
7. I would like to take courses which would help me become more aware of problems in the world today ..... \(\begin{array}{lll}39 & -0.37 & 0.95\end{array}\)
26. The learning center personnel seemed to welcome my telephone calls. ..... \(38 \quad 0.42 \quad 1.15\)
29. The text used was similar to a text that might be used in a course offered on a college campus. ..... \(38 \quad 0.44 \quad 1.40\)
2. I felt at ease calling the learning center for information.
\(37 \quad 0.30 \quad 0.82\)

\section*{Factor V Availability of Faculty}

104. I felt free to ask the faculty questions about the course. ..... \(74 \quad 0.56 \quad 1.19\)
150. I enjoyed talking with faculty over the telephone. 73 ..... \(0.16 \quad 1.02\)
97. I felt at ease talking with faculty by telephone. ..... 69 ..... \(0.20 \quad 1.02\)
113. I felt free to relate any complaints I had to faculty. ..... \(68 \quad 0.42 \quad 1.16\)
155. The faculty seemed genuinely concerned with my progress in the course. ..... 65 ..... \(0.37 \quad 1.08\)
80. I felt the faculty was very competent. ..... 550.80 ..... 0.97
145. I received adequate feedback from the tests about the content of the questions I got wrong, that is, "why my answer was wrong." ..... \(\begin{array}{lll}39 & -0.68 & 1.35\end{array}\)
95. I felt free to complain to the learning centerpersonnel about the things I did not like.350.391 .15

Factor VI Family Involvement
\begin{tabular}{|c|c|c|c|c|}
\hline Item no. & Item & & . Means & Std. dev. \\
\hline 84. & Knowledge I have gained will help me be a better family member. & 62 & -0.06 & 1.15 \\
\hline & As a result of taking this course, I believe I can be a better "spouse." & 60 & -0.18 & 1.19 \\
\hline 96. & My spouse enjoyed studying and learning with me. & 59 & -0.63 & 1.16 \\
\hline 142. & I found it helpful to discuss the course material with a member (or members) of my household. & 55 & -0.01 & 1.20 \\
\hline 115. & As a result of taking this course, I believe I can be a better parent. & 54 & -0.48 & 1.04 \\
\hline 76. & I find it easier to communicate with my children as a result of taking this course. & 50 & -0.61 & 1.03 \\
\hline & As a result of taking this course, I feel I can be a more interesting companion and friend. & 48 & -0.12 & 1.11 \\
\hline \[
81 .
\] & I feel the knowledge \(I\) acquired will help me to be a better citizen. & 46 & 0.12 & 1.06 \\
\hline 130. & As a result of taking this course, I have made some new friends. & 35 & -0.88 & 1.30 \\
\hline 71. & I have discussed this course with my spouse at least once a week. & 35 & -0.76 & 1.36 \\
\hline 33. & My spouse enjoyed watching the video programs with me. & 33 & -0.53 & 1.48 \\
\hline
\end{tabular}

Factor VII Evaluation Component of Course
\begin{tabular}{|c|c|c|c|c|}
\hline Item no. & Item & \multicolumn{2}{|l|}{\begin{tabular}{l}
Fac. \\
load. Means
\end{tabular}} & \begin{tabular}{l}
Std. \\
dev.
\end{tabular} \\
\hline 91. & Tests are the best way to evaluate a student's performance in this course. & 66 & 0.61 & 1.13 \\
\hline 93. & I didn't mind studying for the tests. & 54 & 0.77 & 1.06 \\
\hline 149. & My primary purpose for taking this course was to gain job skills. & 43 & 0.47 & 1.45 \\
\hline
\end{tabular}
79. If a student knows the material included in the text, she/he would do well on the tests. ..... \(42 \quad 1.14 \quad 1.01\)103. After taking the first test, I felt more relaxedabout the next test.\(39 \quad 0.31 \quad 1.32\)
43. The grade reflected the extent of my learning in the course.
Factor VIII Stress Engendered by Involvement in the Course Relating to Family
\begin{tabular}{lllll}
\begin{tabular}{l} 
Item \\
no.
\end{tabular} & \multicolumn{1}{c}{ Item } & \begin{tabular}{l} 
Fac. \\
load. Means
\end{tabular} & \begin{tabular}{l} 
Std. \\
dev.
\end{tabular} \\
\hline 141. \begin{tabular}{l} 
As a result of taking this course, I had much less \\
time to spend with my family.
\end{tabular} & 49 & 0.12 & 1.17 \\
148. I worried about taking the tests.
\end{tabular}
87. My spouse felt the amount of time I needed to spend on the course interfered with our family life.
\(\begin{array}{lll}45 & -0.36 & 1.18\end{array}\)
50. It is extremely inconvenient for me to take a
course at a junior or community college or a four-
year institution (on campus).
125. The pace of the course was too fast for the time I had to spend on it.
\(40 \quad 0,10 \quad 1,30\)
110. Being able to budget sufficient study time for \(\begin{array}{lllll}\text { satisfactory progress in the course was no problem. } & -39 & -0.50 & 1.12\end{array}\)
58. Domestic interruptions and demands have interfered with the amount of time I felt I needed to spend on the course.
\(38 \quad 0.49 \quad 1.21\)
129. The need for quiet study time for this course interfered with the family's activities.
\(\begin{array}{lll}37 & -0.29 & 1.24\end{array}\)
70 I enjoyed the course except for the tests. \(\begin{array}{lllll} & -0.02 & 1.20\end{array}\)
166. Taking the UMA/ISU course required a substantial effort on my part.
0.94

Factor IX Stress Engendered by Involvement in the Course Relating to the Individual
\begin{tabular}{|c|c|c|c|c|}
\hline Item no. & Item & \begin{tabular}{l}
Fac \\
loa
\end{tabular} & Means & \begin{tabular}{l}
Std. \\
dev.
\end{tabular} \\
\hline & I did not have enough energy or stamina to keep up with this course the way I would have liked, due to all of the other demands on my time and energy. & 58 & 0.21 & 1.56 \\
\hline 47. & Work pressures and responsibilities have interfered with the time \(I\) felt \(I\) needed to spend on the course. & 38 & 0.90 & 1.19 \\
\hline 8. & I find it difficult to study for tests. & 38 & 0.04 & 1.26 \\
\hline \[
126
\] & I believe that the difficulty level of this course was equal to or greater than a course comparable to it on a college campus. & 38 & 0.70 & 1.06 \\
\hline 137. & Disciplining myself to study for a test was difficult. & 36 & 0.25 & 1.25 \\
\hline
\end{tabular}

Factor X Vocational Vs. Personal Development Motivation
\begin{tabular}{|c|c|c|c|c|}
\hline Item no. & Item & Fac. load. & Means & \[
\begin{aligned}
& \text { Std. } \\
& \text { dev. }
\end{aligned}
\] \\
\hline 83. & I took this course simply to learn. & -57 & 0.83 & 1.22 \\
\hline 85. & The knowledge I gained in this course is much more important to me than the grade I received. & -47 & 0.82 & 1.06 \\
\hline 165. & My primary interest in taking the course was to gain Iowa State University academic credit. & 43 & -0.15 & 1.46 \\
\hline \[
40 .
\] & This experience has helped me become more aware of my vocational interests. & 38 & 0.20 & 1.51 \\
\hline 30. & The grade I will receive in this course is not very important to me. & -32 & -0.67 & 1.40 \\
\hline
\end{tabular}

Do not load on or fit into any factor

168. Studying for this course has helped me to better \(\begin{array}{lllll}\text { understand my children's study habits and problems. } & 0 & 0.14 & 1.06\end{array}\)
19. I appreciate having an opportunity to express how \(\begin{array}{lllll}I \text { feel about this overall experience. } & 0 & 0.99 & 1.24\end{array}\)
167. The text was a valuable part of the course. \(0 \quad 1.50 \quad 0.71\)
48. In addition to tuition, books, and materials, the course has involved significant additional expense. \(0 \quad-1.17 \quad 1.30\)

\author{
Factor Loadings for UMA/ISU Courses Consumer Experience, Spring, 1976, Psychology Today, Spring and Fall, 1976, Adams Chronicles and Writing for a Reason, Fall, 1976
}
Factor I Impact of Course on the Students
Item Factor
no. Item loading
158. Through taking this course \(I\) have gained new knowledge that will help me to enjoy life more. ..... \(-72\)
116. The overall effect of this course on my life has been desirable. ..... \(-71\)
59. I gained personal satisfaction through taking this course. ..... \(-68\)
42. I learned a great deal in this course. ..... \(-65\)
157. This experience has been a valuable supplement to my pre- vious education. ..... \(-64\)
106. I feel the knowledge gained from this course will be very useful to me. ..... \(-65\)
65. As a result of taking this course, I feel I can be a more interesting companion and friend. ..... \(-64\)
3. I have received benefits other than those \(I\) originally anticipated from taking a UMA course. ..... \(-64\)
90. My personal goals have been advanced through taking this course. ..... \(-62\)
66. Taking this course has given me valuable insight relating to this area of study. ..... \(-60\)
140. The UMA courses provided me with a sense of accomplishment. ..... \(-60\)
81. I feel the knowledge \(I\) acquired will help me to be a better citizen. ..... \(-58\)
63. The overall experience of taking this course has had a pos- itive influence on our family life. ..... \(-58\)
139. I would recommend this course to my friends. ..... \(-55\)
100. In this course, I felt challenged to do my best work. ..... \(-54\)
163. Overall this was a good course. ..... -54
73. As a result of taking this course, I believe I can be a better "spouse." ..... -53
111. The text was helpful for the tests. ..... -53
60. The course was worth the money I spent to take it. ..... \(-51\)
72. As a result of taking this course, I have become more interested in the subject and would like to take additional courses in this area. ..... -51
46. Taking this course has increased my confidence in my abil- ity. ..... \(-50\)
78. I enjoyed reading the text. ..... -50
133. The tests adequately sampled the material covered in the course. ..... \(-49\)
84. Knowledge I have gained will help me be a better family member. ..... \(-49\)
164. My family admires me for taking this course. ..... \(-47\)
112. I believe that I learned as much or more from this UMA/ISU course as I would have learned from a similar college level course offered on a college campus. ..... \(-47\)
55. Overall this course was very interesting to me. ..... -45
167. The text was a valuable part of the course. ..... -43
5. My family has given me extra help and support throughout the time I have been enrolled in the course. ..... -43
169. I would suggest that the first test count less than later tests toward the grade in the course. ..... 42
170. The way the course was presented fit my particular needs. ..... \(-41\)
156. I was able to develop effective study techniques as the course progressed. ..... \(-40\)
168. Studying for this course has helped me to better understand my children's study habits and problems. ..... \(-40\)
76. I find it easier to communicate with my children as a result of taking this course. ..... -38
17. I believe I will remember longer what I have learned in this course than in courses I have taken in a regular class situation. ..... -37
44. The illustrations in the course text were very useful. ..... -36
91. Tests are the best way to evaluate a student's performance in this course. ..... -36
23. I liked the feeling of being a student. ..... \(-35\)
147. I disliked the way the video programs told me what I should do. ..... 35
16. I would be interested in having someone explain how I might be able to obtain special expertise in an area of study or a degree by taking courses from UMA and a variety of other sources, as for example, off-campus courses from a four- year institution, a community college, and/or correspon- dence courses. ..... \(-33\)
143. I would have preferred doing a "project" of some kind instead of taking tests for my grade in the course. ..... 31
43. The grade reflected the extent of my learning in the course. ..... -31
101. I felt that the faculty believed that each student should be allowed to proceed completely at his or her own pace. ..... \(-30\)
Factor II Stress Engendered by Involvement in the Course Relating to the Individual
\begin{tabular}{lll} 
Item & Factor \\
no. & Item & loading \\
\hline
\end{tabular}
58. Domestic interruptions and demands have interfered with the amount of time I felt I needed to spend on the course. ..... \(-81\)
47. Work pressures and responsibilities have interfered with the time I felt I needed to spend on the course. ..... \(-79\)
35. I did not have enough energy or stamina to keep up with this course the way I would have liked, due to all of the other demands on my time and energy. ..... -74
113. I felt free to relate any complaints I had to faculty. ..... 71
8. I find it difficult to study for tests. ..... \(-67\)
110. Being able to budget sufficient study time for satisfactory progress in the course was no problem. ..... 67
125. The pace of the course was too fast for the time \(I\) had to spend on it. ..... \(-65\)
4. Finding time to study was difficult. ..... -64
141. As a result of taking this course, I had much less time to spend with my family. ..... -63
137. Disciplining myself to study for a test was difficult. ..... -58
75. The most I could do was try to pass the tests; learning all of the material seemed too much. ..... \(-56\)
93. I didn't mind studying for the tests. ..... 55
64. Too much reading was required for the course. ..... -52
148. I worried about taking the tests. ..... \(-47\)
37. There should be increased individual flexibility for course completion. ..... -47
87. My spouse felt the amount of time I needed to spend on the course interfered with our family life. ..... -44
22. I don't learn as easily as I did back in high school. ..... \(-43\)
115. As a result of taking this course, I believe I can be a better parent. ..... \(-42\)
70. I enjoyed the course except for the tests. ..... \(-42\)
166. Taking the UMA/ISU course required a substantial effort on my part. ..... -42
122. The overall work load for this course was too heavy for the amount of credit given. ..... \(-41\)
88. The time I had to spend on the course was too great for the benefits gained. ..... -41
98. The vocabulary used in the text was too difficult for a freshman or sophomore college level course. ..... \(-40\)
124. I feel I now know the material covered in the text. ..... 39
92. In this course, I liked feeling responsible for my own learning. ..... 35
13. My children felt a bit neglected at times due to the amount of time I had to spend studying. ..... \(-31\)
152. Involvement with this course has made me feel that I can do college level work. ..... 30
Factor III Reaction to Faculty or "Assisting" Personnel
Item Factor
no. Item loading
104. I felt free to ask the faculty questions about the course. ..... 74
97. I felt at ease talking with faculty by telephone. ..... 74
146. The faculty was helpful in answering the questions \(I\) asked. ..... 74
3. I felt free to relate any complaint I had to faculty. ..... 72
67. The faculty seemed to welcome my telephone calls. ..... 66
155. The faculty seemed genuinely concerned with my progress in the course. ..... 64
150. I enjoyed talking with faculty over the telephone. ..... 63
26. The learning center personnel seemed to welcome my tele- phone calls. ..... 58
18. The learning center personnel were cooperative about trying to meet my needs. ..... 55
95. I felt free to complain to the learning center personnel about the things I did not like. ..... 55
2. I felt at ease calling the learning center for information. ..... 52
24. The learning center personnel made an effort to find answers to my questions. ..... 51
21. The learning center staff play a very small part in the overall UMA/ISU program. ..... \(-49\)
6. I know what services are provided by the learning center. ..... 47
11. The learning center personnel were available when I needed them. ..... 46
14. I understand the functions of the learning center. ..... 45
145. I received adequate feedback from the tests about the con- tent of the questions I got wrong, that is, "why my answer was wrong." ..... 43
80. I feit the faculty was very competent. ..... 28
Factor IV Evaluation of the Course Structure
Item Factor
loading
117. I would have enjoyed more contact with faculty. ..... 78
118. A letter explaining the purpose of each component of the course would be helpful. ..... 75
119. I would have used supplementary "readings" (articles and/or other texts) if they had been available at the learning center. ..... 67
36. I did not need more faculty contact for satisfactory prog- ress in the course. ..... 65
151. An audio cassette tape explaining study methods to use in the course would have been helpful. ..... 65
61. I would have preferred having more contact with other stu- dents. ..... 61
74. An introductory audio tape explaining each component of the course would have been helpful. ..... 57
128. It would have been helpful to have a meeting of all stu- dents enrolled in the area and the instructor at the begin- ning of the course to discuss expectations and an overview of the course. ..... 56
86. Periodic calls from faculty would have served to motivate my studying. ..... 55
77. A review of basic study skills at the beginning of the course would have been helpful. ..... 55
109. There should be at least one phone conference between the student and the faculty during the course. ..... 53
94. In this course, I became so actively involved in learning on my own that I did not need faculty help. ..... 49
49. I would have liked more information about where I stood in comparison to other students. ..... 43
105. My friends admire me for taking this course. ..... 42
107. This whole experience has turned out to be an interesting topic of conversation with my friends. ..... 36
162. A mixture of projects and tests is better than just tests on which to base a student's grade. ..... 35
131. I would like to be given the opportunity of taking compara- ble forms of an examination until I reached the grade level I wanted to attain in the course. ..... 34
Factor V Evaluation of the Video Component of the Course
Item
Item
54. The video programs helped to clarify the material covered in the text(s). ..... -71
56. There was a close relationship between the text and the television component. ..... \(-69\)
41. The quality of the TV programs (or video component) was excellent. ..... \(-67\)
82. The video programs were a valuable part of the course. ..... \(-67\)
32. The video programs were interesting to watch. ..... -65
123. The video programs did not follow the text. ..... 60
89. Watching the video programs was a waste of time. ..... 60
129. The need for quiet study time for this course interfered with the family's activities. ..... -56
154. The video programs were easy to understand. ..... -50
108. The video programs were helpful in preparing for tests. ..... \(-46\)
52. I disliked the humorous segments in the video programs. ..... 37
159. I disliked some of the actors in the video programs. ..... 31
135. The quality of the text and materials was high. ..... -32
161. The text was easy to understand. ..... \(-36\)
Factor VI Personal Development Orientation
Item Factor no. Item loading
30. The grade I will receive in this course is not very impor- tant to me. ..... \(-52\)
85. The knowledge I gained in this course is much more impor- tant to me than the grade I received. ..... \(-47\)
83. I took this course simply to learn. ..... \(-40\)
165. My primary interest in taking the course was to gain Iowa State University academic credit. ..... 36
Factor VII Obtaining an Education through Conventional Mode
Item
Item15. I plan to enroll in a community college or four-year insti-tution to begin work toward a degree.81
12. I plan to enroll in a community college or a four-year institution for additional courses. ..... 77
20. I would like to work toward a degree. ..... 67
25. I want to take additional courses which would help to upgrade my qualifications for a job and/or promotion. ..... 44
50. It is extremely inconvenient for me to take a course at a junior or community college or a four-year institution (on-campus) ..... \(-33\)
38. I am currently enrolled at an area community college. ..... 31

Factor VIII Obtaining an Education through Open Learning Mode
Item
no. Item
Factor
loading
62. I took the UMA course because I wanted to learn while at home instead of the required attendance at a college.
144. I prefer continuing with UMA/ISU courses rather than taking a course on a campus. ..... \(-58\)
9. I plan to take more courses from UMA/ISU. ..... \(-48\)
7. I would like to take courses which would help me become more aware of problems in the world today. ..... \(-40\)
27. I wish UMA/ISU would offer more courses for persona1 enrichment. ..... \(-35\)
Factor IX Family Involvement and/or Support for Student
Item
Item

Factor
 loading
142. I found it helpful to discuss the course material with a member (or members) of my household. ..... \(-59\)
164. My family admires me for taking this course. ..... \(-47\)
138. My spouse feels the course was worth the money I spent to take it. ..... \(-56\)
153. The subject matter content of the course was about what I
had expected it to be. ..... \(-55\)
33. My spouse enjoyed watching the video programs with me. ..... \(-51\) ..... 
102. The material covered in the course was quite different than I had expected it to be. ..... 46
114. The main benefits I have received from taking this course were not my original purpose for enrolling. ..... 46
71. I have discussed this course with my spouse at least once a
week. ..... \(-45\)
10. My family is favorable toward my enrolling in future courses. ..... -45
96. My spouse enjoyed studying and learning with me. ..... -42
39. My original purpose for taking this course changed as I progressed in the course. ..... 38
121. Members of my household (other than spouse) watched the video programs. ..... -26
Factor X Evaluation of Course and Components
Item Factor
no. Item loading
32. The tests in this course are similar to those given in other courses offered for college credit on a college cam- pus. ..... -59
29. The text used was similar to a text that might be used in a course offered on a college campus. ..... -56
57. The majority of "directions" given in the text and study guides was clear and helpful. ..... -50
19. I appreciate having an opportunity to express how I feel about this overall experience. ..... -37
126. I believe that the difficulty level of this course was equal to or greater than a course comparable to it on a college campus. ..... -35
Factor XI Vocational Orientation
Item
Item

\section*{Factor loading}
53. Taking this course has improved my chances of making money.\(-65\)
149. My primary purpose for taking this course was to gain job skills. ..... \(-53\)
51. This experience has helped me to begin developing a new career. ..... \(-51\)
136. I feel confident to try to seek employment relating to the skills I acquired in this course. ..... -48
127. This course has helped me to be a better employee. ..... -48
40. This experience has helped me become more aware of my voca- tional interests. ..... \(-45\)
99. I feel better prepared for a job as a result of taking this course (even though the job might not relate directly to this course). ..... \(-45\)
130. As a result of this course, I have made some new friends. ..... -35
34. As a result of taking this course, I have become acquainted with other adults with interests similar to mine. ..... -32
Factor XII (Not a Factor-1ow and illogical loadings)
Items which loaded on this factor were either too low or were not cohesive, with a common construct.
Factor XIII Cost of Course
\begin{tabular}{rcc}
\begin{tabular}{c} 
Item \\
no.
\end{tabular} & Item & \begin{tabular}{c} 
Factor \\
loading
\end{tabular} \\
68. The cost of books and materials is too high. & -32 \\
120. & The cost of tuition is too high. & -45
\end{tabular}
Factor XIV Fairness of Tests
\begin{tabular}{lll} 
Item & Factor \\
no. & Item & loading
\end{tabular}
103. After taking the first test, I felt more relaxed about the next test. ..... \(-63\)
69. The tests were fair. ..... \(-52\)
79. If a student knows the material included in the text, she/he would do well on the tests. ..... \(-46\)
45. I felt that the amount of memorization required for the tests was about right. ..... \(-38\)

Factor XV (Not a Factor--low and illogical loadings)
Items which loaded on this factor were either too low or were not cohesive, with a common construct.

Items with Loadings Too Low or Content Too Illogical to Fit in One of the Identified Factors
\begin{tabular}{lll} 
Item & Factor \\
no. & Item & loading \\
\hline
\end{tabular}

134. The video programs offered at 7-7:30 a.m. interfered with
 duties I needed to perform (for my family or other purpose). ..... 0
1. The audio tape cassettes were a valuable part of the course. 0
48. In addition to tuition, books, and materials, the course
has involved significant additional expense.
31. A course of this type allows each student to proceed completely at his or her own pace.46
28. The video programs prompted me to keep up on my reading in the text.

Table D-1. Intercorrelations adjusted for group differences
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Variables} & \multicolumn{9}{|c|}{Variables} \\
\hline & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \\
\hline 1 & 1.00 & . 00 & . 00 & . 00 & . 00 & . 00 & . 00 & . 00 & . 00 \\
\hline 2 & & 1.00 & -. 02 & -. 02 & -. 54 & -. 25 & . 14 & . 14 & -. 22 \\
\hline 3 & & & 1.00 & -. 46 & . 24 & . 85 & . 64 & . 41 & . 04 \\
\hline 4 & & & & 1.00 & -. 21 & -. 44 & -. 60 & -. 68 & -. 52 \\
\hline 5 & & & & & 1.00 & . 53 & . 16 & . 17 & . 31 \\
\hline 6 & & & & & & 1.00 & . 49 & . 37 & . 21 \\
\hline 7 & & & & & & & 1.00 & . 40 & . 08 \\
\hline 8 & & & & & & & & 1.00 & . 38 \\
\hline 9 & & & & & & & & & 1.00 \\
\hline 10 & & & & & & & & & \\
\hline 11 & & & & & & & & & \\
\hline 12 & & & & & & & & & \\
\hline 13 & & & & & & & & & \\
\hline 14 & & & & & & & & & \\
\hline 15 & & & & & & & & & \\
\hline 16 & & & & & & & & & \\
\hline 17 & & & & & & & & & \\
\hline 18 & & & & & & & & & \\
\hline 19 & & & & & & & & & \\
\hline 20 & & & & & & & & & \\
\hline 21 & & & & & & & & & \\
\hline 22 & & & & & & & & & \\
\hline 23 & & & & & & & & & \\
\hline 24 & & & & & & & & & \\
\hline 25 & & & & & & & & & \\
\hline 26 & & & & & & & & & \\
\hline 27 & & & & & & & & & \\
\hline 28 & & & & & & & & & \\
\hline 29 & & & & & & & & & \\
\hline 30 & & & & & & & & & \\
\hline 31 & & & & & & & & & \\
\hline 32 & & & & & & & & & \\
\hline 33 & & & & & & & & & \\
\hline 34 & & & & & & & & & \\
\hline 35 & & & & & & & & & \\
\hline 36 & & & & & & & & & \\
\hline 37 & & & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{10}{|c|}{Variables} \\
\hline 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 \\
\hline . 00 & . 00 & . 00 & . 00 & . 00 & . 00 & :00 & . 00 & . 00 & . 00 \\
\hline -. 02 & -. 00 & -. 01 & -. 08 & . 19 & . 54 & . 15 & . 06 & -. 50 & -. 08 \\
\hline . 23 & . 05 & . 19 & -. 02 & . 55 & -. 11 & -. 01 & . 17 & . 11 & -. 06 \\
\hline -. 17 & -. 00 & -. 12 & -. 01 & -. 40 & -. 01 & -. 01 & -. 15 & -. 03 & -. 22 \\
\hline . 15 & . 04 & . 03 & . 12 & -. 05 & -. 30 & -. 17 & . 13 & . 67 & -. 01 \\
\hline . 24 & . 06 & . 18 & . 04 & . 37 & -. 23 & -. 09 & . 21 & . 28 & -. 00 \\
\hline -. 05 & . 03 & . 10 & -. 10 & . 47 & . 03 & -. 01 & . 28 & . 01 & -. 10 \\
\hline . 24 & -. 04 & . 07 & . 13 & . 33 & . 26 & -. 06 & . 20 & . 07 & . 12 \\
\hline . 40 & . 01 & . 14 & . 16 & -. 04 & -. 04 & -. 07 & . 03 & . 09 & . 25 \\
\hline 1.00 & -. 06 & . 18 & . 14 & . 06 & . 15 & -. 04 & -. 10 & . 01 & . 08 \\
\hline & 1.00 & . 05 & . 22 & . 11 & . 00 & . 08 & -. 21 & . 10 & . 05 \\
\hline & & 1.00 & -. 05 & . 20 & . 04 & . 01 & -. 06 & . 02 & -. 09 \\
\hline & & & 1.00 & . 02 & . 03 & -. 02 & . 09 & . 11 & . 11 \\
\hline & & & & 1.00 & . 00 & . 14 & . 08 & . 04 & -. 02 \\
\hline & & & & & 1.00 & . 01 & . 04 & -. 14 & -. 03 \\
\hline & & & & & & 1.00 & -. 02 & -. 12 & -. 03 \\
\hline & & & & & & & 1.00 & . 03 & . 07 \\
\hline & & & & & & & & 1.00 & . 02 \\
\hline & & & & & & & & & 1.00 \\
\hline
\end{tabular}

Table D-1 (continued)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Variables} & \multicolumn{9}{|c|}{Variables} \\
\hline & 20 & 21 & 22 & 23 & 24 & 25 & 26 & 27 & 28 \\
\hline 1 & . 00 & . 00 & . 00 & . 00 & . 00 & . 00 & . 00 & . 00 & . 00 \\
\hline 2 & -. 03 & -. 07 & . 11 & -. 00 & -. 04 & -. 06 & . 08 & . 05 & -. 00 \\
\hline 3 & -. 15 & -. 04 & . 03 & . 09 & . 08 & -. 07 & . 18 & -. 07 & . 19 \\
\hline 4 & . 18 & -. 04 & . 00 & -. 08 & -. 09 & -. 10 & -. 23 & . 02 & -. 14 \\
\hline 5 & -. 00 & . 06 & -. 15 & -. 06 & . 14 & . 00 & -. 04 & -. 09 & . 07 \\
\hline 6 & -. 10 & . 01 & -. 03 & . 04 & . 05 & -. 03 & . 16 & -. 13 & . 17 \\
\hline 7 & -. 12 & -. 10 & . 03 & . 08 & . 16 & -. 04 & . 20 & -. 06 & . 17 \\
\hline 8 & -. 08 & . 12 & -. 06 & . 04 & . 06 & . 02 & . 14 & -. 04 & . 11 \\
\hline 9 & -. 06 & . 25 & -. 09 & . 08 & . 02 & . 06 & . 05 & . 15 & . 07 \\
\hline 10 & . 03 & . 20 & . 04 & . 17 & -. 08 & -. 05 & . 06 & . 18 & . 22 \\
\hline 11 & . 05 & . 12 & -. 02 & . 19 & . 03 & . 30 & . 08 & . 05 & -. 01 \\
\hline 12 & -. 05 & . 03 & . 10 & . 18 & . 07 & -. 13 & . 02 & . 07 & . 05 \\
\hline 13 & . 21 & . 01 & -. 13 & . 12 & -. 04 & . 23 & . 31 & -. 07 & . 00 \\
\hline 14 & -. 07 & -. 08 & . 21 & . 12 & . 04 & . 06 & . 22 & . 05 & . 13 \\
\hline 15 & . 03 & . 07 & . 11 & . 09 & . 10 & . 11 & . 05 & . 21 & . 10 \\
\hline 16 & -. 06 & -. 10 & . 15 & . 02 & -. 14 & . 03 & . 14 & -. 07 & . 02 \\
\hline 17 & -. 03 & -. 08 & -. 06 & -. 10 & . 04 & -. 18 & . 12 & -. 15 & -. 06 \\
\hline 18 & . 04 & . 04 & -. 14 & -. 03 & . 09 & . 04 & . 03 & -. 09 & . 03 \\
\hline 19 & -. 07 & -. 02 & -. 11 & . 02 & -. 10 & . 14 & . 06 & -. 01 & -. 06 \\
\hline 20 & 1.00 & -. 03 & -. 10 & . 05 & -. 10 & . 12 & -. 03 & . 01 & . 00 \\
\hline 21 & & 1.00 & -. 14 & -. 00 & . 09 & -. 04 & -. 07 & . 04 & -. 06 \\
\hline 22 & & & 1.00 & . 04 & -. 03 & -. 09 & -. 01 & . 10 & . 11 \\
\hline 23 & & & & 1.00 & . 26 & . 10 & . 10 & . 37 & . 35 \\
\hline 24 & & & & & 1.00 & . 13 & . 01 & . 10 & . 06 \\
\hline 25 & & & & & & 1.00 & . 07 & . 07 & -. 11 \\
\hline 26 & & & & & & & 1.00 & -. 09 & . 14 \\
\hline 27 & & & & & & & & 1.00 & . 21 \\
\hline 28 & & & & & & & & & 1.00 \\
\hline 29 & & & & & & & & & \\
\hline 30 & & & & & & & & & \\
\hline 31 & & & & & & & & & \\
\hline 32 & & & & & & & & & \\
\hline 33 & & & & & & & & & \\
\hline 34 & & & & & & & & & \\
\hline 35 & & & & & & & & & \\
\hline 36 & & & & & & & & & \\
\hline 37 & & & & & & & & & \\
\hline 38 & & & & & & & & & \\
\hline
\end{tabular}
is based on 165 students.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{10}{|c|}{Variables} \\
\hline 29 & 30 & 31 & 32 & 33 & 34 & 35 & 36 & 37 & \(38^{\text {a }}\) \\
\hline . 00 & . 00 & . 00 & . 00 & . 00 & . 00 & . 00 & . 00 & . 00 & . 00 \\
\hline . 00 & -. 01 & . 09 & -, 05 & . 08 & . 12 & -,05 & . 00 & . 01 & . 16 \\
\hline . 02 & . 13 & -. 18 & . 04 & -. 03 & . 04 & . 03 & . 29 & -. 06 & . 24 \\
\hline . 05 & -. 09 & -. 04 & -. 07 & . 07 & -. 13 & -. 17 & -. 02 & . 07 & -. 15 \\
\hline -. 11 & -. 01 & -. 00 & . 09 & -. 13 & -. 10 & . 08 & -. 02 & . 00 & -. 13 \\
\hline . 03 & . 08 & -. 18 & . 07 & -. 06 & -. 03 & . 05 & . 24 & -. 07 & . 05 \\
\hline -. 06 & . 21 & -. 04 & . 10 & -. 06 & . 06 & . 06 & . 10 & . 02 & . 28 \\
\hline -. 10 & . 11 & . 02 & . 05 & -. 04 & . 16 & . 13 & -. 02 & -. 06 & . 04 \\
\hline -. 03 & -. 05 & . 05 & . 05 & -. 07 & . 03 & . 14 & -. 06 & -. 09 & -. 15 \\
\hline . 15 & -. 01 & -. 00 & . 11 & . 06 & . 12 & . 23 & . 19 & -. 17 & -. 11 \\
\hline . 03 & . 05 & . 04 & . 27 & . 09 & -. 18 & . 09 & . 03 & . 04 & -. 26 \\
\hline . 20 & . 16 & -. 16 & . 08 & . 04 & -. 11 & . 13 & . 19 & -. 00 & . 19 \\
\hline -. 02 & . 00 & . 03 & . 07 & . 03 & . 19 & . 36 & -. 04 & \(\therefore .03\) & -. 22 \\
\hline -. 05 & . 09 & -. 06 & . 00 & -. 06 & . 08 & . 02 & . 15 & -. 20 & . 33 \\
\hline . 04 & . 10 & . 20 & . 12 & -. 03 & . 12 & . 13 & -. 09 & -. 00 & -. 08 \\
\hline -. 05 & . 01 & -. 17 & -. 08 & -. 03 & . 06 & -. 06 & . 25 & -. 01 & . 03 \\
\hline -. 10 & . 17 & -. 15 & . 02 & . 02 & -. 03 & . 06 & . 04 & -. 01 & . 16 \\
\hline -. 13 & -. 05 & . 00 & . 09 & -. 13 & -. 04 & . 08 & -. 02 & -. 05 & -. 20 \\
\hline -. 05 & -. 09 & . 14 & -. 04 & -. 06 & . 08 & . 05 & -. 17 & . 07 & . 06 \\
\hline . 05 & -. 04 & -. 04 & . 03 & . 04 & . 00 & . 06 & . 04 & -. 04 & -. 17 \\
\hline -. 04 & -. 01 & -. 00 & . 01 & . 01 & -. 09 & -. 01 & -. 18 & -. 01 & -. 11 \\
\hline . 11 & . 03 & . 08 & -. 00 & -. 00 & . 08 & . 04 & . 12 & -. 08 & . 12 \\
\hline . 41 & . 48 & . 07 & . 49 & . 06 & -. 05 & . 56 & . 27 & -. 31 & -. 05 \\
\hline . 10 & . 22 & . 09 & . 32 & -. 07 & -. 07 & . 25 & -. 12 & . 01 & . 05 \\
\hline -. 09 & -. 08 & . 18 & . 13 & -. 03 & -. 09 & . 22 & -. 21 & . 03 & -. 18 \\
\hline . 02 & -. 01 & -. 06 & . 12 & . 06 & . 41 & . 21 & . 17 & -. 03 & . 05 \\
\hline . 15 & . 17 & . 25 & . 20 & . 07 & -. 03 & . 23 & . 04 & -. 18 & -. 03 \\
\hline . 20 & . 15 & . 05 & . 26 & . 01 & . 18 & . 26 & . 30 & -. 18 & -. 01 \\
\hline 1.00 & . 32 & -. 05 & . 17 & . 07 & . 03 & . 22 & . 25 & -. 04 & . 01 \\
\hline & 1.00 & -. 04 & . 29 & . 03 & . 01 & . 24 & . 12 & -. 18 & . 14 \\
\hline & & 1.00 & . 08 & . 01 & . 09 & . 16 & -. 39 & . 14 & -. 12 \\
\hline & & & 1.00 & . 03 & . 04 & . 45 & . 09 & -. 09 & -. 18 \\
\hline & & & & 1.00 & -. 02 & . 09 & . 14 & . 06 & . 06 \\
\hline & & & & & 1.00 & . 12 & . 11 & . 05 & . 05 \\
\hline & & & & & & 1.00 & . 04 & \[
-.16
\] & -. 15 \\
\hline & & & & & & & 1.00 & -. 21 & . 10 \\
\hline & & & & & & & & 1.00 & -. 01 \\
\hline & & & & & & & & & 1.00 \\
\hline
\end{tabular}

Table D-2. Factors, factor loadings, means, and standard deviations for UMA/ISU Student Questionnaire for all courses
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Item no.} & \multirow[b]{2}{*}{Item} & \multicolumn{2}{|l|}{\begin{tabular}{c} 
Consumer \\
Experience \\
Course 2 \\
Spring \\
\(\mathrm{N}=27\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 3 \\
\text { Spring } \\
N=38 \\
\hline
\end{gathered}
\]} \\
\hline & & Mean & St.D. & Mean & St.D. \\
\hline & The audio tape cassettes were a valuable part of the course. & . 70 & 1.05 & .14 & 1.17 \\
\hline & I felt at ease calling the learning center for information. & . 76 & . 92 & . 74 & 1.18 \\
\hline & I have received benefits other than those I originally anticipated from taking a UMA course. & 1.09 & . 98 & . 60 & . 96 \\
\hline 4. & Finding time to study was difficult. & . 35 & 1.16 & . 19 & 1.55 \\
\hline & My family has given me extra help and support throughout the time I have been enrolled in the course. & . 79 & . 85 & . 80 & 1.27 \\
\hline & I know what services are provided by the learning center. & . 29 & 1.15 & . 72 & 1.33 \\
\hline & I would like to take courses which would help me become more aware of problems in the world today. & . 74 & . 73 & . 94 & 1.19 \\
\hline 8. & I find it difficult to study for tests. & . 22 & . 85 & . 41 & 1.28 \\
\hline & I plan to take more courses from UMA/ISU. & . 94 & . 90 & 1.05 & 1.11 \\
\hline & My family is favorable toward my enrolling in future courses. & 1.11 & . 95 & . 95 & 1.07 \\
\hline & The learning center personnel were available when I needed them. & . 95 & 1.16 & 1.13 & 1.23 \\
\hline & I plan to enroll in a community college or a four-year institution for additional courses. & -. 16 & 1.38 & . 38 & 1.39 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\begin{tabular}{l} 
Adams \\
Chronicles \\
Course 5 \\
Fa11 \\
\(\mathrm{N}=23\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 6 \\
\text { Fall } \\
\mathrm{N}=34 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Writing for } \\
\text { a Reason } \\
\text { Course } 7 \\
\text { Fal1 } \\
\mathrm{N}=22 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Courses } \\
2,3,5,6,7 \\
N=144
\end{gathered}
\]} & \multicolumn{2}{|l|}{```
Accounting Courses \(1 \& 4\) Spring \& Fall \(\mathrm{N}=154\)
```} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
\mathrm{~N}=154 \\
\hline
\end{gathered}
\]} \\
\hline Mean & St.D. & Mean & St.D. & Mean & St.D. & Fac. & Ldg. & Mean & St.D. & Fac. & Ldg. \\
\hline . 68 & 1.00 & -. 06 & . 97 & . 13 & . 92 & & & . 74 & 1.10 & 4 & 74 \\
\hline 1.25 & 1.55 & 1.22 & 1.26 & . 94 & 1.09 & 3 & 52 & . 30 & . 82 & 4 & 33 \\
\hline . 85 & . 95 & . 67 & . 95 & 1.09 & . 89 & 1 & -64 & . 28 & . 75 & 4 & 46 \\
\hline . 02 & 1.10 & . 90 & 1.28 & . 94 & 1.16 & 2 & -65 & . 41 & . 89 & 4 & 40 \\
\hline . 78 & 1.07 & . 66 & 1.08 & . 94 & 1.41 & 1 & -43 & . 30 & . 87 & 4 & 45 \\
\hline . 31 & 1.06 & 1.14 & 1.20 & 1.02 & 1.22 & 13 & 47 & . 42 & 1.05 & 4 & 46 \\
\hline . 79 & 1.01 & . 97 & 1.17 & . 57 & . 71 & 8 & -40 & -. 37 & . 95 & 4 & 39 \\
\hline . 04 & 1.00 & . 42 & 1.30 & . 24 & 1.30 & 2 & -67 & . 04 & 1.26 & 9 & 38 \\
\hline 1.10 & 1.01 & 1.18 & 1.22 & 1.07 & . 95 & 8 & -48 & -. 12 & 1.37 & 4 & 69 \\
\hline 1.00 & . 99 & . 98 & 1.09 & 1.06 & 1.11 & 9 & -45 & 1.11 & 1.05 & 1 & 33 \\
\hline 1.45 & . 99 & 1.26 & 1.27 & 1.51 & . 97 & 3 & 46 & . 85 & 1.20 & 0 & 0 \\
\hline . 32 & 1.65 & . 52 & 1.49 & -. 15 & 1.40 & 7 & 77 & -. 09 & 1.41 & 4 & -42 \\
\hline
\end{tabular}

Table D-2. (continued)
\(\left.\begin{array}{llll}\hline\end{array} \begin{array}{c}\text { Consumer } \\ \text { Experience }\end{array} \begin{array}{c}\text { Psychology } \\ \text { Today } \\ \text { Course }\end{array}\right\}\)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{4}{*}{\begin{tabular}{l} 
Adams \\
Chronicles \\
Course 5 \\
Fall \\
\(\mathrm{N}=23\) \\
\hline
\end{tabular}}} & \multicolumn{2}{|l|}{\multirow[t]{4}{*}{\begin{tabular}{c} 
Psychology \\
Today \\
Course 6 \\
Fall \\
\(\mathrm{N}=34\) \\
\hline
\end{tabular}}} & \multicolumn{2}{|l|}{\multirow[t]{4}{*}{\[
\begin{gathered}
\text { Writing for } \\
\text { a Reason } \\
\text { Course } 7 \\
\text { Fall } \\
\mathrm{N}=22 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[b]{3}{*}{\[
\begin{gathered}
\text { Courses } \\
2,3,5,6,7 \\
N=144 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{4}{*}{\begin{tabular}{c} 
Accounting \\
Courses \(1 \& 4\) \\
Spring \\
\(\&\) Fall \\
\(N=154\) \\
\hline
\end{tabular}}} & \multicolumn{2}{|l|}{\multirow[b]{3}{*}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
\mathrm{~N}=154 \\
\hline
\end{gathered}
\]}} \\
\hline & & & & & & & & & & & \\
\hline & & & & & & & & & & & \\
\hline & & & & & & & Fac. & & & & Fac. \\
\hline Mean & St.D. & Mean & St.D. & Mean & St.D. & Fac. & Ldg. & Mean & St.D. & Fac. & Ldg. \\
\hline -. 32 & . 97 & . 05 & . 87 & -. 49 & 1.40 & 2 & -31 & -. 01 & 1.32 & 8 & 47 \\
\hline . 40 & 1.02 & 1.09 & 1.26 & 1.11 & 1.23 & 3 & 45 & . 63 & 1.23 & 6 & 34 \\
\hline . 06 & 1.58 & . 21 & 1.67 & -. 89 & 1.48 & 7 & 81 & . 00 & 1.49 & 4 & -49 \\
\hline . 88 & 1.16 & 1.05 & 1.71 & . 78 & 1.59 & 1 & -33 & . 19 & 1.43 & 1 & 32 \\
\hline . 33 & . 80 & . 15 & . 85 & . 61 & 1.30 & & -38 & . 04 & 1.15 & 8 & 46 \\
\hline 1.40 & . 87 & 1.57 & 1.09 & 1.74 & . 87 & 3 & 55 & 1.15 & 1.16 & 0 & 0 \\
\hline . 76 & 1.21 & 1.46 & 1.05 & 1.51 & . 97 & 10 & -37 & . 99 & 1.24 & 9 & 37 \\
\hline . 52 & 1.66 & 1.28 & 1.23 & -. 04 & 1.59 & & 70 & . 69 & 1.45 & 4 & -35 \\
\hline -. 14 & . 91 & . 11 & 1.42 & . 12 & 1.40 & & -49 & -. 02 & 1.27 & 0 & 0 \\
\hline -. 20 & 1.74 & . 23 & 1.73 & . 30 & 1.54 & & -43 & . 08 & 1.39 & 0 & 0 \\
\hline
\end{tabular}

Table D-2. (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Item no.} & \multirow[b]{2}{*}{Item} & \multicolumn{2}{|l|}{\begin{tabular}{c} 
Consumer \\
Experience \\
Course 2 \\
Spring \\
\(\mathrm{N}=27\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\begin{tabular}{l}
Psychology \\
Today \\
Course 3 \\
Spring \\
\(\mathrm{N}=38\)
\end{tabular}} \\
\hline & & Mean & St.D. & Mean & St.D. \\
\hline 23. & I liked the feeling of being a student. & . 55 & . 75 & 1.35 & . 85 \\
\hline & The learning center personnel made an effort to find answers to my questions. & . 71 & 1.09 & . 95 & 1.09 \\
\hline \[
25
\] & I want to take additional courses which would help to upgrade my qualifications for a job and/or promotion. & . 78 & 1.38 & . 93 & 1.18 \\
\hline \[
26 .
\] & The learning center personnel seemed to welcome my telephone calls. & . 77 & 1.08 & 1.06 & 1.09 \\
\hline 27. & I wish UMA/ISU would offer more courses for personal enrichment. & . 89 & . 89 & 1.03 & 1.18 \\
\hline & The video programs prompted me to keep up on my reading in the text. & . 80 & 1.12 & . 70 & 1.51 \\
\hline \[
29 .
\] & The text used was similar to a text that might be used in a course offered on a college campus. & . 51 & . 83 & 1.23 & 1.17 \\
\hline & The grade \(I\) will receive in this course is not very important to me. & -. 88 & 1.00 & -1.17 & 1.53 \\
\hline \[
31 .
\] & A course of this type allows each student to proceed completely at his or her own pace. & . 53 & 1.20 & . 63 & 1.49 \\
\hline 32. & The tests in this course are similar to those given in other courses offered for college credit on a college campus. & . 47 & . 75 & . 65 & . 93 \\
\hline 33. & My spouse enjoyed watching the video programs with me. & -. 35 & 1.07 & -. 41 & 1.21 \\
\hline 34. & As a result of taking this course, I have become acquainted with other adults with interests similar to mine. & -. 79 & 1.13 & -. 77 & 1.38 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{3}{*}{\begin{tabular}{l} 
Adams \\
Chronicles \\
Course 5 \\
Fall \\
\(\mathrm{N}=23\) \\
\hline
\end{tabular}}} & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 6 \\
\text { Fal1 } \\
\mathrm{N}=34 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{\[
\begin{aligned}
& \text { Writing for } \\
& \text { a Reason } \\
& \text { Course } 7 \\
& \text { Fall } \\
& \mathrm{N}=22 \\
& \hline
\end{aligned}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{gathered}
\text { Courses } \\
2,3,5,6,7 \\
N=144
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{\begin{tabular}{c} 
Accounting \\
Courses \(1 \& 4\) \\
Spring \\
\(\&\) Fall \\
\(\mathrm{N}=154\) \\
\hline
\end{tabular}}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
N=154
\end{gathered}
\]}} \\
\hline & & & & & & & & & & & \\
\hline & & & & & & & Fac. & & & & Fac. \\
\hline Mean & St.D. & Mean & St.D. & Mean & St.D. & Fac. & Ldg. & Mean & St.D. & Fac. & Ldg. \\
\hline 1.00 & 1.01 & 1.20 & . 87 & 1.01 & 1.08 & 1 & -36 & . 89 & 1.13 & 0 & 0 \\
\hline 1.02 & . 92 & 1.03 & 1.22 & 1.48 & 1.01 & 3 & 51 & . 16 & 1.30 & 4 & 40 \\
\hline 1.11 & . 91 & 1.32 & 1.04 & . 13 & 1.66 & 7 & 44 & . 69 & 1.48 & 0 & 0 \\
\hline . 99 & . 83 & 1.18 & 1.03 & 1.42 & 1.13 & 3 & 58 & . 42 & 1.15 & 4 & 38 \\
\hline . 71 & 1.01 & 1.08 & . 98 & 1.03 & . 96 & 8 & -35 & 1.02 & 1.14 & 0 & 0 \\
\hline . 94 & . 84 & . 46 & 1.43 & 1.37 & . 94 & 15 & -38 & . 24 & 1.59 & 0 & 0 \\
\hline . 99 & 1.14 & 1.30 & . 94 & 1.48 & . 87 & 10 & -56 & . 44 & 1.40 & 4 & 37 \\
\hline -1.47 & 1.05 & -1.07 & 1.47 & -. 75 & 1.57 & 6 & -52 & -. 67 & 1.40 & 10 & -32 \\
\hline . 73 & 1.13 & 1.01 & 1.25 & -. 28 & 1.34 & 12 & 46 & . 08 & 1.43 & 4 & 50 \\
\hline 1.12 & 1.00 & . 44 & . 88 & . 39 & . 89 & 10 & -59 & -. 05 & 1.26 & 4 & 47 \\
\hline . 88 & 1.26 & -. 26 & 1.13 & -. 08 & 1.46 & 9 & -51 & -. 53 & 1.48 & 6 & 33 \\
\hline -1.01 & 1.25 & -. 73 & 1.34 & -. 70 & 1.45 & 11 & -32 & -. 38 & 1.62 & & -50 \\
\hline
\end{tabular}

Table D-2. (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{\[
\begin{aligned}
& \text { Item } \\
& \text { no. }
\end{aligned}
\]} & \multirow[b]{2}{*}{Item} & \multicolumn{2}{|l|}{Consumer Experience Course 2 Spring \(\mathrm{N}=27\)} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 3 \\
\text { Spring } \\
\mathrm{N}=38 \\
\hline
\end{gathered}
\]} \\
\hline & & Mean & St.D. & Mean & St.D. \\
\hline & I did not have enough energy or stamina to keep up with this course the way I would have liked, due to all of the other demands on my time and energy. & . 23 & 1.14 & . 23 & 1.69 \\
\hline & I did not need more faculty contact for satisfactory progress in the course. & . 48 & 1.04 & . 12 & 1.61 \\
\hline 37. & There should be increased individual flexibility for course completion. & -. 29 & 1.06 & . 09 & 1.38 \\
\hline & I am currently enrolled at an area community college. & -1.36 & 1.33 & -1. 15 & 1.26 \\
\hline & My original purpose for taking this course changed as I progressed in the course. & -1.02 & 1.15 & -1.05 & 1.36 \\
\hline & This experience has helped me become more aware of my vocational interests. & -. 72 & 1.15 & . 37 & 1.46 \\
\hline & The quality of the TV programs (or video component) was excellent. & 1.13 & . 90 & . 69 & 1.46 \\
\hline 42. & I learned a great deal in this course. & 1.26 & . 89 & 1.59 & . 82 \\
\hline 43. & The grade reflected the extent of my learning in the course. & . 10 & . 96 & . 27 & 1.02 \\
\hline 44. & The illustrations in the course text were very useful. & \[
.52
\] & 1.11 & 1.40 & . 91 \\
\hline & I felt that the amount of memorization required for the tests was about right. & . 55 & . 86 & . 69 & 1.16 \\
\hline 46. & Taking this course has increased my confidence in my ability. & . 46 & 1.09 & . 41 & 1.30 \\
\hline
\end{tabular}


Table D-2. (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Item no.} & \multirow[b]{2}{*}{Item} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Consumer } \\
\text { Experience } \\
\text { Course } 2 \\
\text { Spring } \\
\mathrm{N}=27 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\begin{tabular}{c} 
Psychology \\
Today \\
Course 3 \\
Spring \\
\(\mathrm{N}=38\) \\
\hline
\end{tabular}} \\
\hline & & Mean & St.D. & Mean & St.D. \\
\hline 47. & Work pressures and responsibilities have interfered with the time I felt I needed to spend on the course. & . 38 & 1.09 & . 36 & 1.52 \\
\hline \[
48 .
\] & In addition to tuition, books, and materials, the course has involved significant additional expense. & -. 99 & 1.08 & -. 91 & 1.25 \\
\hline & I would have liked more information about where I stood in comparison to other students. & . 81 & 1.22 & . 81 & 1.26 \\
\hline & It is extremely inconvenient for me to take a course at a junior or community college or a four-year institution (oncampus). & . 83 & 1.14 & . 69 & 1.58 \\
\hline 51. & This experience has helped me to begin developing a new career. & -. 72 & . 97 & -. 41 & 1.27 \\
\hline & I disliked the humorous segments in the video programs. & -. 90 & 1.30 & -. 55 & 1.25 \\
\hline 53. & Taking this course has improved my chances of making money. & -. 58 & 1.07 & -. 39 & 1.13 \\
\hline 54. & The video programs helped to clarify the material covered in the text(s). & . 97 & . 64 & . 27 & 1.47 \\
\hline 55. & Overall this course was very interesting to me. & 1.62 & . 70 & 1.84 & . 69 \\
\hline 56. & There was a close relationship between the text and the television component. & . 83 & . 87 & . 33 & 1.46 \\
\hline 57. & The majority of "directions" given in the text and study guides was clear and helpful. & 1.04 & . 51 & 1.24 & 1.09 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\begin{tabular}{l} 
Adams \\
Chronicles \\
Course 5 \\
Fall \\
\(\mathrm{N}=23\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 6 \\
\text { Fall } \\
\mathrm{N}=34 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{aligned}
& \text { Writing for } \\
& \text { a Reason } \\
& \text { Course } 7 \\
& \text { Fall } \\
& \mathrm{N}=22 \\
& \hline
\end{aligned}
\]} & \multicolumn{2}{|l|}{Courses
\[
\begin{gathered}
2,3,5,6,7 \\
N=144 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{```
Accounting
Courses 1&4
    Spring
    & Fall
    N=154
```} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
\mathrm{~N}=154 \\
\hline
\end{gathered}
\]} \\
\hline Mean & St.D. & Mean & St.D. & Mean & St.D. & Fac. & Ldg. & Mean & St.D. & Fac. & Ldg. \\
\hline -. 18 & 1.27 & . 37 & 1.44 & . 76 & 1.43 & 2 & -79 & . 90 & 1.19 & 9 & 38 \\
\hline -. 02 & 1.23 & -1.14 & 1.26 & -1.40 & 1.27 & 0 & 0 & -1. 17 & 1.30 & 10 & 34 \\
\hline . 69 & 1.52 & . 73 & 1.31 & . 63 & 1.36 & 4 & 43 & . 43 & 1.53 & 3 & 36 \\
\hline . 44 & 1.18 & . 81 & 1.42 & . 58 & 1.56 & 7 & -33 & . 73 & 1.57 & 8 & 42 \\
\hline -. 78 & 1.28 & -. 54 & 1.40 & -. 12 & 1.36 & & -51 & -. 38 & 1.38 & 1 & 44 \\
\hline -1.41 & 1.02 & -. 85 & 1.08 & -1.35 & 1.26 & 5 & 37 & . 19 & 1.64 & 2 & -65 \\
\hline -1.12 & 1.22 & -1.11 & 1.21 & -. 41 & 1.25 & & -65 & -. 19 & 1.25 & 1 & 47 \\
\hline 1.16 & . 99 & -. 21 & 1.32 & 1.26 & . 85 & 5 & -71 & -. 52 & 1.40 & 2 & 82 \\
\hline 1.90 & . 58 & 1.64 & . 78 & 1.91 & . 57 & 1 & -45 & 1.14 & 1.18 & 1 & 79 \\
\hline . 98 & 1.03 & . 11 & . 98 & 1.27 & . 89 & & -67 & . 07 & 1.35 & 2 & 64 \\
\hline 1.07 & . 80 & 1.16 & . 90 & 1.57 & . 55 & 10 & -50 & 1.19 & . 90 & 1 & 69 \\
\hline
\end{tabular}

Table D-2. (continued)
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Item} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Consumer } \\
\text { Experience } \\
\text { Course } 2 \\
\text { Spring } \\
\mathrm{N}=27 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 3 \\
\text { Spring } \\
\mathrm{N}=38 \\
\hline
\end{gathered}
\]} \\
\hline & Mean & St.D. & Mean & St.D. \\
\hline 58. Domestic interruptions and demands have interfered with the amount of time I felt I needed to spend on the course. & . 38 & . 89 & . 33 & 1.42 \\
\hline 59. I gained personal satisfaction through taking this course. & 1.16 & 1.08 & 1.46 & 1.06 \\
\hline 60. The course was worth the money I spent to take it. & 1.27 & . 90 & 1.06 & 1.26 \\
\hline 61. I would have preferred having more contact with other students. & . 07 & 1.25 & . 57 & 1.32 \\
\hline 62. I took the UMA course because I wanted to learn while at home instead of the required attendance at a college. & 1.59 & . 76 & 1.64 & . 86 \\
\hline 63. The overall experience of taking this course has had a positive influence on our family life. & . 50 & . 88 & . 56 & 1.06 \\
\hline 64. Too much reading was required for the course. & -. 35 & 1.09 & -. 41 & 1.31 \\
\hline 65. As a result of taking this course, I feel I can be a more interesting companion and friend. & . 22 & 1.01 & . 61 & 1.05 \\
\hline 66. Taking this course has given me valuable insight relating to this area of study. & 1.07 & . 74 & 1.14 & . 97 \\
\hline 67. The faculty seemed to welcome my telephone calls. & . 51 & 1.23 & . 70 & 1.07 \\
\hline 68. The cost of books and materials is too high. & -. 36 & . 96 & -. 47 & 1.16 \\
\hline 69. The tests were fair. & . 20 & . 95 & . 68 & 1.06 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\begin{tabular}{l} 
Adams \\
Chronicles \\
Course 5 \\
Fall \\
\(\mathrm{N}=23\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 6 \\
\text { Fa11 } \\
\mathrm{N}=34 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\begin{tabular}{l}
Writing for \\
a Reason Course 7 Fall \(\mathrm{N}=22\)
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Courses } \\
2,3,5,6,7 \\
\mathrm{~N}=144 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\begin{tabular}{c} 
Accounting \\
Courses \(1 \& 4\) \\
Spring \\
\(\&\) Fall \\
\(N=154\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
\mathrm{~N}=154 \\
\hline
\end{gathered}
\]} \\
\hline Mean & St.D. & Mean & St.D. & Mean & St.D. & Fac. & Ldg. & Mean & St.D. & Fac. & Ldg. \\
\hline -. 21 & 1.12 & . 18 & 1.29 & . 71 & 1.18 & 2 & -81 & .49 & 1.21 & 8 & 38 \\
\hline 1.76 & . 64 & 1.36 & . 87 & 1.38 & . 87 & 1 & -68 & 1.16 & 1.20 & 1 & 85 \\
\hline 1.60 & . 87 & . 99 & 1.08 & 1.64 & . 77 & 1 & -51 & 1.07 & 1.30 & 1 & 79 \\
\hline . 50 & 1.30 & . 40 & 1.41 & . 76 & . 98 & 4 & 61 & . 12 & 1.14 & 3 & 46 \\
\hline 1.90 & . 68 & 1.87 & 1.02 & 1.79 & . 79 & 8 & -60 & 1.48 & 1.12 & 0 & 0 \\
\hline . 43 & . 82 & . 27 & 1.10 & . 11 & 1.04 & 1 & -58 & . 31 & 1.02 & 1 & 51 \\
\hline -. 98 & 1.03 & -. 28 & 1.40 & -. 43 & 1.26 & 2 & -52 & -. 63 & 1.19 & 1 & -40 \\
\hline . 37 & . 54 & . 22 & 1.00 & . 44 & . 66 & 1 & -64 & -. 12 & 1.11 & 6 & 48 \\
\hline . 93 & . 73 & . 84 & 1.00 & . 96 & . 62 & 1 & -60 & 1.05 & . 88 & 1 & 69 \\
\hline . 17 & . 65 & . 49 & 1.03 & . 97 & 1.04 & 3 & 66 & . 54 & . 99 & 5 & 81 \\
\hline -. 40 & 1.22 & -. 23 & 1.14 & -. 43 & 1.00 & & -32 & -. 23 & 1.16 & 1 & -47 \\
\hline 1.01 & . 98 & . 58 & 1.23 & . 98 & . 94 & 14 & -52 & . 85 & 1.07 & 1 & 34 \\
\hline
\end{tabular}

Table D-2. (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Item no.} & \multirow[b]{2}{*}{Item} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Consumer } \\
\text { Experience } \\
\text { Course } 2 \\
\text { Spring } \\
\mathrm{N}=27 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 3 \\
\text { Spring } \\
\mathrm{N}=38 \\
\hline
\end{gathered}
\]} \\
\hline & & Mean & St.D. & Mean & St.D. \\
\hline 70. & I enjoyed the course except for the tests. & . 31 & 1.14 & -. 12 & 1.50 \\
\hline & I have discussed this course with my spouse at least once a week. & 1.08 & . 83 & . 76 & 1.28 \\
\hline \[
72 .
\] & As a result of taking this course, I have become more interested in the subject and would like to take additional courses in this area. & . 58 & 1.03 & . 84 & 1.37 \\
\hline & As a result of taking this course, I believe I can be a better "spouse." & . 37 & . 86 & . 26 & 1.02 \\
\hline \[
74
\] & An introductory audio tape explaining each component of the course would have been helpful. & -. 09 & 1.08 & . 57 & 1.32 \\
\hline \[
75 .
\] & The most I could do was try to pass the tests; learning all of the material seemed too much. & -. 62 & 1.28 & . 29 & 1.36 \\
\hline \[
76 \text {. }
\] & I find it easier to communicate with my children as a result of taking this course. & -. 11 & . 82 & . 07 & . 85 \\
\hline 77. & A review of basic study skills at the beginning of the course would have been helpful. & -. 48 & . 97 & . 44 & 1.15 \\
\hline 78. & I enjoyed reading the text. & . 85 & . 82 & 1.35 & . 97 \\
\hline \[
79 .
\] & If a student knows the material included in the text, she/he would do well on the tests. & . 72 & . 90 & 1.10 & 1.37 \\
\hline 80. & I felt the faculty was very competent. & . 73 & . 82 & . 72 & 1.01 \\
\hline 81. & I feel the knowledge \(I\) acquired will help me to be a better citizen. & . 83 & . 72 & . 54 & . 93 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\begin{tabular}{c} 
Adams \\
Chronic1es \\
Course 5 \\
Fall \\
\(\mathrm{N}=23\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{```
Psychology 
```} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Writing for } \\
\text { a Reason } \\
\text { Course } 7 \\
\text { Fa11 } \\
\mathrm{N}=22 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{array}{r}
\begin{array}{c}
\text { Courses } \\
2,3,5,6,7 \\
N=144
\end{array} \\
\hline \text { Fac. }
\end{array}
\]} & \multicolumn{2}{|l|}{\begin{tabular}{c} 
Accounting \\
Courses \(1 \& 4\) \\
Spring \\
\(\&\) Fall \\
\(N=154\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
N=154 \\
\hline
\end{gathered}
\]} \\
\hline Mean & St.D. & Mean & St.D. & Mean & St.D. & Fac. & Ldg. & Mean & St.D. & Fac. & Ldg. \\
\hline . 39 & 1.34 & . 90 & . 98 & . 15 & 1.21 & 2 & -42 & -. 02 & 1.20 & 8 & 36 \\
\hline 1.02 & . 90 & . 79 & 1.36 & 1.20 & 1.38 & 9 & & -. 76 & 1.36 & 6 & 35 \\
\hline . 97 & . 89 & . 58 & 1.34 & . 92 & 1.08 & 1 & -51 & . 75 & 1.42 & 1 & 68 \\
\hline . 17 & . 70 & . 42 & 1.10 & . 08 & 1.02 & 1 & -53 & -. 18 & 1.19 & 6 & 60 \\
\hline . 42 & 1.07 & . 63 & 1.11 & . 10 & 1.21 & 4 & 57 & . 24 & 1.27 & 3 & 57 \\
\hline -. 83 & . 98 & . 23 & 1.39 & -. 65 & 1.03 & & -56 & -. 53 & 1.29 & 1 & -51 \\
\hline -. 42 & . 85 & . 08 & . 73 & . 10 & . 83 & & -38 & -. 61 & 1.03 & 6 & 50 \\
\hline -. 01 & 1.39 & . 51 & 1.11 & . 62 & . 98 & & 55 & -. 03 & 1.34 & 3 & 49 \\
\hline 1.55 & . 78 & . 83 & 1.08 & 1.00 & 1.11 & 1 & -50 & . 54 & . 94 & 1 & 52 \\
\hline . 84 & . 72 & 1.11 & 1.06 & . 92 & . 93 & & -46 & 1.14 & 1.01 & 7 & 42 \\
\hline 1.40 & . 82 & . 75 & . 85 & 1.87 & . 63 & 1 & 33 & . 80 & . 97 & 5 & 54 \\
\hline . 81 & . 87 & . 47 & . 80 & . 83 & . 89 & 1 & -58 & . 12 & 1.06 & 6 & 46 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\begin{tabular}{c} 
Adams \\
Chronic1es \\
Course 5 \\
Fall \\
\(\mathrm{N}=23\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 6 \\
\text { Fall } \\
\mathrm{N}=34 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{```
Writing for
    a Reason
    Course 7
        Fall
        N=22
```} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Courses } \\
2,3,5,6,7 \\
\mathrm{~N}=144 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{Accounting Courses 1\&4 Spring \& Fall \(\mathrm{N}=154\)} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
\mathrm{~N}=154 \\
\hline
\end{gathered}
\]} \\
\hline Mean & St.D. & Mean & St.D. & Mean & St.D. & Fac. & Ldg. & Mean & St.D. & Fac. & Ldg. \\
\hline . 39 & 1.34 & . 90 & . 98 & . 15 & 1.21 & 2 & -42 & -. 02 & 1.20 & 8 & 36 \\
\hline 1.02 & . 90 & . 79 & 1.36 & 1.20 & 1.38 & 9 & -45 & -. 76 & 1.36 & 6 & 35 \\
\hline . 97 & . 89 & . 58 & 1.34 & . 92 & 1.08 & 1 & -51 & . 75 & 1.42 & 1 & 68 \\
\hline . 17 & . 70 & . 42 & 1.10 & . 08 & 1.02 & 1 & -53 & -. 18 & 1.19 & 6 & 60 \\
\hline . 42 & 1.07 & . 63 & 1.11 & . 10 & 1.21 & 4 & 57 & . 24 & 1.27 & 3 & 57 \\
\hline -. 83 & . 98 & . 23 & 1.39 & -. 65 & 1.03 & 2 & -56 & -. 53 & 1.29 & 1 & -51 \\
\hline -. 42 & . 85 & . 08 & . 73 & . 10 & . 83 & 1 & -38 & -. 61 & 1.03 & 6 & 50 \\
\hline -. 01 & 1.39 & . 51 & 1.11 & . 62 & . 98 & 4 & 55 & -. 03 & 1.34 & 3 & 49 \\
\hline 1.55 & . 78 & . 83 & 1.08 & 1.00 & 1.11 & 1 & -50 & . 54 & . 94 & 1 & 52 \\
\hline . 84 & . 72 & 1.11 & 1.06 & . 92 & . 93 & 3 & -46 & 1.14 & 1.01 & 7 & 42 \\
\hline 1.40 & . 82 & . 75 & . 85 & 1.87 & . 63 & 1 & 33 & . 80 & . 97 & 5 & 54 \\
\hline . 81 & . 87 & . 47 & . 80 & . 83 & . 89 & & -58 & . 12 & 1.06 & 6 & 46 \\
\hline
\end{tabular}

Table D-2. (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{\[
\begin{aligned}
& \text { Item } \\
& \text { no. }
\end{aligned}
\]} & \multirow[b]{2}{*}{Item} & \multicolumn{2}{|l|}{\begin{tabular}{c} 
Consumer \\
Experience \\
Course 2 \\
Spring \\
\(\mathrm{N}=27\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 3 \\
\text { Spring } \\
\mathrm{N}=38 \\
\hline
\end{gathered}
\]} \\
\hline & & Mean & St.D. & Mean & St.D. \\
\hline & The video programs were a valuable part of the course. & 1.33 & . 82 & . 43 & 1.47 \\
\hline 83. & I took this course simply to learn. & . 46 & 1.08 & . 99 & 1.27 \\
\hline & Knowledge I have gained will help me be a better family member. & . 62 & 1.13 & . 56 & 1.14 \\
\hline \[
85 .
\] & The knowledge I gained in this course is much more important to me than the grade I received. & . 59 & 1.03 & . 48 & 1.16 \\
\hline 86. & Periodic calls from faculty would have served to motivate my studying. & -. 18 & . 90 & . 47 & 1.30 \\
\hline \[
87
\] & My spouse felt the amount of time I needed to spend on the course interfered with our family life. & . 84 & . 86 & -. 31 & 1.30 \\
\hline & The time I had to spend on the course was too great for the benefits gained. & -. 99 & . 91 & -. 54 & 1.33 \\
\hline 89. & Watching the video programs was a waste of time. & -1.52 & . 81 & -. 73 & 1.43 \\
\hline 90. & My personal goals have been advanced through taking this course. & . 66 & . 85 & . 71 & 1.15 \\
\hline 91. & Tests are the best way to evaluate a student's performance in this course. & -. 01 & 1.15 & . 59 & 1.37 \\
\hline & In this course, I liked feeling responsible for my own learning. & . 63 & . 49 & 1.28 & . 94 \\
\hline 93. & I didn't mind studying for the tests. & . 38 & . 98 & . 63 & 1.08 \\
\hline & In this course, I became so actively involved in learning on my own that \(I\) did not need faculty help. & . 50 & . 87 & . 35 & 1.47 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{3}{*}{\begin{tabular}{l} 
Adams \\
Chronic1es \\
Course 5 \\
Fall \\
\(\mathrm{N}=23\) \\
\hline
\end{tabular}}} & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 6 \\
\text { Fall } \\
\mathrm{N}=34 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{\[
\begin{gathered}
\text { Writing for } \\
\text { a Reason } \\
\text { Course } 7 \\
\text { Fall } \\
\mathrm{N}=22 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{gathered}
\text { Courses } \\
2,3,5,6,7 \\
\mathrm{~N}=144 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{```
Accounting
Courses 1&4
    Spring
    & Fall
    N=154
```}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
\mathrm{~N}=154 \\
\hline
\end{gathered}
\]}} \\
\hline & & & & & & & & & & & \\
\hline & & & & & & & Fac. & & & & Fac. \\
\hline Mean & St.D. & Mean & St.D. & Mean & St.D. & Fac. & Ldg. & Mean & St.D. & Fac. & Ldg. \\
\hline 1.36 & . 77 & . 19 & 1.05 & 1.55 & 1.11 & 5 & -67 & -. 55 & 1.39 & 2 & 89 \\
\hline . 90 & 1.17 & . 38 & 1.39 & 1.64 & . 83 & 6 & -40 & . 83 & 1.22 & 10 & -57 \\
\hline . 14 & . 29 & . 49 & . 89 & . 55 & . 82 & 1 & -49 & -. 06 & 1.15 & 6 & 62 \\
\hline -. 78 & 1.26 & . 33 & 1.24 & 1.17 & . 87 & 6 & -47 & . 82 & 1.06 & 10 & -46 \\
\hline -. 15 & . 99 & . 21 & 1.39 & . 74 & 1.25 & 4 & 55 & -. 08 & 1.38 & 3 & 52 \\
\hline -. 74 & 1.09 & -. 65 & 1.20 & -. 71 & 1.40 & 2 & -44 & -. 36 & 1.18 & 8 & 44 \\
\hline -. 80 & 1.04 & -. 64 & 1.31 & -1.36 & . 96 & 2 & -41 & -. 70 & 1.25 & 1 & -59 \\
\hline -1.91 & . 80 & -. 63 & 1.21 & -2.00 & . 74 & 5 & 60 & . 31 & 1.51 & 2 & -84 \\
\hline . 73 & 1.07 & . 77 & . 87 & . 70 & 1.26 & 1 & -62 & . 68 & 1.11 & 1 & 67 \\
\hline . 34 & 1.06 & . 68 & . 88 & -. 23 & 1.17 & 1 & -36 & . 61 & 1.13 & 7 & 66 \\
\hline . 92 & . 64 & 1.05 & . 96 & 1.13 & . 83 & 2 & 55 & . 99 & . 93 & 1 & 58 \\
\hline . 67 & . 89 & . 89 & 1.01 & . 42 & 1.12 & 2 & 55 & . 77 & 1.06 & 7 & 54 \\
\hline . 46 & 1.08 & . 61 & 1.13 & . 34 & 1.10 & 4 & -49 & . 38 & 1.22 & 3 & -41 \\
\hline
\end{tabular}

Table D-2. (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{\[
\begin{gathered}
\text { Item } \\
\text { no. }
\end{gathered}
\]} & \multirow[b]{2}{*}{Item} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Consumer } \\
\text { Experience } \\
\text { Course } 2 \\
\text { Spring } \\
\mathrm{N}=27 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 3 \\
\text { Spring } \\
N=38 \\
\hline
\end{gathered}
\]} \\
\hline & & Mean & St.D. & Mean & St.D. \\
\hline \[
95 .
\] & I felt free to complain to the learning center personnel about the things I did not like. & -. 03 & 1.13 & . 42 & 1.08 \\
\hline & My spouse enjoyed studying and learning with me. & -. 37 & 1.12 & -. 52 & 1.10 \\
\hline 97. & I felt at ease talking with faculty by telephone. & . 20 & 1.22 & . 27 & 1.21 \\
\hline \[
98 .
\] & The vocabulary used in the text was too difficult for a freshman or sophomore college level course. & \(-1.36\) & . 93 & -. 27 & 1.55 \\
\hline 99. & I feel better prepared for a job as a result of taking this course (even though the job might not relate directly to this course). & . 15 & . 67 & . 33 & 1.32 \\
\hline \[
100 .
\] & In this course, I felt challenged to do my best work. & . 57 & . 66 & 1.28 & . 91 \\
\hline \[
101
\] & I felt that the faculty believed that each student should be allowed to proceed completely at his or her own pace. & . 44 & . 92 & . 87 & 1.20 \\
\hline 102. & The material covered in the course was quite difference than \(I\) had expected it to be. & -. 42 & 1.03 & . 23 & 1.44 \\
\hline 103. & After taking the first test, I felt more relaxed about the next test. & . 12 & 1.03 & . 09 & 1.21 \\
\hline 104. & I felt free to ask the faculty questions about the course. & . 22 & 1.15 & . 50 & 1.04 \\
\hline 105. & My friends admire me for taking this course. & . 22 & . 79 & . 56 & 1.09 \\
\hline
\end{tabular}


Table D-2. (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Item no.} & \multirow[b]{2}{*}{Item} & \multicolumn{2}{|l|}{\begin{tabular}{c} 
Consumer \\
Experience \\
Course 2 \\
Spring \\
\(\mathrm{N}=27\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\begin{tabular}{l}
Psychology \\
Today \\
Course 3 \\
Spring \(\mathrm{N}=38\)
\end{tabular}} \\
\hline & & Mean & St.D. & Mean & St.D. \\
\hline & I feel the knowledge gained from this course will be very useful to me. & 1.14 & . 76 & . 93 & . 94 \\
\hline 107. & This whole experience has turned out to be an interesting topic of conversation with my friends. & . 28 & . 68 & . 41 & . 98 \\
\hline 108. & The video programs were helpful in preparing for tests. & . 64 & . 65 & -. 18 & 1.34 \\
\hline 109. & There should be at least one phone conference between the student and the faculty during the course. & . 44 & 1.11 & 1.23 & 1.01 \\
\hline 110. & Being able to budget sufficient study time for satisfactory progress in the course was no problem. & -. 14 & . 68 & -. 44 & 1.40 \\
\hline 111. & The text was helpful for the tests. & .71 & . 84 & 1.58 & . 90 \\
\hline 112. & I believe that I learned as much or more from this UMA/ISU course as I would have learned from a similar college level course offered on a college campus. & . 99 & . 97 & . 97 & 1.36 \\
\hline \[
113
\] & I felt free to relate any complaints \(I\) had to faculty. & -. 17 & 1.23 & . 47 & 1.22 \\
\hline \[
114 .
\] & The main benefits \(I\) have received from taking this course were not my original purpose for enrolling. & -. 01 & . 96 & -. 21 & 1.26 \\
\hline 115. & As a result of taking this course, I believe I can be a better parent. & . 17 & . 89 & . 36 & . 94 \\
\hline 116. & The overall effect of this course on my life has been desirable. & . 62 & 1.02 & . 77 & . 98 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{4}{*}{Adams
Chronicles
Course 5
Fall
\(N=23\)}} & \multicolumn{2}{|l|}{\multirow[t]{4}{*}{\begin{tabular}{c} 
Psychology \\
Today \\
Course 6 \\
Fall \\
\(\mathrm{N}=34\) \\
\hline
\end{tabular}}} & \multicolumn{2}{|l|}{\multirow[t]{4}{*}{\[
\begin{aligned}
& \text { Writing for } \\
& \text { a Reason } \\
& \text { Course } 7 \\
& \text { Fall } \\
& \mathrm{N}=22 \\
& \hline
\end{aligned}
\]}} & \multicolumn{2}{|l|}{\multirow[b]{3}{*}{\[
\begin{gathered}
\text { Courses } \\
2,3,5,6,7 \\
N=144 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{4}{*}{\[
\begin{gathered}
\text { Accounting } \\
\text { Courses 1\&4 } \\
\text { Spring } \\
\& \text { Fall } \\
N=154 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[b]{3}{*}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
N=154 \\
\hline
\end{gathered}
\]}} \\
\hline & & & & & & & & & & & \\
\hline & & & & & & & & & & & \\
\hline & & & & & & & Fac. & & & & Fac. \\
\hline \multicolumn{2}{|l|}{Mean St.D.} & \multicolumn{2}{|l|}{Mean St.D.} & \multicolumn{2}{|l|}{Mean St.D.} & \multicolumn{2}{|l|}{Fac. Ldg.} & Mean & St.D. & Fac & Ldg. \\
\hline . 91 & . 86 & . 81 & . 83 & 1.25 & . 85 & 1 & -65 & 1.08 & 1.06 & 1 & 81 \\
\hline . 74 & . 73 & . 34 & 1.09 & . 46 & . 84 & 4 & 36 & . 25 & 1.15 & 1 & 49 \\
\hline 1.19 & . 86 & -. 57 & 1.26 & . 14 & . 99 & 5 & -46 & -. 93 & 1.24 & 2 & 78 \\
\hline . 94 & . 98 & . 77 & 1.41 & 1.48 & . 90 & 4 & 53 & . 71 & 1.17 & 3 & 53 \\
\hline . 68 & 1.07 & -. 17 & 1.49 & -. 37 & 1.44 & 2 & 67 & -. 50 & 1.12 & 8 & -39 \\
\hline 1.28 & . 82 & 1.55 & . 84 & . 76 & 1.10 & 1 & -53 & 1.26 & . 92 & 1 & 39 \\
\hline 1.29 & . 89 & . 95 & 1.21 & . 81 & . 83 & 1 & -47 & . 62 & 1.24 & 1 & 73 \\
\hline . 65 & 1.08 & . 32 & 1.25 & 1.19 & 1.07 & 3 & 72 & . 42 & 1.16 & 5 & 68 \\
\hline -. 01 & 1.32 & -. 09 & 1.21 & -. 22 & 1.13 & & 46 & -. 58 & 1.08 & 1 & -40 \\
\hline . 02 & . 75 & . 44 & . 86 & . 38 & . 62 & & & -. 48 & 1.04 & 6 & 54 \\
\hline . 76 & . 68 & 1.00 & . 91 & 1.25 & . 77 & & -71 & . 76 & 1.04 & 1 & 81 \\
\hline
\end{tabular}

Table D-2. (continued)
\begin{tabular}{cccc}
\hline & & \begin{tabular}{c} 
Consumer \\
Experience \\
Course 2
\end{tabular} & \begin{tabular}{c} 
Psychology \\
Today \\
Course 3
\end{tabular} \\
& & \begin{tabular}{c} 
Spring \\
Stem \\
no.
\end{tabular} & \begin{tabular}{c} 
Spring
\end{tabular} \\
\hline
\end{tabular}
117. I would have enjoyed more contact with faculty. \(\quad 19 \quad 1.03 \quad .82 \quad 1.04\)
118. A letter explaining the purpose of each component of the course would be helpful. . 14 .95 . 76 . 98
119. I would have used supplementary "readings" (articles and/or other texts) if they had been available at the learning center.
\(-.39 \quad 1.05 \quad .20 \quad 1.24\)
120. The cost for tuition is too high.
\(-.14 \quad .98 \quad-.07 \quad 1.35\)
121. Members of my household (other than spouse) watched the video programs.
\(-.57 \quad 1.08 \quad-.31 \quad 1.40\)
122. The overall work load for this course was too heavy for the amount of credit given. -.29 . \(97 \quad-.26 \quad 1.28\)
123. The video programs did not follow the text.
\(-.89 \quad .98 \quad-.26 \quad 1.42\)
124. I feel I now know the material covered in the text. \(\quad .62 \quad .55 \quad .351 .25\)
125. The pace of the course was too fast for the time I had to spend on it. \(-.83 \quad 1.00 \quad .23 \quad 1.56\)
126. I believe that the difficulty level of this course was equal to or greater than a course comparable to it on a college campus.
\(.32 \quad .89 \quad 1.14 \quad 1.06\)
127. This course has helped me to be a better employee.
\(-.02 .52 .16 \quad .97\)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{4}{*}{\begin{tabular}{c} 
Adams \\
Chronicles \\
Course 5 \\
Fall \\
\(\mathrm{N}=23\) \\
\hline
\end{tabular}}} & \multicolumn{2}{|l|}{\multirow[t]{4}{*}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 6 \\
\text { Fall } \\
\mathrm{N}=34 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{4}{*}{\[
\begin{gathered}
\text { Writing for } \\
\text { a Reason } \\
\text { Course } 7 \\
\text { Fall } \\
\mathrm{N}=22 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[b]{3}{*}{\[
\begin{gathered}
\text { Courses } \\
2,3,5,6,7 \\
\mathrm{~N}=144 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{4}{*}{\[
\begin{gathered}
\text { Accounting } \\
\text { Courses } 1 \& 4 \\
\text { Spring } \\
\& \text { Fali } \\
N=154 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[b]{3}{*}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
\mathrm{~N}=154 \\
\hline
\end{gathered}
\]}} \\
\hline & & & & & & & & & & & \\
\hline & & & & & & & & & & & \\
\hline & & & & & & & Fac. & & & & Fac. \\
\hline Mean & St.D. & Mean & St.D. & Mean & St.D. & Fac. & Ldg. & Mean & St.D. & Fac. & Ldg. \\
\hline . 69 & . 86 & . 55 & 1.21 & . 68 & 1.00 & 4 & 78 & . 53 & 1.10 & 3 & 44 \\
\hline . 37 & . 89 & .35 & 1.20 & -. 19 & 1.22 & 4 & 75 & . 04 & 1.15 & 3 & 64 \\
\hline . 62 & 1.06 & -. 39 & 1.22 & -. 21 & 1.22 & 4 & 67 & -. 38 & 1.08 & 3 & 46 \\
\hline -. 38 & 1.16 & -. 40 & 1.27 & -. 15 & 1.00 & 2 & -45 & -. 24 & 1.20 & 1 & -33 \\
\hline . 39 & 1.42 & . 17 & 1.08 & -. 07 & 1.35 & 9 & -27 & -. 87 & 1.37 & 0 & 0 \\
\hline -. 81 & 1.06 & \(-.30\) & 1.16 & -. 03 & 1.29 & 2 & -41 & -. 47 & 1.28 & 1 & -40 \\
\hline \(-.82\) & 1.18 & -. 18 & 1.30 & \(-1.54\) & 1.25 & 5 & 60 & -. 56 & 1.28 & 1 & -43 \\
\hline 1.17 & . 78 & . 58 & .77 & . 57 & . 87 & 2 & 40 & . 43 & 1.10 & 1 & 60 \\
\hline -. 99 & 1.09 & \(-.10\) & 1.17 & . 26 & 1.49 & 2 & -65 & . 10 & 1.30 & 8 & 40 \\
\hline . 88 & 1.03 & 1.29 & . 93 & . 74 & . 88 & 10 & -35 & . 70 & 1.06 & 9 & 38 \\
\hline -. 14 & . 70 & . 19 & . 68 & . 17 & . 80 & 11 & -48 & . 36 & . 99 & 1 & 45 \\
\hline
\end{tabular}

Table D-2. (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Item no.} & \multirow[b]{2}{*}{Item} & \multicolumn{2}{|l|}{\begin{tabular}{c} 
Consumer \\
Experience \\
Course 2 \\
Spring \\
\(N=27\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 3 \\
\text { Spring } \\
\mathrm{N}=38 \\
\hline
\end{gathered}
\]} \\
\hline & & Mean & St.D. & Mean & St.D. \\
\hline 128. & It would have been helpful to have a meeting of all students enrolled in the area and the instructor at the beginning of the course to discuss expectations and an overview of the course. & . 32 & 1.39 & . 86 & 1.42 \\
\hline 129. & The need for quiet study time for this course interfered with the family's activities. & -. 63 & 1.12 & -. 23 & 1.38 \\
\hline 130. & As a result of taking this course, I have made some new friends. & \[
-1.28
\] & 1.04 & -. 58 & 1.19 \\
\hline 131. & I would like to be given the opportunity of taking comparable forms of an examination until I reached the grade level I wanted to attain in the course. & . 11 & 1.04 & . 10 & 1.33 \\
\hline 132. & The video programs were interesting to watch. & 1.09 & . 73 & 1.02 & 1.42 \\
\hline 133. & The tests adequately sampled the material covered in the course. & . 25 & 1.12 & . 75 & 1.23 \\
\hline 134. & The video programs offered at 7-7:30 a.m. interfered with duties I needed to perform (for my family or other purpose). & -. 65 & 1.37 & -. 54 & 1.65 \\
\hline 135. & The "quality" of the text and materials was high. & . 59 & . 99 & 1.04 & 1.44 \\
\hline \[
136 .
\] & I feel confident to try to seek employment relating to the skills \(I\) acquired in this course. & -. 11 & . 54 & -. 04 & . 93 \\
\hline 137. & Disciplining myself to study for a test was difficult. & . 15 & . 75 & . 56 & 1.29 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\begin{tabular}{c} 
Adams \\
Chronicles \\
Course 5 \\
Fall \\
\(\mathrm{N}=23\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 6 \\
\text { Fall } \\
\mathrm{N}=34 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\begin{tabular}{l} 
Writing for \\
a Reason \\
Course 7 \\
Fall \\
\(\mathrm{N}=22\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Courses } \\
2,3,5,6,7 \\
N=144 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\begin{tabular}{c} 
Accounting \\
Courses \(1 \& 4\) \\
Spring \\
\(\&\) Fall \\
\(N=154\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
\mathrm{~N}=154 \\
\hline
\end{gathered}
\]} \\
\hline Mean & St. D. & Mean & St.D. & Mean & St.D. & & Ldg. & Mean & St.D. & Fac. & Ldg. \\
\hline . 27 & 1.17 & . 39 & 1.30 & . 82 & 1.20 & 4 & 56 & . 43 & 1.31 & 3 & 54 \\
\hline -. 61 & 1.12 & -. 48 & 1.08 & -. 47 & 1.49 & 2 & -56 & -. 29 & 1.24 & 8 & 35 \\
\hline -. 90 & 1.25 & -. 96 & 1.29 & -. 56 & 1.42 & 11 & -35 & -. 88 & 1.30 & 6 & 35 \\
\hline -. 21 & 1.00 & -. 01 & 1.38 & -. 21 & 1.08 & 4 & 34 & -. 13 & 1.32 & 3 & 48 \\
\hline 1.60 & . 78 & 1.00 & 1.05 & 1.81 & . 75 & 5 & -65 & -. 44 & 1.49 & 2 & 89 \\
\hline 1.10 & . 68 & . 94 & 1.19 & . 76 & . 95 & 1 & -49 & . 91 & . 89 & 1 & 49 \\
\hline . 04 & 1.04 & -. 10 & 1.45 & -. 51 & 1.79 & 14 & -27 & -. 53 & 1.57 & 0 & 0 \\
\hline 1.17 & . 77 & 1.15 & 1.18 & 1.19 & . 95 & 5 & -32 & 1.02 & 1.11 & 1 & 28 \\
\hline -. 48 & . 87 & -. 23 & 1.09 & . 11 & 1.05 & & 40 & . 03 & 1.29 & 1 & 61 \\
\hline . 19 & 1.22 & . 12 & 1.33 & . 50 & 1.28 & 2 & -58 & . 25 & 1.25 & 9 & 36 \\
\hline
\end{tabular}

Table D-2. (continued)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Item no.} & \multirow[b]{2}{*}{Item} & \multicolumn{2}{|l|}{\begin{tabular}{c} 
Consumer \\
Experience \\
Course 2 \\
Spring \\
\(\mathrm{N}=27\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 3 \\
\text { Spring } \\
\mathrm{N}=38 \\
\hline
\end{gathered}
\]} \\
\hline & & Mean & St.D. & Mean & St.D. \\
\hline 138. & My spouse feels the course was worth the money I spent to take it. & . 61 & . 93 & . 39 & 1.04 \\
\hline 139. & I would recommend this course to my friends. & 1.01 & . 73 & 1.06 & 1.19 \\
\hline 140. & The UMA course provided me with a sense of accomplishment. & 1.10 & . 82 & 1.35 & 1.02 \\
\hline 141. & As a result of taking this course, I had much less time to spend with my family. & -. 21 & 1.05 & . 19 & 1.05 \\
\hline 142. & I found it helpful to discuss the course material with a member (or members) of my household. & . 72 & . 68 & . 28 & 1.14 \\
\hline \[
143 .
\] & I would have preferred doing a "project" of some kind instead of taking tests for my grade in the course. & . 04 & 1.07 & -. 34 & 1.65 \\
\hline & I prefer continuing with UMA/ISU courses rather than taking a course on a campus. & . 63 & . 97 & 1.12 & 1.15 \\
\hline 145. & I received adequate feedback from the tests about the content of the questions I got wrong, that is, "why my answer was wrong." & -. 73 & 1.09 & -1.07 & 1.20 \\
\hline 146. & The faculty was helpful in answering the questions I asked. & . 75 & 1.05 & . 57 & . 98 \\
\hline 147. & I disliked the way the video programs told me what I should do. & -1.13 & . 93 & -. 57 & 1.10 \\
\hline 148. & I worried about taking the tests. & .17 & 1.18 & . 77 & 1.22 \\
\hline 149. & My primary purpose for taking this course was to gain job skills. & -. 76 & 1.12 & -. 48 & 1.51 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{3}{*}{\begin{tabular}{l} 
Adams \\
Chronicles \\
Course 5 \\
Fall \\
\(\mathrm{N}=23\) \\
\hline
\end{tabular}}} & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{```
Psychology
    Today
    Course 6
        Fall
        N=34
```}} & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{\[
\begin{gathered}
\text { Writing for } \\
\text { a Reason } \\
\text { Course } 7 \\
\text { Fall } \\
\mathrm{N}=22 \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{gathered}
\text { Courses } \\
2,3,5,6,7 \\
N=144
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{\begin{tabular}{c} 
Accounting \\
Courses \(1 \& 4\) \\
Spring \\
\(\&\) Fall \\
N \(=154\) \\
\hline
\end{tabular}}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
\mathrm{~N}=154 \\
\hline
\end{gathered}
\]}} \\
\hline & & & & & & & & & & & \\
\hline & & & & & & & Fac. & & & & Fac. \\
\hline Mean & St.D. & Mean & St.D. & Mean & St.D. & Fac. & Ldg. & Mean & St.D. & Fac. & Ldg. \\
\hline . 74 & . 93 & . 53 & 1.00 & 1.02 & 1.20 & 9 & -56 & . 58 & 1.17 & 1 & 68 \\
\hline 1.51 & . 83 & . 75 & 1.00 & 1.40 & . 70 & 1 & -55 & . 99 & 1.25 & 1 & 82 \\
\hline 1.65 & . 78 & 1.09 & 1.12 & 1.82 & . 63 & 1 & -60 & 1.17 & 1.20 & 1 & 88 \\
\hline -. 43 & . 98 & -. 16 & 1.14 & . 11 & 1.38 & 2 & -63 & . 12 & 1.17 & 8 & 49 \\
\hline . 71 & 1.06 & . 19 & . 92 & . 41 & 1.32 & 9 & \(=59\) & -. 01 & 1.20 & 6 & 55 \\
\hline . 21 & 1.26 & -. 18 & 1.44 & . 31 & . 89 & 1 & 31 & -. 52 & 1.29 & 3 & 35 \\
\hline . 71 & . 91 & 1.04 & 1.27 & 1.15 & . 96 & 8 & -58 & . 79 & 1.38 & 1 & 52 \\
\hline 1.00 & . 90 & -. 17 & 1.46 & 1.10 & 1.20 & 3 & 43 & -. 68 & 1.35 & 5 & 39 \\
\hline . 23 & . 83 & . 34 & . 96 & 1.33 & . 91 & 3 & 74 & . 47 & . 97 & 5 & 78 \\
\hline -1.13 & 1.01 & -. 86 & 1.08 & -1.30 & 1.28 & & -37 & -. 32 & 1.20 & 2 & -51 \\
\hline . 95 & . 87 & 1.12 & . 88 & . 72 & . 92 & 2 & -47 & . 62 & 1.15 & 8 & 48 \\
\hline -. 94 & 1.11 & -. 38 & 1.26 & -. 33 & 1.69 & & -53 & . 47 & 1.45 & 7 & 43 \\
\hline
\end{tabular}

Table D-2. (continued)
\begin{tabular}{|c|c|c|c|c|}
\hline Item & \multicolumn{2}{|l|}{Consumer Experience Course 2 Spring \(\mathrm{N}=27\)} & \multicolumn{2}{|l|}{\begin{tabular}{l}
Psychology \\
Today \\
Course 3 \\
Spring \(\mathrm{N}=38\)
\end{tabular}} \\
\hline no. Item & Mean & St.D. & Mean & St.D. \\
\hline 150. I enjoyed talking with faculty over the telephone. & . 19 & 1.09 & . 35 & . 96 \\
\hline 151. An audio cassette tape explaining study methods to use in the course would have been helpful. & . 02 & . 93 & . 57 & 1.26 \\
\hline 152. Involvement with this course has made me feel that I can do college level work. & . 52 & . 98 & . 64 & 1.21 \\
\hline 153. The subject matter content of the course was about what I had expected it to be. & .65 & . 66 & . 48 & 1.25 \\
\hline 154. The video programs were easy to understand. & 1.17 & . 63 & . 93 & 1.19 \\
\hline 155. The faculty seemed genuinely concerned with my progress in the course. & . 09 & 1.09 & . 78 & . 92 \\
\hline 156. I was able to develop effecíive study techniques as the course progressed. & . 36 & . 61 & . 40 & 1.08 \\
\hline 157. This experience has been a valuable supplement to my previous education. & . 75 & . 63 & 1.00 & 1.03 \\
\hline 158. Through taking this course I have gained new knowledge that will help me to enjoy life more. & . 84 & . 73 & . 77 & . 97 \\
\hline 159. I disliked some of the actors in the video program. & -. 66 & . 94 & -. 23 & 1.38 \\
\hline 160. My original purpose for taking this course has been fulfilled. & 1.28 & . 86 & . 57 & 1.39 \\
\hline 161. The text was easy to understand. & . 76 & . 74 & . 40 & 1.21 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\begin{tabular}{l} 
Adams \\
Chronicles \\
Course 5 \\
Fal1 \\
\(\mathrm{N}=23\) \\
\hline
\end{tabular}} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Psychology } \\
\text { Today } \\
\text { Course } 6 \\
\text { Fal1 } \\
\mathrm{N}=34 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{aligned}
& \text { Writing for } \\
& \text { a Reason } \\
& \text { Course } 7 \\
& \text { Fall } \\
& \mathrm{N}=22 \\
& \hline
\end{aligned}
\]} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Courses } \\
2,3,5,6,7 \\
\mathrm{~N}=144 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Accounting } \\
\text { Courses } 1 \& 4 \\
\text { Spring } \\
\& \text { Fall } \\
\mathrm{N}=154 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Courses } \\
1 \& 4 \\
\mathrm{~N}=154 \\
\hline
\end{gathered}
\]} \\
\hline Mean & St.D. & Mean & St.D. & Mean & St.D. & Fac. & Ldg. & Mean & St.D. & Fac. & Ldg. \\
\hline -. 01 & 1.06 & . 19 & . 71 & . 99 & . 96 & 3 & 63 & . 16 & 1.02 & 5 & 73 \\
\hline . 31 & 1.34 & . 16 & 1.51 & . 51 & 1.08 & 4 & 65 & . 11 & 1.26 & 3 & 61 \\
\hline 1.18 & . 88 & . 82 & 1.17 & . 99 & . 76 & 2 & 30 & . 73 & 1.08 & 1 & 61 \\
\hline . 77 & . 78 & . 37 & 1.14 & . 79 & . 89 & 9 & -55 & . 56 & 1.27 & 1 & 56 \\
\hline 1.46 & . 78 & 1.02 & 1.06 & 1.78 & . 63 & 5 & -50 & . 90 & 1.26 & 2 & 33 \\
\hline . 64 & . 84 & 1.08 & 1.09 & 1.67 & . 84 & 3 & 64 & . 37 & 1.08 & 5 & 65 \\
\hline . 88 & . 76 & . 56 & 1.09 & . 74 & . 97 & 1 & -40 & . 62 & . 98 & 1 & 62 \\
\hline 1.11 & . 72 & . 86 & 1.24 & 1.35 & . 75 & 1 & -64 & 1.10 & 1.04 & 1 & 86 \\
\hline . 76 & . 79 & . 62 & . 89 & 1.26 & . 78 & 1 & -72 & . 32 & 1.04 & 1 & 62 \\
\hline -1.18 & 1.33 & -. 52 & 1.40 & -1.09 & 1.22 & 5 & 31 & . 05 & 1.59 & 2 & -68 \\
\hline 1.69 & . 77 & . 81 & 1.30 & 1.06 & 1.03 & 2 & 40 & . 95 & 1.27 & 1 & 62 \\
\hline 1.18 & . 83 & . 22 & 1.28 & 1.47 & . 80 & 1 & 37 & . 76 & . 99 & 1 & 56 \\
\hline
\end{tabular}

Table D-2. (continued)

\begin{tabular}{ccccccc}
\hline & & & & & & \\
Adams & Psychology & Writing for & & Accounting & \\
Chronicles & Today & a Reason & Courses & Courses 1\&4 & Courses \\
Course 5 & Course o & Course 7 & \(2,3,5,6,7\) & Spring & \(1 \& 4\) \\
Fal1 & Fall & Fall & \(\mathrm{N}=144\) & \(\&\) Fall & \(\mathrm{N}=154\) \\
\(\mathrm{~N}=23\) & \(\mathrm{~N}=34\) & & \(\mathrm{~N}=22\) & Fac. & \(\mathrm{N}=154\) & Fac.
\end{tabular}
\(\overline{\text { Mean St.D. Mean St.D. Mean St.D. Fac. Ldg. Mean St.D. Fac. Ldg. }} \overline{\text { M. }}\)
\begin{tabular}{lllllllllllll}
.11 & 1.15 & .29 & 1.34 & 1.10 & .94 & 4 & 35 & .27 & 1.18 & 3 & 40 \\
1.73 & .65 & 1.05 & 1.01 & 1.86 & .52 & 1 & -54 & 1.22 & 1.03 & 1 & 85 \\
.89 & .78 & .59 & 1.06 & 1.06 & 1.07 & 1 & -47 & .93 & .99 & 1 & 52 \\
& & & & & & & & & & & \\
.94 & 1.47 & .60 & 1.19 & -1.02 & 1.27 & 1 & 46 & -.15 & 1.46 & 10 & 43 \\
.66 & .98 & 1.46 & .77 & 1.18 & .80 & 2 & -42 & 1.12 & .94 & 8 & 30 \\
1.34 & .78 & 1.71 & .73 & 1.43 & .80 & 1 & -43 & 1.50 & .71 & 10 & -35 \\
& & & & & & & & & & & \\
.15 & .99 & .45 & .76 & .46 & .76 & 1 & -40 & .14 & 1.06 & 0 & 0 \\
& & & & & & & & & & & \\
.06 & 1.15 & -.37 & 1.37 & .11 & .79 & 1 & 42 & -.67 & 1.24 & 3 & 31 \\
1.11 & .79 & .93 & .94 & .87 & .92 & 1 & -41 & .69 & 1.16 & 1 & 69 \\
\hline
\end{tabular}

\section*{REVISED QUESTIONNAIRE}

In this space it is suggested that a personal letter be written to the students. This letter might be closely patterned after the letter included in the questionnaire used in 1976 with the first UMA/ISU students (Appendix B).

In this revised questionnaire, the items to be retained are circled, and for the reader's information only, the factor on which the question loaded is identified. Following question 170 is a list of suggestions for additional items for the factors which might not measure the construct adequately. If added, the items should be mixed and inserted randomly throughout the questionnaire.
1. ISU-UMA course which I completed
2. Approximate number of hours I spent watching the video component of the course (either by television or at the learning center)
3. Approximate number of video programs I missed seeing

Did you 80 to the learning center to monitor the program e you missed?
4. Average number of hours \(I\) spent \(s t u d y i n g\) this course per week (excluding video component) \(\qquad\)
5. Name of learning center and person I had contact with center
learning center person
6. Number of times \(I\) had contact with the learning center (by phone) \(\qquad\) for what reason( 8 ) \(\qquad\)
(visited center \(\qquad\) times) for what reason? \(\qquad\)

How could the learning center and its staff have been more helpful to you?
7. Name of faculty \(I\) had contact with for this course

Number of times I talked with the faculty person (in person) \(\qquad\) (by phone) \(\qquad\)
8. I had contact with other students enrolled in the course (other than family amer) approximately times a week or \(\qquad\) times during the time \(I\) was taking the courses.
9. Would you be interested in taking another USA-ISU் course? \(\qquad\) - If yes, what kind of course? (as, for example, English, Sociology, Algebra, etc.)
10. Your name
Last First Middle

Social Security Number

\section*{D1rections}
1. It would be greatly appreciated if you would complete the questionnaire within one week and return it in self-addressed envelope, or you may complete it at the learning center. If you do the latter, place your questionnaire inte the envelope provided and seal it before giving to learning center personnel.
2. The information you give will be completely confidential. Under no circumstances will the faculty or learning center personnel or any other Towa State University employee have access to the information except the research personnel. It is lmportant that you be as accurate in your reactions af poralble.
3. Please use the scale below in expressing your reactions to the statements included in this questionnaire.

The extent to which I disagree or agree with the statement When responding to the statements below, use the following scale


If you strongly disagree with the statement given, place a 1 in the blank. If you disagree but belleve ir isn't a "Strong" disagreement, choose a number between 1 and 50 , registering the extent to which you disagree with the statement.

If you strongly agree, place a 99 in the blank, however, if you agree but do not believe that you "Strongly Agree," choose a number between 50 and 99 to show the extent to which you agree with the statement:

If you do not agree or disagree, that is are completely neutral about a statement, use the number 50 .
If the terms "Strongly Disagree" and "Strongly Agree" do not quite describe how you feel about a statement, you may apply the terms "Strongly yes for me" or "Strongly no for me" or such terms as "Definitely true for me" or "Definitely false for me." This approach may make it easier for you when trying to rate how the statement applies to you. YOU ARE ENCOURACED TO USE ANY OF THE NUMBERS EROM 1 TO 99 IN YOUR RATINGS.

If the statement does not apply in your situation, place 50 in the answer blank. (Example: If the statement asks about your spouse's reactions to you taking the course and you do not have a spouse, use the 50).

If you are enrolled in two or more courses, please answer the questionnaire for each course in which you are enrolled and the special group of general questions which do not pertain to a specific course.

Thank you for your time and cooperation.
If you have any questions, please call the UMA-ISU toll free number and ask to speak to Emilia Nordtvedt, UMA coordinator.
\begin{tabular}{|l|l|}
\hline The extent to which I disagree or agree with the statement \\
When responding to the statements below, use the following scale \\
\(\frac{1}{\text { Strongly Disagree }}\) Strongly Agree \\
\hline
\end{tabular}
1. The audio tape cassettes were a valuable part of the course.
2. I felt at ease calling the learning center for information.
3. I have received benefits other than those \(I\) originaliy anticipated from taking a UMA course. (4) \(1 /\) Finding time to study was difficult.
5. My family has given me extra help and ouppori ghoughout the time \(I\) have been enrolled in the course.
6. I know what services are provided by the learning center.
7. I would like to take courses which would help me become more aware cf problems in the world today.
(8) \({ }^{1 / 2}\) find it difficult to study for tests.
if I plan to take more courses from UMA-ISU.
10. My family is favorable toward my enrolling in future courses.
11. The learning center personnel were available when I needed them.
(12) 4 plan to enroll in a comunity college or a four-year institution for additional courses. (13.) My children felt a bit' neglected at times due to the amount of time \(I\) had to spend studying.
14. I understand the functions of the learning center.
(15)4 plan to enroll in a community college or four-year institution to begin work toward a degree.
16. I would be interested in having someone explain how I might be able to obtain special expertise in an area of study or a degree by taking couress from UMA and a variety of other sources, as for example off campus courses from a four-year institution, a comunity college, and/or correspondence courses.
174 I believe \(I\) will remember longer what \(I\) have learned in this course than in courses \(I\) have taken in a regular class situation.
28. The learning center personnel were cooperative about trying to meet my needs.
19. I appreciate having an opportunity to express how I feel about this overall experience.
(20)4 I would like to work toward a degree.
21. The learning center 8 taff play a very small part in the overall UMA-ISU program.
22. I don't learn as easily as I did back in high school.
23. I liked the feeling of being a student.
24. The learning center personnel made an effort to find answers to my questions.
25. I want to take additional courses which would help to upgrade my qualifications for a job and/ or promotion.
26. The learning center personnel seemed to welcome my telephone calls.
27. I wish URA-ISU would offer more courses for parsonal enrichmant.
The extent to which 1 disagree or agree with the statement
When reaponding to the atatements below, use the following scale
Strongly Disagree
28. The video programs prompted me to keep up on my reading in the text.
29) The text used was similar to a text that might be used in a course offered on a college cam-
pus.
30. The grade \(I\) will receive in this course is not very important to me.
31. A course of this type allows each student to proceed completely at his or her own pace.
32) The tests in this course are similar to those given in other courses offered for college credit on a college campus.
(33) '' my spouse enjoyed watching the video programs with me.
34. As a result of taking this course, I have become acquainted with other adults with interests similar to mine.
(35) \(/ 7 /\) did not have enough energy or stamina to keep up with this course the way i would have liked, due to all of the other demands on my time and energy.
36. I did not need more faculty contact for aatisfactory progress in the course.
37. There should be increased individual flexibility for course completion.
38. I am currently enrolled at an area communty college.
39. My original purpose for taking this course changed as \(I\) progressed in the course.
40. This experience has helped me become more aware of my vocational interests.
(41) 2 The quality of the TV programs (or video component) was excelient.
(42) I learned a great deal in this course.
43. The grade reflected the extent of my learning in the course.
44. The illustrations in the course text were very useful.
45. I felt that the amount of memorization required for the tests was about right.
46. Taking this course has increased my confidence in my ability.
(47) Work pressures and responsibilities have interfered with the time I felt I needed to spend on the course.
48. In addition to tuition, books, and materials, the course has involvad significant additional expense.
49. I would have liked more information about where \(I\) stood in comparison to other students.
50) 7 It is extremely inconvenient for me to take a course at a junior or communty college or a four-year institution (on campus).
(5i) This experience has heiped me to begin developing a new carear.
52. I disliked the humorous segments in the video programs.
(53. \({ }^{3}\) Taking this course has improved my chances of making more money.
(54) 2 The video programs helped to clarify the material covered in the text(8).
55. Overall this course was very interesting to me.
\begin{tabular}{|l|l|} 
The extent to which I disagree or agree with the statement \\
When responding to the statements below, use the following scale \\
\(\frac{1}{\text { Scrongly Disagree }}\) Strongly Agree \\
\hline
\end{tabular}
(56) 2 There was a close relationship between the text and the television component.
(57)8 The majority of "directiong" given in the text and study guides was clear and helpful.
(58) \(/\) Domestic interruptions and demands have interfered with the amount of time I felt \(I\) needed to spend on the course.
(59) I gained personal satibfaction through taking this course.
(60) : The course was worth the money I spent to take it.
(61) 3 I would have preferred having more contact with other students.
(62) I took the UMA course because I wanted to learn while at home instead of the required attendance at a college.
63. The overall experience of taking this course has had a positive influence on our family life.
64. Too much reading was required for the course.
(65) \(\mathscr{O}_{\text {As }}\) a result of taking this' course, \(I\) feel I can be a more interesting companion and friend.
66) Taking this course has given me valuable insight relating to this area of study.

676 The faculty seemed to welcome my telephone calls.
68. The cost of books and materials is too high.

697 The tests were fair.
70. I enjoyed the course except for the tests.
71. I have discussed this course with my spouse at least once a week.
72. As a result of taking this course, I have become more interested in the subject and would like to take additional courses in this area.
(73) As a result of taking this course, I believe I can be a better "spouse."
(74) 3 An introductory audio tape explaining each component of the course would have been helpful.
75. The most I could do was try to pass the tests; learning all of the material seemed too much. (76) \({ }^{10}\) I find it easier to commanicate with my children as a result of taking this course.
(72)3 A review of basic study skills at the beginining of the course would have been helpful.
78. I enjoyed reading the text.
79. 7 If a student knows the material included in the text, she/he would do well on the tests.
80. I felt the faculty was very competent.
(81) \({ }^{i 0}\) I feel the knowledge I acquired will help me to be a better cikizen.
(82) 2 The video programs were a valuable part of the course.
83. I took thie course simply to learn.
(84) 10 Knowledge I have gained will help me be a better family meaber.
85. The knowledge I gained in this course is much more important to me then the grade I received.
86) 3 Periodic calls from faculty would have seived to motivate my studying.

(87) 4 My spouse felt the amount of time I needed to apend on the course interfered with our family
life.
88. The time I had to spend on the course was too great for the benefits gained.
(89) 2 Watching the video programs was a waste of time.
(90) I My personal goals have been advanced through taking this course.
91. Tests are the best way to evaluate a student's performance in this course.
92. In this course, I liked feeling responsible for my own learning.
93. I didn't mind studying for the testa.
94. In this course, I became so actively involved in learning on my own that I did not need faculty help.
95. I felt free to complain to the learning center personnel about the things I did not like.
(96) \({ }^{10} \mathrm{My}\) spouse enjoyed studying and learning with me.
97. 6 I felt at ease talking with faculty by telephone.
98. The vocabulary used in the text was too difficult for a freshman or sophomore college level course.
(99) \({ }^{13}\) feel better prepared for a job as a result of taking this course (even though the job might not relate directly to this course).
100. In this course, I felt challenged to do my best work.
101. I felt that the faculty believed that each student should be allowed to proceed completely at his or her own pace.
102. The material covered in the course was quite different than I had expected it to be.
(103) After taking the first test, I felt more relaxed about the next test.
(104) 6 I felt free to ask the faculty questions about the course.
105. My friends admire me for taking this course.
(108.) I feel the knowledge gained from this course will be very useful to me.
107. This whole experience has turned out to be an interesting topic of conversation with my friends.
108. The video programs were helpful in preparing for tests.
(109. 3 There should be at least one phone conference between the student and the faculty during the course.
(110) \({ }^{1 / 4}\) Being able to budget sufficient study time for satisfactory progress in the course was no problem.
111. The text was helpful for the tests.
112. I believe that I learned as much or more from this UMA-ISU course as I would have learned from a similar college level course offered on a college campus.
(113) 6 I felt free to relate any complaints I had to faculty.

114. The main benefits \(I\) have received from taking this course were not my original purpose for enrolling.
115. 10 As \(\varepsilon\) result of taking this course, I believe I can be a better parent.
(116) The overall effect of this course on my life has been desirabie.
117) 3 I would have enjoyed more contact with faculty.
118) 3 letter explaining the purpose of each component of the course would be helpful.
(119) 3 I would have used supplementary "readings" (articles and/or other texts) if they had been available at the learning center.
120. The cost for tuition is too high.
121. Members of my household (other than spouse) watched the video programs.
122. The overall work load for this course was too heavy for the amount of credit given.
123. The video programs did not follow the text.
124. I feel I now know the material covered in the text.
(125)/4 The pace of the course was too fast for the time \(I\) had to spend on \(i t\).
126. I believe that the difficulty level of this course was equal to or greater than a course comparable to it on a college campus.
\(\left\langle(27)^{1 / 2}\right.\) This course has helped me to be a better employee.
1283 It would have been helpful to have a meeting of all students enrolled in the area and the instructor at the beginning of the course to discuss expectations and an over-view of the course.
\(\qquad\) 129. The need for quiet study time for this course interfered with the family's activities.
130. As a result of taking this course, I have made some new friends.
131. I would like to be given the opportunity of taking comparable forms of an examination until I reached the grade level \(I\) wanted to atcain in the course.
(132) 2 The video programs were interesting to watch.
133. The tests adequately sampled the material covered in the course.
134. The video programs offered at 7-7:30 a.m. interfered with duties \(I\) needed to perform (for ury family or other purpose).
135. The "quality" of the text and materials was high.
(136). \({ }^{3}\) I feel confident to try to seek employment relating to the skilis I acquired in this course.
137. Diaciplining myself to study for a test was difficult.
(138) \(/ 1\) My spouse feels the course wes worth the money I apent to take it.
(139) I would recommend this course to my friends.
(140). The LUA courses provided me with a sense of ecomplishment.
(14) 9 As a result of taking this course, I had much lees time to pend with my family.
(142) "I tound it helpful to discus the course mariai with a momer (or ambera) of my household.

143. I would have praferred doing a "project" of some kind instead of taking testa for my grade in the course.
(144)5I prefer continuing with TMA-ISU courses rather than taking a course on a campus.
145. I received adequate feedback from the testa about the content of the question I got wrong, that is, "why my answer was wrong."
(146) 6 The faculty was helpful in answaring the questions \(I\) asked.
147. I disiliked the way the video programs told me wat I ghould dis.
(148) 9 I worried about taking the tests.
149. \({ }^{3}\) My primary purpose for taking this course was to gain job akille.
(250)6 I enjoyed talking with faculty over the telophore.
(15). 3 An audio cassette tape explaining atudy methods to use in the course would have been helpful.
152. Involvement with this course has made me feel that I can do college level work.
(153)// The subject matter content of the course was about what I had expected it to be.
154. The yideo programs were easy to understand.
(155) 6 The faculty seemed genuinely concerned with my progress in the course.
156. I was able to devalop effective study techniques as the course progressed.
(157) / This experience has been a valuable supplement to 听 previous education:
(158.) Through taking thia courae I have gained new knowledge that will help to enjoy life more.
159. I disilked some of the actors in the video programs.
160. Hy origimal purpose for taking this course has been fulfilled.
161. The cext was easy to understand.
162. A mixture of projects and teste is better than just tests on which to base a atudent's grade.
163.) Overall this wee a good course.
164. My family admires me for taking this course.
165. My primary intereat in taking the course was to gain Iowa State Univarsity academic credit.
166. Taking the wid-ISU course required a substantial effort on my part.
167. The teext was a valuable part of the course.
168. Studying for this course has helped me to better understand my children's atudy habies and problems.
169. I would suggest that the first tast count lese than later tsete toward the grade in the course.
170. The way the course was presented fit my particular neede.
272. What would you like to have us change about the whole experionce to improve it? (we need your apecific euggeations)

581a
272. What do you think ohould remain as it ie?
173. What was your goal or reacon for taking the course?
174. Did the rasi experience change the direction of any goale you had prior to taking the course? If "yes," please explain
175. Did you have a reason or goal for taking the course that was not fulfilled? \(\qquad\) - If "yes" please explain \(\qquad\)
176. What are your future goale?

Any other cousents?

\footnotetext{
Thank you so very much for your cooparation. The changen that will be made will be based as much as posaible on the information gained from these questionmaires and suggestions you have given to personmel involved. Best wishes and we hope we can serve you again in the future.
}

Suggestions for additional items for factors which might not measure the construct adequately due to too few and/or items with low factor loadings.

Factor IV (Scale 4) Obtaining an Education through the Conventional Mode I can't now, but eventually \(I\) want to enroll at a college or trade school of some kind.

Before \(I\) took this UMA course, I did not know if I could succeed in a college level course.

I always believed I could succeed in a college level course if \(I\) had the chance to take one.

This UMA course helped me realize I could succeed in a college level course.

Factor V (Scale 5) Obtaining an Education through Open Learning Mode
It is more convenient for me to take a course "in my home" than to commute to a "class."

I prefer taking a course "by myself" than taking a course in which I am a member of a class.

I would like a broader selection of UMA/ISU courses than are currently offered.
or

There are many other courses I would have preferred taking to this one in which \(I\) am currently enrolled if they were offered.

Factor VII (Scale 7) Fairness of Tests
The tests were the right kind of tests for the type of material covered in the course.

In the tests the questions were worded clearly, that is, it was evident what the instructor was asking.

The material the tests covered was the same as what the course covered.
I. would have preferred a different test than the kind used.

Many of the questions asked in tests were trivial, not covered in the course or "trick" questions.

Factor VIII (Scale 8) Evaluation of Course and Components
The quality of this course was as good as a regular college course. Factor IX (Scale 9) Stress Engendered by Involvement in the Course Relating to Family

I had less patience with family members during times of "pressure" (e.g., preparing for tests or writing reports).

I felt frustrated by having to divide my time between course demands and family responsibilities.

Taking this course provided welcome diversion from family responsibilities.

My experience with this course has created an interest in other members of my family to take a course.

The course was much more interesting than I thought it would be.
Factor XI (Scale 11) Family Involvement and/or Support for Student
One or more of my family members helped me study for my course.
Factor XII (Scale 12) Vocational Vs. Personal Development Motivation
I am or would have been satisfied if this course had been offered for noncredit.

It was important to me to receive some kind of "record" like college credit or a certificate to show my employer or a potential employer I had taken this course.

APPENDIX E. UNIVERSITY OF MID-AMERICA BROCHURES AND BACKGROUND PUBLICATIONS

A member of the ISU faculty in the Department of Psychology will be available as course mentor. Students may reach the mentor by free long distance telephone. throughout the course.

Television lessons will be presented from 7 to 7:30 a.m. on Tuesdays beginning on Feb. 10, 1976, on WOI-TV (Channel 5 in central lowa).

This course will earn 4 quarter hours of elective credit. The credit student's costs will include tuition of \(\$ 76\) plus text and study materials of \(\$ 16\), a total of \(\$ 92\). Study materials will be sent to each student by mail.

\section*{The Consumer Experience}

The Consumer Experience is a practical approach to understanding and solving consumer problems. It deals with the system by which products are developed and offered to consumers. Subjects include consumer finance-examining insurance, investments, and credit; consumer fraud and protection; budgeting; and a consumer's guide to buying clothes, food, cars, and homes.

Thirty 30 -minute instructional videotapes -most of a documentary type-carry a main part of the course. Study guide and texts supplement the TV programs. Two TV programs will be presented each week on WOITV (Channel 5 in central lowa); one will be presented at 7 a.m. on each Wednesday, starting Feb. 11, 1976, and one at 7 a.m. on each Friday.

A course mentor, through the Department of Family Environment at lowe. State, will be available by free long distance telephone throughout the course.

Costs for the credit student include tuition of \(\$ 57\) for the 3 -quarter credit hour course. Study materials, which will be sent to each student by mail, cost \(\$ 14\), giving a total for the course of \(\$ 71\).



\section*{YOU and UMA at ISU}

If you're interested in further learning through nontraditional ways, you're on the fast-growth frontier of education today. And you're not alone.

With family, job, and other responsibilities, not everyone can get away to go to college. Some decide later in their lives that they need and want college-and then it may be impossible to get away.

If you're one of thousands of lowans who want college courses but can't go to college, the timus have caught up with your needs. One answer is:

\author{
University of Mid-America Courses \\ Brought to lowans through \\ Iowa State University
}

\section*{What is UMA}

UMA is a program set up by state universities in Nebraska, Missouri, Kansas, and lowa. It develops courses that fit the needs of the student who must or wishes to study at home. The courses are fashioned to fit the life style of the nontraditional student. They use a variety of learning opportunities:
* Regular weekly classes brought into the home by television
* Weekly newspaper articles
* Textbook and other references
* Study guide that ties it all together
* An instructor available by free long distance telephone
* A nearby learning center where the TV programs and other materials are available for individual study

\section*{What Is Iowa State's Part?}
lowa State University presents the courses and awards credit to persons who pass the courses. The ISU faculty selects the courses; an lowa State faculty member is the
instructor who counsels, gives tests, and evaluates student performance.

Credit earned through ISU for UMA courses can be applied toward an ISU degree r or transferred to another institution.

The student who does not wish to earn credit may choose that option. All course materials will be made available, and the student may use UMA services-contact with the instructor, use of the learning center, etc. The student will not be tested or graded.

\section*{Three Courses for Spring Semester}

Three UMA courses are scheduled for lowa students in the coming spring semester. They will be available to all who can receive the broadcast signal of WOI-TV. which is Channel 5 in central lowa. It is available on many cable television systems beyond the reception area of most home TV sets.

TV classes begin during the week of Feb. 9, 1976.

The courses are:
Accnunting I
Psychology Today
The Consumer Experience
tion on each course is given
is folder.

More information on each course is given on the back of this folder.

\section*{Learning Centers}

Iowa State will establish learning centers to serve the students. Area extension offices within the-WOI-TV area will contain learning centers for UMA courses: Des Moines, Fort Dodge, Creston, and Ottumwa.

Depending upon numbers and locations of students, other learning centers may be arranged. Interested students are encouraged to register-or at least to inquire -whatever their location. If it proves to be impossible to serve a student, fees will be returned.

\section*{The Costs}

For the student desiring ! \(S U\) credit for a course, fees are the same as those paid by
resident students at the campus or for those enrolled in off-campus courses. That fee is \(\$ 19\) per credit hour. Each course has additional cost for books and materials. Exact cost for each course is given with course descriptions on the back of this folder.

Fees are due with registration. Books and study materials will be provided by mail before the start of the TV classes.

\section*{Registration}

The student may register by completing the simple registration form included in this folder. The form, with fees, may be turned in through any county or area office of Extension Service, Iowa State University. Or it may be mailed directly to the University: Extension Courses and Conferences, Scheman Building, Ames, lowa 50011.

Help with registration is available at Extension Service county and area offices. Or a person may call for information or help by free long distance telephone to the university Admissions Office: 1-800-262-3810.


\section*{Application and Registration Form Off-Campus Course Only}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|c|}{REGISTRAR USE ONLY} \\
\hline IOWA RESIDENT & & \\
\hline CURR/MAJ & CODE & \\
\hline COLLEGE & YEAR & \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{Student name}} \\
\hline Las! & & \\
\hline \multicolumn{3}{|l|}{Social security number} \\
\hline \multicolumn{3}{|l|}{} \\
\hline \multicolumn{3}{|l|}{} \\
\hline \multicolumn{3}{|l|}{} \\
\hline \multicolumn{3}{|l|}{} \\
\hline \multicolumn{3}{|l|}{Local telephone number _________________} \\
\hline \multicolumn{3}{|l|}{\begin{tabular}{l}
Will you receive vocational rehabilitation benefits for ISU enrollment? \\
Yes \(\qquad\) No \(\qquad\)
\end{tabular}} \\
\hline
\end{tabular}

Is this your first enrollment at lowa State University? \({ }^{*}\)
\(\square \mathrm{Yes}\)
[.] No

If no, when was your last enrollment? \(\qquad\)
Has your name changed since your last enrollment? [.] Yes [.] No
If yes, what was it previously?
Do you desire undergraduate (special) credit? [
*This section for students new io lowa State:
Female ___ Male __ County of residence \(\qquad\)
U.S. citizen: Yes __ No __ Date of birth \(\qquad\)
Previous education:
\begin{tabular}{lll} 
GED Certification ___ Place & & \\
High school graduation & & \\
School & & \\
College or university & & \\
\hline College & Degree & Year
\end{tabular}
Iowa State University has my permission to obtain certifica-:
tion of the previous education attainments listed above.:
Signature


\section*{COLLEGE AT HOME FOR THOSE WHO}

\section*{CAN'T GET TO A CAMPUS}
- earn regular college credit
- no classes, no attendance required
- choose your own time and place to study
- courses for career improvement,
personal enrichment,
college credit
- open admission: anyone may register on a simple form - register by mail in August or September 1976, for one or more courses.

\section*{UMA}
is a program set up by state universities in Nebraska, lowa, Missouri and Kansas. It develops courses that fit the needs of people who must or wish to study at home They use a variety of learning opportunities:
- Regular weekly television programs which are exciting and unusual
- Newspaper articles mailed to you
- Textbook(s)
- Study guide that ties it all together and shows you how to study
- A professor available by toll-free phone
- A nearby Learning Center where exams are taken, TV programs are available, and educational advice and support can be obtained.

\section*{FOUR COURSES FOR FALL, 1976}

Accounting 1, Psychology Today, Writing for a Reason and The Adams Chronicles will be available to all who can receive Lowa Educational Broadcasting Network channels or WOI-TV. They may also be available on other stations or cable systems. Telelessons begin the week of October 4, except for The:Adams Chronicles over IEBN which begins September 20. Course work should be completed by February 28, 1977. More information on courses is included elsewhere in this booklet.

\section*{WHAT PART DO ISU AND UI PLAY?}

For Fall, 1976, Iowa State University will ofier the courses and award credit to persons who pass them. The University of lowa is a member of UMA and will offer courses for credit in the future.

The university faculties select the courses; they are the instructors who help students with course content and evaluate student performance.

Credit earned through ISU for UMA courses may be ap plicable toward an ISU undergraduate degree at the option of each department. Credit is generally transferable to other institutions

You may enroll for no-credit, which means you receive course materials, you may talk with the professor and use the Learning Center, but you will not be tested or graded.

\section*{LEARNING CENTERS}
to serve students are located at ISU Area Extension Service offices throughout lowa, at Cass and Shelby County Extension Service offices, at lowa Wesleyan College in Mount Pleasant and at Luther College in Decorah.

\section*{THE COSTS}
for UMA courses are the same as for regular on or offcampus ISU courses, \(\$ 19\) per quarter credit. Students buy books and materials for use at home; these are mailed directly to you.
Fees for non-credit enrollment are exactly the same as for credit enrollment. Fees must be sent with the registration form.

\section*{REGISTRATION}

Anyone may register by completing the simple form included in this folder and by returning it with the tuition and materials fee. The form and fee may be returned to any County or Area Extension Service Office, or mailed to ISU. The form is pre-addressed. If possible, please register by September 15. Enrollment is open until November 5, 1976.

\section*{For information or help:}

Phone or visit your County or Area Extension Service Office
Phone toll-free between August 23 and September 17 ONLY to ISU-UMA office:

1-800-262-3818
Phone toll-free to UI Continuing Education Division: 1-800-272-6430
Phone toll-free to ISU Admissions Office 1-800-262-3810

\section*{WRITING FOR A REASON: An Introduction to College-Level Composition}

This is a non-credit course designed to help anyone learn the basic elements of effective writing. The course focuses on the writing of clear and accurate sentences, sound paragraphs and coherent essays, and on the relation between clear thinking and good writing. It aims to develop an awareness of how language works in the communication process.

The primary material for the course will be presented in 30 "telelessons," two per week for 15 weeks. Each student will also receive a study guide correlated to the TV lessons, a composition handbook, and supplementary materials prepared by ISU English Department instructors.

Each student will be expected to mail in 10 or 11 written assignments, which will be carefully evaluated and returned with instructor's comments. The instructors will
be available for consultation with students by toll-free telephone.

Tuition is \(\$ 57\), plus \(\$ 14\) for course materials. Enrollment for the fall term is limited to 60 students.

The lowa Educational Broadcasting Network will televise this course beginning October 5, with previews begin ning September 21. Each week includes two lessons:

Tuesdays, 3:30-4:00 p.m. (Repeat Wed. 7:30-8:00 am)
Thursdays, 3:30-4:00 pm (Repeat Fri. 7:30-8:00 am)
WOI-TV (channel 5 in central lowa) will air the first lesson of each week on Tuesdays, 7-7:30 am, and the second lesson each week on Thursdays, 7-7:30 am, beginning October 5.

\section*{ACCOUNTING I}

An understanding of financial statements is essential to anyone interested in business administration or enterprise. This introductory but demanding course gives you an opportunity to learn to analyze financial statements as well as how to accumulate and organize financial data. It has been found very useful not only by people who are interested in maintaining basic accounting records; but also by managers of various types of business. Accounting I is part of a two-course sequence in accounting available in the lowa UMA program.
Sixteen television lessons, a textbook, a study guide, a "checkpoints" book of trial tests, audio-cassettes and a set of newspaper articles are available for use in your home. A cassette tape recorder will be needed.

A professor from the ISU Department of Industrial Administration will be available to students by toll-free telephone.

Accounting I will earn 4 undergraduate quarter credits at ISU. Tuition is \(\$ 76\); course materials (sent by mail) are \(\$ 38\), for a total cost of \(\$ 114\).

Television programs will be aired over lowa Educational Broadcasting Network channels on Mondays, from 3-3:30 pm, beginning October 4. They will be repeated on Tuesdays at 8-8:30 am . They will also be available on WOI-TV, channel 5 in central lowa, on Mondays from 7-7:30 am, beginning October 4.

They may also be available from your local station; check fall listings.

Enrollment for Accounting I credit is limited to 100 :students.

\section*{PSYCHOLOGY TODAY}

This challenging introductory psychology course covers all basic areas of general psychology, including sensation, perception, motivation, biological foundations of behavior and learning, social behavior, adjustment and psychopathology. The emphasis is on a scientific approach to the understanding of human behavior.

The course includes fifteen television programs. A textbook from the publishers of Psychology Today magazine, plus a study guide and set of newspaper articles are mailed to the student.
A member of the ISU Psychology Department faculty will be the course instructor; he may be reached by toll-free telephone.

Psychology Today will earn 4 undergraduate quarter credits at ISU. The costs are \(\$ 76\) for tuition and \(\$ 16\) for materials, which totals \(\$ 92\).

Previews of programs 1 and 2 will be aired over IEBN on Tuesday September 21 and 28 respectively. Over WOI-TV, channel 5 in central lowa, the programs will be seen on Wednesdays, 7-7:30 am, and repeated on Fridays, 7-7:30 am, beginning the week of October 4, 1976. They will be aired on Tuesdays at \(3-3: 30 \mathrm{pm}\), beginning October 5 , over lowa Educational Broadcasting Network channels, with a repeat on Wednesdays at \(8-8: 30 \mathrm{am}\). They may also be available from your local station; check fall listings.

\section*{THE ADAMS CHRONICLES}

The Adams Family: 1775-1900-American history through the lives of one of the nation's most illustrious families. Themes covered in this sophomore-level college course include: the Revolution, national politics, diplomacy, economic developments, and cultural life.
Thirteen to 15 telecasts will be aired. The student will be mailed a textbook, study guide, and supplementary readings.

Three professors from ISU's History Department will serve as course instructors and will be available to students via toll-free telephone.

The Adams Chronicles will earn three undergraduate quarter credits at ISU, and will be offered on a Satisfac-tory-or-Fail basis only. Tuition is \(\$ 57\) and materials are \(\$ 22\), for a total course cost of \(\$ 79\).

Students will be required to write a term paper and take a comprehensive examination. Enrollment is limited to 100 students.

The lowa Educational Broadcasting Network will televise this course on Mondays from 7 to 8 pm , beginning September 20.

From \(\qquad\)
\(\qquad\)

UMA
Office of Extension Courses and Conferences

\section*{Scheman Building}
lowa State University
Ames, lowa 50011

APPLICATION AND REGISTRATION FORM OFF-CAMPUS COURSE ONLY


Is this your first enrollment at lowa State University? YES NO
If no, when was your last enrollment?
Did you leave in good standing? YES___NO
Has your name changed since your last enrollment? YES NO
If yes, what was it previously?
Previous education: PLEASE FILL IN ALL LINES WHICH APPLYTO YOU
GED certification
Year: \(\qquad\) Name of Place

High School Graduation
Year: Year:
College or University
Year: \(\qquad\)
Name of College
lowa State University has my permission to obtain certification of the previous education attainments listed above.
\(\qquad\)

Do you desire credit? YES \(\qquad\) NO 0 All credit is undergraduate special credit.)

\section*{Check the courses}
you wish to take:
( ) AccountingI
Charges

Tuition \$76 Materials \$38 Total \$114
Tuition \(\$ 76\) Materials \$16

Total \(\$ 92\)
() Writing for a Reason
() The Adams Chronicles

Tuition \$57 Materials \$14

Total \(\$ 71\)
Tuition \$57 Materials \(\$ 22\) Total \(\$ 79\)

Total cost for courses checked


Cost is the same even if no credit is desired.

Method of Payment:
(payable to lowa State University) Order () Mastercharge (only)
For Mastercharge credit card payment, give:
Card Number \(\qquad\)
Date of Expiration \(\qquad\)
Will you receive vocational rehabilitation benefits for ISU enrollment? YES \(\qquad\) NO

If you are receiving public assistance and desire financial aid for the tuition of these courses, fill in the following lines:
\(I\) certify that at this time 1 am receiving public assistance through the

Name of Program or Source

\section*{Signature}


\title{
Members of the University of Mid-America Consortium
}


Iowa State University
University of Iowa
Kansas State University
University of Kansas
University of Minnesota
University of Missouri
University of Nebraska
South Dakota State University University of South Dakota

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The University of Mid-America is funded principally by the National Institute of Education.

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Director of Delivery Systems
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\section*{About UMA}

The University of Mid-America is a major regional experiment in "open learning" or "teaching at a distance" which is governed by a consortium of midwestern state universities and funded principally by the National Institute of Education (NIE). Access, productivity and quality are emphasized at UMA, which was created to explore the extent to which postsecondary educational opportunities could be expanded when constraints of time and place are reduced or eliminated, high quality educational opportunities are offered on learners' own terms (and at an affordable cost), and educational productivity is improved through the use of technology. In addition, UMA is envisioned as a regional system in one geographic area which might serve as a model for development of such programs in other sections of the nation.

In the broadest of terms, the mission of the University of Mid-America is to foster development of a new approach to learning which permits Americans to achieve personal and career goals through highly accessible and ultimately affordable opportunities for high-quality educational experiences. Three specific goals, identified to guide UMA's development during the next several years, include: (1) developing multimedia courses of sufficient quality to insure widespread use within the UMA region and elsewhere; (2) assisting the consortium members in
their development of statewide delivery systems in partnership with the postsecondary educational community and distributing course materials to institutions nationwide; and (3) improving the ability of higher education to serve new audiences through research and dissemination activities.

The University of Mid-America was founded as a not-for-profit corporation in 1974, after more than three years of research and development activities funded by the Office of Education and the National Institute of Education. Five state universities in four states were charter members. By 1978, the consortium's membership totaled nine universities in six states, including the University of lowa, Iowa State University, the University of Kansas, Kansas State University, the University of Minnesota, the University of Missouri, the University of Nebraska, the University of South Dakota, and South Dakota State University. In addition, the University of North Dakota and North Dakota State University were considering consortium membership.

The presidents of the member universities serve as members of UMA's governing Board of Trustees. Five faculty members from each institution form an Academic Council which advises the staff and the Board on curriculum planning and course development matters. A National Council of Advisors, consisting of leaders in government, education, industry, labor and philanthrophy, advises the Trustees from a national perspective.

UMA's central office staff is headquartered in Lincoln, Nebraska, where course development, research and dissemination activities are centralized. Staffs which plan and direct delivery activities are located in each of the UMA states and are employees of the member universities.

\section*{Curricullumin}

From its headquarters, the University of Mid-America offers neither credits nor degrees. Students enroll through the delivery systems of the member institutions. Thus the curriculum available to any student is that provided by the participating university. Working in concert with its consortium members, UMA determines course development priorities which are selected to enable delivery systems to plan their offerings and students to plan their programs, and to guide administrative and financial planning.

UMA's long-range curriculum plan specifies four areas of undergraduate course development (business, energy and environment, the humanities, and agriculture), as well as continuing education for professionals. In the undergraduate areas, UMA intends to develop clusters of related courses (both lower- and upperdivision) in each area. In any given delivery system, these can be supplemented by courses developed elsewhere to permit that delivery system to offer a more complete curriculum, perhaps to offer an external degree. With sufficient funding from NIE and other sources, UMA intends to provide a complement of courses that can contribute to the external degree program of any participating institution. High-quality courses developed elsewhere will not be duplicated. Given adequate funding, implementation of this plan would allow UMA to complete five to six new courses in each of the major subject areas within five years.

\section*{Course Development}

The open learning course development process is complex, time-consuming and costly. Yet UMA is committed to development of a process in which academic and media quality is maintained, costs are reduced, and materials are completed without delay. UMA's course design and production process, patterned after that pioneered by Britain's Open University, merges these elements: course content sufficient to ensure adoption by academic departments, as well as to ensure learner satisfaction; the emerging science of instructional design, with its concern for sequencing and presentation of instruction; aesthetic appeal; and evaluation activities undertaken during the formative stages of course development to ensure qualiity and effectiveness.


UMA's courses for the distant learner integrate both traditional and nontraditional elements, including video and audio lessons for broadcast by educational television and radio stations, popularized materials for newspaper publication, audiocassette tapes, study guides and textbooks.

To finance course planning and development projects, UMA seeks grants from a variety of public and private sources, including government agencies and endowments, private foundations and corporations. Such grants have been awarded by NIE, the National Endowment for the Humanities, the Ford Foundation, the Lilly Endowment and the Japan and Hoso-Bunka Foundations, among others.

Course production costs may range from \(\$ 100,000\) to \(\$ 1\) million per course, depending largely on the number of television lessons produced and the production style employed. The typical UMA credit course is budgeted at about \(\$ 325,000\). UMA's television materials are not merely "taped lectures." Some utilize a documentary style, while others have made use of dramatic vignettes. Production of a single course may take from six months to two years.
For content advice, UMA seeks expertise from the most prestigious faculties of UMA's own consortium members and institutions elsewhere in the U.S. In some courses, such nationally known scholars as Henry Steele Commager and Edwin O. Reischauer have served as advisors. Additionally, each course team benefits from the advice of content panels whose mernbers review and comment on course components during every stage of development.

\section*{Research and Evaluation}

UMA's commitment to quality is further illustrated by the ambitious research and evaluation agenda established at its founding. The research staff has conducted studies on effectiveness of courses with adult learners, collected data on demographics of those who enroll, and designed surveys to determine public awareness of nontraditional learning opportunities. More than 25 reports on UMA's research and evaluation studies have been published since early 1975, and 7,000 copies have been disseminated in the U. S. and abroad. Responses to a survey of recipients of the reports indicated the studies had been read often and widely used by others engaged in similar pioneering efforts.
Recently, UMA took yet another step in development of a research model for distance education when it initiated a regional approach to research into adult learning. The effort resulted in an initial design for a cooperative research program involving facuity members from several of the consortium institutions.


The University of Mid-America is committed to assisting in the development of statewide open learning delivery systems in each of the states in which consortium members are located.

UMA's regional approach to open learning, dependent as it is on the cooperation of existing universities of major stature, challenges institutions with longstanding traditions to overcome their natural resistance to major change, and thus innovations are sometimes adopted rather slowly. Yet several of UMA's consortium members are landgrant institutions with century-old histories of educational outreach and with programs which annually serve thousands of citizens in nontraditional waysthrough correspondence, field and extension classes, educational television and radio. Through the University of Mid-America, these institutions have committed themselves to another expansion of their services for off-campus audiences.

The extent of participation by member institutions is considerable: many hours of time of their presidents, other administrators and faculty members have been devoted to planning and development activities; new offices for administration of distance-teaching delivery programs have been created, longdistance telephone lines for academic counseling installed, regional learning centers established. By the end of Fiscal Year 1977, more than \(\$ 1.8\) million had been contributed by the states to the UMA experiment through direct cash allocations, in-kind services, time and other resources. Individual state delivery systems were offering from two to 12 courses per semester.


In the first three years of delivery system operations in the UMA region, nearly 6,500 enrollments had been processed. Demographic studies conducted by UMA researchers show that those who have enrolled thus far constitute a new clientele in American higher education. Most are women-many of them homemakers with young children still at home. Their ages average 37 , considerably older than their counterparts on campus. Half of them have had no previous college experience, and many have had no formal schooling for several years. Median family income is about \(\$ 11,000\). Many of them live in cities, isolated not by geographic distance from colleges and universities, but by such barriers as domestic demands, pressures of work, inconvenient schedules and fear of failure in the classroom. UMA's studies indicate that many adults want to determine, in the privacy of their homes, their ability to succeed in a college-level course before enrolling on a campus.
Nearly two-thirds enroll for credit, and a similar percentage say they have a degree objective. They consistently rate the quality of UMA's course materials as good to excellent, yet they often say the courses are more difficult than they expected. Sill, more than half complete their course work, and nearly \(100 \%\) of those receive passing grades. Studies indicate that courses taught at a distance are as rigorous as those taught on campus, and that learning can be as effective through the use of media as in the more traditional classroom approach.

While enrollments have not been as large as UMA had once anticipated, experience in the UMA region seems comparable to that of institutions in other parts of the U. S. In the UMA states, enrollments per course per state have averaged about 50 , with a range of as few as 15 to as many as 450 . By comparison, enrollments in such national successes as The Adams Chronicles and The Ascent of Man have averaged 40 to 50 per institution nationwide. Still, UMA believes that larger enrollments are possible if enough courses can be developed to provide institutions and students with a much wider selection.

While the numbers of students who have been willing to pay for their learning have been fewer than once anticipated, those who take advantage of the "free" television segments or published newspaper articles total far more than had been expected. A recent survey in Nebraska, where the greatest amount of market analysis has been conducted, shows that those who viewed 10 or more television lessons totaled 10,000 or more, and 21,000 of the state's one million adults had read 10 or more course newspaper articles. Independent surveys by Nebraska's largest newspaper, which has published newspaper components as a public service, indicate that the lessons attracted readership comparable to the paper's most popular features.


Since mid-1976, when UMA began distribution of its course materials outside the six-state region, colleges and universities nationwide have leased or purchased course materials. Most popular among courses currently available for national distribution have been those in accounting, poetry, and application of agricultural pesticides, a short noncredit course designed to help satisfy state and federal certification requirements.

UMA's five-year plan projects a gradually increasing number of uses for UMA-produced courses, so lease income produced can support the consortium's core administrative structure and also finance revisions of outdated course materials. Adoption and use of courses by institutions nationwide also will help to ensure that society's investment in the UMA experiment will benefit the largest possible number of learners.

The University of Mid-America remains alert to the potential for more effective distribution of course materials in the future, with the assistance of such technological advances as the communications satellite and the videodisc. Better instrustional use of community antenna and cable systems is also on the UMA agenda for continued investigation.

\title{
Future of Lifelong Learning
}

Since early 1970, higher education in the United States has been urged to create new opportunities for lifelong learning with maximum convenience for learners. The pressures have accelerated recently, as reflected in such national policy statements as the Lifelong Learning Act passed by the Congress in 1976.
As chairman of the National Commission on Non-Traditional Study, Samuel B. Gould in 1973 encouraged Americans to look beyond the bounds of tradition:
Full opportunity to learn cannot be limited to the young: it must be for everyone, any walk of life, for whatever purposes are beneficial...No longer can it be the single opportunity of a lifetime; now it must become the total opportunity for a lifetime.
(Diversity by Design)
The University of Mid-America has been created to provide one major avenue for lifelong learning-an avenue designed for those who must study on their own time, at their own pace.
"This type of college work," wrote one midwestern adult, "is a very good idea and very useful to people like myself who have a little time and desire but are unable to fit a regular college class into our lives because of time and distance involved. Hope this program will continue."

\title{
UMA-Produced Courses in Distribution
}

\author{
Principles of Accounting I and II Anyone for Tennyson? (Poetry)* Pests, Pesticides and Safety for the Private Applicator (Agriculture) Introduction to Symphonic Music* Japan, Part I: The Living Tradition (History) Introduction to World Food Problems Going Metric \\ *Adapted from existing materials
}

\section*{Courses}

\section*{Currently in Production}

Japan, Part II: The Changing Tradition (History)
The Great Plains Experience (History)
Foundations of American Nationalism (History)
Small Business Management

Some of the courses listed as in production will be ready for distribution during 1978. For information on courses now available or on those soon to be completed, write to:

University of Mid-America
Office of Marketing and Information
1600 North 33rd Street, M.S. 322B
P.O. Box 82006

Lincoln, Nebraska 68501


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State Delivery System Coordinators
}

\section*{Iowa}

Emilia Nordtvedt 111 Curtiss Hall Iowa State University Ames, lowa 50011

\section*{Kansas}

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Empire State College
Kermit Hansen
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Walter Hiersteiner
Kansas Board of Regents
Warren G. Hill
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Education Commission of the States
Fred K. Hoehler, Jr.
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AFL-CIO Labor Studies Center
Cyril O. Houle
Professor
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National Association of State
Universities and Land Grant Colleges
Francis Keppel
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Aspen Institute for
Humanistic Studies

Fred G. Kling
Prosecuting Attorney
Gentry County, Missouri
Leslie Koltai
Chancellor
Los Angeles Community College
Wade H. McCree
Solicitor General of the
United States
Douglas R. Moore
President
Mankato State University
David E. Morrill
South Dakota Board of Regents
Franklin D. Murphy
Chairman of the Board
Times Mirror
William C. Norris
Chairman of the Board
Control Data Corporation
Mary Louise Petersen
Iowa Board of Regents
William Priest
Chanceilor
Dallas County Community College
Stanley F. Redeker
Past President
Iowa Board of Regents
William R. Roy, M.D.
St. Francis Hospital
Topeka, Kansas
Robert W. Scott
Federal Co-Chairman
The Appalachian Regional Commission
Oscar E. Shabat
Chancellor
City Colleges of Chicago
W. A. Strauss

President and
Chairman of the Board
Northern Natural Gas
Stuart Symington
Former U.S. Senator
Missouri
David Utz, M.D.
Mayo Clinic
Norman E. Watson
Chancellor
Coast Community College District
Van O. Williams
President, Board of Curators
University of Missouri-Columbia

\section*{A Background Statement on University of Mid-America courses in Iowa Summer and Fall, 1976}

Iowa State University and the University of Iowa are cooperatively providing further opportunity for Iowans to obtain college credits or to simply learn for personal enrichment through home study of University of Mid-America courses. In an imaginative new approach to college study at home ISU offered three University of Mid-America courses in the Spring of 1976, and four will be offered by ISU in the Fall, 1976. These courses will be available to all Iowans via public service telecast over Iowa Educational,Broadcasting Network and WOI-TV. The University of Iowa may begin to offer UMA courses for credit during 1977.

The Fall, 1976, courses are 15 weeks in length. They include reofferings of Accounting I and Psychology Today, plus two new courses, "Writing for A Reason" and "The Adams Chronicles."

Accounting I - An understanding of financial statements is essential to anyone interested in business administration or enterprise. This introductory but demanding course gives you an opportunity to learn to analyze financial statements as well as how to accumulate and organize financial data. It has been found very useful not only by people who are interested in maintaining basic accounting records, but also by managers of various types of business. Accounting I is part of a two-course sequence in accounting available in the Iowa UMA program.

Psychology Today - This challenging introductory psychology course covers all basic areas of general psychology, including sensation, perception, motivation, biological foundations of behavior and learning, social behavior, adjustments and psychopathology. The emphasis is on a scientific approach to the understanding of human behavior.

Writing for A Reason - This first semester college freshman course in English composition will help anyone to write effectively for their own pruposes; it covers basic writing skills, planning a composition, and composing effective sentences, paragraphs and essays. It also focuses on good thinking and various aspects of language. This course is offered
on a non-credit basis only.
The Adams Chronicles - The Adams Family: 1775-1900-- American history through the lives on one of the nation's most illustrious families. Themes covered in this sophomore-level college course include: the Revolution, national politics, diplomacy, economic developments, and cultural life.

\begin{abstract}
What UMA Courses Are Like
UMA courses are multi-media educational experiences designed by teams of nationally known scholars and course designers. The courses generally include professionally produced weekly television programs, textbooks with reading assignments, a study guide specifically keyed to course materials, and may also include workbooks, a series of weekly newspaper articles, and audiotapes. The student has free telephone communication with his instructor and adviser at the UI or ISU campus.
\end{abstract}

\section*{Learning Centers}

While UMA courses are designed to let the student study at home at the time of his/her choosing, one of the major innovations of the UMA approach is the "Learning Center," located within fifty miles of any student in Iowa。 Students enrolled for credit usually go there to take tests; any student can view or review videotape recordings of the TV lessons, and talk with Learning Center personnel who can help them seek out other educational opportunities, such as colleges near home and correspondence courses. Students may also take exams at the Learning Centers at other than scheduled times.

Learning Centers for Fall 1976 UMA-Iowa courses are located at the twelve ISU Area Extension Offices, at Iowa Wesleyan College in Mount Pleasant, at Luther College in Decorah, and at the Cass County and Shelby County Extension Offices.

\section*{The UMA Consortium}

The University of Mid-America was formed in 1974 as a consortium of five midwestern universities: Iowa State, Kansas, Kansas State, Missouri and Nebraska. The University of Iowa joined the consortium
early in 1976, and the University of South Dakota joined several months later. Initiative for the formation of UMA came from the University of Nebraska.

The Presidents of the member universities comprise the UMA Board of Trustees. ISU President W. Robert Parks was recently elected Chairman. A National Advisory Council -- which includes Mrs. Mary Louise Petsison, of Harlan, President of the Iowa Board of Regents, and former Iowa Regent Stanley Redeker, of Boone -- serves UMA. Educational policies are formulated with inputs of an academic council, made up of five faculty representatives from each of the member universities.

Iowa State University members of the Academic Council are: Harold Crawford, Head of the Agricultural Education Department; Ruth Hughes, Professor and Head of the Home Economics Education Department; Richard Herrnstadt, Professor of English; Thomas Hannum, Professor of Psychology; and Edwin Lewis, Assistant Vice President for Academic Affairs.

University of Iowa members of the Academic Council are: May Brodbeck, Vice Fresident of Academic Affairs; Bruce E. Gronbeck, Associate Professor of Speech and Dramatic Art; Mildred Lavin, Assistant Professor of Education and Director of Extended Studies, Division of Continuing Education; Russell
M. Ross, Professor of Political Science; and Sherwood D. Tuttle, Professor of Geology and Associate Dean of College of Liberal Arts. A smell group of professional educators make up the LMA Headquarters, ir Lincoln, Nebraska.

\section*{Relation to State Universities}

At Iowa State University, UMA courses are coordinated within University Extension. At the University of Iowa, UMA courses are a program of the Continuing Education Division. University Extension Dean Charles E. Donhowe heads the UMA program at ISU, and Dean of Continuing Education Robert F. Ray heads the UMA program at UI. A full-time Coordinator with statewide responsibility for the UMA program and delivery system, Ms. Emilia Nordtvedt, is based at ISU.

Each state in the UMA consortium makes its own decisions about UMA activities within the state. Each course offered for credit by ISU or UI has been reviewed and approved for credit by faculty members in the respective university departments. The university policies apply to students
enrolled at one institution or the other. Iowa State's normal in-state tuition rate -- \(\$ 19\) per quarter credit hour -- will apply to those enrolling in UMA courses at ISU. University of lowa tuition will be similar.

Students taking UMA courses at ISU or UI are admitted as special students, with no high school completion required. A simplified enrollment procedure is available, with all arrangements handled by mail. Noncredit enrollments are welcome. ISU and UI provide a free phone line for persons with questions about these and other programs. At ISU the number is 1-800-262-3810, at UI 1-800-272-6430. Information and application forms will be available in County and Area Extension Offices throughout Iowa beginning in mid-August, 1976.

\section*{Studies Show Interest in Higher Education Open Learning}
(The University of Mid-America is part of an educational frontier ) often called "open learning." The phrase refers to ways of learning other than in the ordinary classroom on a college campus. Many studies show that half or more of out-of-school adults desire additional educational experiences for self-improvement, to help with career goals, or toward a college degree. UMA students are typical of those turning to open education throughout the nation, who are motivated to learn but find distance or personal barriers that prevent them from getting to campuses where traditional classes are available.

\section*{Available to Other Colleges}

The second semester of UMA courses in Iowa is a program of Iowa State University and University of Iowa. However, it will be possible for other credit-granting colleges and universities to relate to it. Arrangements can be worked out to make it possible for another college to include a course for its own students, on or off-campus.

\section*{The Future}

Open learning programs for adult off-campus students will increase in number and scope. Educators foresee alliances within the state's
higher educational establishment to make such experiences available throughout lowa. In the future, these patterns of cooperation might link the statewide educational television and public radio networks and the private and public institutions of higher education.

For Further Information:

Emilia Nordtvedt, State Coordinator for UMA in Iowa 111 S Curtiss Hall, ISU Ames, Iowa 50011

Telephone: 515-294-4750
\begin{tabular}{|c|c|c|}
\hline Russell Swenson 592 & Telephone: & 319-363-9631 \\
\hline \multicolumn{3}{|l|}{Cedar Rapids Area Extension Director} \\
\hline \multicolumn{3}{|l|}{Box 1427, 4401 6th St. Rd. SW} \\
\hline Cedar Rapids, Iowa 52406 & & \\
\hline Robert B. Hegland & Telephone: & 712-328-0077 \\
\hline \multicolumn{3}{|l|}{Council Bluffs Area Extension Director} \\
\hline \multicolumn{3}{|l|}{2 Northcrest Drive} \\
\hline Council Bluffs, Iowa 51501 & & \\
\hline James C. Almquist & Telephone: & 515-782-7066 \\
\hline \multicolumn{3}{|l|}{Creston Area Extension Director} \\
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\hline \multicolumn{3}{|l|}{Creston, Iowa 50801} \\
\hline Richard D. Munster & Telephone: & 319-326-2314 \\
\hline \multicolumn{3}{|l|}{Davenport Area Extension Director} \\
\hline \multicolumn{3}{|l|}{310 Kahl Building} \\
\hline \multicolumn{3}{|l|}{Davenport, Iowa 52801} \\
\hline Thomas A. Robb & Telephone: & 515-276-4597 \\
\hline \multicolumn{3}{|l|}{Des Moines Area Extension Director} \\
\hline \multicolumn{3}{|l|}{3839 Merle Hay Rd. - Room 225} \\
\hline \multicolumn{3}{|l|}{Des Moines, Iowa 50310} \\
\hline Glendon W. Kuiper & Telephone: & \(319-582-3466\) \\
\hline \multicolumn{3}{|l|}{Dubuque Area Extension Director} \\
\hline \multicolumn{3}{|l|}{1890 John F. Kennedy Road} \\
\hline \multicolumn{3}{|l|}{Dubuque, Iowa 52001} \\
\hline Henrietta Van Maanen & Telephone: & 515-576-7257 \\
\hline \multicolumn{3}{|l|}{Fort Dodge Area Extension Director} \\
\hline \multicolumn{3}{|l|}{5 North 16th, Box 877} \\
\hline \multicolumn{3}{|l|}{Fort Dodge, Iowa 50501} \\
\hline Lyle R. Mackey (As of August 1, 1976) & Telephone: & 515-424-5432 \\
\hline \multicolumn{3}{|l|}{Ma'son City Area Extefision Director} \\
\hline \multicolumn{3}{|l|}{1631 4th Street, SW} \\
\hline \multicolumn{3}{|l|}{Mason City, Iowa 50401} \\
\hline William E. Linstrom & Telephone: & 515-682-8324 \\
\hline \multicolumn{3}{|l|}{Ottumwa Area Extension Director} \\
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\hline \multicolumn{3}{|l|}{Ottumwa, Iowa 52501} \\
\hline Roger Iverson & Telephone: & 712-258-0651 \\
\hline \multicolumn{3}{|l|}{Sioux City Area Extension Director} \\
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\hline \multicolumn{3}{|l|}{Spencer Area Extension Director} \\
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\hline \multicolumn{3}{|l|}{Spencer, Iowa 51301} \\
\hline Alvin T. Goettsch & Telephone: & \(319-232-6654\) \\
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\hline
\end{tabular}

APPENDIX F. DESCRIPTIONS OF STUDENTS IN COURSES

The following is a rather brief description of the students enrolled in each of the five courses, based on the analysis of the findings in this study.

\section*{Accounting I}

The Strong-Campbell Interest Inventory indicaced these students to be very conventional, effective at well structured tasks, avoid ambiguous situations and problems involving interpersonal relationships or physical skills. These students tend to describe themselves as conscientious, efficient, obedient, calm, orderly, and practical. They want to advance in the world--to gain power and status. They generally value material possessions and will work hard to attain them.

Vocational preferences include bookkeepers, clerical workers, financial analysts, quality control experts, statisticians, etc.

These persons also tend to be persistent in an academic setting and also prefer working alone and with things and ideas rather than with people.

In the ISU Student Questionnaire these students enrolled in this course to increase their vocational skills and to become more aware of their vocational interests. They were also interested in trying to improve their professional status and to increase their awareness of the political and social concerns in the world--possibly as it would affect the economy and job market.

The educational background of these persons (in comparison to students enrolled in the other courses) was average, that is lower
than students in Consumer Experience and Adams Chronicles but higher than students in Psychology Today and Writing for a Reason,

The Video-Component of the course was noted "very low" by these students in comparison to the ratings of the video component by students in other courses. There were, of course, some individual differences in ratings, that is some students appreciated this component of the course and rated it as valuable--but considered as a group, the ratings were low.

These individuals also did not want more structure or more contact with faculty. They were evidently quite satisfied with the amount of structure in the course, thus, either the course was well-structured or structured in a way that was acceptable to the type of student enrolled.

In evaluating the faculty and their reaction to faculty the Accounting students were about equal to those in Adams Chronicles. The interpretation, based on means of items is that the faculty welcomed their calls, but they did not feel at ease talking to faculty.

The accounting students again did not enroll in the course to directly benefit their families, and they were not interested in learning just for the sake of learning. They wanted to acquire a specific skill that they could put to use--either out in the world or on a paying job or for "keeping records" for the family or a family business.

These students felt that the pace of the course was a bit fast and this may have been due to the domestic and job related
responsibilities they had. These were busy people who felt they needed to improve or learn a skill for job related reasons. Possibly more than any other group they needed flexibility in submitting assignments and taking tests. In many cases they had very little control over the "demands" of their personal lives, yet they wanted to learn. Repeats of the video components at later dates, possibly a course offered over a period of a year--as from January to middle of November, and a break during July and August might be more realistic.

The video component, the course study guides, etc. should all be constructed to help the individual learn in a structured, no frills, manner. Every minute counts (from their point of view) and they tend to respond best to an orderly, well sequenced, precise approach, specific directions, immediate feedback from tests, with detailed explanations of why they made mistakes-what they evidently misunderstood, etc. To them, taking a course was comparable to performing on a job--a precise exacting type of position.

\section*{Adams Chronicles}

The students in Adams Chronicles were the least "conventional" of all of the groups. Thus, they could be described as not being effective at structured tasks. These persons enjoy ambiguous situations and problems involving interpersonal relationships. They do not tend to value material possessions as highly (as those, particularly, in Accounting and Consumer Experience) and are not as a rule, "conscientious," "efficient," "obedient," "calm," "orderly," or "practical."

This group of students were also not interested in self improvement for the purpose of becoming better parents, spouses, friends or citizens, and were uninterested in discovering their vocational interests.

This group was somewhat interested in expanding their interests and awareness of the world around them--philosophies, cultures, political concerns, etc.

Their educational background was high, (next to Consumer Experience, the group with the highest educational background) and based on the correlations of "Education" with the occupational categories of "Social," "Investigative," and "Ariistic," and tinis group's very low score on "conventional," these students enjoy some social contacts with others, may prefer to work in groups, are investigative. They may also prefer free unstructured situations with opportunities for self expression.

The students in Adams Chronicles rated the video programs very highly (next to Writing for a Reason, the group that rated the video higher than any other group). They believed the programs to be a valuable part of the course, easy to understand, excellent quality, very helpful in preparing for the tests and they appreciated the humorous segments. They also indicated that there was a close relationship between the video programs and the text.

In evaluating the degree of structure for the course the students in Adams Chronicles were in the middle compared to the other courses. They were average in wanting a letter or audio cassette to explain the course components. They did not feel a need to have all students in an area meet to discuss the course and did not believe that periodic
calls from faculty would motivate their studying, however, they did believe there should be at least one phone conference between themselves and faculty during the course. This is also a group of students who indicated they would have used supplementary "reading" materials if they had been available at the learning centers.

Based on means of items this group probably would have preferred more contact with faculty and with students. They also wanted to know where they stood in comparison to other students.

These students were about average compared to other groups in their rating of the faculty. They did not feel, however, that the faculty welcomed their telephone calls or were very helpful in answering their questions. They also did not feel very free to ask faculty questions about the course and did not enjoy talking to faculty over the telephone and were not at ease in talking to them. They did feel free, however, to relate any complaints they had to the faculty and believed the faculty was somewhat interested in their progress. Their rating for the faculty's competence was high and they did receive adequate feedback from tests, etc.

Since this is the group that was least "conventional" it is interesting and a bit puzzling that they did not enjoy faculty contact to any great extent. Since this group also had a high composite educational background (compared to other groups) "faculty" may have a stereotyped image--competent, efficient but not a "friend" with whom one feels equal and completely at ease, Many combinations of reasons might be explored.

To benefit the family was not a reason for enrolling for the majority of these students. They did not believe the knowledge gained would be helpful to their families, that it would improve them as a spouse or parent. However, they did find it helpful to discuss the course content with members of their families and said they discussed the course with their spouse at least once a week and their spouse enjoyed watching the video program with them. They also felt that as a result of taking the course they could be a more interesting companion and friend, also a better citizen.
of the five courses the students enrolled in, the students in Adams Chronicles and Accounting \(I\) seemed to be at opposite ends of a continuum. These students were interested in simply learning, however they were very "grade conscious" (more than any other group and their primary interest in taking the course was to gain academic credit.

This group was completely uninterested in using the knowledge gained to either acquire a job or upgrade themselves as employees.

These students also seemed to have an abundance of time at their disposal and were not bothered by domestic interruptions or demands, work pressures or responsibilities, or lack of energy or stamina.

They also had no problems studying for tests and very emphatically stated they did not have less time to spend with their family as a result of taking the course and did not find the pace too fast. The course seems to have been a very satisfying experience for the students. This may have been due to their high educational background and informed, realistic expectations from the course.

\section*{Consumer Experience}

The students in Consumer Experience were almost as "Conventional" (Strong-Campbeil Interest Inventory) as the students in Accounting \(I\). These people also prefer well-ordered environments and like systematic, verbal and numerical activities. They are usually conforming, prefer subordinate roles, are effective at well-structured tasks, avoid ambiguous situations and problems involving interpersonal relationships and physical skills. These people also enjoy bookkeeping and similar jobs. This group also tends to be academically oriented.

This group differed from accounting in that they were somewhat more interested in informing themselves--that is, wanting to become better citizens, parents, etc. They were also a little less interested in vocational and personal "growth."

The educational background of the students was very high compared to all the other groups.

Since the factor on "Education" correlated with the occupational categories Social, Investigative and Artistic, it may also be concluded that this group had some interests similar to these types. They have some social interests, are investigative, that is, have a need to know and are somewhat creative-mas compared to the Accounting I students, (who tend to be so very "conventional" without the "broadening" effect that generally accompanies a higher educational background.)

The video component as a whole was rated quite highly by these individuals, however not quite as high as Adams Chronicles or Writing for a Reason. They felt the quality was quite high, rather interesting
to watch, helpful in preparing for tests and helped to clarify the material, etc. They appreciated the video part of the course but didn't rate it extremely high or low.

These students did not believe additional "structure" was necessary. For example: they did not want a letter or an audio cassette tape at the beginning of the course which served to explain the purpose and components of the course; did not want an audio cassette tape which explained study methods to use in the course; and did not believe periodic calls from faculty would serve to motivate their studying.

They were positive, but in comparison to the other groups, rated lowest in believing there should be at least one phone call from faculty during the course, and they were lowest in wanting more contact with faculty. They felt they became so actively involved in learning on their own that they did not need faculty help. Since this was the group with the highest "composite" educational background they evidentiy felt they could take a course on their own with little assistance. They indicated they would have liked information on how they stood compared to other students--the effects of our educational system?

This group rated the faculty involvement the lowest of all the groups, however they believed that the faculty welcomed their phone calls and were quite helpful in answering the questions they did ask. There was a paradox in this respect in that they added they did not feel free to ask the faculty questions about the course and they did not enjoy talking to the faculty over the phone and did not feel at ease doing so. They also did not feel free to relate complaints
to faculty and did not have the feeling that the faculty was concerned about their progress.

They felt the faculty was competent but also complained about not receiving adequate feedback on the tests.

One of the major goals for the students in this course was to benefit their families and they felt they accomplished their goal in that they gained knowledge that would help them to be a better family member. It is interesting and a bit perplexing that they stated their spouse did not enjoy studying with them, yet they found it helpful to discuss the course material with a member (or members) of their household and discussed it with their spouse at least once a week.

This course also did not help them to communicate with their children. They also rated it a low positive in helping them to be "more interesting companion or friend," but they rated it high in helping them to be a better citizen.

This group had a definite goal in mind for taking the course. They wanted information that would help them to become better consumers and through application of this information be better able to serve their families. This group definitely had no vocational aspirations for enrolling. They were not trying to improve themselves as employees or trying to obtain a job as a result of knowledge gained.

This group had a few problems with unexpected family related interruptions and found that most pressures interferred with time they needed to spend on the course but they could cope. They had some difficulty trying to study for tests and found budgeting time for study
was somewhat of a problem but again not pronounced. They considered the pace of the course about right--definitely not too fast regardless of the few problems they encountered in finding time to study. Also it did not require time they felt they needed to spend with their families.

Since this group had a high educational background (by comparison) and were aware of the contents of the course, they seemed to progress smoothly, and were very complimentary about knowledge gained in the course. They did not seem to need extra guidance or help and requested none.

Psychology Today
These students are not very "conventional," that is they generally do not prefer a type of job that requires a great deal of structure and they enjoy ambiguous situations and problems. They also generally enjoy being involved in interpersonal relationships.

These students (compared to the other groups) were the most interested in becoming a better person or citizen and also in becoming a better spouse, parent and friend. They also wanted to learn how to use their leisure time creatively. They also wanted to increase their "awareness" and interests.

The educational background of this group was the lowest of all groups and this lack of formal education may have accounted for their interest and "thirst" for knowledge to expand their scope of interests and awareness. This lack of education may also have helped to
create some "doubts" in their minds about their adequacy as parents, spouses, citizens. They were possibly wanting more knowledge and information to help guide them in their present "roles."

This group did not believe the video programs were a valuable part of the course, that is necessary for understanding the material and helpful in preparing for the tests. They did not see a close relationship between the video component and the material covered in the text. However they did think the programs were interesting to watch--compared to the other courses they rated them as "average" in this respect.

The Psychology students wanted more structure than any other groups. Since their composite educational background was very low compared to all other groups except Writing for a Reason and since these students also wanted additional structure, it may indicate a fear in attempting a college level course and a need for additional guidance and support.

This group wanted the introductory letter and audio cassette tape explaining the course components, an audio tape giving information on study skills to use for the course, periodic calls from faculty to help motivate their studying and strongly felt that there should be at least one phone conference between student and faculty during the course.

This group also wanted more contact with faculty and with other students. They also wanted to know how they compared with other students. These students rated faculty quite highly but not in comparison to the students in Writing for a Reason. Tcey felt the faculty welcomed
their phone calls and were fairly helpful in answering their questions. They felt free to ask the faculty questions about the course and felt fairly at ease in talking with faculty but did not actually enjoy talking with them as compared to Writing for a Reason. They did enjoy it more than the students in Adams Chronicles, however.

These students also felt the faculty was genuinely concerned about their progress in the course, was competent, but had one complaint-they did not believe that feedback on the tests they took was adequate.

The students in Psychology were also quite positive in believing the course helped them to be better family members, spouse and parent. They also believed they were more interesting persons as a result of the course and that the course was some help in contributing to their value as a citizen.

They were quite positive in their over-all comments about the course helping them to be better family members and yet they gave very negative responses relating to their spouses studying the course with them. Some, however, discussed the course with their spouses at least once a week and a few found it helpfui to discuss the material with members of their household. In these areas they did not rate as highly as Consumer Experience and Adams Chronicles.

The students in Psychology wanted to "learn" but they were also quite interested in gaining academic credit. These students wanted to learn about "Psychology" and hoped the knowledge would help them to be better family members but a few, particularly the spring group also hoped the course might help them vocationally.

Domestic interruptions and work pressures were somewhat of a problem but not as severe as for the students in Accounting and Writing for a Reason.

They had enough energy and stamina to keep up with the course but found it difficult to budget their time in a way that allowed for sufficient study time. Studying for the tests was espec: m lly difficult for this group. Some felt that as a result of the course they had less time to spend with their families.

Since this group had a lower educational background it is quite possible that they needed help in organizing their time and acquiring study skills. This group consisted of many who were exploring-wanting to know if they could cope with a college level course and also wanting to satisfy their curiosity about the study of psychology. In many instances they were surprised by the course content and the difficulty level of the course, and additional help and guidance throughout the course might have been advisable.

Writing for a Reason
This group is not as "conventional" as the students in Accounting, but more "conventional" than those in Psychology or Adams Chronicles. This group scored high (next to Psychology) in respect to wanting to improve themselves, that is to become better family members and citizens. They also wanted to learn how to use leisure time creatively.

This group, however, is not interested in expanding their "awareness" or "interests" in general about the world around them.

Since the educational background of this group is the very lowest of all of the groups, it is possible that these students, as those in Psychology, feel a need to upgrade their general knowledge and skills-and it is interesting that for both of these groups the score was high for wanting to improve themselves for the benefit of their families and their communities. Due to the "value" our culture has placed on "education" they may feel inadequate and even guilty about being able to perform their "roles" as parents, spouses and community members, therefore want more knowledge that they feel will help them in these roles.

The students in Writing for a Reason rated the video component higher than any other group. They belie:od the video programs to be a very valuable part of the course, interesting to watch, of excellent quality, an aid in clarifying material presented in the text and easy to understand.

In evaluating course structure, the students definitely did not want a letter or audio tape explaining the purpose of each course component, but they did want an audio cassette tape which explained study methods which would be effective in the course, and believed a review of study skills at the beginning of the course would help.

This group also would have appreciated a meeting of all students and instructors in the area. They felt that periodic calls from faculty would have served to motivate their studying-and very strongly indicated a need for at least one phone conference between student and faculty during the course.

This group would also havepreferred more contact with other students, and more contact with faculty. These students rated the faculty far above the other students. Since this group felt a definite need for faculty contact and help, this may have influenced their ratings--or it may be that the faculty was so receptive and helpful that it encouraged them to turn to the faculty when they were in need of assistance and/or encouragement.

In discussing the course with the faculty it was very evident that the faculty had learned to appreciate and enjoy the students and were dedicated to helping them improve their writing skills.

These students enjoyed talking to faculty over the telephone, felt at ease about contacting faculty, felt free to relate any complaints to faculty and felt that the faculty were genuinely concerned with their progress in the course and felt the faculty was very competent.

Most of these students had low (composite) educational backgrounds, took the course on a non-credit basis and knew a permanent grade would not be entered on their record. These all may have had an effect on the rapport that was so evident between the students and faculty. They appreciated one another and the students gained more from the course than improved writing skills.

These students rated this course the highest of all the groups as contributing to tiee benefit of their families. As a result of taking this course they believed they could be a better family member (not a better "spouse," however) particularly a better parent. As a result of the course their communication with their children was slightly improved.

They definitely felt the course helped them to be a more interesting companion and friend, and a better citizen.

They discussed the course content at least once a week with their spouse and with other family members, but stated the spouse did not enjoy studying with them,

The major goal of students in this group was to learn writing skills. They were not interested in gaining academic credit. As a result of taking the course, however, they felt more confident about their skills in writing and in seeking employment. The course also helped them become aware of their vocational interests. Compared to all other courses the students in this course felt they had gained the most in becoming better prepared for a job. This is particularly interesting since it was not one of their goals in enrolling in the course.

These students found taking the course very demanding due to family responsibilities and interruptions. They also felt the pace of the course was too fast for the time they had to spend on it. There may be several explanations for this. Since it was offered on a non-credit basis it is possible that they did not anticipate the amount of work actually involved and also, they may not have realized how much time they would need to learn the skills taught. Again, their educational background was low compared to other groups and to them the course may have been more difficult than expected.```

