

ED 031 158

24

HE 001 029

Improvement of Persistence to Remain in School by Potential Dropouts of Community College Students through the Evaluation of a General Education Program, Final Report.

Macomb County Community Coll., Warren, Mich.

Spons Agency-Office of Education (DHEW), Washington, D.C. Bureau of Research.

Bureau No-BR-7-E-193

Pub Date Jun 68

Grant-OEG-0-8-019300-0209-010

Note-327p.

EDRS Price MF-\$1.25 HC-\$16.45

Descriptors-Community Colleges, Course Objectives, \*Experimental Curriculum, \*General Education, Higher Education, \*Persistence, \*Potential Dropouts, \*Student Ability

The majority of students entering Macomb County Community College enroll in the liberal arts curriculum with the intention of earning college credits and transferring to a 4-year institution. But many of these freshmen are "latent terminal" students with poor to average high school grades and low SCAT or ACT scores who fail in their chosen curriculum and leave college between the first and second semesters. The Educational and Cultural Development (ECD) Program, which began in the fall of 1965, is a broad, integrated, 1-year general education curriculum that is structured to provide a successful and productive educational experience in a highly personalized environment. ECD students enroll in 5 courses, on a block schedule basis: social science, natural science, communications, humanities, and orientation. A larger number of students in 2 groups that successfully completed the ECD Program have earned more credits and higher grades in a shorter length of time than a comparison group of regular liberal arts students and those who persisted into their second year continued to achieve ahead of the liberal arts group. This report presents the theoretical structure and description of the ECD Program, the rationale on which it is based, faculty team reports on the 5 areas of study, and a detailed evaluation. The final recommendations are presented to those who might wish to incorporate any or all of them into a new or existing program. (WM)

ED031158



U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE  
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION  
POSITION OR POLICY.

EVALUATION and PROGRESS REPORT

JUNE 1968

**EDUCATIONAL REPORT**

**7-E-193**

**OEG-8-8-019300-0209-010**

**An evaluation of the effectiveness of an experimental general education program in improving persistence in college, academic achievement, educational-vocational redirection, involvement and personality development of latent terminal community college students.**

**James S. Munro  
Project Director**

**Macomb County Community College  
14500 12 Mile Rd.  
Warren, Michigan  
48093**

**October, 1968**

**U.S. Department of  
Health, Education, and Welfare**

**Office of Education  
Bureau of Research**

BR 7-E-193  
PA-24  
DE-BR

FINAL REPORT

Project No.: 7-E-193  
Grant No.: OEG-0-8-019300-0209-010

Improvement of Persistence to  
Remain in School by Potential  
Dropouts of Community College  
Students through the Evalua-  
tion of a General Education  
Program

Dr. James S. Munro

Macomb County Community College  
Warren, Michigan

June, 1968

The research reported herein was performed pursuant to a Grant with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. Department of  
Health, Education, and Welfare

Office of Education  
Bureau of Research

HE 001 029

## PREFACE

The following Basic Education Progress Report represents the results of three years of operation. Basic Education (or Educational and Cultural Development Program as it was termed) began in September, 1965 as an educational experiment in an attempt to reverse the trend of the average and below average student to leave Macomb as a failure. The evaluation of the program was built into its structure at the onset and has played a key role in direction and change since that time. Early evaluations were limited and essentially descriptive but have become more involved and thorough since then.

A small amount of the material contained in this report appeared in an earlier progress report, but most of the data is new. This progress report will both describe and evaluate the program's accomplishments so that it can be of use to others who face problems similar to those found at Macomb County Community College.

Part of this report was financed under a Government Grant from the U. S. Office of Education. Macomb financed the remainder and has allowed the program to continue. Follow up studies on all the students who have entered this program since September, 1965 are being continued, and new evaluation tools have been added.

There are four main sections in the report: (1) The Introduction; (2) The Description of the program; (3) The Evaluation of the program, and (4) The Final Recommendations. The Introduction contains the rationale for setting up the program. The Description section contains the Area reports from Communications, Humanities, Natural Science, Social Science and Orientation. The Evaluation describes the groups that were studied, discusses the results of the data collected on them and summarizes these results. The Final Recommendations are based on the entire report and written for any others who might wish to incorporate any or all of them into a new or existing program.

## ACKNOWLEDGEMENTS

Prepared and edited by:

Terrance Almquist  
Gary Blodick  
Sara Chalhian  
James Munro, South Campus Director

With the assistance of:

James Campitelle, Director  
Harold Boadway, (Director)\*

Edwin Arnfield  
Nancy Arnfield  
William Hoerauf  
Dorothy Kaufman

John Rae  
Martin Hogan  
Gus Demas\*  
Allan Levy\*

Natural Science Lead Teacher  
Humanities Lead Teacher  
Social Science Lead Teacher  
Orientation Lead Teacher and  
Counselor

Communications Lead Teacher  
Coordinator of Instructional Research  
Natural Science Lead Teacher  
Communications Lead Teacher

Staff members:

Robin Avery  
Dorothy Buchan  
Herman Chapin\*  
Douglas Dassow\*  
Paula Drewek  
Georg Ettl  
Alan Gross\*  
Robert Grossman  
Thomas Kogel\*  
Mary McCartney  
Arthur Ritas  
Richard Rivers  
Karl Sjolander  
Dennis Thompson  
Peter Tomlinson\*

Communications  
Natural Science  
Humanities  
Natural Science  
Humanities  
Humanities  
Communications  
Social Science  
Communications  
Natural Science  
Communications  
Social Science  
Natural Science  
Communications  
Natural Science

Clerical staff:

Fay Hare  
June Jesse  
Christine Kaminski  
Gladys Knapp  
Carolyn Koehn  
Doris Walker

\*Former staff members

## TABLE OF CONTENTS

PART	PAGE
<b>I. THE INTRODUCTION</b>	
Theory and Research.....	1
A Curriculum Model.....	4
General Education.....	5
A Case Study.....	7
Program Rationale.....	7
Explanation of Rationale.....	8
Curriculum.....	8
Redirection.....	10
Personalization.....	10
Experimentation and Innovation.....	11
The College Setting.....	11
Program Background.....	11
Program Description.....	12
Objectives and Procedures.....	12
Groups to be Studied.....	19
<b>II. DESCRIPTION OF THE PROGRAM</b>	
Communications.....	34
Humanities.....	60
Natural Science.....	81
Social Science.....	91
Orientation.....	110
<b>III. THE EVALUATION OF THE PROGRAM</b>	
Methodology.....	146
Persistence.....	148
Discussion.....	156
Academic Achievement.....	159
Discussion.....	173
Redirection.....	179
Discussion.....	179
Student Evaluation of the Faculty and Program.....	184
Innovations.....	205
Teams.....	208
Discussion.....	211
Second Year Questionnaire.....	212
Discussion.....	235
Interviews.....	241
Multiple Regressions.....	247
Grade Point Average.....	248
Credits Earned.....	255
Persistence.....	264
SCAT-T and Co-op Eng.....	272
Summary.....	286

PART	PAGE
V. RECOMMENDATIONS AND CONCLUSIONS	290
APPENDICES	
A. Responses to Questionnaire.....	297
B. Vertical Team Structure.....	303
C. Sample Block Schedules.....	304
D. Teaching Effectiveness Rating Scale.....	305
E. ECD Program Evaluation - 150.....	306
F. ECD Program Evaluation - 160.....	310
G. Follow-up Questionnaire.....	314
H. Data Sheet.....	318



## EXPERIMENTATION IN GENERAL EDUCATION

### Introduction

A crucial problem confronting American higher education in general and especially community college education is the development of effective general education curricula. There is a great disparity between the general education goals of most institutions of higher education and the evidence that these goals are being met for a substantial proportion of the student body. This disparity is accentuated in community colleges where evidence seems to indicate that the existing curricula do not meet the needs of a majority of the students. There have been sufficient theoretical and empirical contributions in recent years to permit the formulation of a number of propositions for general education curriculum development. The Educational and Cultural Development Program at Macomb County Community College is an experimental general education program which incorporates a number of these principles and will be described in some detail.

### Theory and Research

The conception of education as a system that develops each individual to his highest potential necessitates that progress be measured in terms of personality change and development as well as academic achievement. A certain amount of theory does exist relating to personality change and development during late adolescence due to the contributions of Robert W. White (16), Erik Erikson (3), Nevitt Sanford (14), and Robert Havighurst (6). A number of recent studies have been designed to determine what kinds of change and development occur in students during their college years and what processes and mechanisms contribute to student change. The research seems to indicate that most institutions of higher education in the United States are not especially successful in producing significant changes in their students. An analysis of the institutions which do have a substantial impact on their students reveals a number of common denominators which are included in the following propositions:

1. The existence of a powerful total environmental press is essential to affecting significant changes in students.
  - a. Philip Jacob stated, as a conclusion of his study, that, "a look at whole colleges rather than just a selection of courses or other educational influences in isolation, reveals that sometimes a combination of factors can produce a distinctive, institutional atmosphere, a 'climate of values' in which a student is decisively influenced." (7, 99)

- b. Nevitt Sanford also concluded, "In considering the determinants of personality change in college, it is our impression that the overall culture of the college is more important, in general, than any particular factor that can be isolated within a single college environment." (14, 79)
  - c. Dressel and Mayhew found that student values were more likely to be changed where core programs of general education were carefully integrated and the educational experiences were not confined to courses. (2)
  - d. G. Robert Pace has clearly demonstrated that distinctive patterns of college environments have predictable and demonstrable consequences and that crucial knowledge about a college concerns its overall atmosphere. (10)
2. Special emphasis should be placed on the quality of the freshman program, as the student's initial college experiences are of crucial importance.
- a. Benjamin Bloom concluded that, ". . . environment may have its greatest effect on individuals in the first year or so that they are within it. . . As individuals leave one environment and enter another they seem to be especially susceptible to the effects of the new environment in the initial period in the new environment." (1, 196)
  - b. Mervin Freedman reported that, "Basic changes in qualities of character, outlook on life, and fundamental personality characteristics are consolidated by the end of the sophomore year." (4)
3. The establishment of personal relationships between students and faculty are necessary if students are going to be affected by their college experiences.
- a. Philip Jacob concluded that, ". . . where influence is seen, faculty are likely to have value commitments which are firm and openly expressed, and are outgoing and warm in their personal relations with students. Influence is more pronounced where association between faculty and students is normal and frequent, and students find teachers receptive to unhurried and relaxed conversations out of class." (7, 8)

- b. The results of the Cornell Values Study indicated that the major criticisms students made of their colleges were directed at tendencies toward impersonality. (5, 7)
- c. Carl R. Rogers summarized the kind of student-faculty relationships which contribute to influencing and molding student behavior and personality: "If the leader is understanding, acceptant, and permissive toward his group. . . and responsible participation by the student is permitted and encouraged, then academic learning proceeds about as usual as measured by conventional tests, and personal growth and adjustment improve significantly." (12, 317)
- d. Peck and Havighurst have observed that students and others will tend to develop in accordance with the type of treatment they receive from others:

"The only way to obtain genuinely friendly treatment from others for any length of time is to treat them in the most friendly, considerate way possible. The only way to breed a reasonable attitude and effective reasoning powers in other people is to be consistently and patiently reasonable with them. . . The only way to beget dependably stable, sincerely motivated, ethical behavior from others is to treat them in exactly this way." (11, 200)

- 4. Peer-group influences must be recognized and directed in accordance with educational objectives.
  - a. Nevitt Sanford wrote, "What students learn in college is determined by their fellow students; by the norms of behavior, attitudes, and values that prevail in the peer groups to which the student belongs." (13, 463)
  - b. Theodore M. Newcomb has examined and verified influence of peer groups and has suggested that peer group influences should be mobilized on behalf of educational objectives. He recommended that, "larger colleges should be composed of smaller units. . .," and that peer groups' influence is likely to further the education goals if, "arrangements concerning college (or subcollege) membership, living-group membership, and classroom experience are so dovetailed that groups of individuals who are important to one another come to share many interests, including intellectual ones." (9, 486)

5. An ongoing evaluation process which includes effective student and faculty feedback mechanisms is essential.
  - a. Dressel and Mayhew found that a key characteristic of institutions which had a significant impact on their students was a "broadly conceived evaluation activity (as) a continuing part of the program." (2, 246)
  - b. Student feedback mechanisms are important for curriculum improvement.
  
6. The ability of experimental educational units to provide special advantage for influencing students should be utilized in educational planning.
  - a. The well-documented "Hawthorne Effect" can and should be deliberately stimulated and maintained in educational curriculum development.
  - b. Nevitt Sanford stated, ". . . if experimental colleges succeed because of their novelty, the university's task becomes relatively simple: it has to keep on setting up experimental colleges and thereby creating a permanent "newness.'" (7, 155)

The propositions which have been discussed should be of considerable significance to those institutions of higher education which are committed to the development of each student to his highest potential. College curricula which were developed with these propositions in mind would have a number of characteristics.

#### A Curriculum Model

The curriculum would be planned to provide a powerful total environment for the student during his first two years of college. A great variety of challenging experiences; curricular, cocurricular, and extra-curricular, would be included in ways which would further the integration of developmental changes with the students' total personality structure. Positive personal relationships between students and faculty would be created by frequent student contracts, formal and informal, with capable, friendly, and acceptant faculty members. Student peer group relations would be fostered and utilized in the achievement of the institutional objectives. Systematic and continuous evaluation of the curriculum and its objectives would be conducted and would include effective mechanisms for feedback from students and faculty members. Experimental programs would be cooperatively developed by faculty members and constantly revised in accordance with evaluation results. This curriculum model is exemplified by a very small number of institutions of higher education and its applicability to the great variety of institutions in the United States is a major question.

The application of the discussed propositions to community college curriculum development poses a number of difficult, but not irresolvable, problems. An example of one of the most serious problems and how it might be at least partially resolved is the problem of creating a powerful total environment for students in a commuter type institution. A possible solution would be the utilization of a "locked-in" scheduling system which would force the student to spend more time on campus and give him an opportunity to participate in a number of cocurricular and extracurricular activities. For instance, a full-time student might be assigned to a "package" schedule which ran from 8 a. m. to 4 p. m. and included his schedule of classes, leisure and recreational time, time and activities to get him involved with other students and faculty members, time for study, library work, tutorial instruction in a programmed learning facility, and a dynamic series of cultural and educational activities. In addition to the time and involvement during the greater part of the school day, inducements should be made to involve the student in various evening and weekend activities such as in attending plays, concerts, movies, art shows, and special field trips. Environmental influences tend to be greatest when active interaction and involvement occur and when people participate in common activities.

The importance of peer group relationships in determining college outcomes makes it essential that community colleges devise ways to encourage the development of peer group relations among college students. One procedure which is effective in meeting that objective is a "block scheduling" approach which brings students together in the same group for all or most of their classes. This forces students to develop close personal relationships with other students and can help to provide the social reinforcement which many students seem to need to remain in college and be influenced by it.

The stimulation of experimentation in many community colleges is an extremely difficult task due to the typical conservatism of faculty members, the need to have courses and programs accepted by the various senior institutions to which students wish to transfer, and the lack of expert evaluation and research assistance. However, in all probability, experimentation and the added impact of experimental programs are needed even more in community colleges than in other types of higher education institutions. An institutional commitment to experimentation can be attained and larger community colleges can be subdivided into manageable experimental units. More emphasis needs to be placed on recruiting and assisting creative faculty members in experimental projects. Where research and development assistance cannot be obtained within the institution, cooperative arrangements might be made with universities and/or by pooling resources with other community colleges.

#### General Education

The preceding theory and research point to the need for general education programs based upon the following definition of general education which was written by Horace Morse:

"General Education, . . . , is more concerned with the learner than with the content, which may be organized or reshuffled with regard to traditional fields. Its goals are individual development in its various aspects, and it places emphasis upon behavior and social usefulness as well as upon intellectual development as an outcome of learning. It is a manifestation of the democratic spirit in higher education, for it admits a wider scope of abilities and a far broader clientele." (8, 11)

General education, as defined by Dean Morse, is obviously consistent with the kind of curricular model suggested by the theory and research previously cited.

In addition to the emphasis on the individual development of the student, a general education approach provides a number of other advantages for community colleges. The student-centered orientation of general education permits great flexibility in curriculum development. Curriculum experimentation and innovation can be more readily stimulated because general education courses and programs are less likely to become "frozen" and it is possible to operate outside of the narrow bounds of specialized subject areas.

The consolidation of instructional effort toward a core of broad basic courses reduces the tendency toward proliferation of courses which is often detrimental to an educational institution. The large number of community colleges which have enrollments under one thousand students are in considerable difficulty when they attempt to offer courses in the traditional liberal arts specialties. A small number of interdisciplinary general education courses such as those offered by the newly established Montcalm Community College in Michigan might well strengthen the educational programs of small colleges.

The broad range of courses and the student-centered emphasis of general education are also especially important in community colleges where a high proportion of the students need assistance in establishing realistic educational-vocational goals. A required core of general education courses does permit students to change programs with a minimum of difficulty and credit loss.

The existence of effective general education programs in hundreds of American colleges and universities indicates the applicability of the general education approach. However, it does seem probable that an effective general education approach is most essential for students who are least likely to complete those four year liberal arts curricula which do provide a broad integrative educational foundation. The community college students who complete a semester, a year, or two years of college have relatively little opportunity to gain from a broad general education experience. The vocational-technical students also tend to have little or no exposure to general education because of the demands of the specialized two-year programs and the tendency to have the general education requirements met through courses which are in no way related

to the definition of general education used in this article. There is a great need for experimentation and innovation in general education approaches to serve the needs of community college students.

### A Case Study

An experimental general education program has been developed and has operated for two years at Macomb County Community College in Warren, Michigan. The Educational and Cultural Development (ECD) Program provides a broad, integrated first-year college experience for academically average to poor community college students in a highly personalized environment. Approximately twelve hundred full-time students have been involved in the ECD Program since its inception in the Fall, 1965 Semester. The following parts of this section will both describe and evaluate the first two years of the ECD Program at Macomb County Community College. Some of the material that is included in this report has been in previous reports, but the majority of material, descriptive and evaluative is new and changed. The beginning ECD group of students and the comparison group that entered at the same time have completed their two years at Macomb so that the evaluation of their performance can be more complete than that done at the end of their first year. In addition to these two groups, the second year ECD group of students is included in the evaluation and this adds more in the way of comparison.

The initial section of this evaluation report will furnish the theoretical structure of this program, followed by the rationale upon which the program is based and a brief description of the program itself and its objectives. The reports that describe what each of the five areas, Natural Science, Communications, Humanities, Social Science and Orientation, has done and is doing, will then follow. The description of the Teams and some of their activities will complete the section describing the program itself. The final section of the report will then deal with evaluation. The three groups being evaluated will be described, their actual accomplishments discussed and then the summary will attempt to conclude the significance of the findings in relation to what was attempted as well as what was learned so that suggestions for further research and changes in direction can be discussed.

### Program Rationale

1. A significant and obvious disparity between the college curricula at Macomb County Community College and the actual educational outcomes and apparent needs of the students.
2. A very pronounced difference between the educational and vocational aspirations of many Macomb students and their chances of attaining these aspirations based on past performance.

3. An increasing impersonality toward the student within the institution due to its rapidly expanding college enrollment of more than seven thousand students in September, 1965.
4. A need to stimulate faculty experimentation, innovation, and exploration of approaches most appropriate to effective instruction at Macomb County Community College.

### Explanation of Rationale

#### Curriculum

There is an obvious disparity between the regular, liberal arts curriculum offered at Macomb and the actual accomplishments of the students. There is very little precise information about the students at Macomb County Community College, but what there is demonstrates rather dramatically that Macomb's problems are almost exaggerations of those in other community colleges. For example, a study carried out by the Counseling Department in 1964 found that out of 272 entering students, 87% indicated they wished to continue their education in a senior institution. Yet these same 272 students had a high school record of C or below in 86.4% of the cases; and were from backgrounds where 43% of the fathers had not graduated from high school. The Student Services Division at Macomb indicates that only about 10% of entering students ever actually do transfer. A profile of entering freshmen prepared by the Student Services Division in 1966 shows 71.9% of Macomb's students are below the 50th percentile of the SCAT (School and College Ability Test) according to national norms and that over 40% have high school averages below C. A study of all grades received by Macomb's students in the fall semester of 1964 found that only 51.7% of the students received C or above in their courses, or that almost half of the students did not succeed in earning transferable credit.

In 1963 a small study was made based on a 10% random sampling of the applicants. 148 students were selected and of this 148, 100 students actually signed up for classes. From these 100 students, it was found that 87 stated that they were entering liberal arts transfer courses so as to ultimately transfer to a senior institution. Of these 100 students who entered in September of 1963, one was still taking courses in January of 1967. The other 96 (three records were unavailable) had left Macomb during the preceding three years. About one-third of these students left Macomb after earning 8 or less credits; 54, (over one-half) of these students earned one semester's worth of credits or less; 76 of the 97 earned two semesters' worth of credits or less and 22 students out of the 97 earned no credits whatsoever, even though every one of the 97 students attempted at least one class and the majority of the students attempted a full semester's load or more. Only 7 students earned enough credits to actually graduate and of these 7, only two had sufficient honor points to permit graduation. Overall, 11 of the 97 actually earned enough credits with sufficient honor points to have transferred one year's work to a senior institution. Of these 11 who were successful, only one entered



Macomb with a SCAT-T score of 24 (all the others were above this) and yet almost 40% of Macomb's entering freshmen fall into this lower quartile category. This presents a composite of failure--high expectations that are quickly, within the first and second semesters, destroyed. Only 43 students (of the original 100) enrolled for classes the second year and 25 of these 43 maintained a G.P.A. of 2.00 or above. It was within the first and second semester that most of the failures dropped out.

The problem is the "latent terminal" student who has an average, or below, high school record, and low SCAT or ACT (American College Testing) scores, who enters college with aspirations of not only finishing two years, but transferring. The failure of these students is highlighted by the small percent who actually earn credits that are transferable and the small number that ever graduate. When faced with these failures, students leave or drop out without achieving their stated goals. Macomb has, as the studies indicate, provided a means for success to only a small percent of the students and clear cut failure for many.

A solution that has been suggested is that the community colleges improve their predictability procedures--finding better testing procedures that will make it easier for students to be placed in certain vocational programs. However, as was pointed out in a recent article of the AAJC Journal, there are very few reliable measurements that will predict with any accuracy, just which student will succeed and which student will fail. And this method assumes that academic success is one-dimensional and linear, what is measured today will be similar to what is measured later. A recent book by David E. Lavin, that summarizes much of the current research in education, indicates that the relationships are less direct. "The findings suggested that higher-achieving students respond to high grades with increased incentive and that the lower achievers respond to lower grades with decreased incentive. Thus, persistence is here viewed as a variable dependent on performance with a feedback effect which tends to affect future performance. That is, high grades result in a higher level of persistence which in turn may lead to higher grades, while low grades may produce the opposite effect (and) ...it suggests that certain personality variables may be results of--as well as determinants of--academic performance."<sup>1</sup> Thus, just predicting failure may, in itself, have an effect or be self-fulfilling; whereas, success can cause more success.

Macomb has, during the last ten years, offered many courses, but about two-thirds of the student body is enrolled in liberal arts, transfer courses. Career programs, such as marketing, secretarial, and nursing were not available until 1965. Over the years some remedial, pre-college courses have been developed, such as English 50, Math 90 and Chemistry 90. Each of these courses was started by the separate department and had no relationship to any other remedial course. The department reacted to their individual department needs, not to the needs of the college as a whole. The failure

---

<sup>1</sup>David E. Lavin, "Personality Factors as Predictors," The Prediction of Academic Performance (Russell Sage Foundation, 1965), p. 83.

rate for these courses averages about 51%. When the English Department did a study on their English 50 students in 1964, it was their conclusion that even when their students did take the remedial courses, the failure rate of the regular English courses was just as high as previously. The study of grades for the Fall, 1964 semester indicates the failure rate for students in a Math 100 course was higher than the failure rate of the Math 90 course. And even if a student does enter a remedial course in one area, he can, at the same time, take regular liberal arts courses in another area. There is no overall consistent program.

As the catalogue descriptions indicate, the liberal arts transfer courses at Macomb are independent units designed to serve a pre-specialization function and are roughly equivalent to those offered in a 4-year institution. But as the SCAT and ACT scores and high school records illustrate, the student at Macomb is not the same as a student in a 4-year institution. The Macomb student begins college with an average or below average high school record, and test scores that fall below the 50% of the SCAT scores and is then faced with courses geared to students who are above these averages. The college has made very few course changes over the years, except to add more sections of existing courses or, as mentioned, add pre-college remedial courses. As the 1967 North Central Report stated, ". . . Another general problem (at Macomb) . . . is lack of effort spent on structured analysis of student characteristics data." And the report also stated, ". . . the small number of graduates from transfer curricula (at Macomb) under 10% suggests a serious mismatching of student interests and abilities with educational programs." The "latent terminal" student enters a program that is destined to fail him. He quickly learns that Macomb offers him little or no chance for success.

### Redirection

Closely related to this problem of inappropriate curricula is the problem of assisting students to make more realistic educational and vocational decisions. As the statistics from The Study of 100<sup>1</sup> indicated, only about 1% of the students scoring in the lower half of the SCAT-T earned enough credits with a grade point average which allowed them to graduate. Yet, about 70% of Macomb's entering students fall into the lower half of the SCAT-T. When questioned, however, almost 80% of the students who apply at Macomb indicated that they were entering a liberal arts transfer curricula. Such high aspirations matched with such poor actual success would mean that unless the previous drop-out rate of between 40 and 50% is to continue, one job that must be done with the students in the lower ranges of the SCAT-T is to assist them in changing their educational goals.

### Personalization

The problem of increasing impersonality toward students in a rapidly growing institution such as Macomb was considered to be one of the problems preventing students from achieving success. As the Profile of Entering Freshmen Class<sup>2</sup> indicated, about 86% of the entering students have high school grades of C or below. A Counseling Department survey indicates that

43% of the entering students came from homes where their fathers had not graduated from high school. In other words, the majority of students coming to Macomb have no history of academic success nor do they have anyone in their immediate environment that has successfully completed college or is familiar with the college experience.

### Experimentation and Innovation

The problem of stimulating experimentation and innovation by faculty is one of utmost importance. The development of the ECD Program at Macomb County Community College demonstrates that it is possible for community college faculty members to cooperatively plan and operate a creative program. It is necessary, however, to build into the program areas that are unstructured open to continual innovation. The faculty members should be relatively flexible, open-minded and willing to work to create an atmosphere which encourages further experimentation and innovation, as well as be willing to expose their views and ideas to the other faculty.

### The College Setting

Macomb County Community College is a rapidly expanding community college which was established in 1954 within a K-14 district, the Van Dyke Public Schools. The college became a part of a county district in 1962 which is presently operating on a South Campus site, constructing buildings on a Center Campus site and purchasing land for a North Campus. Macomb County is part of the Detroit Metropolitan Area and contains approximately 550,000 people, and has a state equalized assessed valuation of more than one and a half billion dollars. Macomb County Community College opened with an enrollment of almost 10,000 students in the Fall of 1966. The Fall, 1966 equated full-time enrollment of 6500 was the largest of any of the almost 30 community colleges in Michigan.

### Program Background

The development of an experimental general education program at Macomb County Community College was the result of several years of discussion and planning involving a number of individuals and committees. The various ideas which had been presented were consolidated and the guidelines for the Educational and Cultural Development (ECD) Program were established by a special planning committee during the Winter and Spring of 1965. In April, 1965 a program director was selected and faculty members were recruited to plan and conduct the experimental program. A substantial budget allocation was approved by the college administration and Board of Trustees to support a program development workshop during the summer of 1965. The program staff cooperatively planned the program and its courses; prepared the course objectives, syllabi, and instructional materials; and ordered necessary books and other materials. The program was actually initiated for the Fall, 1965 Semester with approximately four hundred full-time day students.

### Program Description

The Educational and Cultural Development (ECD) Program is a first-year college level curriculum of general education which is based upon the philosophy of general education, the theory of personality development, and the research into student outcomes of college experience. The ECD Program provides a broad, integrated general education experience characterized by individualized attention by instructors; close personal associations among students; comprehensive testing, test interpretation, and counseling to aid students in making realistic educational-vocational choices; involvement of students and faculty in a variety of cultural, recreational, and social activities; and courses which emphasize student interest, critical thinking, contemporary life, and community involvement.

The ECD Program consists of five areas of study which have been planned as a coherent whole. The curriculum is outlined below:

<u>First Semester</u>		<u>Second Semester</u>	
Social Science 150	4	Social Science 160	4
Natural Science 150	4	Natural Science 160	4
Communications 150	4	Communications 160	4
Humanities 150	3	Humanities 160	3
Orientation 150	1	Orientation 160	1
	<hr/>		<hr/>
Total Credit Hours	16	Total Credit Hours	16

ECD Program students enroll in the courses listed above on a block schedule basis. The schedule is pre-packaged to provide a favorable weekly time sequence and the students meet ten hours each week in small group sessions of 20 students and six hours each week in large group sessions of 60 students. Students attend all of their classes with the same group which encourages the development of close personal associations among students.

The successful completion of the one-year ECD Program enables the student to continue his education in career or transfer programs at Macomb County Community College or to transfer to a senior institution as a sophomore.

### Objectives and Procedures

Objective 1 To increase the duration of the student's involvement in college experiences.

Procedure 1 The major criterion for inclusion of material in a course syllabus is its relationship to life in general and the development of interest in the subject is considered more important than deriving a technical base for further specialization.

Procedure 2 Courses are designed to promote carry-over of interest by their emphasis on contemporary development.

Procedure 3 The students are block scheduled so that they will attend all their classes with the same group of students and have opportunities to develop primary relationships which may reinforce the educational goals.

Procedure 4 Personal attention by instructors and the group and individual counseling offered in the orientation courses provide opportunities to aid students in resolving their problems.

Objective 2 To improve students' chances of succeeding academically.

Procedure 1 All courses are concerned with improving language, critical thinking, and study skills.

Procedure 2 Faculty members from the different subject areas meet weekly in vertical teams to further coordination and integration of assignments and activities so as to emphasize the relationships among the various courses and reduce problems resulting from duplicate and poorly timed assignments.

Procedure 3 Students are referred to the Programed Learning Center when special problems are identified which might be resolved through available programs.

Procedure 4 In a mid-semester review, the vertical teams identify students with academic problems and attempt to assist the student in the resolution of the problems through individual conferences and/or appropriate referrals.

Objective 3 To increase the number of students who complete one or more of the following: associate degree programs, college career programs, or transfer to another institution.

Procedure 1 Students are encouraged to take the prescribed core of courses which will satisfy most of the distributive course requirements for graduation.

Procedure 2 Students are informed about and encouraged to explore alternative programs in accordance with their abilities.

Procedure 3 Each student is given individual assistance in planning his educational program.

Objective 4 To help students gain information about themselves and their relationships with others.

Procedure 1 Students write a life aims paper at the beginning and end of their first year in which they state their reasons for entering college, their hopes for the future and, finally, evaluate their success at the conclusion of the year.

Procedure 2 The Social Science classes use a problem-solving approach in discussing topics such as the family and other social groups.

Procedure 3 The Communications classes have each student use his own personal experience as material for written papers.

Procedure 4 A Humanities unit is designed to help students to become aware of their own philosophy of life and how it may relate to other, already existing philosophies.

Objective 5 To help students assess their own goals and redirect those which are unrealistic.

Procedure 1 Each student attends a one-hour orientation class each week in a group of from ten to twenty students and has several individual conferences with his counselor.

Procedure 2 The testing program which includes achievement, aptitude, and interest instruments; the interpretation of test results, and the completion of ability-interest profiles are designed to improve the student's self-assessment and the appropriateness of his educational-vocational choice.

Procedure 3 Students are assisted in formulating both short and long range educational and vocational goals.

Procedure 4 Students are encouraged to explore a variety of educational-vocational areas through the use of vocational projects which include interviews, speakers, and research activities.

Objective 6 To develop positive relationships between students and faculty.

Procedure 1 Student-faculty interaction takes place through field trips, athletic activities, and attendance at a variety of cultural, social and other activities.

Procedure 2 The small group discussion sessions encourage student-faculty communications and interaction.

Procedure 3 Individual conferences and informal contacts between students and faculty members occur frequently.

Objective 7 To stimulate the development of those primary group relationships among the students which further the overall goals of the program.

Procedure 1 The students are block scheduled so that they will attend all of their classes with the same group of students.

Procedure 2 Field trips, movie series, intramural sports, cultural, social and other activities are scheduled to encourage student interaction.

Objective 8 To make the student's first year of college enjoyable as well as beneficial.

Procedure 1 The program is student centered rather than subject-matter centered.

Procedure 2 Courses are designed to promote carryover of interest by their emphasis on contemporary developments.

Procedure 3 Student evaluation of the faculty and the program are used as a basis for making changes.

Procedure 4 The courses are structured so that students achieve successes during the initial weeks of the semester.

Procedure 5 The general informality of the program, the non-threatening atmosphere, the opportunity provided by the block scheduling, and small discussion sessions provide an immediate atmosphere that encourages free and open participation by students.

Objective 9 To encourage student involvement in the college environment through participation in a variety of co-curricular activities.

Procedure 1 Students are informed about community and college cultural events and are encouraged to attend. In many cases tickets are made readily available at reduced rates.

Procedure 2 Certain cultural events are assigned as class requirements.

Procedure 3 Speakers from the college and the community as well as professional performers are brought into the classroom.

Procedure 4 Student athletic teams are organized to participate in the intramural program and informal games are scheduled with the faculty.

Procedure 5 Students are informed and encouraged to participate in student clubs, government, and publications.

Objective 10 To encourage the personality development of students.

Procedure 1 Efforts are made to assist students to make realistic vocational choices through testing, test interpretation, occupational studies, interviewing, and other direct experiences.

Procedure 2 A new and different environment is provided in which students are challenged by and exposed to different ideas and experiences; encouraged to establish new relationships with students and faculty members; induced to test out various roles, and forced to analyze their own attitudes, values and behavior.

Objective 11 To assist students in developing broad understandings of the major areas of knowledge.

Procedure 1 Students enroll for a prescribed core of integrated courses.

Procedure 2 In addition to the common core of courses, students are involved in a number of other educational, cultural, and social activities.

Procedure 3 Each course is designed to acquaint students with many fields of interest and interrelationships with the broad subject area.

Objective 12 To help students draw relationships among the broad fields of knowledge.

Procedure 1 A student enrolls for a core of courses which is taught by a vertical or interdisciplinary team of instructors who develop experiences and assignments which cross subject area lines.

Procedure 2 The coordination and integration of assignments stress the relationships among courses.

Procedure 3 The Communications courses combine composition and speech using the subject matter from the Humanities, Natural Science, and Social Science courses.



**Objective 13** To assist students in developing acceptable reading, writing, speaking and studying skills.

**Procedure 1** The Communications course is designed to teach clear writing, speaking, and thinking.

**Procedure 2** The Communications course works with other areas to set up standards for all written assignments as well as essay questions on tests.

**Procedure 3** All courses use their discussion sessions to analyze the various assigned readings.

**Procedure 4** The Orientation course has as its first semester's goal the teaching of certain study skills and habits applicable to all courses.

**Procedure 5** Vocabulary development is fostered in all courses with the communications course being responsible for developing an intradepartmental vocabulary test to be given as a pre and post test.

**Objective 14** To help students develop the skill of critical thinking and apply it to the understanding of subject matter in the various areas.

**Procedure 1** The Communications course presents a method of writing that has as its goal the analysis of the student's thinking in the first semester and the analysis of articles, poetry and short stories the second semester.

**Procedure 2** The Communications course uses articles for analysis that contain content from other areas.

**Procedure 3** The Communications course encourages students to question their own language and their use of the language.

**Procedure 4** The students are encouraged in their discussion groups to question one another and their assigned readings.

**Procedure 5** All courses encourage students to state their personal opinions on various topics so that they can question one another and themselves.

**Objective 15** To help students develop understanding of and tolerance for other individuals, groups, cultures and ideas.

**Procedure 1** The Social Science course includes cross cultural studies of various countries and governments.

**Procedure 2** The Humanities course uses art, music, literature and drama from many countries and cultures.

Procedure 3 The religions and values of various cultures are studied and discussed in both Humanities and Social Science.

Procedure 4 Speakers are brought in so that students can question and analyze the speaker's viewpoints.

Procedure 5 Students are assigned interview projects in Social Science that bring them into contact with people who represent various viewpoints or are of a different race or religion.

Procedure 6 Race is used as an area of study in Social Science.

Objective 16 To assist students to become aware of their community and its resources.

Procedure 1 Guest speakers make presentations on local issues and problems that relate to subject-matter fields.

Procedure 2 Field trips are sponsored by the subject-matter areas to get students to visit parts of the community that they might otherwise not see.

Procedure 3 The Social Science-Communications experience projects force students to go out into their community to do research related to a general topic.

Objective 17 To assist students to become actively involved in their community.

Procedure 1 Students are encouraged to participate in local political campaigns.

Procedure 2 Opportunities are made available for students to work with local service organizations as well as government-sponsored programs.

Objective 18 To assist students in the development of a variety of means by which they may creatively express themselves.

Procedure 1 A creative project is required of all Humanities students in which they utilize some artistic media in an attempt to communicate an abstract idea or attitude.

Procedure 2 A variety of artistic media are used in Humanities classes to express abstract ideas and individual attitudes.

Procedure 3 Students are given an opportunity to make dramatic presentations for a joint Communications-Humanities project.

Objective 19 To assist students in accepting responsibility for their own educational development.

Procedure 1 The courses are organized so that a considerable amount of assistance is initially provided for the student and gradually withdrawn over the course of the year.

Procedure 2 Each course is directed toward the stimulation of student interest in that area so that learning will more likely continue after the completion of the course.

Procedure 3 Students are encouraged to use the services of the Programed Learning Center to resolve some of their individual learning problems.

Objective 20 To promote instructional experimentation and innovation.

Procedure 1 Faculty members are exposed to significant developments in education through distribution of written materials, visitations to other institutions of higher education, the use of consultants to present new ideas and approaches, and attendance at conferences.

Procedure 2 Evaluation is a continuous activity which stimulates constant program and course revision.

Procedure 3 Faculty members are encouraged to prepare their own course materials.

Procedure 4 Faculty members are encouraged to exchange ideas through cooperative planning of courses, presentations of new ideas and practices in the division bulletin and at division meetings, and observations of other instructor's classroom activities.

#### Groups to be studied

This study will include three groups, two of them went through the ECD Program and the other group took liberal arts courses and were not part of any organized program. Group A, 393 students, entered the first ECD Program in September, 1965. These students had no foreknowledge of what kind of program they were entering and had applied to be full time day students in the liberal arts program. Group B contains 156 students who also entered Macomb in September, 1965 and had applied to be full time day students in the liberal arts program. Group C contains 561 students who entered the ECD Program in September, 1966. There is no comparison group in liberal arts to match.

All the students who were placed into the ECD Program had SCAT-T scores that fell into the range between the 10th and 58th percentiles. The comparison group that was picked also fell into these percentile ranges. Because of the stipulation that the comparison group must be full time day students within these percentile ranges, all full time, day

students who met this criterion were placed in the category of a comparison group. This accounts for the smaller number of students in Group B.

Before they entered college, all the students were given the SCAT and COOP English achievement tests. Tables 1 through 3 indicate the number and percent of students who fall into the decile ranges of the two separate sections of the SCAT (quantitative and verbal), and the SCAT-total, which is a summation of the verbal and quantitative scores.

The three groups have statistically significant differences when compared as to their mean SCAT-T scores. Group A had 48.67% of their students falling under the 29 percentile; Group B, on the other hand, has 22.52% of their students within this same range, but Group C has 63.7% of their students within these lowest three deciles. Over three-fourths (3/4) of the comparison group's students placed in the decile ranges between 30 and 69. If the SCAT-T can be used as a discriminating measure of student differences, then the comparison group would appear to be much more capable of college work and academic success than either Groups A or C.

The COOP English tests were administered by the college at the same time as the SCAT. Tables 4 through 6 indicate the number and percent of students from each group in decile ranges.

Again, Group B has a higher mean score and more students in the upper decile ranges than either Group A or C. Group C scores significantly lower than either of the other two groups.

Tables 7 and 8 indicate the father's and mother's educational background.

The three groups are similar when compared in this manner.

Table 9 is the three groups' high school rank.

When Groups A, B and C are compared as to their high school rank, their similarities are clear.

Each student's future academic intentions are indicated on their application form. Table 10 describes these intentions.

Tables 11 and 12 give the number and percent of students by sex and age in Groups A, B and C.

The only other comparison that might be made between Groups A and B would be that Group A did not know anything about the program they were placed in until they were actually "in" it. As a result, there was a considerable amount of misunderstanding and confusion. Many students felt that they were being placed in a high school program and that none of the credits would transfer, whereas others resented having their courses pre-planned. The students had expected that they would be able

TABLE 1

## S.C.A.T.-V. BY DECILES, GROUPS A, B, AND C

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
90-99	0.0	(0)	0.0	(0)	.4	(2)
80-89	1.6	(6)	.7	(1)	.8	(4)
70-79	.5	(2)	2.0	(3)	.6	(3)
60-69	11.4	(43)	17.2	(26)	8.6	(46)
50-59	3.5	(13)	2.0	(3)	3.0	(16)
40-49	18.6	(70)	21.2	(32)	17.0	(91)
30-39	29.0	(109)	29.1	(44)	27.2	(146)
20-29	9.8	(37)	13.9	(21)	11.8	(63)
10-19	21.3	(80)	12.6	(19)	24.6	(132)
00-09	4.3	(16)	1.3	(2)	6.2	(33)
TOTAL NUMBER	100.0	(376)	100.0	(151)	100.0	(536)
NO DATA		(17)		(5)		(25)
<p>N = 527; t A/B = 2.18; df = 525; p &lt; .05</p> <p>N = 912; t A/C = 2.42; df = 910; p &lt; .02</p> <p>N = 687; t B/C = 4.06; df = 685; p &lt; .001</p>						
MEAN	35.14		38.90		32.26	

TABLE 2

S.C.A.T.-Q. BY DECILES, GROUPS A, B, AND C

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
90-99	1.1	(4)	1.3	(2)	.2	(1)
80-89	3.2	(12)	8.6	(13)	1.3	(7)
70-79	4.0	(15)	13.3	(20)	1.9	(10)
60-69	4.8	(18)	9.9	(15)	4.3	(23)
50-59	14.4	(54)	22.5	(34)	10.7	(57)
40-49	13.8	(52)	10.6	(16)	10.1	(54)
30-39	18.4	(69)	13.3	(20)	20.0	(107)
20-29	19.4	(73)	9.3	(14)	25.2	(135)
10-19	16.8	(63)	10.6	(16)	20.6	(110)
00-09	4.3	(16)	.7	(1)	5.8	(31)
TOTAL NUMBER	100.0	(376)	100.0	(151)	100.0	(535)
NO DATA		(17)		(5)		(26)
<p>N = 527; t A/B = 5.96; df = 525; p &lt; .001</p> <p>N = 912; t A/C = 4.46; df = 910; p &lt; .001</p> <p>N = 686; t B/C = 9.43; df = 684; p &lt; .001</p>						
MEAN	37.69		50.00		31.77	

TABLE 3

## S.C.A.T.-T. BY DECILES, GROUPS A, B, AND C

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
90-99	.3	(1)	0.0	(0)	.2	(1)
80-89	.8	(3)	0.0	(0)	0.0	(0)
70-79	.5	(2)	.7	(1)	.2	(1)
60-69	.3	(1)	1.3	(2)	0.0	(0)
50-59	12.2	(46)	27.8	(42)	3.3	(18)
40-49	22.3	(84)	31.1	(47)	17.2	(93)
30-39	14.9	(56)	16.6	(25)	15.4	(83)
20-29	26.3	(99)	14.6	(22)	35.0	(189)
10-19	21.0	(79)	8.0	(12)	25.7	(139)
00-09	1.3	(5)	0.0	(0)	3.0	(16)
TOTAL NUMBER	100.0	(376)	100.0	(151)	100.0	(540)
NO DATA		(17)		(5)		(21)
<p>N = 527; t A/B = 6.24; df = 525; p &lt; .001</p> <p>N = 916; t A/C = 5.19; df = 914; p &lt; .001</p> <p>N = 691; t B/C = 11.06; df = 689; p &lt; .001</p>						
MEAN	31.98		40.36		27.00	

TABLE 4

CO-OP ENGLISH-V. BY DECILES, GROUPS A, B, AND C

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
90-99	0.0	(0)	0.0	(0)	0.0	(0)
80-89	0.0	(0)	.7	(1)	.2	(1)
70-79	4.2	(16)	3.3	(5)	2.8	(15)
60-69	9.8	(37)	17.9	(27)	7.6	(41)
50-59	7.2	(27)	8.0	(12)	5.9	(32)
40-49	11.4	(43)	11.3	(17)	9.6	(52)
30-39	19.9	(75)	23.2	(35)	24.2	(131)
20-29	9.0	(34)	9.9	(15)	12.4	(67)
10-19	31.3	(118)	16.6	(25)	25.9	(140)
00-09	7.2	(27)	9.3	(14)	11.5	(62)
TOTAL NUMBER	100.0	(377)	100.0	(151)	100.0	(541)
NO DATA		(16)		(5)		(20)
<p>N = 528; t A/B = 2.41; df = 526; p &lt; .02</p> <p>N = 918; t A/C = 1.68; df = 916; p &lt; .10</p> <p>N = 692; t B/C = 3.71; df = 690; p &lt; .001</p>						
MEAN	33.33		37.93		31.21	



TABLE 5

## CO-OP ENGLISH-S. BY DECILES, GROUPS A, B, AND C

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
90-99	.8	(3)	.7	(1)	.2	(1)
80-89	1.6	(6)	4.6	(7)	1.9	(10)
70-79	2.9	(11)	2.7	(4)	2.0	(11)
60-69	13.8	(52)	19.9	(30)	7.8	(42)
50-59	15.1	(57)	12.6	(19)	11.5	(62)
40-49	12.5	(47)	9.3	(14)	10.4	(56)
30-39	14.1	(53)	19.2	(29)	16.1	(87)
20-29	10.1	(38)	10.6	(16)	15.2	(82)
10-19	18.8	(71)	14.6	(22)	19.8	(107)
00-09	10.3	(39)	6.0	(9)	15.3	(83)
TOTAL NUMBER	100.0	(377)	100.0	(151)	100.0	(541)
NO DATA		(16)		(5)		(20)
<p>N = 528; t A/B = 2.12; df = 528; p &lt; .05</p> <p>N = 918; t A/C = 3.95; df = 916; p &lt; .001</p> <p>N = 692; t B/C = 5.02; df = 690; p &lt; .001</p>						
MEAN	36.77		41.30		31.14	

TABLE 6

CO-OP ENGLISH-E. BY DECILES, GROUPS A, B, AND C

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
90-99	.3	(1)	0.0	(0)	0.0	(0)
80-89	.8	(3)	.7	(1)	.2	(1)
70-79	0.0	(0)	.7	(1)	.2	(1)
60-69	1.9	(7)	5.3	(8)	.9	(5)
50-59	7.4	(28)	8.6	(13)	2.4	(13)
40-49	10.6	(40)	10.6	(16)	7.4	(40)
30-39	5.6	(21)	7.3	(11)	5.4	(29)
20-29	28.4	(107)	27.2	(41)	27.4	(148)
10-19	21.8	(82)	17.2	(26)	22.7	(123)
00-09	23.3	(88)	22.5	(34)	33.5	(181)
TOTAL NUMBER	100.0	(377)	100.0	(151)	100.0	(541)
NO DATA		(16)		(5)		(20)
<p>N = 528; t A/B = 1.48; df = 526; p NS</p> <p>N = 918; t A/C = 4.90; df = 916; p &lt; .001</p> <p>N = 692; t B/C = 4.81; df = 690; p &lt; .001</p>						
MEAN	24.23		26.83		18.94	

TABLE 7

## FATHERS EDUCATION, GROUPS A, B, AND C

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
6 TH	5.2	(16)	2.6	(3)	2.0	(8)
8 TH	13.9	(43)	19.1	(22)	13.0	(51)
10 TH	14.2	(44)	16.5	(19)	17.6	(69)
H.S. DIPLOMA	44.5	(138)	36.5	(42)	44.8	(176)
1 YR.	3.9	(12)	1.7	(2)	4.6	(18)
2 YRS.	6.1	(19)	8.7	(10)	5.9	(23)
3 YRS.	2.6	(8)	2.6	(3)	2.8	(11)
4 YEAR DEGREE	9.7	(30)	12.2	(14)	9.4	(37)
TOTAL NUMBER	100.0	(310)	100.0	(115)	100.0	(393)
NO DATA		(83)		(41)		(168)

N = 425; CHI SQUARE A/B = 6.78; df = 14; NS

N = 708; CHI SQUARE A/C = 6.56; df = 14; NS

N = 513; CHI SQUARE B/C = 7.57; df = 14; NS

TABLE 8  
MOTHERS EDUCATION, GROUPS A, B, AND C

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
6 TH	3.2	(10)	3.5	(4)	.3	(1)
8 TH	8.6	(27)	13.8	(16)	12.4	(49)
10 TH	14.7	(46)	18.1	(21)	15.2	(60)
H.S. DIPLOMA	60.4	(189)	50.0	(58)	56.8	(225)
1 YR.	5.4	(17)	6.0	(7)	3.8	(15)
2 YRS.	2.9	(9)	5.2	(6)	4.3	(17)
3 YRS.	1.0	(3)	0.0	(0)	2.3	(9)
4 YEAR DEGREE	3.8	(12)	3.5	(4)	5.1	(20)
TOTAL NUMBER	100.0	(313)	100.0	(116)	100.0	(396)
NO DATA		(80)		(40)		(165)

N = 429; CHI SQUARE A/B = .6.96; df = 14; NS

N = 709; CHI SQUARE A/C = 16.81; df = 14; NS

N = 512; CHI SQUARE B/C = 15.11; df = 14; NS

TABLE 9

## HIGH SCHOOL RANK, BY DECILES--A, B, AND C

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER	TOTAL NUMBER
90-99	.3	(1)	0.0	(0)	1.9	(9)	(10)
80-89	1.6	(5)	2.4	(3)	1.5	(7)	(15)
70-79	4.8	(15)	4.0	(5)	6.6	(32)	(52)
60-69	9.9	(31)	12.9	(16)	12.6	(61)	(108)
50-59	13.1	(41)	16.9	(21)	10.6	(51)	(113)
40-49	15.7	(49)	13.7	(17)	14.3	(69)	(135)
30-39	15.7	(49)	8.9	(11)	13.7	(66)	(126)
20-29	15.0	(47)	15.3	(19)	15.3	(74)	(140)
10-19	13.7	(43)	17.7	(22)	17.8	(86)	(151)
00-09	10.2	(32)	8.1	(10)	5.8	(28)	(70)
TOTAL NUMBER	100.0	(313)	100.0	(124)	100.0	(483)	(920)
NO DATA		(80)		(32)		(78)	
<p>N = 437; t A/B = 0.37; df = 435; NS</p> <p>N = 796; t A/C = 1.24; df = 794; NS</p> <p>N = 607; t B/C = 0.49; df = 605; NS</p>							
MEAN	37.23		38.07		39.14		38.35

TABLE 10  
 CURRICULAR CHOICES AS INDICATED  
 ON STUDENT APPLICATIONS

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
<b>LIBERAL ARTS</b>						
Pre-Education	26.9	(105)	17.9	(28)	38.7	(185)
Pre-Professional	28.9	(114)	35.9	(56)	21.8	(123)
<b>BUSINESS</b>						
Pre-Business Ad.	15.6	(61)	19.2	(30)	12.4	(70)
Other	2.8	(11)	3.8	(6)	1.9	(11)
<b>PRE-ENGINEERING</b>	3.1	(12)	9.0	(14)	1.1	(6)
<b>GENERAL STUDIES</b>	13.0	(51)	3.9	(6)	27.3	(154)
<b>OTHER</b>	2.3	(9)	9.0	(14)	.9	(5)
<b>NO DATA</b>	7.4	(29)	1.3	(2)	1.9	(11)
<b>TOTAL NUMBER</b>	100.0	(392)	100.0	(156)	100.0	(565)

TABLE 11  
SEX DISTRIBUTION

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
MALE	63.7	(287)	80.0	(130)	60.0	(400)
FEMALES	36.3	(105)	20.0	(26)	40.0	(160)
TOTAL NUMBER	100.0	(392)	100.0	(156)	100.0	(560)

TABLE 12  
AGE DISTRIBUTION

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
17	21.0	(82)	15.0	(23)	22.0	(126)
18	66.0	(254)	58.0	(93)	60.0	(340)
19	10.0	(40)	12.0	(19)	13.0	(71)
20	1.0	(5)	8.0	(12)	2.0	(11)
OVER 20	2.0	(3)	7.0	(11)	3.0	(17)
TOTAL NUMBER	100.0	(384)	100.0	(158)	100.0	(565)

to go through registration and choose whatever they wished rather than merely picking blocks of classes. Group B students, however, did pick and choose as they wished. Group C students were more prepared than Group A, but they also were placed into the program without prior consent.

As a whole, then, these students who entered the ECD and liberal arts programs came from high school backgrounds where the majority earned C or below grades, and the majority of their parents had a high school diploma or less. Most of them enter Macomb with the intentions of earning college credit so as to ultimately transfer to a 4 year institution. These students have not succeeded academically in the past nor do they come from families that contain college graduates. These students enter college with only one kind of academic experience behind them--high school, and this was not highly successful. The comparison group when described in this manner is really quite like the ECD groups. The only difference evident is in the pre-achievement tests.

As to age and sex, it was found that: (1) over 90% of the three groups were within the 17-21 age range; (2) in Group A, there were 105 females, 287 males, in Group B, 26 females and 130 males, and in Group C, 160 females and 400 males.



## A R E A   R E P O R T S

The treatment given to the E. C. D. groups (A & C) is described on the following pages. Each area report provides a definition a rationale, information about the development of the course, course objectives, and a syllabus.

C O M M U N I C A T I O N S

Lead Teachers

Allan Levy

Alan Gross

Assistant Professors

Sara Chalgian

John Rae

Instructors

Robin Avery

Arthur Ritas

Dennis Thompson

## COMMUNICATIONS

### AREA REPORT

#### I. Description

##### A. Definition

The communications course is an attempt to increase students' skills in critical thinking; composition writing; formal and informal discussion; public speaking; general listening; and analyzing expository writing, poetry, and short stories. The main emphasis in Communications 150 (first semester of the two-semester sequence) is on writing compositions within a logically organized outline pattern which is based on semantics. Communications 160 (second semester) concentrates on critical analysis of expository writing (news articles, editorials, letters to editors, etc.) and literature (poetry and short stories).

##### B. Rationale

The communications course helps the community college student in the area of perhaps his greatest need - verbal skills.

No classroom - including the laboratory of everyday living - ignores verbal skills in its final evaluation of performance. These communication skills - writing, reading, speaking, listening, thinking (communicating with oneself) - are decisive components, if not the whole, of a student's conscious being. Days... careers... entire lives are often made or broken on the merits of a person's ability to communicate. One noted psychiatrist-author went so far as to refer to people as "communication boxes" and to emotional derangement as simply "communication breakdown."

Language command and logical, perceptive thinking - in a business report, in a personal letter, over the telephone, in a job application, on a speaker's platform, on a golf course, on a dance floor - are the keys to occupational and social reward. Yet nearly four out of every five community college students rank below the national average in verbal ability for college freshmen.

Finally, on a grander scale, a weak communication background portends problems in every aspect of living. Although science breakthroughs occur daily, human misunderstandings and dissatisfactions continue to abound in the form of crippling strikes, neighborhood rioting, and internecine wars. Scientific advancement is to man's advantage only if man's personal relations with himself advance similarly... and personal relations is communications.

### C. Philosophy

The instructors of the communications course believe that all teaching, whether it intends to or not, reflects a particular prevailing attitude toward the student(s) involved. Our philosophy is a description of our attitude toward our students, and our curricular direction must reflect this attitude if we are to be consistent.

Basically our attitude toward our students is that their low scores on verbal tests are probably evidence of a weakness in academic background, not necessarily of an inability to perform acceptably in a college-level classroom. For this reason we avoid, whenever possible, remedial teaching per se or any other connection with secondary school language arts courses.

We take this stand because, in a majority of cases studied to date, classroom remediation of past failures has proven unsuccessful. Further, findings indicate that the most successful learning takes place when new materials, concepts, content, methods, etc. are the basis for the course. Educators agree that a totally new scholastic environment is an important key in achieving the most positive overall effect on students. Finally, we feel that to call a program remedial is to make the existence of his past failures a student's first lesson.

### D. Organization

Approach - The general methodology of the communications course is a service-center approach to skill building in the areas of composition, speech, critical reading, listening, and critical thinking. The course is skill building in that it measures its success by the worth of the students' final efforts - not at all by his knowledge of any particular "facts" or other content. It is a service center in that subject matter used in practice exercises is taken largely from curricula of the other ECD courses... in a process of close inter-discipline integration.

Structure - The standard communications section consists of 20 students meeting with their instructor 4 times (50 minutes each) a week for 4 semester credit hours. Three of the sessions are in a small, informal discussion setting and the fourth in a large-group situation where the instructor's four sections (80 students) gather for a lecture, movie, impromptu theme, or other such activity which lends itself to a large audience.

## II. Area Development

Since the communications course we teach is an evolutionary phenomenon, "change" is one of its most distinguishing characteristics. Some of the more notable milestones in its evolution are:

- A. An early and fundamental change took place when the first text for the course, The Modern Essay, was examined after one semester and, for our purposes, found lacking. Although an excellent collection of readings for a more literary course, it proved too difficult for our students so that discussion groups had to devote a disproportionate length of their time merely to understanding the readings. Program evaluation sheets later substantiated the fact that our students neither liked the essays nor found them helpful.

The decision then was made to collect a variety of essays from many anthologies. These essays were selected not for their difficulty but for their organization, clarity of central idea, and adaptability to other courses in the division. The essays then were compiled, supplemented with original respective worksheets relating them to our semantics approach to writing, and republished as part of our own developed text, "What I Meant To Say Was...."

- B. An even broader and more fundamental pair of changes involved the speech portion of the course.

Initially the course devoted one hour each week to speech -- a speech lecture in the large group one week and a small discussion group treatment the next, etc. The instructor was always a speech person, separate from the composition teacher.

Early in the first semester it became evident that the impersonality of the large lecture group was incompatible with the desired individuality of speech education. Therefore, after nine weeks of the semester, speech was taught once each week (still) but always in one of the small groups.

The second of the two changes, effected after the first year, was to eliminate the position of "speech person" and incorporate the speech portion as part of a one-instructor course.

- C. Probably the biggest "bomb" in the brief history of the course was the first series of weekly #150 lectures; they dealt academically with the evolution of the English language from Beowulf to the present. After six weeks of this, the small group discussions evaluated the lectures, and it was immediately clear that the student saw no meaningful connection between the lecture material and the development of their own writing skills. Different instructors in the department reacted differently to the revelation so that by mid-term the lectures had become the private domain of the individual instructor.
- D. Charting the evolution of the #160 course is not considered worth the effort here. The course was put together so hastily to begin with and in so many stages thereafter, that dramatic, isolated changes have not occurred as yet.

### III. Course Implementation

#### A. Course Description

At this point the skill of primary concern in the communications class is thinking, because, of course, it is fundamental to all the other skills. Of these other skills, writing receives the most directed attention, and we concentrate on two types.

The more common of these is the composition, which, in approximate terms, is written weekly and contains 250 - 300 words. In the first semester the students' compositions should: (1) begin with a statement of their own point of view on some issue within their own experiential background; (2) follow with a clear, specific definition of any vague or general terms in the viewpoint statement (definition should relate semantically to the supporting example (s) which follow); (3) follow with one or more personal-experience examples that support the viewpoint as it was there defined; and (4) conclude with a summary of the example(s) and a statement of why they support the viewpoint as there defined. At the same time that we want the student to become proficient at this semantics-based type of organization, which we call the "four-point criterion," we also want for the student, in these same compositions: (1) that his paragraphing exhibit clear understanding of the interrelationships of the four "points," (2) that his writing (and eventually his thinking) be free of general statements which he cannot support through

his own personal experiences, (3) that his writing be free of any statements which do not fit within the "four-point criterion" as well as free of any other excess verbiage, (4) that his sentences be grammatically complete (not sentence fragments or run-on sentences), and (5) that his writing otherwise be mechanically correct. With regard to the latter, corrective comments on themes and occasional individual referral to particular "programs" in the Program Learning Center constitute almost our entire attention to mechanics (excluding sentence completeness). Literary style receives almost no attention whatsoever, except perhaps in the area of brevity.

Composition in Communications 160 (second semester) differs only in that the viewpoint is no longer one from the student's experiential background but is instead a "viewpoint," as he sees it, that a particular author demonstrates in a particular piece of writing. The supporting examples, then, instead of being experiences from the student's background, are particular words or phrases whose "image" (for the student) gave rise to the student's opinion of the author's "viewpoint."

The second type of writing, a journal, changes only incidentally from the first semester to the second. In both cases the student is assigned to "reflect on paper" (in his stenographer-notebook journal) 4 - 6 times a week. No entry should be of less than 50 words -- an attempt to avoid a diary-type "laundry list" of the day's activities. The journals are collected every few weeks, read, commented on occasionally as to content, graded solely on the basis of quantity and overall "seriousness of purpose," and returned to the student. The multiple aim of the journal is: (1) that the student get practice at "just writing," without fear or frustration for want of mechanical correctness; (2) that he retain certain selected thoughts in his mind long enough to develop them and perhaps even to arrive at a conclusion; and (3) that he have this expressive "outlet" with which to relieve possible anxieties.

Oral skill development centers mostly on discussion and conversation with a little attention given to speechmaking. Building skill in the informal discussion process is a built-in ongoing part of the course, since the small-group sessions in both semesters are conducted in an informal

discussion setting (i.e. the chairs are arranged in circular fashion when room size permits). Formal discussion is treated in a separate unit (in the first semester) wherein the exercise is usually a symposium forum (introductory short speeches by a panel... followed by panel interaction... followed by panel-audience interaction). It is hoped that this combination of discussion and conversation training will result mainly in the student's increased ability to: (1) recognize the subject under discussion and to refrain from deviating from it and from changing it too abruptly; (2) refrain from interrupting while another is speaking; (3) separate personal biases about the speaker from an objective evaluation of the speaker's words; (4) recognize and react accordingly to the dangers in one or a few participants monopolizing the "floor;" and (5) remember and apply the other ethics, amenities, and principles that make one a pleasant and productive discussant-conversationalist. It is further hoped that the student concurrently will become imbued with the spirit of the "faiths" that underlie effective democratic discussion: (1) faith in the dignity of the individual, (2) faith in the right of the individual to participate in decision making, (3) faith in "majority rule," (4) faith in "majority's" respect for "minority's" rights, and (5) faith that "truth" will sooner emerge when sought freely by a cooperative group.

The course includes one speech or oral report each semester. The student is thereby introduced to elementary principles of presentation (posture, gesturing, eye contact, vocal clarity, volume, conversational vocal quality), and the speech should follow some logically arranged outline pattern. The attempt is -- rather than to turn out polished speakers -- to take the student who later finds himself speaking or reporting before a group and to better enable him: (1) to organize his presentation according to some logically outlined pattern, (2) to feel and therefore to appear more at ease, and (3) to deliver the presentation with sufficient aplomb that the audience's attention is not detoured from the message of the speech to the actual delivery process.

The teaching of listening in educational institutions is still in its infancy quantitatively and qualitatively. Indeed, the communications course has not yet taught listening directly, but it will attempt to do so this academic year. Attempts will be made to familiarize the student with information concerning: (1) the low efficiency rate at which Americans have been found to listen, (2) the high cost of



this problem to the individual and to business and industry, (3) harmful listening habits that impede effective communication, and (4) how to overcome these habits. We have not yet devised pre- and post-tests (measuring the student's listening efficiency) with which to evaluate the unit, but we expect to do so in time for their inclusion in Communications 150 this year.

Analysis of written material becomes nearly the entire subject matter content of Communications 160. The first half of the course deals with expository writing, such as news articles, editorials, and letters to editors. With Time magazine as the basic source material, the student is taught: (1) to separate what is "information" (that which could be verified) from what is "viewpoint" (what the author "says" about the information) and (2) to identify just what the author's viewpoint is, as evidenced by word choice, by leading statements, by illustrative material, and/or by the author's pattern of selecting what information to include and what to exclude. Finally, the same analytic process is carried over to the second half of the semester and there applied to selected poetry and short stories.

## B. Syllabus

### 1. Course Requirements

#### a. Written Materials - Communications 150

- (1) "What I Meant To Say Was...."; Sara L. Chalghian and Timothy G. Davies; William C. Brown Book Company, Dubuque, Iowa, 1966.
- (2) Webster's New World Dictionary of the American Language (pocketsize edition); edited by David B. Guralnik; Popular Library Inc., New York, 1959.
- (3) Hiroshima; John Hersey; Bantam Books, New York, 1966.
- (4) Inherit the Wind; Jerome Lawrence and Robert E. Lee; Bantam Books, New York, 1964.
- (5) The Hidden Persuaders; Vance Packard; Pocket Books, New York, 1967.

#### b. Activities - Communications 150

**(1) Reading**

- (a) Approximately one essay each week. These essays either discuss language as an implement of communication, or they are of a general nature and serve as subject matter for composition assignments. Many of the latter type essays are provided by the other ECD courses to aid in inter-disciplinary integration.
- (b) Inherit the Wind. This book demonstrates very dramatically how personal biases impede logical thinking and, consequently, learning as well. It also demonstrates how misuse of languages and its "images" further distorts man's view of "reality." It also lends itself to interdisciplinary usage by Social Science (implications of social change in evolution), Natural Science (evolution theory), and Humanities (science vs. "mythology").
- (c) Hiroshima. This book well exemplifies the type of writing we are trying to instill - objectivity based on personal point of view - by relating six separate descriptive points of view about the same phenomenon. This book also integrates well with the curricula of Social Science (science and morality), Natural Science (genetics, atomic energy), and Humanities (philosophy of death).
- (d) The Hidden Persuaders. This book provides some insights into and intelligent defenses against mass media propaganda.

**(2) Writing**

- (a) Approximately one theme a week as described in the syllabus (p. 38).
- (b) Journal entries of 50 words or more 4 - 6 times a week as described in the syllabus (p. 39).

(3) Speaking

- (a) One symposium panel discussion as described in the syllabus (p. 40).
- (b) One speech or oral report as described in the syllabus (p. 40).
- (c) Daily class participation as described in the syllabus (p. 40).

c. Written Materials - Communications 160

- (1) Handbook for Analysis; Sara L. Chalghian; William C. Brown Book Company, Dubuque, Iowa, 1967.
- (2) Short Story Masterpieces; edited by Robert Penn Warren and Albert Erskine; Dell Publishing Co., Inc., New York, 1965.
- (3) Silent Spring; Rachel Carson; Crest Books, New York, 1964.
- (4) Time Magazine.

d. Activities - Communications 160

(1) Reading

- (a) Selected articles, editorials, and letters to the editor in Time Magazine during the first half of the semester.
- (b) Approximately one essay each week from Handbook for Analysis. These essays teach analytic skills for use in interpreting spoken and written material.
- (c) Approximately two short stories each week in Short Story Masterpieces during the second half of the semester.
- (d) Approximately 20 selected poems from various sources.

- (e) Silent Spring. This book's top-heavy ratio of editorializing "information" makes it especially suitable for our type of analysis. It also integrates very well with Social Science (social problems implicit in technological advancement) and Natural Science (ecology).

## (2) Writing

- (a) Approximately one theme a week as described in the syllabus (p. 38-39).
- (b) Journal entries of 50 words or more 4 - 6 times a week as described in the syllabus (p. 39).
- (c) One "book review" of Silent Spring in which the student is to explain: (1) what the problem is that Rachel Carson presents, (2) where the problem is located in time and space, (3) why Rachel Carson considers it to be a problem, (4) what solutions she suggests, and (5) how much of what she writes is "viewpoint" and how much "information."
- (d) One expository paper on an "interview project" in which each student interviews a public figure associated with some occupational endeavor in which the student is presently interested. The student should include: (1) what reasons went into his choice of that particular interview; (2) a summary report of the interview itself, including the mechanics of the interview operation as well as the content of the ideas exchanged; and (3) an evaluation of the interview, stating in what ways it was successful and in what ways it was not, based mostly on its original purpose(s).

## (3) Speaking

- (a) One oral report (paralleling the written report) on the "interview project."

(b) Daily class discussion as described in the syllabus (p. 39-40).

e. Examination

Generally the four examinations during each semester are regularly scheduled, evenly spaced impromptu themes written during the weekly lecture session, although one may be assigned as a "take-home" impromptu. The final examination is simply a fifth impromptu theme of two hours during final examination week. All the impromptus should employ the same writing principles stressed throughout the semester.

2. Grading criteria

Since a "grade" simply communicates one person's measurement of another's performance, it is difficult to say that any one element of our students' behavior has "absolutely no bearing on their grade." Therefore, to that extent, everything the student does with respect to the course probably has some effect, however minimal, on his final grade. Nevertheless, the bulk of that grade is a result of the student's final ability to write clearly and logically; to speak effectively; and to read, listen, and think critically. Finally, it should be kept in mind that although every communications instructor grades his students within these general specifications, there is no mandatory grading policy in the department, so no two of the present instructors are without their individual grading policy differences.

3. Model Outline

The Communications #150 course maintains its "identity" by "centering" around two relative "constants" -- (1) the text, "What I Meant To Say Was..." and (2) the suggested sequence of weekly lectures.

a. Following is mention of 15 of the 20 readings from the text, including possible "handling" of them.

(1) "American Disgrace: College Cheating" (Jerome Ellison)  
This essay is quite generalized and prejudiced. It can be used to merely spark a discussion on cheating so that the students can then more easily write the first paper on cheating, or it can be used to

question the students as to just what is a definition of cheating.

- (2) "The Poor Amidst Prosperity" (Time Magazine essay October 1, 1965)  
 This essay has many possible definitions of poverty -- some more precise than others. The essay could be used to point up the various ways an author can go about defining an abstract concept such as poverty (and could be compared with Ellison's essay in that respect).
- (3) "Overgeneralizing - Fallacy Number One: Secundum Quid" (Stuart Chase)  
 This essay could be used as an introduction to just what generalizing is -- from Chase's viewpoint. The various points he makes about generalizing could be discussed, with students offering their own definitions and examples.
- (4) "How To Say Nothing in Five Hundred Words" (Paul Roberts)  
 The essay's most useful (to us) part may be the "student's" paper, with consideration of how he wrote it. Discussion could search out why the student's generalized thoughts are meaningless and required no thought. The point could also be made that these kinds of generalized clichés prevent organized writing -- they can mean anything, and, therefore, anything that is said here is as "good" as anything else -- there is no pattern. The students might even find that they could re-write that student's essay using many different generalized clichés and still have essentially the same viewpoint as the student.
- (5) "Many Moons" (James Thurber)  
 This story is fun for the students to read, and it can be extremely useful for discussion. Each of the "wise men" was unable to solve the Princess' problem because they generalized about the moon and what it was. The Jester did not generalize; he asked the Princess what she thought the moon was, and she told him what it was in experiential terms which made it possible for the Jester to obtain the "moon" for her. In other words, once the generalizing was done away with, the people

involved could solve their problem. The second problem was just as easily solved; the Jester asked the Princess what she thought about it, rather than telling her what was wrong about her thinking.

(6) "Words" (Warren Weaver)

This essay is, obviously, about words, but it is, at the same time, a useful example of a speech. Therefore, it can be used in either manner or not at all. It is essentially an informative piece of writing that does not present any clear viewpoint.

(7) "Words and the World View" (Stuart Chase)

This essay is not smoothly organized, but it does contain the beginnings of many new ideas about language, ideas that most of the students may not even have thought of previously. These ideas can be touched on lightly in class, but the instructor should be prepared to have them hotly "questioned." The essay can easily be related to Social Science's discussion of ethnocentrism; students should be encouraged to avoid judging the other cultures' uses of language but rather to become interested in comparing.

(8) "Thoughts on the Brotherhood of Man" (Eric Hoffer)

This essay is generalized, and Hoffer has some unique views about brotherhood. Thus the approach could be of two different types -- critically, or as a beginning for discussing "definitions" of "brotherhood." Having the students attempt to restate some of Hoffer's views or statements is a possible way of initiating the discussion.

(9) "The Cliché Expert Testifies on the Atom"  
(Frank Sullivan)

This essay is a good example of saying nothing while using accepted phrases. It cannot really be discussed as content, but the worksheets at the end, which suggest that the students write their own conversation, make for good "role playing" in the classroom.

- (10) "The Man in the White Marble Toga" (Marshall Fishwick)  
This is an almost "perfect" example of how history can be simply a collection of generalized statements -- the result is "a man in a white marble toga." A possible technique for discussion would be for the students to compare their own "pictures" of George Washington and to move from there to an understanding of why generalized pictures of people tell practically nothing about the real person. Sometimes it is helpful to bring in actual selections from history textbooks so that the students can analyze them by finding the generalized statements therein.
- (11) "The Great Debate on Education" (Clifton Fadiman)  
This is an essay that rests largely on generalized statements about education as well as a clear statement as to how the author "stands." Sometimes it is fun and beneficial to "lure" students into immediately agreeing or disagreeing with the author and then to question them as to what they mean -- and move from there to questions about what Fadiman might mean.
- (12) "Figures Prove" (Stuart Chase)  
This, like Chase's article on overgeneralizing, is informative rather than argumentative. At this point, students should be able to move on from questioning generalized statements to questioning generalized statistics. One effective method is to bring in examples of misleading numerical figures in the mass media, especially in advertising.
- (13) "The Decline of Greatness" (Arthur M. Schlesinger, Jr.)  
This essay could be useful in its use of advanced vocabulary. "Greatness," and how it can, should, is, or might be defined is the basis for understanding what Schlesinger might be saying. Otherwise it can be used in much the same way as is the Fadiman essay.



- (14) "An Answer to Juvenile Delinquency" (Gerald Walker)

This article was picked as one that would coordinate well with Social Science. However, it is an example of an article which rests its definitions on research rather than on public opinion. It also restricts its view of juvenile delinquency to more precise definitions and is quite clearly written.

- (15) "Sportsman or Predator?" (Joseph Wood Krutch)

This essay is a rather good lead into #150. When the author calls hunters "predators," then you know his viewpoint about them. Mr. Krutch expresses a clear viewpoint, and all of it is against hunters. The manner he uses to express repeatedly this viewpoint, the words he uses, the examples he employs, etc. should be part of the discussion. The questions at the end (or rather the paragraphs the students should write thereto) are interesting as a basis for discussion.

- b. The following sequence of weekly large-group presentation is only a suggested model.

- (1) What the writing problems of students are.

The goal of this lecture is to give some explanation of why entering students do have writing problems and what these problems commonly are. Hopefully the students will recognize and accept these problems as a "normal" condition at the beginning of the course. The instructor could display sample themes by using an overhead projector. He could demonstrate why the sample themes are disorganized and relate the disorganized features to the writing and reading experience many of the students have had in high school. Part of this explanation should lead the students to the idea that the work in Communications will deal with learning how to organize their writing and thinking.

- (2) What organization is.

The goal of this lecture is to introduce the students to the idea that there is no such thing as "organization" by itself--rather organization

is determining arrangements based on a purpose. The instructor could discuss how children learn organization and could then lead into the idea that organization is a relative feature of content. He could use as examples (of ways to organize) essays from the other disciplines. Even mathematical and geometric progression patterns could be related to writing patterns in this manner.

(3) Generalizing.

The goal of this lecture is to pull together ideas from (1) the previous week's lecture, (2) the students' writing in class, and (3) Chase's essay on overgeneralizing, so as to stress why generalized statements are the main cause of disorganized thinking and writing. The instructor could explain the various uses of the generalized statement or the process of generalizing. He could offer some background material on how generalizing is an integral part of the learning process of children and then detail the problems of why organization and generalizing are incompatible.

(4) Impromptu theme #1.

(5) The "four-point criterion."

The object here is to tie together all the previous lectures so that it becomes evident to the students how the end result of the course work to date is an organized paper using the "four-point criterion" (described on page \_\_\_\_). The instructor could use examples from the previous week's impromptu theme examination.

(6) Being a good observer.

The goal is to help students complete the observation process mainly by being aware of differences (objectivity) as well as of similarities (generalization). The medium is a movie lecture, "What Is a Good Observer?" (30 minutes) by the late Dr. Irving Lee of Northwestern University.

(7) Essay questions and the "four-point criterion".

The purpose is to demonstrate that poor organization and generalizing lead to poor grades on essay tests - so as to help the students improve their writing

in all classes. The presentation could make use of essay questions and answers - even other instructors, if possible - from the other disciplines.

- (8) Impromptu theme #2
- (9) Symposium forum on student services.  
The purpose is to acquaint the students with the Student Services Division on campus while presenting them with a model symposium discussion. The instructor can utilize on the panel representatives from the following campus services: (1) financial aid, (2) student and graduate placement, (3) counseling, and (4) student activities.
- (10) Difference between words and things.  
The goal is to impress the student about the limitations of mere words as symbols for "reality." The medium is another Irving Lee movie, "On the Difference Between Words and Things," from his series of eight, which first appeared as a television lecture series dealing with thought and language.
- (11) Problems of thinking and speaking that are the result of our language structure.  
The goal is self-evident, and the instructor may use the Chase reading, "Words and the World View," from the text.
- (12) Impromptu theme #3
- (13) Impromptu workshop.  
The aim is to provide individualized writing aid for the students and, at the same time, demonstrate that each individual instructor's writing approach is adhered to by each of the other instructors in the department. The instructor apportions equal numbers of graded impromptu themes from the previous week, and each instructor works closely with his eight (approximately) apportioned students in their correction - revision of the theme. The "helping" instructors hopefully will have had possession of the graded themes for a day or two so as to look them over and acclimate themselves to the students' instructor's comments on the themes.

- (14) Writing mechanics.  
The objective is to clear up some of the mechanical errors common to many of the students' papers. Sample themes can be utilized.
  - (15) Proofreading.  
The goal is to motivate and teach method for proofreading and revising written work before it is finally submitted. Especial emphasis is given to brevity, transition, and unity.
  - (16) Impromptu #4.
  - (17) Review.
- c. The Communications #160 text, Handbook for Analysis, is a collection of 14 chapters written by Sara Chalhian, co-author of the #150 text. Her suggested utilization of the 14 chapters follows.
- (1) "Introduction"  
The first chapter could be used to help go over what the students learned in Communications #150. It seems helpful to encourage them to be objective about the entire thinking process that #150 encouraged--and if they seem hazy on the subject, to do some reminding by going over the main parts of the four-point criterion and the reasons for it. The newspaper article for Pages 4, 5, and 6 could be used to spark a discussion about the problems that language can create or cause. In this article, the problem was a matter of life and death.
  - (2) "Why Analyze?"  
This chapter can be used to help move from a basic discussion of Communications #150 concepts to some of the ideas about analyzing. After discussing how each student analyzed his own thoughts or views with the four-point criterion, it might be helpful to discuss the meaning of viewpoint as it relates to some author. The article on pages 10, 11, and 12 can be discussed merely from the standpoint of finding the different "viewpoints" within. Hopefully there should be some arguing as what is the author's viewpoint, so that the class can move on,

questioning why they think the author can have so many views. Bringing in a very generalized letter to the editor can spark further discussion. A good writing activity at this point might be to give them one of the copies of articles on Socialism and have them first underline the different viewpoints and, second, write out explanations as to why they think that is the author's view.

(3) "Just Ask the Author"

This chapter attempts to have the students think about the connection between each one of them and the "author" (be he an announcer, speaker, writer, etc.). This beginning step is to have them think through the impossibility of ever telling "all" about anything, be it a description, an event or an idea. This "impossibility" is a rather difficult concept and requires some time and discussion. Once they have accepted that no one can say or write "everything" about anything, then they are ready to accept that whatever is said, pictured or written is somebody's organization (this "somebody" could, of course, be even a camera) and this "organization necessarily reflects the author's "viewpoint." Add, then, the hypothesis formulated in #150--that words are interpreted differently by different individuals--and it becomes clear why communication breakdowns abound. When incomplete "maps" are delivered and received as being complete; when the sender of an image and the receiver of a different image are both unaware that their communicability was bypassed by a difference in interpretation - communication breakdown is almost inevitable. The immediate problem to be discussed in this chapter, then, is the problem of how the viewer defends himself against the author's organization. If the receiver (of the speech, T. V. show, movie, etc. ) cannot check the author's information and cannot "see" more than the author allows as well as cannot be sure just what the words mean, then how does he learn to evaluate the message?

(4) "Reading and Thinking"

The main point of this chapter is to connect what has been discussed so far with the basic idea that

the word is not the thing. The chapter should not just leave the students with the one idea; it should also encourage them to consider that words are used by authors for more than just one reason—they are used to start up feelings or emotions and, as such, are filled with unspoken implications and prejudices. The students might rediscuss the article about the suicides - in relation to name-calling. The assignments on pages 21-27 can be used to demonstrate in writing what labels are used and what these various labels mean to different people in the class.

(5) "Words and Reality"

This chapter continues the "the-word-is-not-the-thing" theme and then moves to the idea that "the map is not the territory." Again the students can be reminded that no matter how precise the map, it never, never pictures everything within the borders shown, and that the map should serve some definite purpose; in other words, it has viewpoint. In a sense, this chapter goes over some of the ideas from Chapter IV, but it takes another attack. This chapter hopefully should end with the student moving away from just one word or label to considering an entire article as a possible "viewpointed" map of the world about him. The worksheet on "truth" is quite a complicated assignment, but it has two articles that present two sides to an event--the one on Kennedy is the most complicated; the one on the Kensey murder (accident) is much simpler--but both of them indicate very clearly that there is no way (after an event) of finding out exactly what happened, that any event can be interpreted in many different ways, that no one will know if the "word map" of the Kennedy assassination will ever match the "territory." The final point of this assignment could be to have the students accept truth as (1) what they accept; (2) a conclusion based on reasons; or (3) the result of careful scientific investigations, but always open to change--never static.

(6) "Point of View"

Having drawn together the ideas from all the previous chapters, the student should be ready to consider that if every author is involved in choosing what to say (because he must limit his statements) and that all words are open to interpretation, then everything that is written (spoken or illustrated) must have a point of view, and this point of view is contained in the words (or pictures) that the person uses. Also, they should come to accept the importance of finding out the author's viewpoint. Once this step is taken, then the students are ready to start dividing what they read into two parts, "viewpoint" and "information."

(7) "Facts"

One main problem in understanding that information is neutral and can be used in a variety of ways rather than being just true or false, is that many students want to call statements of information "facts" and, thereby, feel such statements must be true. The purpose of this chapter is to free the students' thinking from this confusion so that they can make more precise judgments. Just how far a teacher wishes to go into distinguishing between "facts" and information should, perhaps, be bounded by the definition that facts are statements a person makes about his immediate environment that describes this environment as carefully as he can. The first writing assignment (p. 66) is useful as a basis for discussing whether history is factual or not, but will lead to much arguing. The late Dr. Irving Lee's movie, "How to Make a Statement of Fact" is the best help here.

(8) "Numbers, Graphs, Charts"

This chapter does not offer any new ideas; it merely cites those already discussed and applies them to numbers and graphs. At first it is difficult for students to accept that any author could manipulate numbers, but after discussing a few concrete examples, they are much more capable of being critical of graphs and numbers. The special problems of fractions and percents should perhaps be emphasized. Advertisements are an excellent source of examples.

- (9) "What, Where and Why"  
This chapter has one purpose--to explain how to write an analysis paper. It could be used as a source when going over the structure or pattern that is set up for the students to follow. The four student papers on pages 82-85 can be used as comparisons after the students write an analysis of the same article, or they can be used as a basis for class discussion beforehand.
- (10) "Analysis and Understanding What You Read"  
The main purpose of this chapter is to teach the application of the analysis procedure in reading and understanding articles or textbooks in other classes. Each one of the points can be discussed, but the explanation has much more meaning if use is made of actual examples from the other disciplines. The student carry-over of what is learned in #160 can not be assumed; it must be completely explained, and they should practice analyzing textbook readings.
- (11) "What's the Difference?"  
This chapter could be used to summarize the first half of #160 and then lead into the second half. Comparing a Time Magazine article that announces a death with a short poem on death might be helpful as a basis for understanding the difference between articles and creative writing.
- (12) "Advertising and Analysis"  
The basic assumption of this chapter is that discussing advertising is an effective approach to having students verbalize the many connotative meanings of words. It also assumes that many students fear the complications of short stories and poetry because of inexperience and that having them realize that their sophistication in understanding advertising will help them approach poetry and short story and analysis more positively. Before actually discussing a poem or story the instructor may find it helpful to have the students discuss several T. V. advertisements, especially those which rest heavily on pictorial images with few supportive words. The students may shock themselves when they realize the many,



many implications that they are able to verbalize and how very complicated many of the images are. From this, it is easier to move on to discussing a poem or short story in much the same way. They should be moving toward actually being able to write out a viewpoint about a poem or story. The important thing is to emphasize that a viewpoint about a story or poem must be based on a definition, whereas, the viewpoint of an author of an article does not have to be defined.

(13) "Where and Why"

This chapter is an attempt to explain the writing structure of story- and poetry-analysis papers. The student papers (samples) are gone over so that the mistakes that students are most likely to make are demonstrated and explained. All the student papers are written about the same poem. Hopefully the students reading them will be able to see the similarity between the structure of article analysis papers and the structure used for analyzing poetry and stories.

(14) "Conclusion and So Forth"

This chapter can be used to summarize #160 for the students.

- d. The Communications #160 course, like #150, "centers" around a text -- in this case, Handbook for Analysis. However, the weekly lecture sequence in #160 is not as structured as in #150. Instead, the course is subdivided into units of 1-3 weeks in length, and lectures (large group presentations) vary widely from one instructor to another.

Week  
1)

- (1) Introduction of materials, approach, and report analysis.
- (a) Handbook for Analysis, Time, and Short Story Masterpieces will be the major textbooks used.
- (b) The purpose of Communications 160, its relationship to Communications 150, and the projected integration with the other disciplines will be explained.

- (c) Stress will also be placed on the importance of speech and the job interview which is the major assignment within the speech portion of the class.

Week  
2-4)

(2) Verifiability of Reports

- (a) The different levels of agreement or the uses of statistics, charts, and figures, will be presented.
- (b) Examples of symbols that can be agreed upon such as measurements and chemical symbols will be discussed.
- (c) Demonstration of how the use of abstract words can create disagreement with the symbols.
- (d) The students will be aided in the analysis of short articles to find the various symbols that can be agreed or disagreed with.
- (e) During this unit the students will begin their job interviews with the counselors.

5-6)

(3) Slanted Writing, Inferences, Judgments, and Opinions as Distinct from Information.

- (a) To explain to the student how basic statistics can be interpreted in at least two ways.
- (b) To explain how to describe concrete objects and slant the viewpoint.
- (c) Present words and their emotional connotation.
- (d) To show the student how to separate the author from the bias.
- (e) To demonstrate for the student ways to critically analyze slanted, prejudiced, or generalized writing and/or speaking.
- (f) Have the students continue work on their job interviews.

- Week 7)
- (4) Interviewing
- (a) To show the student how to relate interview questions to the response.
- (b) To enable the student to practically apply his skill in critically analyzing slanted, prejudiced or generalized writing or speaking.
- 8-11
- (5) Approaches to Reading Short Stories and Poetry
- (a) To show how an author uses symbols and connotative meanings.
- (b) To demonstrate ways and means for organizing a story as related to reality.
- (c) To show the student how to critically analyze short stories and poetry.
- (d) To help the student discuss central themes as they relate to the stories and poetry.
- (e) The instructor will introduce the speech project for the semester.
- 12-13)
- (6) Various Ways to Compare One Short Story to Another
- (a) The student must first define the limits for comparison.
- (b) He must be sure to limit the comparisons to like subjects.
- (c) Present the various mediums of censorship.
- (d) Discuss the relationship between the artist and censorship.
- (e) Arguments pro and con on censorship.
- 15-16)
- (7) Presentation of Speech Projects.
- 17)
- (8) Final Examination.

Prepared by:  
Allan Levy  
Lead Teacher, Communications Area

HUMANITIES

Lead Teacher

Nancy Arnfield

Assistant Professor

Herman Chapin

Instructors

Joann Casey

Paula Drewek

Georg Ettl

Lee Starkey

## HUMANITIES

### AREA REPORT

#### I. Description

The Humanities course as taught in the Division of Basic Education at Macomb County Community College provides an interdisciplinary approach to the study of the fine arts: painting, music, architecture, literature and theatre. Emphasis is placed upon the way in which the various arts reflect or comment upon man's concept of himself and the world in which he lives.

The proposed inclusion of such a course within a general education program for first year community college students who are not likely to transfer was met initially with severe reservations. Humanities courses, in the traditional sense - frequently a "Survey of Western Civilization" - are usually not taken by students until their sophomore years when they bring a greater level of sophistication and peripheral academic experience to the course. Experience in similar courses offered previously by the Division of Liberal Arts indicated that students tended to be hostile or, at best, skeptical. From the total student population of Macomb County Community College a very small percentage enrolled in courses which might be considered within the realm of the humanities.

Students from the majority of the high schools which feed into Macomb have had little, if any, academic experience with the fine arts. In addition, their socio-economic backgrounds preclude most first hand experience with museums or the performing arts. Because of their inexperience and unfamiliarity with the humanities most are rigid, conservative and highly ethnocentric in their judgments, and hold tenaciously to appallingly ingrained and negative opinions with regard to the arts, artists and social history generally.

It was felt that if the Division of Basic Education was to fulfill its goal of preparing the students for a more interesting and enriching life, the Humanities would, of necessity, need to play a vital role. Because of the nature of the student body most traditional approaches to teaching the course materials were thought to be inappropriate. For this reason an attempt was made to incorporate the most applicable elements of various existing programs and organize them in a fashion likely to be most meaningful

to the students. It was thought that if attitudes were, at best, neutral, it was probably because the students lacked experience with the humanities. Thus the course strived to provide a wide range of situations on several levels where the students could actually participate in artistic productions, performances and exhibitions. In order that they might more fully understand their experiences, supplementary background information was supplied through lectures and readings which were then discussed in class.

In order to reach the primary goal--a change in a positive direction of the student's attitude toward the humanities--the instructors chose to emphasize first, actual participation in experiences within the fine arts, either on a primary or secondary level and, secondarily, an assimilation of that knowledge necessary and useful in aiding comprehension of these experiences.

The course has three areas of concern: concepts, chronology and creativity. Rather than adhere to a rigid consideration of the chronology of events in the evolution of civilization it was decided to permit the conceptual approach to dominate course organization. Within the several concepts considered (i.e., "How Did It All Begin?", "The Nature of God and Man," and "Where Do We Go From Here?"), however, chronology plays a part. Since the effects of societal change and adaptation upon the arts are the predominant concern, the questions are frequently dealt with in a modified chronological manner, emphasizing the more significant changes or periods of time.

Creativity also has two aspects. First, the students are encouraged to relate each of the topics covered to their own lives in an attempt to articulate, define and clarify their own philosophies and concerns. Tests and other projects reflect this effort. Second, the students are required to complete a creative project in an attempt to embody and express some abstract idea or feeling in a tangible form. Through this the student realizes that communication may be effected through means other than the usual, verbal ones and recognizes the difficulties facing an artist as he attempts to express himself.

The course is organized into one weekly large-group (60 students) lecture and two weekly discussions of twenty students each. The first provides the instructor with an opportunity to present background information, general announcements, summary statements and efficient testing. The latter allows the students to explore representative samples from the arts that reflect the concept under discussion, in a more flexible and stimulating atmosphere.

## II. Area Development

The major problems confronted by the Humanities area during the 1966-67 year were the assimilation and orientation of the five new faculty members who were added to the original two instructors, and the development of realistic objectives that could be measured and yet provide sufficient flexibility to permit optimum vertical team integration. The unfamiliarity of all of the new instructors with the program itself and of several with either teaching techniques or specific course content compounded the first problem immeasurably. In order to survive, a certain amount of rigidity was necessary; in this way much duplication of effort was avoided and individuals were able to capitalize upon their greatest areas of strength. In the first semester, units were developed cooperatively with certain individuals researching and organizing a given body of information and then sharing the results of that work with the rest of the staff.

The second semester a team teaching approach was attempted. In this, a pair of instructors was held responsible for the complete development of each of three units: art, music and theatre. Each week one of the pair delivered all of the lectures for the week for all classes. The next week, the second member did the lecturing and so they alternated through the unit. Other instructors attended at least one of the lectures and implemented their usual discussion groups using materials suggested by the coordinating team. The following units were handled by different pairs of instructors, in the same manner as the first.

Team teaching as utilized here enabled the students to be exposed to a variety of instructors with a variety of styles and manners. On the semester evaluations they appeared, for the most part, to like the approach. This approach also enabled the instructors to develop a unit in the area in which they were best prepared while their colleagues, less skilled in a particular area, had the benefits of hearing their peers and learning from them. The main drawback of the system was the structure it imposed upon all classes which, in turn, hindered vertical team integration and flexibility.

Because all but one of the second semester instructors were new to the program, the course and the specific materials, the team teaching approach was an efficient means of reducing pressure

on the individuals involved and avoiding unnecessary duplication of effort. In all probability, however, it will not be used on an area-wide basis in the future. Two or three instructors whose courses seem to be running in a parallel direction may elect to utilize the device for short periods of time if it seems practical. For a program of this sort the drawbacks outweigh the advantages once the instructors have developed a repertory of technique and content in the area.

The second semester has consistently provided the staff with the greatest challenge and has been altered the greatest number of times in an attempt to make it more meaningful and interesting to the students. One weakness can be attributed to the fact that each time it was taught the arts were dealt with separately rather than as an integrated unit. Another weakness, the first time it was taught, was an overemphasis upon specific and detailed content. The next course revision eliminated content so completely as an aesthetic approach was adopted that the class became boring and repetitious. The arts were still considered separately, which compounded the difficulty of presenting the semester as a vital course. The dynamism and vitality of the faculty members enlivened what might have proved a tedious semester and the students responded favorably, in general.

Of the three units presented the one which was viewed most favorably was the theatre unit which emphasized the way in which the theatre reflected or commented upon the crucial concerns of a period. Hopefully, the present semester (Fall, 1967) has combined the successes of the final unit with the integrated approach of the introductory semester to overcome the dominant weaknesses. The course has been organized in such a way as to show how crucial issues of various periods are reflected by the arts and how the arts are affected by them. Such considerations as economics, politics, and war and peace -- all of which are a part of the Social Science course taken simultaneously by the students -- have been covered concurrently with their inclusion in that course. Integration has become possible on both a content and a procedure basis. For the latter, all areas have become involved in utilizing the processes of analysis, comparison and synthesis of various content areas within their own disciplines.

The co-curricular activities which have proved so successful in the past will be expanded and even more closely tied to the happenings in the classroom. The first year the program was in



operation 370 students attended at least one of the seven events made available (plays, symphony) and 200 attended the art museum. The second year, 29 events were sponsored (including a week-end trip to Chicago) and nearly 3000 tickets were sold. The faculty and students from other divisions participated so enthusiastically in the program that there is now going to be a college sponsored box office where discounted tickets will be available to all who wish to purchase them.

Whenever possible, a curricular unit is culminated by a related experience in the community. The first semester units on art and music include trips to the Institute of Arts, to the Detroit Symphony, and to various playhouses in the city. The unit on architecture was concluded with caravan tours of outstanding examples of architectural styles located in various sections of the metropolitan area. Each field trip is usually structured to serve as a major portion of the unit test. The advantages are many: students are made aware of some of the attractions of their own community; classroom material is seen as having application to the outside world; the pressure of an artificial in-class testing procedure is occasionally removed; students are able to become acquainted with their instructors on a less formal basis.

It is most interesting to watch the progressive sophistication of the students in response to these events. Early in the fall of 1966 they were taken to see a showing of the art film "Hiroshima, mon amour." Reactions ranged from incensed to scatological, so uncomfortable were they with naturalism in the performing arts. In May, 1967, 97% of the students attended the professional production of "Marat/Sade" which used the same essential naturalistic factors. The force of the play stunned most of the students but reactions were amazingly perceptive, objective and rational. In both instances the students had spent time in class preparing for their experience. This kind of change can occur only after an intense, division-wide orientation to controversy and analysis and cannot take place in a short time. Yet, that it could happen at all with these rigid, ethnocentric, insulated youngsters is remarkable and a tribute to all the instructors from each of the areas.

A basic change that has taken place in the basic method is structuring of the presentation of materials and tests. Bloom's process of cognitive development is now used as the basis by which content is organized: from the simplest to the progressively

more complex; from simple recall to the synthesis of several factors. Testing expectations were similarly patterned so that students were not expected at the beginning to be on the same level of sophistication as they were at the semester's end. A relatively successful effort was made to provide students with the objectives for a specific unit at that unit's inception so they would know precisely what was expected of them with respect to the skills and content presented. Tests were then precisely coordinated to reflect and test those objectives. Student success in these units increased perceptibly. In spite of the over-all success of this procedure far more attention needs to be paid to testing in general and to the development of a final exam in particular. The staff is particularly interested in developing a test which will measure not only to what degree the student has acquired new knowledge but, also, how he is able to apply what he has learned to new and paradigm situations.

As has usually happened, one of the most successful elements in the course was the creative project assigned to the students. As described earlier, the students have an opportunity to work individually with any artistic medium they select, in an attempt to express some feeling, attitude, or idea they hold. In lieu of a single, totally independent project some instructors have chosen to organize a series of workshops where the students work with a medium, media, and a topic selected by the instructor. The inventiveness and originality of thought and execution is noteworthy especially when one considers that most of the students have had no previous training or experience.

### III. Course Implementation

For the 1967-68 year, eleven major objectives were decided upon by the staff as being valuable, realistic and sufficiently flexible to permit a variety of topics and approaches which would facilitate integration among the various disciplines as represented on the various teams. The objectives are:

1. To stimulate the development of open and inquiring minds.
2. To provide students with experiences which they may not have encountered previously.
3. To discover that conflicting or inconsistent answers to the same fundamental philosophical questions are acceptable according to the conditions of time and place.

4. To develop positive attitudes toward the humanities.
5. To be able to use an objective approach to the understanding of ideas and works of art.
6. To increase the range and depth of experience with the humanities.
7. To become acquainted with some of the outstanding works of literature, music and the visual arts.
8. To understand that the humanities reflect and comment upon man's concept of himself and the world in which he lives.
9. To become aware of the unity of content and diversity of form among the humanities.
10. To be able to define, identify and apply the vocabulary fundamental to an understanding of and conversation about the fine arts.
11. To encourage creative expression through both verbal and non-verbal means.

Each of these objectives permits the utilization of a variety of topics, concepts and methods of implementation. The selection may be based upon the faculty member's interests and background, the class's orientation, the direction the vertical team wishes to take, or any combination of the above. While each is approached to some degree during both semesters, objectives three, five and ten receive particular emphasis during the first semester, six and seven, during the second.

Suggested general means by which the objectives may be implemented are outlined below. In each instance it will be noted that specific content may be determined at the discretion of the instructor.

1. To develop open and inquiring minds.
  - a. demonstrating how opinions change as information is gathered.

- (1) covering some topic in class for which a series of explanations has evolved due to increased knowledge and discovery
  - (2) showing students how their own attitudes toward the arts change as they learn more about them
  - b. helping students analyze the opinions of themselves and others
    - (1) refusing to passively accept overgeneralization or unsupported contentions
    - (2) creating an atmosphere in discussions that is conducive to constructive disagreement
    - (3) teaching a means by which opinions may be challenged
  - c. recognizing and making students aware of the rewards for initiative and inquisitiveness
    - (1) complimenting voluntary participation in discussion
    - (2) permitting disagreement with the teacher or text
    - (3) giving credit for voluntary participation in extra-curricular events
    - (4) including individual initiative as a portion of the final grade
    - (5) rewarding students who are prompt and accurate with assignments
2. To introduce students to experiences which they may not have encountered previously.
- a. considering subject matter with which they may not hitherto have concerned themselves.
  - b. having the students manipulate artistic media in class
  - c. requiring and encouraging the students to experience the fine arts in performance or exhibition

- d. sponsoring field trips to the art museum, symphonies and the theatre
  - e. sponsoring field trips to significant architectural structures in the Detroit metropolitan area
3. To discover that conflicting or inconsistent answers to the same fundamental philosophical questions are acceptable according to the conditions of time and place.
- a. comparing two or more divergent viewpoints on at least one fundamental philosophical question
  - b. considering at least two viewpoints selected from different times and/or cultures regarding a single issue
4. To develop a positive attitude toward the humanities.
- a. structuring successful experiences with the fine arts
    - (1) beginning at the level on which the students are functioning
    - (2) providing positive reinforcement and praise
    - (3) structuring the course so that its complexity increases gradually
  - b. involving students on both primary and secondary levels
    - (1) stimulating each student to participate in discussion
    - (2) requiring some involvement in field trips to activities related to the humanities
    - (3) requiring a "scrapbook or portfolio," which continuously directs their attention to current issues in the humanities
  - c. helping the students become aware of the humanities as they are dealt with via the mass media by making students aware of significant television programs, motion pictures and magazine articles and helping them evaluate them as they would other art forms.

5. To be able to use an objective approach to the understanding of ideas and works of art.
  - a. continual practice in understanding works of art through the use of a predetermined objective approach
  - b. use of the four-point criteria as established by Communications as a means of implementing the objective approach selected
6. To increase the range and depth of experience with the humanities.
  - a. curricular activities - secondary experiences
    - (1) utilizing a variety of slides, recordings, prints and literary materials
    - (2) encouraging overt reactions to the media presented
    - (3) use of a weekly news magazine to call attention to contemporary occurrences within the humanities
    - (4) discussing in depth the ideas and implications expressed in various art forms
    - (5) portfolios in which clippings and activity evaluations may be stored and commented upon
    - (6) providing more detailed study of selected artists, forms, periods or styles
  - b. co-curricular activities - primary experiences
    - (1) field trips to various social cultural events
    - (2) rewarding individual initiative for voluntary participation
    - (3) creative projects

7. To become acquainted with some of the outstanding works of literature, music and the visual arts.
  - a. choice of outstanding works to illustrate ideas and elements discussed in class
  - b. field trips to concerts, plays and museums
  - c. in-depth study of selected and/or representative artists, composers and writers
8. To understand that the humanities reflect and comment upon man's concept of himself and the world in which he lives.
  - a. selecting some chronological period(s) and issue(s) within the period(s)
  - b. utilizing works of art which best reflect or comment upon the period or issues
  - c. analyzing works of art in an attempt to discover the attitudes reflected there
9. To become aware of the unity of content and diversity of form among the humanities.
  - a. considering fundamental social, political, economic, philosophical or technological problems or issues
  - b. revealing fundamental problems or issues within a form or among several forms
  - c. comparing the way in which two or more forms reveal the same concepts
10. To be able to define, identify and apply the vocabulary fundamental to an understanding of and conversation about the humanities.
  - a. introducing the words and giving examples in concrete forms
  - b. providing situations in which the words are used in a discussion of the forms

11. To encourage creative expression through both verbal and non-verbal means.
  - a. creative term projects or workshops
  - b. student leadership in discussions
  - c. overt physical response to art forms
  - d. practice manipulating the various artistic media

The difficulties involved in evaluating such objectives are only too obvious. It is this problem which the faculty is currently undertaking to resolve. Objectives one and four, for example, will be tested not specifically by the area but by the standard CSQ test given at the beginning and end of the entire year. The initial test results reveal strong hostilities toward or reservations about the arts in general. It is predicted that considerable change will be revealed when the post-test is administered at the year's end.

Objective two can, and has been, measured primarily by survey and comparison. Students are asked during the introductory week to fill out a questionnaire in which they discuss, among other things, their experiences with museums, music, plays and other art forms. Records are then kept during each semester of how many events are attended and activities participated in. An attempt will be made to evaluate objectives three, six, eight and nine with paradigm questions which reveal whether or not students apply and transfer the skills learned with specific concepts to other, related, concepts. The structuring and presentation of these problems present the greatest obstacle to a departmental final exam. In spite of these difficulties it is felt to be important to compare the functioning of all students so that the effectiveness of the various units and approaches may, in part at least, be measured.

Objective five can be tested by having the student first outline and explain the procedure he intends to use and second, apply that procedure to a specific work of art -- preferably one not previously encountered. To a degree objectives eight and nine may also be examined through the application of the objective approach to forms and/or periods not dealt with in class.



Objectives six and seven may also be tested by "before and after" questionnaires which ask students to reveal previous experiences, both curricular and non-curricular; to list artists, and titles; and recognize styles, compositions and forms with which they may be familiar.

Objective ten may be tested through simple identification of elements as they appear in actual art forms; by the ease with which the vocabulary is used when carrying out the objective analysis, either on a test or in class discussions; by writing definitions of selected vocabulary words and providing an example of each or by matching a word with an appropriate definition selected from a list of several definitions.

Objective eleven will be evaluated primarily upon the execution of the creative projects or workshops and the quality of the preparation and participation in the twice weekly small group discussions.

The individual units selected by the instructors as a means for reaching the general objectives will each be structured around specific operational objectives. These objectives will be used as a guide for determining whether or not the unit has been mastered successfully. Specific examples of possible units will be developed in the following section.

Although at this point it can definitely be said that attitudes have changed, minds have become more open, experiences have been increased, acquaintance with the arts has been mastered, divergent forms have been synthesized and greater degrees of objectivity have been achieved, no real documentary evidence has been maintained systematically. Such record keeping will, therefore, be an additional task assigned to area members during the forthcoming year.

#### IV. A Sample Syllabus

##### A. Course Descriptions

1. Humanities 150 is an introduction to the world of the artist and the philosopher; their languages and their concerns. Students are provided with experiences in relating and training parallels and distinctions among specific works of art which embody men's<sup>3</sup> feelings and ideas. Emphasis is

placed upon the questions man has pondered regarding himself and his relation to the universe.

2. Humanities 160 is a continuation of the previous semester. As emphasis is placed upon the more intensive study of outstanding works of art. These works are used to reveal the way in which the arts evolve as a process of action and reaction to forces within the total environment.

#### B. Course Requirements

A Qualifying Statement -- Within the descriptions provided above and guided by the objectives listed earlier, each instructor is free to develop his own course materials, approaches and topics.

##### 1. Materials

- a. Textual material is selected according to the topics covered by the instructor. Two anthologies, Mirror of Men's Minds, Vol. I and II (Wm. C. Brown and Co., Dubuque, Iowa) have been created by members of the department to provide unified sources of supplementary readings. Each anthology covers a range of topics in a variety of manners of sufficient breadth to permit considerable flexibility in its use.
- b. A series of color reproductions is made available so students may have easy access to works of art for the purposes of analysis and observation.
- c. A record which contains a variety of selections providing examples of the several musical elements and expressive qualities is frequently recommended.

##### 2. Activities

- a. All students are required to attend the Art Institute and the symphony at least once a semester. Frequently tests are structured to take place at such times. Credit is always given for attendance.
- b. A sheet of recommended activities is produced each month. Attention is drawn to plays, concerts, lectures

and art exhibits occurring within the metropolitan area as well as outstanding television and radio programs. A record of attendance at these functions and a personal evaluation of each is accumulated in a portfolio of "individual initiative" activities.

- c. Special field trips or supplementary projects may be assigned by the instructor in conjunction with the development of a given unit, if he so chooses.

### 3. Term Projects

A creative or research project or a series of workshops structured by each instructor is required of every student. The first semester project is primarily the exploration of a specific medium in an attempt to make tangible some abstract idea, feeling or attitude. The second semester project usually relates more precisely to some unit or units.

### 4. Grading Criteria

Grades are based upon a consideration of the five basic areas listed below. The percentage weights suggested for the two semesters serve as general guidelines and may be varied 5-10% according to the emphases of the instructor.

a. Unit tests or projects	$\frac{150}{20\%}$	$\frac{160}{40\%}$
b. Discussion (attendance, preparation, participation)	25%	20%
c. Term Project	20%	10%
d. Final Exam	25%	20%
e. Individual Initiative	10%	10%

### C. Unit Organization

The following is a brief description of the way in which several instructors have chosen to implement the first semester's objectives. Each person provides his students with a set of specific objectives upon which each unit will be based and which

will provide the structure and limitations for testing. In this way individual and team emphases may be more flexibly carried out.

1. Humanities 150

a. Unit I. The Language of the Artists

In order that the students may develop a facility for discussing works of art, there is a need to provide them with a common basic vocabulary. Emphasis is placed upon the way the basic elements are used in order to achieve a variety of expressive qualities. Slides and musical examples are selected with increasing degrees of complexity, beginning with those that are most likely to be comprehensible and attractive to the student. In progressing to the more abstract and intricate compositions effort is made to show how the elements retain their importance. No attempt is made to teach "taste" or the evaluation of works of art. It is impossible, and not undesirable to avoid discussing the value or function of certain works when students' queries initiate such interchange.

In this unit, then, the student's basic antipathy to art and "long hair" music are acknowledged and partially countered. They are provided with an understanding of the artists "language," an objective approach by which works of art may be analyzed and interpreted, and an attitude which necessitates the withholding of evaluative judgments until further familiarity, evidence and knowledge is attained.

b. Unit II. How Did It All Begin?

In an attempt to show how different times and cultures answer a single philosophical question, many instructors have considered the pre-Christian Greek, the Hindu, the Judaeo-Christian and frequently, the scientific, or Darwinian, concepts of creation. By reading from primary source material, observing representative slides and hearing indigenous music, students are helped to see the similarities and differences among the explanations.

In addition they are able to see how the study of several art forms, each related to the same idea, enables one to gain insight into abstract attitudes and ideas.

c. Unit III. The Changing Concepts of the Christian God.

As a transition from the creation and the nature of the god or gods involved to the consideration of the way architecture reflects man's concept of his own relationship with God, students are introduced to the variety of ways man has defined God's nature. Again, readings and slides are used to make the ideas and changes more readily comprehensible.

d. Unit IV. The House of the Lord.

In this unit the changing liturgies, philosophies, social and geographical conditions, technological advances, and sources of wealth and labor are related to the development of religious and secular architecture. Again, emphasis is placed upon the way in which art relates to and depends upon its total environment. Included here, too, are the musical forms, particularly those of the pre-classic styles, which reveal in their own ways the development and modification of religious attitudes.

e. Unit V. Where Do We Go From Here?

The position of this unit is a tenable one. Depending upon the amount of time the instructor has allocated to the preceding topics, it may or may not be included in the first semester course. When it is, the concern is with the way in which man's view of death determines his value system and the manner in which he lives his life. Philosophies, or life-views, that have been considered here are religion (other-worldly directed), social philosophies (this-worldly directed) and existentialism (self-directed).

2. Humanities 160

This second semester allows for the widest divergence, the greatest flexibility and, consequently, the least similarity from one instructor to another. Depending upon

the interests and concerns of the individual, the team and the classes, a variety of means may be used to limit and direct the materials included. The primary concern during the second semester is to provide a broader and deeper experience with the arts. To this end, specific styles, periods, artists and forms are selected. They are then studied in relation to each other and to their environment, emphasizing how they reveal or comment upon the latter. Emphasis is placed upon the contrast, the adaptation and the evolution among forms.

Examples may be briefly noted from the second semester class offered during the Fall Semester, 1967.

a. Unit I.

For the purpose of integrating with Social Science emphasis was placed upon the economic position of the artist and the way his art was affected by his growing independence. Rembrandt was chosen as the painter representative of the Dutch Baroque style and philosophy. The concerto grosso proved to be a musical composition whose form was determined in large part by the socio-economic structure of society. It was also the form whose modifications be most continuously traced during succeeding periods of time.

A unit project was designed to acquaint the students with several works of art at the Institute of Arts. By determining the stylistic devices of one of several Baroque artists who have a number of works on display, comparing that style to the Dutch Baroque generally and Rembrandt specifically and contrasting it to the style of a Southern Baroque artist it was possible for the students to draw upon what they had learned, apply it to a new situation and begin to develop a method for the transference of knowledge and skills learned.

b. Unit II.

The Rococo and Neo-classic art styles were used to provide a transition between the Baroque and the Romantic as well as provide a background for the development of the French Revolution. In addition to visual art works and essays

by Defoe and others, students read Sheridan's School for Scandal and listened to the music of Mozart. Mozart was particularly chosen for the way he developed the concerto form, perfected the sonata-allegro movement (included as an illustration of the Neo-classicist's concern with form) and represented both the Rococo and Neo-classic ideals. Emphasis was placed upon the disparity between the life-styles of the haves and the have-nots.

c. Unit III.

The styles of Romanticism and Realism were chosen to reflect the rise of the common man, the dignity and importance of the individual and the validity of the concept of freedom. Visual art styles were studied generally, without emphasis upon memorizing large numbers of titles by specific painters. Tchaikovsky's Piano Concerto No. 1 in B<sup>D</sup> Minor and Beethoven's Sixth Symphony, the Pastoral, were selected as examples of romanticism and realism in music, absolute and program music and the symphony and concerto forms which utilize and modify the previously studied sonata-allegro movement.

d. Unit IV.

For the final unit, students were asked to select from a list of ten, the two topics they would most prefer to discuss. Jazz, contemporary art and program music were the most frequently noted and so the final unit will be developed around these items. Contemporary poetry will be related to jazz with respect to form, variation and improvisation.

V. Summary

While the development of specific units and testing procedures leave much room for improvement and refinement, it can be generally stated that the Humanities staff feels it has progressed a considerable distance toward the achievement of its objectives. Commendation must, and most importantly, be given to the enthusiastic, creative and concerned instructors whose sincere dedication revitalizes the triteness of the descriptive phrases and enlivens and challenges the

existence of otherwise lithargic, unaware students. Their abilities to present materials in an interesting, meaningful fashion supersede any other evaluation that might be made. The abilities, the interest and the sophistication of the students increase in nearly immeasurable quantities from the year's beginning to its conclusion.

Constantly confronted with the return of students whose interest and participation in the humanities has been sparked, nurtured and perpetuated (the latter through the student's own initiative), one cannot but possess a feeling of success and satisfaction. Such contentment can never become stultifying, however, for the next semester there reappear the lethargic, the hostile and the immature saying in effect, if not in fact, "Go ahead, show me. . . ." And so we must.

Prepared by:  
Nancy Arnfield  
Lead Teacher, Humanities Area



N A T U R A L   S C I E N C E

Associate Professor & Lead Teacher

Edwin A. Arnfield

Assistant Professors

Dorothy Buchan

Mary McCartney

Instructor

Karl Sjolander

## NATURAL SCIENCE

### AREA REPORT

#### I. Description

The one year sequence in Natural Science introduces students to: the evolution of man, man's relationships to his internal and external environments, and the problems confronting him--such as pollution, conservation, public health, and disease. Although these topics are not new, their presentation is different. The physical and biological sciences are studied not as separate entities, but as interrelated parts of the entire science spectrum, applicable to everyday life. Hopefully, this approach will aid in the development of better educated individuals in our society. Facts are not stressed; the emphasis is on the acquisition of broad scientific concepts. Ample time is devoted to the study of the scientific method since it plays a vital role in the development of patterns of critical thinking. Selective laboratory experiences are utilized in pursuing this important endeavor. The practical application of the scientific method will acquaint the student with many of the basic concepts of science and also help him to evaluate scientific information.

#### II. Rationale and Philosophy

One definition of general education is that it concerns itself with the knowledge, skills, and attitudes of individuals, hopefully improving them as citizens, and consequently favorably affecting society. It is inconceivable that a general education experience would be significant without eliciting the aid of science. Our society is definitely science oriented. The issues of space explorations, conservation, air and water pollution, public health, disease, birth control, nutrition and many other current problems permeate it. These issues have a definite effect on the destiny of mankind; consequently, a well-informed citizen should not only be able to understand their importance but also evaluate them. Thus, with the criteria of knowledge and ability to evaluate, attitudes are formulated.

The term, skill, is a broad one but it has a specific meaning in science. Scientific skills in a general education program go beyond the use of scientific instruments as the thermometer and microscope but more specifically refer to the development of critical thinking--approaching a body of knowledge with a method. Scientists have coined the term "scientific method" but in essence this methodology is applicable to all bodies of knowledge. Upon completing a one year general education science experience, students should be able to understand and evaluate scientific articles appearing in the mass media.

Approaching knowledge systematically is applicable to all disciplines and thus is a significant integrating factor in an interdisciplinary approach.

Natural Science, as we define it, includes both the biological and physical sciences. We do not separate science into its separate entities because such segregation contradicts one of our major premises that all knowledge is interrelated.

A unifying theme is used to consolidate the various aspects of science into a meaningful whole. In Natural Science 150, with the unifying theme of evolution, we proceed to trace the evolution of science, its method, matter and energy, the universe, solar system, our earth, the origin of life, its perpetuation, and man himself. Natural Science 160 studies man in perspective with his internal and external environment and the everyday problem he faces for survival and improvement. Thus, the unifying theme is man and his environment.

### III. Organization

#### A. Structure

Natural Science 150 and 160 meet five hours per week. Two one hour sessions are devoted to lectures, a two hour sequence for laboratory and discussion, and one hour for programmed mathematics. The lectures are flexible in that they may also be used for showing films, slides, and for discussions. Laboratory time has also been used for audio-tutorial systems, field trips, and discussions.

#### B. Approach

In the large group lecture sessions (60 students) the students are introduced to many basic concepts of science through formal lecturing and informal discussions. Here the general ideas are presented. The lectures are often complemented by movies, filmstrips, and slides.

In the laboratory the ideas and methods introduced in the lectures are put to practice. The scientific method is reinforced as the student continually observes, hypothesizes, experiments, and concludes. The students learn to use the tools of the scientist with care and efficiency. The last half-hour of the two hour laboratory sessions is devoted to informal discussions in reviewing previous experiments and clarifying lecture topics. Once or twice during the year, structured discussions are utilized to encourage debate for further comprehension of controversial issues and to reinforce communication skills.

#### IV. Area Development

After completion of the first year of Natural Science, some major changes in the curricular structure became necessary. The amount of subject matter content was found to be excessive and contradicted our general education objectives. The physical and biological sciences were not integrated but presented as separate entities. The material was too traditional and not related to the students' everyday life. The primary reason for such disjoint courses was the need to meet equivalency responsibilities with the Division of Liberal Arts. Our one year sequence successfully completed would be equivalent to the first semester Biology and Physical Science courses. This hampered our experimental ideas until we finally gained autonomy.

To integrate the various sciences into a meaningful whole which could be applicable to everyday life, unifying themes were added: "evolution" for 150, and "man and his environment" for 160. The theme approach integrated the sciences illustrating their relationships.

The laboratory sessions were not stressing practical application of subject matter and methodology. Thus new experiences were devised to develop and reinforce critical thinking. By means of the scientific method the students learn how to observe, hypothesize, experiment, and evaluate at the beginning of the year with the help of the instructor but later on they conducted independent research which was recorded and concluded in laboratory reports. Scientific theory is insignificant unless it can be applied.

The materials utilized the first year added to the disjointness of both Natural Science courses. We were unable to find a natural science textbook suitable to our objectives; thus, we were forced to use a series of paperbacks which dealt with separate topics. Many mimeographed materials were produced and handed out but a uniform package was lacking. To solve this significant problem, we wrote our own Natural Science text and lab manual for 150 which was published through W. C. Brown and Company and ready for use in the fall of 1967. Besides a complete integrated text and lab manual, a list of performance objectives are included at the end of each chapter which tell the student exactly what he is responsible for upon completion of a given chapter. These are not study questions but behavioral objectives.

The year-end evaluation of the courses also signified that many of our general course objectives had not been met. After thorough analysis, we decided that these objectives were not truly operational. We rewrote them into operational forms according to the systems approach which includes the objective, procedures to meet the objective, and finally method or methods of evaluating or testing the objective.

Evaluation or testing was also a problem since we had not established unit instructional objectives. The examinations were not accurately testing our students. With the inclusion of these objectives in the textbook, more appropriate and fair test questions have been developed which will evaluate student performance with a greater degree of accuracy.

Several innovations were implemented with favorable responses from the students. First of all, programmed instruction was utilized both in and out of the Programmed Learning Center as a supplemental exercise to reinforce learning. The text "Programmed Genetics" was assigned to specifically reinforce the concept of cell division (mitosis and meiosis). The students were also referred to the Learning Center to work programs dealing with photosynthesis, anatomy, and physiology. The programs increased student learning and interest as their test scores and evaluation comments indicated. More programs will be utilized this year as more appropriate texts are published and as the learning center increases its staff and facilities.

An audio-tutorial unit was developed dealing with mitosis and meiosis which also enhanced student learning. The synchronized tape and slides were complemented with specific laboratory experiments where the students could study as often as they felt necessary. The plans for the coming year include more units utilizing this approach.

Since no formal mathematics course is offered in the Division of Basic Education and since the comprehension of numerical relationships is a necessity in everyday life, a weekly mathematics program was instituted through the Learning Center.

For four hours of Natural Science credit, the students will spend five hours in the classroom per week. One hour per week will be spent in the center working mathematics programs. Ten percent of their Natural Science grade will be based on the successful completion of assigned programs. The mathematics supervisor in the center will pre-test the students as well as interview them before deciding their specific needs. Two plans will be offered. Plan (A) is devised for those students who have the ability and desire to continue in mathematics. This plan will terminate with Algebra, and if successfully completed will replace Math 100, the prerequisite for math majors at Macomb. Plan (B) which will probably involve the majority of our students, deals with everyday arithmetic or consumers math. It will prepare the student to cope with everyday math problems such as insurance, principal, interest, and budgets. With the addition of mathematics to the basic education curriculum, our students will now achieve a more thorough education.

## V. Proposed Course, 1968-69

### Objectives and Procedures

In Natural Science we desire to develop a student who is scientifically literate by helping him to understand:

The nature and purposes of science;  
 Science as both product and process,  
 a body of knowledge, concepts  
 and generalizations  
 and  
 a method of solving problems  
 which is an important tool in  
 the critical thinking skills;  
 The relationship between science  
 and society.

#### A. The nature and purposes of science.

1. To help the student become aware of the philosophical bases of science.
  - a. By introducing him to the empirical, rational and pragmatic aspects of science.
  - b. By reading selected passages by philosophers and engaging in subsequent group discussions.
2. To help the student understand some basic history of science.
  - a. By reading and discussion of original writings of philosophers and scientists.
  - b. By briefly surveying some important historical events in the history of science.
3. To help the student become aware of the ways in which science evolved along with society.
  - a. By reading and discussion of the impact of social events upon scientists.
  - b. By reading and discussion of the impact of some scientific events upon society.

#### B. Science as product.

1. To help the student acquire a basic vocabulary which will allow him to understand current communications of and about science in the various mass media.

- a. By building vocabulary and vocabulary skills within the content of the several units.
  - b. By assignment and discussion of selected and topical motion pictures, television and radio presentations.
2. To help the student gain an in-depth understanding of some basic concepts in the scientific disciplines.
    - a. By exploring selected concepts in such areas as geology, anatomy and physiology, ecology, and physics.
    - b. By investigating the interrelationships among the selected disciplines.
  3. To develop an awareness of the orderliness of our physical and biological environment.
    - a. By investigating evolutionary patterns.
    - b. By developing relationships about the universe from micro- to macro-scopic.
    - c. By in-depth studies of physical and biological relationships during on-site trips.

**G. Science as Process.**

1. To help the student to thoroughly comprehend and effectively use the methods of science.
  - a. By reading and discussing the various aspects of scientific method.
  - b. By evaluating the investigation procedures of several famous scientists.
  - c. By acquiring experience in the processes involved in observation, data gathering and manipulation, hypothesizing, experimenting and theorizing.
  - d. By understanding the solution of controlled problems in laboratory and field.
2. To help the student develop useful skills in critical thinking.
  - a. By utilizing the skills of the scientific method within the framework of critical thinking.

- b. By laboratory study and discussion which stress such cognitive skills as recall, comprehension, application, analysis, synthesis and evaluation.

#### D. The Relationship between Science and Society.

To help the student see relationships between science and his responsibilities as an informed citizen.

To develop a sensitive awareness of the effects of science upon society as well as those of society upon science.

1. By reading and discussing several social problems with which science is involved.
2. By discussing at least one instance where social need has affected scientific research.
3. By discussing at least one instance where scientific research has forced revision of social ethics.

## VI. Syllabus

### A. Course Description

**Natural Science 150:** Natural Science 150 is a group of interrelated units unified throughout by the theme of "evolution". The course commences with a unit on the nature and the methods of science. Several units then follow. The instructor, in cooperation with his vertical team colleagues can choose a unit on the evolution of the physical universe or the evolution of the earth, or a unit on the nature of life. The semester culminates with a unit on the evolution of man.

**Natural Science 160:** Natural Science 160 is also a group of interrelated units unified throughout by means of a theme concerned with man and his environment, both internal and external. The instructor, in consultation with his vertical team colleagues, may select two of several units. The units cover such topics as the human body, the physical environment, perception, and an in-depth study of an organ-system. The second segment is a unit on field ecology. The course culminates in a unit on science and society. Here four topics from a group of ten or more are selected for study. They cover such issues as pollution, food supply and mankind, conservation, overpopulation, nuclear energy utilization, drugs and their use, euthanasia, scientists and politics, eugenics, and medical ethics.



The laboratory sequence in both 150 and 160 is concerned with development of critical thinking skills. They begin with aspects of observation coupled with emphasis upon the cognitive skills of recall and comprehension. Next the laboratory is concerned with data and data handling coupled with emphasis upon application; hypothesis coupled with analysis and synthesis; experimentation coupled again with analysis and synthesis; and ending with work on theorizing coupled with the cognitive skills of evaluation and judgment. The sequence is repeated within the structure of the second semester course in utilizing a new set of materials and conditions.

#### B. Course Requirements - Grading Criteria

Natural Science 150:	(4) one-hour Lecture Exams	<u>100</u> pts. each
	Total	400 pts.
	(4) Lab Reports, 25 pts. ea.	100 pts.
	Lab Quizzes	100 pts.
	Discussion & Participation	100 pts.
	Term Project	100 pts.
	Final Exam	<u>200</u> pts.
	Total number of points	1000

Natural Science 160:	(4) one-hour Lecture Exams	<u>100</u> pts. each
	Total	400 pts.
	(4) Lab Reports, 25 pts. ea.	100 pts.
	Lab Quizzes	100 pts.
	Term Project	100 pts.
	Discussion & Participation	100 pts.
	Final Exam	<u>200</u> pts.
	Total number of points	1000

#### C. Course Materials

Natural Science 150: Arnfield et al. Natural Science, A Course in General Education in Science. Dubuque, Iowa: Wm. C. Brown Co., 1967.

Michigan Conservation. Lansing, Michigan: Department of Conservation, a quarterly journal.

Dampier, W. C. and Dampier, M. Readings in the Literature of Science. New York, New York: Harper and Row, Publishers, 1959.

Natural Science 160: Morrison, Thomas F. et al. Human Physiology. New York, New York: Holt, Rinehart and Winston, Inc., 1967.

Underhill, Raymond A. Laboratory Anatomy of the Frog.  
Dubuque, Iowa: Wm. C. Brown Co., 1951.

Buchsbaum, Ralph and Buchsbaum, Mildred. Basic Ecology.  
Pittsburgh, Pennsylvania: The Boxwood Press, 1964.

#### D. Model Outlines

##### Natural Science 150

Week	Unit	Laboratory
1	The Nature of Science	Scientific Observation
2		Measurement
3		A Controlled Experiment
4		Models of Atoms
5		A Cloud Chamber
6	The Physical Universe	Density & Crystals
7		Minerals
8	The Earth	Rock Types
9		Analytic Keys
10	The Nature of Life	Basic Units of Life
11	The Evolution of Man	Mitosis & Meiosis
12		Heredity
13		Human Heredity
14		Fossil Evidences
15		Survey of Kingdoms
16		Review & Summary

##### Natural Science 160

Week	Unit	Laboratory
1	The Human Body	Dissection - Frog
2	In-depth Organ-System	Dissection - Frog
3		Dissection - Frog
4	The Physical Environment	Dissection - Rat
5	Choose two-3 weeks	Dissection - Rat
6		Dissection - Rat
7	Field Ecology	Mapping Techniques
8		Abiotic Factors
9		Abiotic Factors
10		Biotic Factors
11		Field Study
12	Science & Society	Panel Discussions
13	Choose 4 Topics-- One each week.	Panel Discussions
14		Panel Discussions
15		Panel Discussions
16		Panel Discussions

Prepared by

Edwin A. Arnfield  
Associate Professor and Lead Teacher  
Natural Science

S O C I A L   S C I E N C E

Lead Teacher

William Hoerauf

Assistant Professors

Terrance Almquist

Gary Blodick (to February, 1968)

Richard Rivers

Instructor

Robert Grossman

National Teaching Fellow

Andre' Cedras

## SOCIAL SCIENCE

### AREA REPORT

#### I. Description

##### A. Definition

The one year course in Social Science (150 and 160) introduces the student to the broad areas concerned with the study of man in his social environment. Both Social Science 150 and 160 emphasize understanding some of the significant aspects of American culture as they relate to the individual, the group, and the whole of society. Although course materials are taken from the traditional disciplines of Sociology, Anthropology, Economics, and Political Science, the processes that influence human behavior within these fields are given major emphasis. Particularly stressed are the coherent principles (scientific method) inherent in the methods of investigation as used by social scientists in any field of endeavor. In addition there is an expectation that the student, as a result of the course, will make reflections and prudent decisions about matters that concern himself and public policy.

##### B. Rationale

We cannot conceive that a formal approach to learning would exclude the proper study of man. Thus, few would question the viability of including the social sciences in a course of college instruction.

The major question to be considered with respect to the role of the social sciences in general education is what advantages, if any, does a course in social science have over specialized areas of study within the social sciences. Those who do not favor a general approach to the social sciences argue that it would be more worthwhile to introduce the student into the area of study by concentrating instruction in one of the several disciplines of social sciences, such as history, using this as a model for further comprehension of the diverse areas within the social sciences. Further, they claim that since the methods of inquiry are essentially the same in all the social sciences, the student will be able to transpose and generalize the methods and knowledge learned from one subject to another with relatively little trouble. A final objection is made toward a general approach on the ground that if social science is taught as an entity, it ought to be taught as a final step, after the student has mastered a series of courses that are part of the discipline.

Thus, they conclude, to teach the social sciences as a freshman course in general education can only unnecessarily complicate the path that leads toward the goal.

To answer these arguments, we must first understand that the essence of comprehending a discipline lies in viewing it first as a whole and then examining the component parts as they relate to the whole. Recent research has shown that the mind is able to grasp facts more firmly when it sees them as integral parts of a larger concept.

Secondly, we have little assurance that the knowledge in one field of specialization will be utilized in another field unless the parallels are immediately evident. Knowledge of the methods of political science, for example, does not necessarily help us choose a proper marriage partner, although the methodology may be the same. Moreover, there is the ingrained tendency on the part of educators to regard their field of specialization as distinct from other fields with the consequence that there often is a feeble effort at coordination among the social science disciplines. The common focus indeed too often becomes obscured. One of the major weaknesses that man has had to face in the modern world is that he has been taken apart to be examined, but has not been put together again.

General education in the social sciences is general in that it seeks to remedy the above; it attempts to effect a synthesis by bringing separated subjects together for the study of phenomena which is general (yet changing) in human affairs. Thus an introductory course in social science seems especially appropriate for understanding man and his society as a totality, and most proper in a course of general studies.

### C. Organization

1. Structure--Both Social Science 150 and 160 meet four hours each week. The student attends a lecture two hours each week, and the remaining two hours are spent in small discussion groups. The structure, while formal, is not designed to be rigid. Participation in community experiences, field trips, and guest speakers frequently alter the above pattern.

2. Approach--The lecture period (approximately 60 students) is used to introduce the major concepts of the unit under study. Here the attempt is made to present an overview of the subject and materials necessary for an understanding of the unit. Concepts are clearly explained, critically examined, and amplified upon where necessary. Initiation to the basic data,

terms, and major problems usually precedes or is part of the formal lecture. This hour, depending upon the instructor, may be utilized in a variety of ways. In itself, the lecture is not an entity but is designed to achieve the course goals and to complement the small discussion sessions.

In the small discussion sessions, the students examine the information and ideas given in the lecture period in detail. While understanding the relevancy of the lecture material is of importance, equally significant is the exchange of ideas and the development of communication skills. Student passivity is not accepted: dissent, criticism, and alternate solutions to problems are encouraged, as is a respect for the opinions and judgments of others. The discussion session is not designed to be highly structured. The teacher may design or institute any teaching method that best seems to satisfy the programs goals. Normally, however, the discussion is encouraged by assigning a reading in advance.

## II. Area Development

In the fall of 1966, the Social Science course began with minor modifications from the previous school year. Within a few weeks it became clear that many aspects of our course needed revision. Prompted by changes within the division, greater responsibility placed upon the teaching team, and changes resulting from a careful examination of the existing course of study, our area underwent significant development. The major changes effected can be classified under the headings of (1) course flexibility, (2) course integration, and (3) course objectives.

### A. Course Flexibility

An examination of the Social Science course at the beginning of the school year would reveal a course centered around a well defined structure. Although the overall objectives were geared toward flexibility, our approach toward their attainment proved to be unsuitable. The course material and instructional procedure, being fairly well prescribed in the syllabus, precluded many opportunities for deviation or creative teaching. In addition, since departmental examinations were given at the end of each unit of study, the faculty found it difficult to complete the material that would be included in the tests.

As a result problems soon became apparent. Some instructors were hard pressed to complete the units of study in the allotted time, while classes that proceeded at a faster pace had to delay until a new unit could begin. Excess concern for

subject matter sequence minimized the amount of attention that could be given to individual student problems. A serious obstacle also developed when members of the teaching team made suggestions for integration that could not be implemented easily by the Social Science instructor. Most harmful was the built-in restriction on the opportunities for teacher innovation or deviation from the normal teaching pattern.

Thus, within the first few weeks of the fall term and continuing throughout the school year, we began to alter our course structure, making it more adaptable to changes taking place and more commensurate with the program goals.

As a first step, members of the department agreed to remedy the tyranny of the common unit examination, giving each instructor the responsibility of constructing his own testing instruments. This freed the teacher of the burden of pointing his instruction toward the test: He was now able to devise his own methods of instruction and could easily alter or deviate from the usual teaching techniques.

Secondly, the instructors agreed that although the lecture-discussion method of instruction was fairly well established, it was not inviolate. Could we, we asked, utilize that block of time in another manner? Might time be more fruitfully utilized by deviating from the standard procedure? Could the lecture period, for example, be better spent by working in the library? Could our discussion period be combined with another teacher's group? Would the Programmed Learning Center give assistance if we arranged to spend our classtime working on programmed instruction? We found no rationale, except tradition, that prevented our doing any of the above. Moreover, we found that once we adopted a flexible approach to our instruction, we could easily integrate our course with the other areas of study. It is not necessary to list the specific benefits accrued from the above changes or to examine in detail the many resulting improvements. Generally, they resulted in the following:

1. More creative teaching in the classroom.
2. Greater student involvement in community affairs.
3. Greater integration of subject matter with other areas.
4. Greater use of community resources within the classroom.

5. Greater use of library facilities, audio-visual materials, and programmed instruction.
6. A more careful examination of the role of the social sciences within our program.

#### B. Integration

The same rationale that explains the validity of having a social science course rather than courses within the social sciences also helps explain the need for the integration of knowledge among the various disciplines.

One of the main functions of the teaching team is the exploration of areas of common concern. To a great extent, the social sciences are fertile ground for the assimilation of ideas, hence, the Social Science faculty found little difficulty in integrating their subject with the other areas of study.

Although the actual process of course integration varied with each teaching team, the most fruitful efforts in the area of Social Science involved the following:

1. The methodology taught in Communications for the development of critical reading skills was also used in Social Science.
2. Themes and research papers written for Social Science were read and corrected by the Communications teacher. A common approach toward the writing of these papers proved helpful to the students.
3. In a few classes pocket books were jointly assigned in several areas. Aldous Huxley's Brave New World (S. S. 150) was particularly successful in correlating ideas in Humanities, Natural Science and Social Science.

Less successful was Robert Heilbroner's The Worldly Philosophers (S. S. 160) used in Communications and Social Science. The reading level proved too sophisticated for most of the students, although ostensibly, the book appeared to have value in both areas.

4. A joint field trip to Recorder's Court and the Wayne County Jail was highly rewarding in providing an



experience that was used for writing themes and for analyzing the American system of justice. As a result of this experience, many students also gained insights into courtroom procedure and due process of law.

5. This year, as well as last, both Communications and Social Science 160 used Time Magazine from which articles were assigned for critical analysis. Time, with its tendency to overgeneralize from insufficient data, is an excellent source for critical analysis and for the development of reading skills, as well as a source of information about current political events.
6. The combined effort of teachers in Communications and Social Science brought several locally prominent speakers to our classrooms. In addition to providing information in their fields of specialization, they often presented unpopular views on current issues, thereby creating student interest and discussion.

#### C. Course Objectives

Our instructors spent a considerable portion of the time last year attempting to resolve some difficulties that arose in the two years the course has been in operation. As a result of our examination of these difficulties, we were forced to modify our course goals. The resulting changes are explained below.

A major problem centered upon our difficulty of clarifying the social scientific method of investigation. Our course emphasized the conclusions--the major findings--of the social sciences without regard to the method whereby these conclusions were reached. We placed undue emphasis on the substance of the discipline without showing the student that behind the substance was a methodology. Thus, we restructured much of our course so as to give more attention to the method whereby conclusions are reached, along with the resultant findings.

Another major problem we found difficult to resolve concerned the role of the subject material incorporated with the social sciences. Unquestionably the amount of information available for use in the social sciences is overwhelming and continues to proliferate daily. The question of how we can accommodate our instruction to the knowledge explosion plagued us. What specifically is to be made known to the student?

We agreed that before one could understand the framework of the social sciences, he had to understand the substantive material of the discipline. What evolved was a list of the substantive concepts we believed to be important to our area of study, concepts that can be used as tools for further investigation and that might be broad enough so as to allow for the assimilation of new knowledge as it is made known. A list of the substantive concepts we consider important is included in the course syllabus on page 109.

An important change grew out of our concern for student apathy toward many of our units of study. We made an erroneous assumption that students would be interested simply because we were dealing with matters that are directly related to their lives. This proved untenable. We found that we must plan activities for class work which would interest the students in the social sciences, activities such as field trips, community experiences, and interviews. When they were carefully planned and realistically related to the areas under discussion, this type of experience is an important learning device. Thus we will continue to explore the possibilities of giving our students first-hand experiences in community affairs.

Some of the faculty members found the assigned textbook and book of readings rather restrictive. With the ample amount of learning materials available, there is definite value in using various instructional media. In the past year, for example, we have made fruitful use of programmed instruction, full length paper backs, periodical magazines, and independent study programs. Undoubtedly this trend will continue.

Additionally, our faculty discussed our role in the development of more positive student attitudes. We agreed that part of our course should reflect the importance of values, attitudes and beliefs. We agreed also, that a student must reflect upon his own attitudes and must be given experiences that will make him more aware of his own beliefs and prejudices thereby enhancing the possibilities for change.

### III. Proposed Course Objectives for 1967-68

In writing the objectives for the one year course in Social Science, we have attempted to achieve several goals. First, we have categorized our objectives into the three areas of concepts, skills and attitudes, so as to delineate the specific types of behavior we wish to measure. Second, although we have stated our over-all course objectives in general terms, which gives some idea of the direction we wish the course to take, we have also included

some examples of the specific kinds of behavior we wish the student to attain. In doing this we hope to give some indication of how these goals might be taught and evaluated.

## I. Cognitive Concepts

- A. To increase the student's understanding of the changing and probabilistic nature of knowledge.
  - 1. Recall and recognition of factual information about contemporary society contrasted with past societies and cultures.
  - 2. Recall of the major characteristics of our society in the past and their transition to the present.
  - 3. Describe the trends and effects of social change.
  - 4. Recall of the forces which determine and shape the political, economic and social structure.
- B. To increase the student's understanding of the complex nature of society.
  - 1. Recognition of the vast areas of knowledge encompassed with the social sciences.
  - 2. Recognition of several solutions to social problems without any one being "correct."
  - 3. Recall of several major conflicting theories regarding the same social phenomenon.
  - 4. Recall of the major institutions that might be concerned with one or the same social problem.
- C. To increase student familiarity with the following value concepts: Dignity of Man, Empathy, Loyalty, Freedom and Equality, Government by Consent of the Governed.
  - 1. Identification of terms and statements that have significance in a democratic society.
  - 2. Recall of several factors, past and present, which have made for increasing interdependence and cooperation of people all over the world.

3. Recall of the basic civil liberties guaranteed under the Constitution.
  4. Recall, from observation, individual rights under due process of law.
- D. To increase student knowledge of some of the major social problems of modern society.
1. Recognition of the basic elements inherent in a social problem.
  2. Analysis of a newspaper article dealing with racial unrest, giving points of view on the validity of the article.
  3. Recall and analysis of the content of a speech dealing with poverty.
  4. Formulation, in written form, of an argument supporting welfare payments to the poor.
- E. To improve the student's knowledge of the major occupational fields related to the social sciences.
1. Identification of the many sub-fields within the social sciences.
  2. Recall of the divisions within the social sciences.
  3. Interpretation of the various fields of specialization within the social sciences.
  4. Interviewing of people employed in governmental agencies.
- F. To increase student understanding of himself and his relation to others.
1. Recall of how heredity and environmental factors interrelate to influence the development of the individual.
  2. Recall and list examples of the process of socialization.
  3. List some important factors in the development of the personality.
  4. Recall of the important principles that pertain to man and his groups.

## II. Skills

- A. To enable the student to increase his understanding of his own problems and to make prudent decisions on the basis of his own thinking.
  - 1. Ability to estimate the consequences of a personal course of action.
  - 2. Ability to integrate the results of a personal experience into an effective conceptual whole.
  - 3. Ability to recognize the characteristics of rational and irrational behavior.
  - 4. Ability to identify the processes involved in making a decision.
- B. To increase the student's skill in generalizing from data.
  - 1. Ability to formulate appropriate hypothesis based upon an analysis of facts.
  - 2. Ability to modify any generalization in the light of new facts.
  - 3. Ability to apply social science generalizations and conclusions to actual social science data.
  - 4. Ability to distinguish fact from hypothesis.
- C. To increase the skill of precise communication in the social sciences.
  - 1. Ability to communicate effectively in writing and while speaking.
  - 2. Ability to relate the results of a personal experience, either orally or in writing.
  - 3. Ability to use discussion techniques to effectively communicate with others.
- D. To develop the art of inquiry and formulation of opinions on the basis of one's own thinking, rather than on passive acceptance of "authority."

1. Ability to see the techniques used in persuasive materials such as advertising, propaganda and the like.
2. Ability to differentiate value judgment from predictions or consequences.
3. Ability to recognize the consequence of an hypothesis when given information and assumptions.

### III. Attitudes

- A. To increase the student's ability to contribute to those around him and to become more empathetic to the ideas and opinions of others.
  1. To undertake the solution of a problem as a member of a group.
  2. To accept differences of race and culture.
  3. To appreciate family members as persons with needs and interests of their own.
  4. To listen to others with respect.
- B. To increase student involvement in community affairs.
  1. To communicate orally or in writing an interpretation of a community experience.
  2. To criticize the main argument of a speaker dealing with local government or politics.
  3. To take an active part in a political campaign.
  4. To witness an actual courtroom trial.

### IV. Evaluation of Objectives.

Normally, members of the social science area use the teacher constructed examination to measure student achievement. We make no distinction when testing between content (knowledge) and processes (ability and skills) because of the difficulty of distinguishing between content and processes on test questions. To get around this difficulty and to avoid dealing with test questions that try to measure complex behavior patterns, we generally try to test for the kinds of tasks our objectives

imply, rather than for the somewhat hypothetical processes that may be involved in the intangibles of the mental processes and abilities. Thus we ask for the meaning of a particular term, for a particular fact or principle. We also ask for the explanation of some phenomenon or for a possible solution to a problem. The specific testing devices may include identification, multiple choice, true-false and essay type questions.

## V. Course Syllabus

### A. Course Description

**Social Science 150:** An analysis of the behavioral sciences and their contributions to the understanding of man, his culture and society; fundamental problems of contemporary society.

**Social Science 160:** A continuation of the first semester's course. The major problems within the areas of our economic and political life; international relations.

### B. Course Requirements

The specific requirements for both courses depend to a great extent on the instructor. Given below is a list of materials and activities which are commonly used.

#### 1. Written

- a. Almquist, T. and Blodick, G., Readings in Contemporary American Society, Vols. I and II, Dubuque: W. C. Brown Book Co., 1966.
- b. Axline, Virginia, Dibs: In Search of Self, Boston: Houghton Mifflin Co., 1964.
- c. Biesanz, J. and Biesanz, M., Modern Society (3rd Edition): Englewood Cliffs: Prentice Hall, 1964.
- d. Fincher, Ernest, The Government of the United States. Englewood Cliffs: Prentice Hall, 1967.
- e. Hunt, Elgin F., Social Science, (3rd Edition): New York: The Macmillan Company, 1966.

- f. Huxley, Aldous, Brave New World. New York: Bantam Books, 1966.
- g. Steinbeck, John, The Grapes of Wrath. New York: Viking Press, 1967.
- h. Time. (Semester Subscription)

## 2. Activities

- a. Interviews with community resource persons.
- b. Examination of content of mass media to illustrate concepts.
- c. Library research projects.
- d. Guest speakers.
- e. Field Trips.
- f. Panel discussions.
- g. Minimum of one written project per semester, growing out of the student's personal experience, utilizing the concepts learned in the course.

## 3. Grading Criteria

a. Semesters Examinations	50%
b. Final Examinations	20%
c. Discussion Participation	20%
d. Paper	10%
	100%



## PROPOSED COURSE OUTLINE 1967 - 68

The following outline for the one year course is intended only as a suggestion; it does not determine the manner by which the course is taught.

## SOCIAL SCIENCE 150 - First Semester

- I. Introduction to Social Science
  - A. Nature of Science and the Scientific Endeavor
    - 1. Techniques of Social Science
    - 2. Changing Nature of Science and Knowledge
    - 3. Science in Contrast to other Ways of Knowing
  - B. Twentieth Century - Dawn or Twilight?
- II. Man, Culture and Society
  - A. Man as a Unique Organism
    - 1. Man as Animal
    - 2. Distinctive Human Characteristics
  - B. Evolution of Man
    - 1. Biological Man
    - 2. Psychological Man
    - 3. Social Man
    - 4. Cultural Man
  - C. Man as an Individual
    - 1. Development of the Personality
    - 2. Factors of Development
    - 3. The Self
    - 4. The Role of Culture

**D. Man in Culture**

1. Patterns in Various Cultures
2. The Function of Culture

**E. Man in Society**

1. Associations of Groups
2. Social Stratification
3. Social Class Functions
4. Social Learning and Social Control

**III. Social and Cultural Change**

- A. Sources of Cultural Change
- B. Responses to Change
- C. Change in a Technological Society

**IV. Social Institutions****A. Family Structure**

1. Concepts of the Family
2. Family Structure and Societal Factors
3. Patterns of Marriage
4. Family Organization

**B. The School**

1. Educational Functions of the School
2. The School as a Subculture
3. The School and the Socialization Process

**V. Social Problems - Examples**

- A. Categories of Social Problems
- B. The Racial and Ethnic Problem
- C. The Urbanization - Population Problem

**SOCIAL SCIENCE 160 - Second Semester****I. Understanding the Economy-Essential Analysis, Facts and Institutions**

- A. Fact of Scarcity
  - 1. Alternative Costs
  - 2. What, How and For Whom of Production
- B. Attempts to Deal with Scarcity
  - 1. Socialism
  - 2. Free Enterprise
  - 3. "Mixed Systems"

**II. Basic Free Enterprise Economic System**

- A. Consumer's Role
  - 1. Consumer Demand
  - 2. Role of Prices-Supply and Demand
- B. Producer's Role
  - 1. Types of Business Organizations
  - 2. Role of Profits
  - 3. Competition and Monopoly
- C. Government and the Allocation of Resources
  - 1. Concept of Alternative Costs

2. Growth of Government Expenditures

3. Taxes

4. Federal Controls and Regulations

D. National Income Theory

1. Savings, investment, circular flow, etc.

2. Problem of Economic Growth

3. Monetary Policy-Federal Reserve System

4. Fiscal Policy

E. Government and the Welfare State

III. The Political System as an Instrument of Social Control

A. Concepts of State, Government, Law, Citizenship

B. The American Political System

1. Historical Background

2. The Constitution

3. Separation and Division of Powers

4. The Executive Branch - Powers and Duties

5. The Legislative Branch

a. Powers and Duties

b. Methods

6. The Judicial Branch - Powers and Duties

7. Political Parties

8. The Voter

IV. International Relations

A. Concepts of: Nation, Nationalism, Sovereignty

- B. Relations Among Nations
  - 1. Diplomacy and War
  - 2. Concept of Power
- C. American Foreign Policy
  - 1. Objectives
  - 2. Successes and Failures
- D. International Law and Organization
  - 1. The United Nations
  - 2. Possibilities for World Peace

At the end of our one year course in Social Science the student should be familiar with the following substantive concepts:

- 1. Culture
- 2. Institution
- 3. Social Control
- 4. Social Change
- 5. Sovereignty of the Nation-State in the Community of Nations
- 6. Industrialization-Urbanization Syndrome
- 7. Power
- 8. Scarcity
- 9. Saving
- 10. The Modified Market Economy
- 11. Compromise and Adjustment

William Hoerauf  
Lead Teacher, Social Science Area

O R I E N T A T I O N

Lead Teacher

Dorothy Kaufman

## ORIENTATION

### AREA REPORT

#### I. Description

##### A. Definition

Orientation is a one-hour class which meets weekly for the purpose of acquainting students with their new environment in college, aiding them in solving problems they encounter, and in constructing plans for their educational and vocational futures.

##### B. Rationale

The rationale for including such a class as Orientation with the four academic subjects is that it is a place where students can discuss college experiences other than subject matter, that it will not be attached to a particular subject and for this reason will become an aid in further integration of all subjects into the student's total college experience.

##### C. Philosophy

It has been assumed from the inception of the Program that these students need more counseling than do those who score in the top half on the SCAT and Co-Op English standardized tests. Basic Education students appear to be, in many cases, immature, unmotivated, poorly prepared scholastically, and unrealistic in their vocational choices. These characteristics of many community college students have led to Burton Clark's term "latent terminal." The thought behind that term is that these students are actually two-year material only, and should be on some type of a technical or business curriculum. It was also the original reason for staffing the classes with counselors, in order to aid in this re-direction function of the program.

##### D. Organization

###### 1. Methodology/Approach

During the academic year 1966-67 we had instructors from the Student Personnel Services Division (counselors), the

Social Science Department of the Basic Education Division, the Program Director, and the Lead Teacher. For this reason, the methodology will be stated in four ways.

a. Methods of counselors

Generally, this was an informal group approach. Notable innovations were that one counselor met students for coffee and/or breakfast in the cafeteria. Another divided his classes into groups of two, meeting ten one week and the other ten the following week, so that he would have a small group atmosphere ideally suited to group counseling. The remainder used a variety of informal classroom procedures and small group techniques. All assumed class members as counselees.

b. Method of Program Director

The Director of the Basic Education Division has always taken at least one or two classes for the purpose of keeping close to the students and their feelings and problems. In general, the Program Director conducted his classes in a more formal, social science lecture type presentation, allowing the class to question informally. He also presented information on the history of the college, its physical facilities and future directions to all of the Orientation classes by invitation. He continued an "open-door" policy for his students, seeing them individually in his office as a program adviser, and conferring with the Program Counselor frequently.

c. Methods of the Social Science instructor/Orientation instructor.

- (1) A combination of the two methods mentioned above.
- (2) Generally an informal group approach, non-directive in type, in which students talked about what was of most concern to them.
- (3) When specific topics seemed most important to his students, he used a more formal lecture-type presentation, as in learning how to read catalogs of colleges to which students wished ultimately to transfer.
- (4) Personal conferences were held with each student.



- d. In summary, the objectives of the course were implemented through a variety of procedures: Lecture presentations, outside speakers, informal class discussions, small group discussion techniques, written surveys and assignments of reading of a limited nature, administration or group tests, and individual conferences for test interpretation, educational planning and personal problems. Each Orientation instructor who was a counselor assumed his class members as counselees. Instructors who were not counselors (the Program Director and one Social Science instructor) acted as program advisers to their class members but referred some students to the Lead Teacher who is a counselor lent to this Division by the Division of Student Personnel Services, or to some other counselor on that staff.
- e. The mechanics of staffing the classes were as follows:
- (1) Fall Semester, 1966, 29 blocks with the following personnel:
    - (a) Counselors: 18 sections. Six counselors with three blocks of 20 students each or 60 students. Total 360 students.
    - (b) Program Director: 3 blocks. Total 60 students.
    - (c) Program Counselor/Lead Teacher: 8 sections. Total 160 students.
    - (d) Orientation 160 was discontinued starting with the Fall, 1966 semester, so there were no 160 classes scheduled for the spring, 1967, either.
  - (2) Spring Semester, 1967, six blocks with the following personnel:
    - (a) Counselors: None
    - (b) Program Director: None
    - (c) Program Counselor/Lead Teacher: 4 sections. Total of 80 students.

- (d) Instructors in other subject matter areas:  
One, with two sections comprising a total  
of 18 students.

## 2. Structure/Syllabus

### a. Objectives - Orientation 150

#### (1) General

- (a) To enable students to solve problems of beginning college life.
- (b) To aid students in constructing plans for educational and vocational objectives.

#### (2) Specific

- (a) To develop a vocabulary of academic regulations to deal effectively with admission, registration, withdrawal, transfer and other college procedures.
- (b) To choose a tentative occupation in harmony with his educational plans.
- (c) To identify his own academic needs and list where to go for specific help in the institution for his needs.
- (d) To plan adequately for study, work, and recreation within his available time.
- (e) To develop methods for attacking each subject matter course in the most effective way.
- (f) To interpret his scores on aptitude and interest tests and to tell what they mean in terms of his vocational and educational objectives.
- (g) To select his second semester courses wisely according to what he has learned about his abilities and interests.
- (h) To construct a realistic plan for the remainder of his courses at Macomb County Community College.

**b. Approach**

- (1) The manner in which these objectives will be implemented is through brief lecture presentations by the instructors, informal class discussions, and individual conferences. Two sessions will be confined to testing, and two to large group sessions concerned with (1) financial aids, placement, and student activities, and (2) various career programs offered here.
- (2) Each Orientation instructor will assume his class members as counselees.
- (3) It is recommended that an informal group approach be used, whatever type the instructor seems most comfortable with. It is hoped that innovation will be the keynote, and techniques and experiences will be shared each week at the Orientation Area Meetings.
- (4) Orientation instructors will meet with the remainder of the Vertical Team for their students.

**c. Course Description**

Orientation 150 introduces students to college requirements and aids them in assessing their abilities, interests and achievements and in making educational and vocational plans based on objective information. Study methods for college courses are presented and students are encouraged to explore first-hand an individual occupational choice in preparation for a technical report for Communications 160. One credit hour is given each enrollee unless he withdraws from the course.

**d. Course Requirements**

- (1) Attendance
  - (a) Is required at all sessions, or made up in a manner satisfactory to the instructor.

- (b) After three absences without satisfactory explanation, student will be dropped from class.
  - (c) Student will still be able to make appointments for individual counseling whether in class or not.
- (2) Completion of written requirements as follows:
- (a) Orientation Survey (pre-test)
  - (b) Study Habits Survey
  - (c) Personal Information Survey
  - (d) Study Schedule
  - (e) Profile Sheet completed
  - (f) Program Work sheet for 2nd semester
  - (g) One Interest Test
  - (h) Mechanical Aptitude Test
  - (i) Orientation Survey (post-test)
- (3) To be completed in second semester (formerly Orientation 160)
- (a) Career investigation paper in Communications 160.
  - (b) Program Work Sheet for sophomore year, individually with counselor or program adviser.
- e. Course Outline

(Individual instructors will deviate from this outline except for testing sessions and large group sessions.)

Week 1.

Orientation Information Survey administered. Personal Information Survey begun. ECD Program Discussed. Its relation to remainder of college. Catalog discussed and assignments and appointments made.

- Week 2. Study Habits Survey administered. Personal information survey completed as far as possible. Discussion. College regulations - catalog.
- Week 3. Interest test administered. (OAIS)
- Week 4. Explanation of interest tests in general. Other tests, such as aptitude (intelligence), achievement, also explained. (Sample Profile Sheet - overhead projector), Discussion. Educational planning begun for 2nd semester.
- Week 5. Study Habits discussed. Study schedule begun. Exam taking methods discussed. Education planning continued.
- Week 6. Financial aids, college placement, student activities. Outside speakers, possibly.
- Week 7. Results of interest tests returned. Discussion of profile sheets in general. Further educational planning.
- Week 8. Discussion: exam taking, note taking. "What Is Technical Education?"
- Week 9. Mechanical Aptitude Test. Individual appointments.
- Week 10. Career programs presented. Outside speakers, possibly.
- Week 11. Discussion.
- Week 12. Further interest tests, if desired. Continue educational planning and occupational investigation.
- Week 13. Review of exam. taking methods. Discussion.
- Week 14. Educational - vocational planning.
- Week 15. Educational - vocational planning.
- Week 16. Educational - vocational planning.
- Week 17. Program work sheets due. Administration of Orientation Survey - (post-test).

## II. Area Development - changes and reasons

- A. During the second semester, Mr. Robert Grossman, the Social Science instructor who taught two sections of Orientation, developed a method for teaching students how to read catalogs for senior colleges. This was then incorporated into the Program Counselor's subject matter to be covered, and added to the Freshman Seminar Guidebook which was being developed. In addition, we requested and received 25 copies of Wayne's and Eastern Michigan's catalogs for class use.
- B. Since we had abolished the textbook from the previous year, we used mimeographed materials and standardized tests. Many of these were incorporated into the Freshman Seminar Guidebook for use next year. Those used in 1966-67 were:
1. Glossary of academic terms (M.E.S.C.)
  2. Personal Information Sheet
  3. Study Habits Survey
  4. Profile Sheet
  5. "How to get the Most out of your Textbooks" (Pamphlet)
  6. Study schedule sheets (2) from "Learning to Learn."
  7. Note-taking methods
  8. SQ4R study method from "Learning to Learn."
  9. Article from Family Circle on Reading Books.
  10. OAIS Interpretation
  11. The OAIS test
  12. Mechanical Aptitude Test (Bennett)
  13. General interpretation of tests.
  14. How to Investigate Occupations
  15. Where to go for more Information About Careers.
  16. How to gain information in groups.
  17. Program Work Sheets
- C. At the close of the Spring Semester, 1967, it was decided to abolish the Profile Sheet, for the following reasons:
1. Some of the tests listed on it were now going to be different anyway.
    - a. The Placement Test given to all students will now be A.C.T. instead of S.C.A.T. and Co-Op English.

- b. The Mechanical Aptitude Test had not proved useful for our students. Very few of them proved to be apt mechanically, nor very interested in technical fields of any type.
  - c. The O.A.I.S. had proved difficult for instructors and counselors alike to interpret to students. It also did not seem to offer a wide enough range of occupational areas. The "Creative" score, while at first seeming to be an important one, later appeared less important as we had been cautioned that it sometimes denoted "rebelliousness" more than actual creativity. While this survey may be administered later for research purposes, it was decided to administer the Kuder Interest Inventory (Form DD) which had recently been developed for college students and adults. This scale, in addition to offering a wide range of occupations, has college majors listed on the answer sheet. The Program Counselor administered this in addition to the O.A.I.S. during the spring semester, as did the other instructor, and both liked the results of the Kuder.
2. For two years we had been operating on the theory that if students could be shown their strengths and weaknesses on a simple profile, they might become more realistic than they had been in the past about choosing a vocation, and might choose a career program instead of aspiring to a four year degree. Somehow this didn't seem to work. We found that:
- a. Students generally didn't have very many strengths. It proved discouraging to them, even in a private conference, to be shown such a profile.
  - b. Concerning low ability scores, students either shrugged them off, confessed they never could get math (or English), or didn't believe that the scores were correct. This appears possibly to be an ego-defense which shields them from facing reality even more than prior to entering college. It was decided to have no profile sheet next year and study other means of reaching the students.

D. The marking system for the course was changed.

1. At the close of the first year one of the recommendations of the instructors had been to abolish marks altogether. The mark "Cr" was decided upon because it would carry no honor points, but would still be a credit course and thus be eligible for reimbursement for State aid. When it was too late to make a further change, it was discovered that the IBM machine could carry only one letter and not two. There would be no failing marks, for students would be encouraged to withdraw if they found they had to miss too many classes. "P" was then the most usual mark given the Fall Semester of 1966. It was soon discovered after the marks were recorded, that we had some very good students whom this mark penalized, because "P" is equated as "C" with only two honor points. As a consequence, this lowered the Grade Point Average of A and B students as well as many others.
2. Since "P" is within the regular marking system, no real change had been made. For this reason, during the Spring Semester, 1967, the grading procedure for Orientation 150 classes was re-established, with these modifications:
  - a. No failing or unsatisfactory grades were to be given.
  - b. Students would be encouraged to drop the course if they could not attend.
  - c. If a student did drop, the college procedure would be followed, namely, "W" before the middle of the semester, but only "WP" after the middle of the semester. In no case would a student receive a WF or UW, to be charged against his grade point average. In all other cases, students received the grades of A, B, or C, which agrees with the principles of good counseling that students should not be penalized for electing or dropping the course.

E. It was decided to recommend the reinstatement of Orientation 160 for the 1967-68 year, for the following reasons:



1. We had been struggling for three semesters without it. There is not time to get students ready for their second year of college. Furthermore, they are not psychologically ready to project their course plans more than one semester ahead during their first semester.
2. The plan of placing the Occupations paper into the Communications 160 class did not work out as planned. Consequently, the students for these semesters seldom did a research paper or technical report on this subject. The theory for placing this subject matter in Orientation 160 in the first place had been that students who study a career, interview someone in that career for first-hand information, give an oral report, and write a paper on it, have a good knowledge of the actual occupation and how he can fit the requirements. During this study they also discover other occupations from each other, their reading, and become more conscious of occupations in general. They also learn a method for investigating an occupation; if the first one they choose is not to their liking, they then know how to go about investigating another.
3. After the decision had been made to drop Orientation 160 from the Basic Education curriculum, a content analysis of 160 students' Life Aims papers was made during the summer of 1966. Repeatedly, students wrote that one of the most valuable experiences they had during their entire year was "going out into the community to interview a person in their field." When this was discovered, the plans could not be changed for omitting Orientation 160 for the year 1966-67.

### III. Proposed Course Implementation for 1967-68.

#### A. Systems approach

1. Using the systems approach, desired behavior at the end of the course should be described at the beginning of it. Although this had been done during 1966-67, a further refinement will be attempted during 1967-68.

2. Weekly Area meetings of all Orientation instructors are being implemented during the Fall Semester, 1967. These have aided immeasurably in shaping the course and re-defining the specific objectives into items which can be tested.
3. One of the criticisms of the Orientation course from the previous progress report was that even though the implementation is left to the individual instructor, his methods should be spelled out some place, if only as a check on himself. It was further stated that although the evaluation component for this course is difficult because of the nature of the content, a determination could be made of whether or not the students can do the activities listed as objectives.
4. Inasmuch as the grades for this course will not be given according to the amount known at the end of the term, it seems feasible to construct a survey to match the objectives stated in the syllabus. Then each instructor will be able to see how well his students have mastered the objectives of the course with the methods he has used. Since the instructors are either (1) subject-matter oriented and under the direction of another Area in Basic Education as well as Orientation or (2) counselors who are under the direction of the Coordinator of Counseling in an entirely different division--that of Student Personnel Services, this seems an especially appropriate device. This survey is being planned with the aid of all instructors of the course in the Area Orientation meetings.

#### B. Model syllabus

1. Catalogue course description for Orientation 150
  - a. Freshman Seminar 150 (name being changed 1968-69 catalog)

Introduces students to college requirements and facilities, aiding them in assessing their abilities and interests in order to make educational and vocational plans based on objective information. Study methods for college courses are introduced as well as a practical approach to motivation to succeed in college.

**b. Freshman Seminar 160**

The continuation of Freshman Seminar is listed later with the syllabus for that course.

**2. Course Requirements****a. Attendance**

- (1) Attendance is required at all sessions, or to be made up in a manner satisfactory to the instructor.
- (2) After three absences without satisfactory explanation or make-up, the student will be dropped from the class.
- (3) Student will still be able to make appointments for individual counseling with his Freshman Seminar instructor even though dropped from the class.

**b. Written Requirements (all except the last two are contained in textbook)**

- (1) Orientation Survey
- (2) Study Habits Survey
- (3) Personal Information Survey
- (4) Study Schedule
- (5) Program Work Sheet for Second Semester classes
- (6) One interest inventory
- (7) A "post course" survey to be administered the 16th week.

**c. Materials**

- (1) Freshman Seminar Guidebook, edited by Dorothy B. Kaufman. This was the only textbook required during the Fall Semester, 1967. (published internally by Macomb County Community College, Warren, Michigan 1967)

- (2) So You're A College Freshman, by Elwood N. Chapman, (Chicago: Science Research Associates, 1967) will be required for entering freshmen during the Spring Semester, 1968 in addition to the above.
- (3) One interest test.
  - (a) The Kuder Occupational Interest Survey (Form DD)- for college students and adults is administered the third week of classes.
  - (b) Students who miss this survey are required to take one other interest survey. The California Occupational Interest Inventory (Advanced, Grade 9 to Adult, 1956 Revision) is recommended because it is easily hand-scored and has many Vocational Interest Analyses stemming from it.
- (4) A "post course" survey to be administered during the 16th week of classes, well before the final examination week so this will not be confused with a grading system. This survey is now in the process of being constructed during Area Orientation meetings.

d. Activities.

- (1) Use of the Freshman Seminar Guidebook, edited by the Program Counselor/Lead Teacher in Orientation. This is a combination of the mimeographed material formerly used with the addition of new readings and published internally by Macomb County Community College, sold through the Book Store.
- (2) Reinstatement of Orientation 160 for the Spring Semester, 1967. This will be changed to Freshman Seminar 160 beginning with the Fall Semester, 1968.
- (3) During the Fall Semester, 1967, with the cooperation of the Communications 160 instructors, Mr. Dennis Thompson and Dr. Alan Gross, the technical report on an occupation has been reinstated. Some of the mimeographed materials formerly employed in Orientation 160 are being used in

these Communications classes. The Orientation Lead Teacher is acting as a resource person for 160 students who need aid in locating individuals for these students to interview. Mr. Grossman, who had some of these students in Orientation classes during the Spring of 1967, is also aiding in this manner. It is hoped that these students will in this way be better served than those of the past three semesters when Orientation 160 was omitted from course offerings.

- (4) During the Fall Semester, 1967, with the cooperation of Mrs. Nancy Arnfield, the Lead Teacher in Humanities, those students in Humanities 160 will take the Allport Study of Values, administered by the Lead Teacher in Orientation. These students will be encouraged to return for counseling to compare the results of this survey with those of the Kuder Occupational Interest Survey (DD) administered in Orientation 150 last semester.
- (5) The Lead Teacher in Orientation is serving on the Team F (for 160 students) as well as her own Team D (for 150 students) during the Fall Semester, 1967. Mr. Grossman is requested to meet with this team when his former students are involved. For example, students who are doing less than satisfactory work at mid-term (D and E) will be referred to these people. This is in lieu of the mid-term review developed in 160 teams last semester when no counselors were readily available as Orientation 160 instructors serving on teams. It is hoped that in the Spring Semester, 1968 counselors will be serving on each team due to the reinstatement of Orientation 160.
- (6) Several subject-matter instructors in the Basic Education Division expressed an interest in teaching Orientation classes during the year 1967-68. Fewer counselors desired to do so. One of the criticisms which counselors had made of the course during its first year was that the structure of it made it difficult to set up a group counseling situation. They also desired clarification concerning

the role they should play: teacher or counselor. It was proposed by the Lead Teacher that we continue Orientation 150 during 1967-68 using as many subject-matter instructors as possible, and only those counselors who wish to teach such a class. It is hoped that the schedule will be arranged so that at least one counselor will meet with each team. During the Fall, 1967 semester, only one team did not have a counselor teaching Orientation. Mrs. Beverly Datz, a counselor who had previously taught the course, kindly consented to attend the Team meetings to be of service to the instructors even though not teaching a class in Orientation.

- (7) Mr. Robert Grossman, the Social Science instructor who taught Orientation 150 during the Spring Semester, 1967, has proposed an experiment in small group work which would involve six blocks of students. The purpose of this is to gain better rapport with students and a closer relationship between faculty and students than exists under the present structure of the Orientation classes. By careful planning, each block will be split in half with no more than ten students in it. One teacher or counselor will meet once weekly with each small group. Due to room and personnel shortages this will be difficult administratively but seems worth the effort. The following instructors are involved in this experiment during the academic year 1967-68: Mr. Grossman, Mrs. Paula Drewek, Dr. Alan Gross and the counselors: Mr. Donald Capps and Mr. Salvatore Evangelista.
- (8) Since the 160 course is being reinstated, the segment of the 150 course last year which dealt with the reading of senior college catalogs will be moved to 160, allowing more time in 150 for small group work.
- (9) An Area Orientation meeting is held weekly because there is so much counseling detail to be learned by the subject-matter instructors in order to become program advisors.

### 3. Grading Criteria.

- a. The grades of A, B, C, W, and WP are the only grades which shall be given for Freshman Seminar 150.
- b. Each instructor will give grades according to his own standards. For example, last year one instructor marked on attendance only. Another marked on a combination of attendance and whether or not all of the required written assignments had been completed. It is expected that this practice will continue during 1967-68, with individual variations. It is hoped that some recommendations will be forthcoming from the entire area.

### 4. Model outline

(Individual instructors will deviate from this outline expect for testing sessions and large group sessions planned for the total department.)

- Week 1. Orientation Information Survey administered. Personal Information Survey begun. (Assigned for outside work, perhaps.) ECD Program discussed, especially its relation to the remainder of the college. Catalog discussed, assignments in workbook made, appointments made.
- Week 2. Study Habits Survey administered. Personal information survey completed and corrected. Discussion of college regulations in the catalog. Credit hours and honor points explained. Study schedule explained and assigned.
- Week 3. Study schedules collected. Interest test administered. While students are taking interest test, instructor looks over study schedules. Consultations with each student as he finishes test, as some may not take the full hour. Appointments made with others. Reassignment of study schedules. Those students who do not finish the interest test in the allotted time are required to finish it during this week so that they may be sent away for scoring. Since it takes at least three weeks for the answer sheets to be returned, absentees will need to take a different interest test, individually hand scored. (Kuder, Form DD--machine scored; California--hand scored.)

- Week 4. Explanation of interest tests in general. Use Workbook, pages 10 and 11, if desired, "General Testing Explanation." Collect Study schedules for looking over to hand back next week. (Students should have made a rough copy of schedule to keep for themselves for a week.)
- Since tests in subject-matter courses are being given from the fourth week on, it is good to begin material on how to take tests during this week. Study habits should take care of themselves from now on, if the formula SQ4R is applied, pages 19, 20 Workbook.
- How to take essay exams is covered in Communications classes. How to take objectives exams will be presented in Freshman Sem. 150; this will be covered in the Area meeting, as it is not in the workbook this year.
- Week 5. Results of Study Habits Survey compilation discussed in each class, showing where they are weak and what remedies may be applied. (This will be discussed in Area meeting.) Psychological results of cramming discussed.
- Week 6. If it can be arranged with Communications 150 instructors, have a symposium of several speakers in their large group session, on the topic of: financial aids, college placement, and student activities. If this is not possible, arrangements will be made for individual speakers to visit these classes. Assign Workbook, pages 32-42 (career programs.)
- Week 7. Same as above with career programs available within the college.
- Week 8. Interest test results returned. General interpretation and making of profiles. This takes a full hour, and may even spread over into the next session.
- Week 9. Begin educational planning, page 43. Perhaps an explanation again of the value of general education is appropriate here. Those who wish to pursue a technical career may wish to complete a full year on the ECD Program prior to entering a career program. This may be the week to start group work if this has not been done before. Divide students into groups according to their occupational interests and/or



the results of the interest test. Page 53 in the Workbook may be helpful, "Gaining Information in a Group."

- Week 10. Continuation of educational planning, in connection with careers desired, whether or not they agree with interest test results. All students interested in fields of engineering should make an appointment to take a mechanical aptitude test. These will be explained in Area meeting.
- Week 11. Discussion of graduation requirements as listed in the college catalog in connection with their first year's schedule. These should be completed by now, in order that pre-registration may be given out again next semester when program planning for the whole second year is begun. If at all possible, the same group of students should register for the same block for the second semester. Even if they are breaking some of the classes, they should keep together in Freshman Seminar 160.
- Week 12. Further interest tests, if desired, generally on an individual basis. Continuation of educational planning and investigation of various occupations by small groups. Reports to class of what they have discovered will be made starting next week.
- Week 13. Review of exam-taking methods. Students report on what they have found out about college so far. Compare with articles in Workbook, pages 8-9, "College Freshmen Tell How It Is Done" and pages 25-26, "Counseling Staff Offers Reasons Regarding U of M Student Failures." Student reports on occupations.
- Week 14. Stress importance of communications skills in completing college or technical program. Demonstrate how this helps in social science, humanities, and natural science. Play the word game in Workbook, page 24. The key will be given to instructors in Area meeting. Read accompanying article, "Do You Know How Words Can Make You Rich?" Explain the principles of rapid reading, skimming, etc. Pass book lists to encourage students in the "one book a month" habit. Student reports on occupations.

- Week 15. Student reports on occupations. Begin telling classes what they will be doing in Freshman Seminar 160: a type of personality test (Allport Study of Values) to see if it agrees with the interest test they took this semester; field research on the tentative career they have chosen this semester, including an interview with an individual actually working in this job; a written term report on this occupation, being aided by the Communications 160 instructor; completion of second year program planning; plans made for transfer to a senior college or to a technical program or school.
- Week 16. Administration of the Post-Course Survey.
- Week 17. Student reports on occupations. Wind up course.
5. Catalog course description for Orientation 160
    - a. Continuation of Freshman Seminar 160. Examination of the principles of mental hygiene through comparison of tested values and interests as applied to students' vocational objectives and attitudes toward employment and human relations. An in-depth study of an individual occupation is completed, with exploratory employment in a chosen field encouraged.
    - b. Freshman Seminar 150 is listed above with its syllabus.
  6. Course requirements
    - a. Attendance
      - (1) Attendance is required at all sessions unless specifically excused for field research, or to be made up in a manner satisfactory to the instructor.
      - (2) After three absences without satisfactory explanation, a student will be dropped from the class.
    - b. Materials
      - (1) Freshman Seminar Guidebook, edited by Dorothy B. Kaufman (published by Macomb County Community College, Warren, Michigan, 1967). This text is sold through the Book Store. Students who were enrolled in Orientation 150 will already have the book.

- (2) Your Attitude is Showing, by Elwood Chapman (Chicago: Science Research Associates, 1964). This is a small paper-back book dealing with methods of getting along in business and industry.

c. **Activities.** Completion of written and other requirements:

- (1) Data Sheet. (This is not in the first edition of the text-book. It will be given to instructors in Area meetings.)
- (2) Allport Study of Values.
- (3) Field Research Blank on Career Investigation.
- (4) How to read college catalogs work sheet.
- (5) A technical report on an occupation, which includes library research, sending for pamphlet material, and an interview with an individual engaged in that occupation. It is hoped that the form for this report will be worked out in each team with the cooperation of the Communications 160 instructors. The carbon copy is to be kept in student's file.
- (6) Program Plan for second year at M. C. C. C.
- (7) Freshman Seminar 160 Post-Course Survey
- (8) An oral report on the occupation, either individual or in a group, if instructor desires this activity.
- (9) At least one individual conference with a Program Adviser or Counselor regarding student's future educational plans.

7. **Grading Criteria.**

- a. The grades of A, B, C, W, and WP are the only grades which shall be given for Freshman Seminar 160.

- b. Each instructor will give grades according to his own standards. It is hoped that some recommendations will be forthcoming from the entire Area for the 160 course in addition to the 150 course.

8. Model outline

(Individual instructors will deviate from this outline.)

- Week 1. Review Freshman Seminar 150, especially SQ4R, note-taking, and exam-taking. Discuss difficulties encountered in various courses and make plans as a group to attack any weaknesses. Individual appointments with students who made poor grades the first semester, to discuss their individual problems. Assign: "Misconceptions," pages 51, 52 of Freshman Seminar Guidebook; also Preface, Table of Contents, Introduction, Chapters 1 and 2 of Your Attitude is Showing.
- Week 2. Discuss articles and chapters assigned. Pass back Program Work-Sheets from last semester. Pass catalogs and discuss reasons for knowing general direction before planning second year courses. Discuss graduation requirements. Encourage additional individual interest surveys (California Occupational Interest Inventory, which can be hand-scored.) Hand out blank data sheet and assign for next week. Use overhead projector to show a sample of a completed data sheet. This should serve to show students the qualifications they need for the job they eventually hope to achieve as well as how many qualifications they may have by the end of their second year in college for an entry job at a semi-professional level.
- Week 3. Collect data sheets. Discuss further. Assign Field Research Blank, pages 65-67, in textbook. Discuss this long-range assignment. Hand out half-sheets for interview information to be completed next week. Assign Chapter 3 in Chapman text.
- Week 4. Discuss interview procedures. Collect interview blanks. Discuss difficulties in finding library material and make

appointments with students to see what is in Basic Education Division Guidance files. Discuss Field Research Blank further, including procedures for sending away for materials. Pass back data sheets and discuss. Discuss assignment in Chapman text. Assign Chapter 4 and 5 in Chapman.

- Week 5. Short written quiz on Chapters 4 and 5 in Chapman while looking over Field Research papers to see which students are having difficulty and need individual help. Give time to groups who are going together for interviews to work out details. Hand back Field Research papers for them to continue work on. Assign Chapter 6 in Chapman.
- Week 6. Begin program planning for next semester. Introduce "Reading College Catalogs" and pass one set of either Wayne State University or Eastern Michigan University catalogs to use for samples. Pages 46-50, Guidebook. Go through first eight topics listed on page 46 together, showing students how to find the requirements. Jot down answers under "Questions Before You Begin." Also use M. C. C. G. catalogs to complete requirements for graduation. Assign remainder of Program Work Sheet to be done outside class. Assign remainder of college catalog assignments to be done outside also. Assign Chapter 7 in Chapman, to be discussed next week along with Chapter 6.
- Week 7. Pass set of college catalogs (opposite from those last week) and repeat the process. Assign: complete your own program work sheet at home or in the library with the catalog of the college of your choice for next week. Discuss chapters 6 and 7 in Chapman. Since Chapter 7 is long, some discussion may be held over. Assign Chapter 8.
- Week 8. Collect "college catalogs" assignment. Make appointments with those who need help. Discuss interviews which students have already had for their research report. Stress question #8, page 65, "Do the steps to enter this occupation, according to your interviewee, agree with your prior research?" Discuss entry jobs in fields of largest choice; summer jobs which may be good training ground. Check program plans and re-assign for next week in case of errors.

Collect completed ones. Discuss Chapter 8. Announce Allport Study of Values for next week and its purpose.

- Week 9. Collect remainder of program plans. Administer Allport Study of Values. You may wish to demonstrate scoring all at once next week. Use time for individual interviews with students who finish early. Pass back program plans with comments, if completed.
- Week 10. Score Allport Study of Values. Interpret in a general way. Compare with fields of interest from results of Kuder Occupational Interest Survey administered last semester. Return college catalogs assignment. Discuss Chapter 8 in Chapman. Assign Chapter 9.
- Week 11. Return remainder of program plans and discuss. Form groups high in each "value" on the Allport, to discuss how these agree or disagree with their chosen occupational areas. Meet with each group. Discuss Chapter 10.
- Week 12. Encourage students not satisfied with career choices to obtain further interest and/or aptitude tests. Research papers are due to Communications class this week (if this has been worked out in the team and is agreeable to the Communications instructor.) Discussion of students' experiences obtained during interviews. Discuss Chapter 10. Assign Chapters 11 and 12.
- Week 13. Further discussion of interviews and findings about careers from students' field research. Introduce the D. O. T. (Dictionary of Occupational Titles.) Refer back to the article in the Guidebook on "Misconceptions." Discuss Chapters 11 and 12. Assign 13 and 14.
- Week 14. Further discussion or reports by students of their interviews. Continuation of work with the D. O. T. Stress job fields or areas as opposed to a specific job. Show this relationship. Discuss Chapters 13 and 14. Assign Chapter 15.
- Week 15. Research papers due to Freshman Seminar 160 classes. Further discussion of D. O. T., entry jobs, summer jobs. Review of College Placement Service, Financial Aids, Student Activities. Discuss Chapter 15. Assign Chapters 16, 17, and 18.

- Week 16. Assign Chapters 19 and 20 for next week for discussion along with the others. Administer "Post-160 Survey."
- Week 17. Wind up course. Discuss Chapters 16, 17, and 18. Discuss possible plans for a Basic Education meeting occasionally during the sophomore year for the purpose of helping students with difficulties they may encounter. Discuss Chapters 19 and 20. Oral evaluation of the course if this seems appropriate.

#### IV. Summary

The greatest change which has occurred during the 1966-67 year has been the abolition of the Orientation 160 course. After trying for three semesters to do without this course, it has been realized that Basic Education students need more guidance, not less, than Liberal Arts students, and plans are being made to reinstate the 160 course.

Another noteworthy change is the name of the course from "Orientation" to "Freshman Seminar" for 1968-69. The rationale for this is that there are several "Orientation" sessions and other courses by the same name on this campus and this often causes confusion. Also, after the first few weeks of the class, students become oriented to their new environment and have a tendency to think they no longer need to attend. Since by definition a seminar is "a meeting for giving and discussing information," this fits the activities of our 150 course. Another definition of seminar is "a group of advanced students studying under a professor with each doing original research and all exchanging results through reports and discussions." This agrees with the activities planned for our 160 course.

A development which began during the Spring semester, 1967 has been expanded during the Fall semester, 1967, namely the utilization of more Basic Education subject-matter instructors to teach Orientation and fewer counselors to do so. This expansion has resulted in weekly area meetings which have become seminars led by the Lead Teacher in Orientation and assisted by the counselors who are teaching Orientation.

Another development which may prove to be revolutionary is the experiment going on in Block 1 through 6 during the year 1967-68. If the small group (ten or less) approach proves to be more supportive for students than the usual block of twenty students, it may be that this structure will be adopted on a wider basis in future semesters, providing the rooms and personnel are available.

## ORIENTATION 1967-68

During the current academic year we tried an experiment in the Orientation classes of using more instructors of subject matter from the Division of Basic Education than counselors from the Division of Student Personnel Services than we formerly had done. One reason for this was that we had fewer counselor volunteers to teach the classes than formerly. The first semester five counselors, in addition to the lead teacher, taught Orientation classes as well as eleven instructors from other subject matter areas within the Division of Basic Education.

Because of the great variety of backgrounds of the teaching personnel, it was necessary to have weekly meetings for the Orientation Area. This not only posed problems of time and space for meetings but also proved strenuous to both instructors and counselors. Due to the variety of schedules, two Orientation Area meetings were held weekly in order that each person would be able to attend one meeting. When counselors were able to attend meetings they were most helpful in expanding the explanations given by the Lead Teacher/Program Counselor. Since they were also required to attend team meetings, it was impossible many times for them to take time to attend one of the Area Meetings.

During the second semester (for Orientation 160) since all of the instructors except two had taught the 150 course, it was felt not necessary to continue the weekly meetings. Only three Area Meetings were held the second semester. The same counselors continued teaching Orientation 160 classes, but there were some additions and deletions in the seven subject matter instructors utilized.

Since Orientation 160 had not been offered for a year, it was somewhat changed from the year 1965-66. A textbook was experimented with, entitled, Your Attitude Is Showing, by Elwood Chapman (paperback) and the Allport Study of Values was administered as a follow-up to the Kuder Occupational Interest Inventory given in 150. The term report on an occupation was reinstated and handled on the basis of team cooperation, in whatever manner the individual instructors could work it out on their teams.

The Freshman Seminar Guidebook (paperback) edited by Dorothy Kaufman, was used both semesters, and a revision of it is planned to be used next year also (1968-69).

Elwood Chapman's So You're A College Freshman (paperback) was used in the three Orientation 150 classes during the second semester. It is the consensus of opinion of both teachers and students that neither of these books should be used again.

Although there are many things wrong with the Orientation course as it now stands, it is believed that it is surely better than not having it at all. Before any drastic changes can be introduced, the original plan must be examined under which it was incorporated into the structure of the



Educational Cultural Development Program of the Division of Basic Education. With this in mind, the Lead Teacher has interviewed each counselor who has taught the course this past year and is in the process of interviewing each subject matter instructor to ascertain personal views of how the course can be improved and/or altered.

One of many suggestions which has developed from the experience of having instructors teach the course is to streamline the referral process. This was explained at the final Division Meeting for the year, 1968.

During the year, the name of the course was changed to Freshman Seminar 150 and 160 so that future students hopefully will construe it as a discussion class which is valuable throughout the year rather than only the first few weeks until they are oriented to college life.

During 1967-68 a revised equivalency sheet was issued as a result of joint efforts of the Lead Teachers and Program Counselor. The Lead Teachers had expressed the feelings of their areas that by equating courses with already established Liberal Arts courses they were being restricted in innovation and further development of their courses as the needs of students changed or were perceived differently by the instructors.

At the Division Meeting, May 10, 1968 the Program Counselor gave the history of the equivalency sheet, showing that it had been a necessary transition step in order that counselors working as liaison agents with other colleges in Michigan would have some common basis by which to interpret our courses. It is hoped that "departmental" credit only will be given at other colleges for our courses and that those students who wish to specialize in a particular academic area will begin with the basic courses in their fields after their year of general education. If we had not had these few years of so-called equivalency on which to base our curriculum, it is possible that not only our own faculty members outside the Division of Basic Education but also admissions officers in other Michigan colleges would have perceived it as a non-transfer program. These sheets are appended to this report. (Appendix A & B)

A counseling intern, Mr. Anthony Donato, assisted the Lead Teacher during two late afternoons per week during the second semester. In addition to being a learning situation for him, he also tabulated results of the Final Surveys given the first semester. The Survey itself was a joint effort by all the instructors of Orientation 150 classes to ascertain how well the goals for the semester were attained.

It was agreed to administer the Final Survey during the 16th week of classes since no final exams are given in Orientation classes. It was also agreed that instructors might decide to have students fill them out anonymously, only placing the block number on the sheets. However, out of 26 sections, only 17, or 65%, were returned for tabulation. Two of those were not identified by block number.

From the questions on the Survey, Mr. Donato asked the following questions in order to arrive at some kind of a comparison:

1. Which block had the fewest (or most) errors?
2. Which block best understood how to figure G.P.A.?
3. Which block best understood procedures for transfer?
4. Which block had the greatest number of students who entered with a vocational objective?
5. Which block had the greatest percentage of students who changed their vocational objectives during the semester?
6. Which block had the greatest percentage of students who did not know or answer concerning their strengths and weaknesses?
7. Which block had the greatest percentage of students who did not know what they could do to improve their weaknesses?

The questions tabulated concerning favorite student activities were not arranged according to blocks, but were rated (1) sports, (2) lectures (3) field trips in order of popularity.

The most common subject matter weaknesses expressed by students were not tabulated by blocks, but were rated (1) Science (2) English (3) Math (4) History in order of times mentioned. Interestingly enough, the most common strengths received the same order of preference: (1) Science (2) English, and (3) Math. History was not mentioned as a strength.

A chart is appended showing the rough data according to blocks arranged in descending order of correct questions. For more meaningful interpretation graphs should be prepared for each of the relevant questions. However, Mr. Donato's general impressions from correcting all of the Surveys will no doubt be upheld. His remarks are appended with the chart. (Appendix C & D)

Final Surveys for Orientation 160 have been collected and it is hoped that a similar tabulation can be made in the fall of 1968, possibly by student help.

\* \* \* \* \*

In conclusion, it is my impression that the Orientation classes have not been able in most cases to meet the objectives set up at the beginning of the year. All of the counselors handed in their Final Surveys. The ones who were omitted were those of subject-matter instructors. Further generalizations can not be made at this time. However, several subject-matter instructors expressed frustration with the program advisement portion of the course as they felt inadequate to deal with it. Since this is one of the key parts in aiding students to plan for the future my recommendation is to use as few subject-matter instructors as possible. If it is at all possible to utilize counselors on an overload basis this would probably meet with more approval than as a part of their counseling day.

Prepared by:  
 Dr. Dorothy Kaufman  
 Lead Teacher, Orientation Area and  
 Counselor, Division of Student Services

## Appendix A

## Educational and Cultural Development Program

REVISED COURSE EQUIVALENCY SHEET  
(1968)General Statement

In general, none of the courses in the Educational and Cultural Development Program replaces any Liberal Arts Courses, with the exception of English 110, English 120 and Political Science 100 for graduation purposes.

The approach used by the faculty of the Educational and Cultural Development Program is a broad, general one, similar to that used at Michigan State University's "University College," Wayne State University's Monteith College, Northern Michigan University's Common Learnings Program, and Boston University's College of Basic Studies. The course names and content of the "ECD" courses are similar to many of those mentioned in these other colleges. The matter of equivalency with liberal arts courses is dealt with in a different manner on each campus.

"ECD" has had many more successful students than was expected from college placement test scores and high school transcripts. Consequently, the level of aspiration of approximately 40% of these students continues to be high and the matter of equivalency with Liberal Arts Division courses recurs. A new statement seems appropriate.

General Education CourseLiberal Arts Equivalencies

## I. Communications

A. Communications 150	4 hours	**Communications 90 for career program students; English 110 for transfer students.
1. Composition 3 hrs.		
2. Speech* 1 hr.		
B. Communications 160	4 hours	**Communications 91 for career program students; English 120 for transfer students.
1. Composition 3 hrs.		
2. Speech* 1 hr.		

\*The speech included is primarily discussion techniques and oral interpretation and may be equated as general speech credit, but is not equivalent to Speech 100 or any other course in the Speech Department.

\*\*A grade of C generally permits entry to the next level course in the English Department in Liberal Arts: English 231 is recommended as a natural sequence. However, Communications instructors may recommend additional Freshman English courses if they feel students need further preparation before continuing. It is also recommended that students complete the sequence of ECD Communications rather than attempt to go from Communications 150 to English 120.

## ECD Revised Equivalency Sheet (1968)

General Education CourseLiberal Arts Equivalencies

II. Social Science 4 hours None.

## A. Social Science 150

1. Sociology 3 hrs.
2. Anthropology 1 hr.

While the subject matter remains essentially the same, this course emphasizes problems which man encounters in his social environment such as poverty and crime.

B. Social Science 160 4 hours Political Science 100  
(for graduation purposes)

1. Political Science 3 hrs.
2. Economics 1 hr.

An integrated course placing primary emphasis on the governmental structure of the United States with added emphasis on economic practices and theory as they are practiced in different economic systems.

It is recommended that those students who intend to major in any of the social sciences begin those ~~subject~~ either the second semester of their freshman year or during their second year, depending upon their achievement in Social Science 150. It is also recommended that this decision be made carefully and in consultation with a counselor.

## III. Natural Science

A. Natural Science 150 4 hours None.

1. Physical Science 1 hr.
2. Geology 1 hr.
3. Evolution 2 hrs.

A generalized course dealing with the origins of the earth and man.

B. Natural Science 160 4 hours None.

1. Anatomy and  
Physiology 2 hrs.
2. Ecology 2 hrs.

The emphasis is upon man's problems in his physical environment.

It is recommended that students who prove able enough in Natural Science 150 (A grades) and wish to major in a specific science, begin that sequence the second semester instead of electing Natural Science 160, e.g. Biology 100.

## ECD Revised Equivalency (1968)

General Education CourseLiberal Arts Equivalencies

## IV. Humanities

A. Humanities 150                      3 hours                      None.

1. Art Appreciation
2. Music appreciation
3. Philosophy & literature

B. Humanities 160                      3 hours                      None.

1. Art appreciation
2. Music appreciation
3. Philosophy & literature

While Humanities has generalized art and music appreciation within it, there is also much more of philosophy and literature included than would appear from the former equivalency sheet. It is recommended that if both Humanities 150 and 160 are successfully completed, students not take Art 191 (Appreciation) or Music 131 (Appreciation) in the Liberal Arts Division.

## V. Freshman Seminar

A. Freshman Seminar 150              1 hour                      None.

1. Understanding of self
  - a. Own test interpretation
  - b. Examination of educational and vocational goals
2. Methods of learning
  - a. Own methods examined
  - b. Methods of other college students examined

B. Freshman Seminar 160              1 hour                      None.

1. Understanding of self
  - a. Examination of own values and attitudes toward employment, work and study habits, and relationships with others.
  - b. The choice making process.
2. Methods of Learning
  - a. New methods introduced
  - b. Own methods re-examined

## ECD Revised Equivalency (1968)

While the content of these courses is psychological in nature, they are not designed to replace any psychology courses, but rather as a survey of some of the principles of mental hygiene applicable to freshmen. It is intended that individual conferences with a counselor will accompany these classes. Some colleges will accept these classes for generalized credit, notably Eastern and Northern.

## Appendix B

Educational and Cultural Development  
Program Course Equivalencies (old sheet)

The subject matter of the general education courses and their suggested course equivalencies are listed below:

General Education CourseLiberal Arts Equivalencies

## I. Natural Science

- |                        |         |   |
|------------------------|---------|---|
| A. Natural Science 150 | 4 hours |   |
| 1. Geology             | 2 hours | } |
| 2. Chemistry           | 2 hours |   |
| B. Natural Science 160 | 4 hours |   |
| 1. Biology             | 4 hours | } |

Physical Science 102

Biology 100

## II. Social Science

- |                       |         |   |
|-----------------------|---------|---|
| A. Social Science 150 | 4 hours |   |
| 1. Sociology          | 3 hours | } |
| 2. Anthropology       | 1 hour  |   |
| B. Social Science 160 | 4 hours |   |
| 1. Political Science  | 3 hours | } |
| 2. Economics          | 1 hour  |   |

Sociology 100\*

Political Science 100\*

\*If both Social Science 150 and 160 are successfully completed.

## III. Humanities

- |                       |         |   |
|-----------------------|---------|---|
| A. Humanities 150     | 3 hours |   |
| 1. Art appreciation   | 2 hours | } |
| 2. Music appreciation | 1 hour  |   |
| B. Humanities 160     | 3 hours |   |
| 1. Art appreciation   | 2 hours | } |
| 2. Music appreciation | 1 hour  |   |

- C. If both Humanities 150 and 160 are successfully completed

Art 191 (Appreciation)  
Music 131 (Appreciation)

## IV. Communications

- |                       |         |   |
|-----------------------|---------|---|
| A. Communications 150 | 4 hours |   |
| 1. Composition        | 3 hours | } |
| 2. Speech*            | 1 hour  |   |
| B. Communications 160 | 4 hours |   |
| 1. Composition        | 3 hours | } |
| 2. Speech*            | 1 hour  |   |

\*\*Communications 90,  
English 50, English 110

\*\*Communications 90,  
English 110, English 120

\*The speech included is primarily discussion techniques and oral interpretation and may be equated as general speech credit, but is not equivalent to the beginning speech course which is essentially public speaking.

\*\*A grade of C generally permits entry to the next level course in the English Department. However, in addition, Communications instructors reserve the right to recommend additional courses in the English Department if they feel students need further preparation.

## V. Orientation

None

Appendix C

RESULTS OF ORIENTATION 150

Block No.	No. of Students	No. Correct Questions	No. Incorrect Questions	% Correct Figure GPA	% Correct Transfer Procedures	Favorite Activity	% Entered Vocational Objective	% Changed Vocational Objective	Most Common Weakness	Most Common Strength	% Did Not Know Strengths Or Weaknesses	% Know What Can Be Done About Weakness
7	17	20.5	4.5	59.0	26.5		76.5	6.0			-0-	23.5
21	17	20.4	4.6	12.0	97.0		94.1	47.0			11.8	52.9
6	10	20.2	4.8	20.0	90.0		80.0	40.0			90.0	40.0
B	23	20.1	4.9	43.0	91.3		17.3	21.7			30.4	13.0
23	21	19.6	5.4	5.0	42.8		57.1	14.3			-0-	38.1
17	17	19.5	4.5	35.0	82.3		47.1	23.5			17.6	29.4
A	23	19.0	6.0	4.0	30.4		47.8	13.0			26.1	21.7
15	18	18.8	6.2	36.0	94.4		77.7	38.9			16.7	33.3
22	18	18.5	6.5	-0-	44.4		66.6	11.1			-0-	44.4
27	11	18.3	6.7	50.0	50.0		72.7	9.0			9.1	45.5
9	12	18.2	6.8	50.0	25.0		91.6	-0-			66.7	25.0
10	18	17.8	7.2	28.0	19.4		61.1	11.1			33.3	11.1
5	7	17.7	7.3	14.3	71.4		85.7	-0-			100.0	57.1
12	14	17.4	7.6	7.0	14.2		92.8	21.4			14.2	57.1
11	12	17.3	7.7	33.3	66.6		58.3	25.0			75.0	16.7
30	15	16.3	8.7	-0-	10.0		66.6	26.4			53.3	6.7
4	15	16.2	8.8	-0-	23.3		93.3	13.3			46.7	46.7



PROGRAM EVALUATION

## Methodology

1. Background information on all students will be obtained from their Macomb County Community College application forms, pre-college achievement tests, high school transcripts, and from end of the year questionnaires given to all ECD students and mailed to the comparison group.
2. Information on college credits, grades and persistence will be obtained from the records kept at Macomb.
3. Vocational interests of the ECD students at entrance into college will be obtained from the Life Aims papers written immediately after enrollment into the program. Vocational choices of the comparison group will be obtained from their college application forms.
4. Vocational choices of both ECD students and the comparison group at the end of the second year will be taken from a questionnaire administered to ECD students at the end of their second semester and mailed to the comparison group during the summer.
5. ECD students and comparison group students' first year involvement in college activities, part time employment and future plans will be obtained from end of the year questionnaires given to ECD students and mailed to the comparison group during the summer.
6. ECD students' and comparison group students' (a) second year involvement in college activities, (b) second year part time employment, (c) future plans, (d) second year schooling, (e) jobs held, if not in school, (f) second year attitudes about classes, faculty, and college, (g) reasons for dropping out of college, and (h) second year reactions to total college experience will be obtained from a questionnaire mailed to all students during the summer after their second year and answered personally by those students who came in for interviews.
7. ECD student evaluations of the entire program will be obtained from Program evaluations given at the end of each semester.
8. Material on faculty innovations will be obtained from sample material developed by the Teams.

All the data will be used to develop tables and furnish content for a narrative. The tables will result from material coded for Control Data Corporation and material tabulated by hand.

The tables from Control Data will result from data about (a) all students background; (b) all students pre-college tests, credits, grades and persistence at Macomb; (c) all students first year involvement, employment, and vocational plans.

The tables based on hand tabulated material will cover second-year (a) enrollment, (b) jobs, (c) plans, (d) attitudes about faculty, classes and college, (e) persistence, (f) part time employment, and (g) student evaluations of the Program.

The material not placed in tabular form will furnish the basis for narrative.

The overall organization of the evaluative material will relate to the objectives set forth in the beginning section of this Progress Report.

## PERSISTENCE

One of the measures of the ECD Program's success is the students' persistence in the program and after they leave it, their persistence in the liberal arts program at Macomb County Community College. Persistence is defined in this study in two ways. First, persistence is simply the number and percent of each group that stayed at Macomb for a given length of time. Second, persistence is the measure of credits attempted and earned by the students in each group. That is, credits attempted would be the number of credits that each student actually registered for, whereas the credits earned would be the number of credits he was actually taking at the end of each semester or year. This would mean that all classes withdrawn from or dropped during the semester or year, as well as those failed, would be subtracted from the final count of credits earned.

### Hypothesis

The ECD Program hypothesized that: (1) more students would stay longer if they entered into our program than if they registered in the regular liberal arts transfer courses; (2) that the ECD students in Groups A and C would attempt and earn more credits each semester and year than those students in the liberal arts program; and (3) ECD students would drop fewer courses so that the difference or discrepancy between credits attempted and credits earned would be less for the ECD students than the students who registered in liberal arts courses.

Table 13 compares Groups A and B as to number and percent of the students who actually stayed in college the entire four semesters (or two years).

Group A and B are similar when compared in this manner. Both groups managed to keep about 40% of their original group. This would mean that about 40% of those students who entered ECD and liberal arts in 1965 were actually taking some courses in June of 1967.

When all those students in both Groups A and B who actually stayed the full two years were compared as to their mean SCAT-T scores, it was found that Group A students who stayed had a mean score of 32.27; whereas Group B students who persisted had a mean score of 38.82.

Table 14 measures the persistence rate of all three Groups, A, B, and C, for one year.

Again, all three groups, considered in total, have similar persistence rates. About 80% of those students who began the year in September actually were taking courses at the end of the second semester.

Table 15 indicates the students who entered Macomb in 1963 had a much higher rate of drop-outs as compared to Groups A, B and C.

These students were all taking courses during the afternoon and evening hours, as the college did not yet have any day classes.

TABLE 13

## PERSISTENCE--A AND B, TWO YEARS

	A PERCENT	A NUMBER	B PERCENT	B NUMBER
4 Sem.	45.2	(117)	40.0	(62)
3 But Less Than 4	3.3	(13)	5.2	(8)
3 Sem.	13.5	(53)	12.9	(20)
2 But Less Than 3	4.9	(19)	5.8	(9)
2 Sem.	19.4	(76)	21.3	(33)
1 But Less Than 2	5.1	(20)	1.9	(3)
1 Sem.	6.4	(25)	9.0	(14)
Less Than 1	2.3	(9)	3.9	(6)
TOTAL NUMBER	100.0	(392)	100.0	(155)
NO DATA		(1)		(1)

TABLE 14  
 PERSISTENCE-- A, B, AND C, ONE YEAR

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
2 Sem.	82.2	(323)	80.8	(126)	81.2	(454)
1 But Less Than 2 Sem.	4.8	(19)	2.6	(4)	3.9	(22)
1 Sem.	9.4	(37)	12.8	(20)	12.2	(68)
Less Than 1 Sem.	3.6	(14)	3.9	(6)	2.7	(15)
TOTAL NUMBER	100.0	(393)	100.0	(156)	100.0	(559)
NO DATA		(0)		(0)		(2)

TABLE 15

## PERSISTENCE FROM THE STUDY OF 100

TOTAL ENTERED	1 SEMESTER OR LESS	3 SEMESTERS OR LESS	LESS THAN 4 SEMESTERS	NO DATA	TOTAL DROPS	4 SEMESTERS OR MORE
100	33	56	63	3	63	34

Table 16 is persistence measured as the number of credits attempted and earned. This table indicates the number and percent of all students in Groups A, B and C who attempted and earned a given amount of credits in one year. Within the boxed-in area can be observed the number and percent of all the students who actually attempted and earned between 25 and 33 credits in one year. Group A had 58.5% of their students fall within this success category, Group B had 25.6% and Group C had 59.0%. 72.3% of the students in Group B attempted to earn between 25 and 33 credits, but their performance fell short of this.

Another means of interpreting this table would be to decrease the range of success and consider that attempting and earning between 28 and 33 credits in one year is considered to be success. That is, a student, if he wishes to graduate in two years, must earn between 28 and 33 credits his first year in order to fulfill graduation requirements in one more academic year. When the area of success is decreased, then Group A has 47.3% of their students fall into this category; Group C has 51.3% and Group B has 10.2%. Again, comparing Group B's attempts at earning this number of credits with the actual performance, indicates that 34.6% of Group B made an attempt to earn between 28 and 33 credits, but 10.2% actually did so.

Table 17 moves on from the first year comparison to the second year comparison between Groups A and B. Again, this table relates each student's attempts at earning credits to their actual earning of those credits.

Macomb County Community College requires that a student have earned 62 credit hours in order to graduate. Therefore, a student who attempts and earns 55 or more credits will be considered to have achieved their two year goal. The students in both groups who actually achieved this goal are in the box at the upper right hand corner. Group A had 22.6% of their students fall within this box; whereas Group B had 10.1%. Group B actually had 32.8% of their students attempt to earn 55 or more credits during the two years, and in Group A 41.2% of their students attempted this. Group A had fewer students attempt to earn 55 or more credits and fail at earning this number; Group B had more students attempt to earn 55 or more credits than actually did so.

Table 18 relates mean credits attempted and earned to SCAT-T decile ranges for all three groups for one year only.

Both Groups A and C attempted and earned more credits than Group B in all SCAT-T decile ranges. The difference between A and B and B and C is statistically significant when credits attempted and earned is the means of comparison. The discrepancy or difference between credits attempted and credits earned is greater for Group B in all SCAT-T decile ranges. The mean credits attempted by Group B never goes above 28 in any of the decile ranges. Yet earning 28 credits in one year is necessary if a student is to finish his academic work in the prescribed two years.



TABLE 16  
CREDITS ATTEMPT/EARNED - YEAR 1, A, B, & C,

Gr. Att.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.
C 31-33	0.2	1	0.2	1	0.2	1	0.7	4	2.2	12	0.7	4	2.7	15	1.8	10	5.3	29	5.8	32	2.2	12	47.9	264
B 31-33					0.6	1					1.3	2			1.3	2					1.3	2	0.6	1
A 31-33	0.3	1			0.3	1			0.3	1	1.3	5	0.3	1	0.5	2	0.8	3	0.5	2	2.6	10	3.8	15
C 28-30					0.2	1	0.4	2	0.2	1			0.2	1	0.7	4	1.3	7	1.1	6	2.2	12		
B 28-30									1.3	2	0.6	1	3.2	5	4.5	7	4.5	7	7.1	11	8.3	13		
A 28-30			0.5	2	0.8	3	1.5	6	3.1	12	4.4	17	3.3	13	3.8	15	4.4	17	10.0	39	41.0	160		
C 25-27							0.2	1	0.7	4	0.4	2	0.4	2	0.4	2	0.4	2	0.9	5				
B 25-27	1.3	2	1.3	2	0.6	1	0.6	1	3.2	5	2.6	4	3.8	6	6.4	10	9.6	15	8.3	13				
A 25-27					0.5	2	0.3	1	0.3	1			0.3	1	0.3	1	0.3	1	0.8	3				
C 22-24	0.2	1			0.2	1					0.2	1	0.4	2	0.4	2	1.5	8						
B 22-24							1.3	2	1.3	2			1.9	3	3.2	5	1.3	2						
A 22-24	0.8	3	0.3	1	0.3	1	0.3	1	0.3	1			0.3	1	0.3	1								
C 19-21	0.2	1	0.4	2	0.2	1			0.5	3	0.5	3	0.2	1	0.2	1								
B 19-21			0.6	1									0.6	1	1.3	2								
A 19-21					0.3	1																		
C 16-18	4.7	26	2.5	14	1.6	9	0.9	5	2.2	12	0.2	1	2.5	14										
B 16-18	0.6	1					0.6	1	0.6	1														
A 16-18																								
C 13-15	0.2	1	0.2	1																				
B 13-15	4.5	7	0.6	1			1.9	3	1.3	2														
A 13-15	6.9	27			1.0	4	0.8	3	1.0	4	1.3	5												
C 10-12									0.2	1														
B 10-12	2.6	4					0.6	1	1.3	2														
A 10-12	0.3	1																						
C 07-09					0.2	1																		
B 07-09	0.6	1																						
A 07-09	0.3	1																						
C 04-06	0.2	1	0.2	1																				
B 04-06	0.6	1																						
A 04-06																								
C 01-03																								
B 01-03																								
A 01-03																								
Gr. Earn	0		1-03		4-06		7-09		10-12		13-15		16-18		19-21		22-24		25-27		28-30		31-33	

TABLE 17

CREDITS ATTEMPTED--CREDITS EARNED--GROUPS A AND B, TWO YEARS

Gr. Attpt.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.	PCT.	NO.		
B 67-69 A 67-69																						
B 64-66 A 64-66					0.6	1					0.3	1				0.3	1	0.3	1			
B 61-63 A 61-63																0.6	1		0.5	2		
B 58-60 A 58-60																			0.6	1		
B 55-57 A 55-57			0.6	1							1.3	2	0.3	1			0.3	1	0.6	1		
B 52-54 A 52-54									0.3	1	0.5	2					0.3	1	0.5	2		
B 49-51 A 49-51											0.3	1	0.3	1				0.6	1	0.3	1	
B 46-48 A 46-48							0.5	2	0.6	1	0.3	1			0.3	1	0.5	2	0.6	1		
B 43-45 A 43-45									0.5	2	0.5	2	0.8	3	0.8	3	1.3	2	0.6	1	1.9	3
B 40-42 A 40-42	0.6	1					0.6	1			0.6	1					1.3	2	0.6	1	0.3	1
B 37-39 A 37-39	0.3	1					0.6	1	0.3	1	0.6	1			0.6	1			0.3	1	0.6	1
B 34-36 A 34-36					0.5	2					0.6	1	0.3	1	0.5	2	0.5	2	0.6	1	0.6	1
B 31-33 A 31-33			0.3	1			0.3	1			0.8	3	0.3	1			1.3	2	0.6	1	0.6	1
B 28-30 A 28-30	0.3	1	0.5	2	1.0	4	0.6	1	0.5	2	0.6	1	2.6	4	1.3	2	1.9	3	1.3	2	1.9	3
B 25-27 A 25-27	0.6	1	0.6	1	0.6	1	0.6	1	0.6	1	0.6	1	1.3	2			0.6	1	0.6	1		
B 22-24 A 22-24	0.8	3	0.3	1			0.6	1	0.3	1	0.6	1	1.3	2	0.6	1						
B 19-21 A 19-21	0.3	1	0.6	1	0.3	1									0.6	1						
B 16-18 A 16-18	0.6	1					0.6	1	0.6	1												
B 13-15 A 13-15	4.5	7	0.6	1			1.3	2	1.3	2			1.3	5								
B 10-12 A 10-12	1.9	3					0.6	1	1.3	2												
B 07-09 A 07-09	0.6	1																				
B 04-06 A 04-06	0.6	1																				
B 01-03 A 01-03																						
Gr. Earn	0	1-30	4-06	7-09	10-12	13-15	16-18	19-21	22-24	25-27	28-30	31-33										

PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO.

0.3	1					0.3	1			0.3	1	0.5	2	0.6	1	1.3	2	0.6	1	1.3	4
														0.3	1	1.5	6	0.8	3	0.3	1
0.5	2				0.6	1		0.5	2	0.3	1	0.5	2			1.3	2				
0.6	1			1.3	2	0.6	1			0.6	1					3.1	12	0.8	3		
0.3	1	0.3	1	0.3	1	0.1	1	0.5	2	2.1	8	1.5	6	1.8	7	2.3	9	5.1	20		
0.6	1			1.3	2			0.6	1	2.6	4	2.6	4	1.9	3	0.6	1				
0.5	2			0.3	1	0.8	3	1.5	6	0.5	2	0.8	3	1.5	6	1.8	7				
0.6	1			1.3	2	2.6	4	1.9	3			0.6	1	0.6	1						
0.3	1	0.8	3	0.5	2	0.8	3			0.5	2	0.3	1	10.	4						
				1.3	2	0.6	1	0.6	1	0.6	1										
0.3	1			1.0	4	0.3	1			0.8	3	0.3	1								
				0.6	1	0.6	1														
0.3	1	0.5	2	0.3	1	0.3	1			0.5	2										
0.6	1			0.6	1	0.6	1														
0.3	1	1.0	4	0.8	3	0.5	2	0.3	1												
				0.6	1	1.9	3														
		0.5	2	0.8	3	0.3	1														
				0.3	1																
0.6	1																				
0.5	2																				
0.3	1																				

34-36 37-39 40-42 43-45 46-48 49-51 52-54 55-57 58-60 61-63 64-66 67-69

TABLE 18

MEAN CREDITS ATTEMPTED/EARNED  
RELATED TO SCAT-T DECILE RANGES  
GROUP A, B, & C - ONE YEAR

SCAT-T DECILES	A MEAN CR. ATT.	A MEAN CR. EARNED	B MEAN CR. ATT.	B MEAN CR. EARNED	C MEAN CR. ATT.	C MEAN CR. EARNED
90-99	30.0	20.0	0.0	0.0	33.0	30.0
80-89	31.0	30.0	0.0	0.0	0.0	0.0
70-79	30.0	25.5	15.0	0.0	32.0	29.0
60-69	30.0	9.0	12.5	6.0	0.0	0.0
50-59	28.7	23.0	25.2	18.5	28.9	26.7
40-49	28.3	23.2	26.2	19.8	28.2	23.9
30-39	27.9	22.1	25.8	18.6	27.5	23.1
20-29	27.3	20.9	24.5	15.6	28.1	23.7
10-19	28.3	22.5	20.3	12.9	27.9	22.7
00-09	26.2	13.3	21.0	14.6	25.7	18.4

## MEAN CREDITS ATTEMPTED

CHI SQUARE A/B = 48.85; df = 9; p < .01

CHI SQUARE A/C = 55.74; df = 9; p < .01

CHI SQUARE B/C = 0.35; df = 9; NS

## MEAN CREDITS EARNED

CHI SQUARE A/B = 52.28; df = 9; p < .01

CHI SQUARE A/C = 42.23; df = 9; p < .01

CHI SQUARE B/C = 49.02; df = 9; p < .01

## Discussion

### Part I - Reasons for Measures (Part II will draw conclusions)

The purpose for measuring persistence in college as simply the number and percent of students staying a given length of time was based on the earlier indications that the drop-out rate at Macomb was between 40 and 50% at the end of one year. The Study of 100 which described students who entered in 1963 not only had this drop-out rate, but the drop-outs were mainly from the lower percentiles of the SCAT-T where the greatest majority of Macomb's entering students test. Therefore, the ECD Program set one of its goals, just keeping a student in college long enough for him to achieve some form of success, even if this success was merely that he found out that college was not an answer to his needs. In this way more students would have the opportunity to be exposed to a variety of ideas and learning experiences, even if they ultimately choose to pick some other vocation.

The limitations of this one-dimensional measurement were soon evident. Just staying in college is no indication of what is happening to the student. Students can stay and register for a full load each semester, but finish at the end of each semester with only one or two classes' worth of actual credit, because they drop out or disappear from two or three of their classes. To continually attempt and never quite succeed in earning a certain amount of credits can also be a measure of failure. It was found that in The Study of 100 that, although a majority of the students actually attempted during the first year to earn at least one semesters' worth of credits or more, actually 40% of them earned 6 or less credits and 22% earned no credits whatsoever. Therefore, there needed to be some measure devised to indicate the quality of the students' persistence, or some means of determining in a more precise manner what they were accomplishing within a given amount of time. Having two measures, credits attempted and credits earned also provides us with another measure which is the difference between the credits attempted and earned. We can determine if SCAT-T (for example) is a predictor of a student's tendency to attempt more credits than he can actually earn; or use this difference as a measure of comparison among the groups.

### Discussion - Part II

It was found that the liberal arts group (Group B) actually persisted at about the same rate as both ECD groups. It must be kept in mind that all the students in Groups A, B and C were full-time day students, the majority of whom were between the ages of 17 and 21. They may have part time jobs, but their main occupation is going to college. Evidently, simple persistence is as related to outside factors as it is related to internal changes. When the college operated only during the evening hours, many of the students who entered worked full time during the day and were not as committed to their college career. This could be the vital factor that caused them to persist at a lower rate.

It is important to mention, as described previously, that Group B students had SCAT-T scores that were significantly higher than those students in Groups A and C. If SCAT-T can be considered as a predictor of a student's chances of persisting at college, then Group B should have had a higher percentage of students staying a longer period of time, whereas, the opposite is so. Groups A and C had a slightly higher percentage persisting.

When Groups A and B were compared as to the mean SCAT-T score of those students who actually stayed a full two years, then it was found that Group A and B differed. Group A's lower mean score of 32.27 compared to B's 38.82 would seem to indicate that the ECD Program actually kept students who, on the basis of their entering scores, would have been less likely to have stayed in college.

The differences among the three groups become more evident when persistence is considered in terms of credits attempted and credits earned. For the first year's attempt, both Groups A and C had about 2/3 of their students actually earn between 25 and 33 credits in comparison to Group B students who earned this number of credits in 25.6% of the cases. This would indicate that the ECD students' persistence is providing them with more success than those who entered the liberal arts program. It must be remembered that every student that enters the ECD Program is encouraged to take the full package of courses, or between 30 and 32 credits for the entire year. Group B students, on the other hand, are given free reign to sign up for any courses made available to first-year entering students.

Another aspect of the ECD Program is the block scheduling. A student signs up for a block of courses that are taught by a team of instructors. This team of instructors meets regularly to integrate the content of the courses, to discuss and seek solutions to any current problems, be they individual students or groups of students, and to arrange for team projects or trips. In the liberal arts program there is no connection between any two courses or groups of courses.

The higher percentage of Group B students who attempt credits without earning them is most certainly a measure of how easy it is for liberal arts students to give up. If failure can be defined as not achieving your expectations, then not earning the credits you attempt is one measure of failure. Group B students have a higher rate of failure than both Groups A and C. That is, even though they persist in college at a similar rate, all three groups are not achieving at a similar rate while they are here.

When groups A and B are compared as to credits attempted and earned during their second year at Macomb, Group A maintains its lead. Considering that approximately 40% of both groups stayed the full two years, then having 22.6% of Group A and 10.1% of Group B actually earn 55 or more credits indicates that even after leaving ECD, the ECD students continue to achieve. The difference between those who attempted and earned in both

groups again shows that Group B had more students actually attempt to earn these credits than actually did; whereas Group A had more students reach success than those who tried and failed. Considering that Group A had a higher rate of success in earning credits must be kept in the framework of the two groups' entering SCAT-T scores. If these scores could be counted on to predict success, then Group B should have achieved by earning more credits, within the two year span of time. Such was not the case.

When credits attempted and earned by all three groups in one year's time is related to the groups' SCAT-T decile ranges, it is evident that students in Groups A and C achieved more than Group B in all the decile ranges, but this is especially evident in the lower two deciles, 10-19 and 20-29. Those in Group B who were in this decile range actually earned in one year's time only about one semester's worth of credit, and the mean credits earned in all the decile ranges of Group B (between 10 and 59) never even reaches one year's worth of credits.

This evidence does appear to indicate that providing an environment that makes it easier for students to take a pre-planned package of courses would assist them in earning more credits in a given amount of time as well as preventing them from establishing a pattern of attempting and failing.

## ACADEMIC ACHIEVEMENT

A measure of the success of the ECD Program are the grades earned by the students who entered the program in comparison to the grades earned by those who did not. Grades can be simply defined as the letter grades received by students in all the courses they have taken, transformed into numerical equivalents (A equals 4, B, 3; C, 2, D, 1). The Grade Point Average for any student is computed by multiplying his grade times the number of credits assigned to that course so as to arrive at his honor points. These honor points for all courses are then divided by the total credits that any given student completed in a given semester or year. The total grade point average for a group of students is computed by summing up all the honor points and credits completed and dividing the former by the latter. A grade point average of 2.0 indicates that a student or group of students has maintained the minimum grades necessary in order to earn transfer credit or graduate from Macomb County Community College.

One method of looking at grades would be to find out the overall grade point average of each group for each year and compare these averages. The other method would be to relate this grade point average to the number of credits earned during a given length of time.

### Hypothesis

It is hypothesized that: (1) Groups A and C will earn a higher grade point average than Group B during their first year at college; (2) more students in groups A and C will earn more credits at a higher grade point average than students in Group B; (3) the students who achieved these higher grade point averages will continue to earn more credits at a higher grade point average when they enter their second year at Macomb County Community College and take liberal arts courses.

### Results

Table 19 gives the number and percent of students in each G.P.A. range from Groups A, B and C for one year. Keeping in mind that 2.00 is the point at which grades can be considered as transferable, then this will be used as a dividing line between the successes and failures. Group B has about 71% of their students falling below the 2.0 G.P.A. range; Group A has 66% of their students below this and Group C has 48%.

Table 20, similar to the table above, deals only with the second year grade point averages of Groups A and B.

Group A has about 66% and Group B has 69% of their students falling below the 2.0 grade point average. The mean grade point average for both groups has risen, but the difference between the two mean G.P.A.s is still similar. This pattern of grades, percent above and percent below the 2.0 division, is fairly consistent from year one to year two.



TABLE 19

G.P.A.--A, B, AND C--ONE YEAR

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
3.5-3.99	0.3	(1)	0.0	(0)	1.5	(8)
3.0-3.49	3.4	(13)	1.3	(2)	5.2	(28)
2.5-2.99	7.9	(30)	6.7	(10)	17.5	(95)
2.0-2.49	22.1	(84)	20.7	(31)	27.6	(150)
1.5-1.99	26.6	(101)	29.3	(44)	17.7	(96)
1.0-1.49	17.6	(67)	23.3	(35)	15.8	(86)
0.5-0.99	12.9	(49)	9.3	(14)	7.2	(39)
0.0-0.49	9.2	(35)	9.3	(14)	7.7	(42)
TOTAL NO.	100.0	(380)	100.0	(150)	100.0	(544)
NO DATA		(13)		(6)		(17)
MEAN	1.70		1.65		1.98	

$N = 530$ ;  $t_{A/B} = 0.75$ ;  $df = 528$ ; NS

$N = 924$ ;  $t_{A/C} = 4.91$ ;  $df = 924$ ;  $p < 7.001$

$N = 694$ ;  $t_{B/C} = 4.64$ ;  $df = 692$ ;  $p < 7.001$

TABLE 20

G.P.A.--A AND B--2ND YR. CUMULATIVE

	A PERCENT	A NUMBER	B PERCENT	B NUMBER
3.5-3.99	0.3	(1)	0.0	(0)
3.0-3.49	2.4	(9)	2.0	(3)
2.5-2.99	8.4	(32)	7.3	(11)
2.0-2.49	22.7	(87)	21.3	(32)
1.5-1.99	25.1	(96)	29.3	(44)
1.0-1.49	17.8	(68)	19.3	(29)
0.5-0.99	13.8	(53)	10.7	(16)
0.0-0.49	9.7	(37)	10.0	(15)
TOTAL NUMBER	100.0	(383)	100.0	(150)
NO DATA		(10)		(6)
MEAN	1.77		1.73	

N = 533; t A/B = 0.40; df = 531; NS

Table 21 is the relationship of grade point averages to SCAT-T decile ranges for all three groups, for their first year. Groups A and C have higher grade point averages than Group B in every decile range (except one). The greatest differences between grade point averages between Groups A and C and Group B are in the lower decile ranges.

Table 22 is the relationship between grade point averages for the second year and SCAT-T deciles for Groups A and B.

Group A has a higher grade point average than Group B in every decile, except one. Again, the greatest difference between the two groups is at the lower two decile ranges of SCAT-T.

Table 23 is a comparison between SCAT-T and grade point average. Here we have the mean SCAT-T of all the students who had grade point averages that fell within .5 grade point ranges.

The difference between the mean SCAT-T score of Groups A and B and Groups B and C is statistically significant. Those earning grade point averages of 2.0 or above in Group B had much higher pre-college achievement scores than those earning the same grade point average in Groups A and C.

Table 24 deals with the grade point change from year one to year two. The range of grade points is one-tenth and the number and percent of students in both Groups A and B are placed in the category that indicates whether their G.P.A. went up or down by a given number of tenths.

Table 25 compares persistence of Groups A, B and C to their mean Grade Point Average. A and B were compared for two years persistence and C Group is for one year only.

The students who stayed the full four semesters had the highest grade point average, and their grade point averages were higher than the mean G.P.A. for either group.

Tables 26 and 27 compare credits attempted and earned of those students who had grade point averages over 2.0. That is, the students who are placed on this particular table are only those who maintained a grade point average of 2.0 or above. Table 26 compares Groups A, B and C for one year.

As was done previously, those students who attempted and earned 25 or more credits in one year's time are in the box of the upper right hand corner. 93.0% of Group A students who had grade point averages above 2.0 earned between 25 and 33 credits; Group C had 85.1% of their students doing the same. Group B students who had grades over 2.0 earned 25 or more credits their first year in 60.4% of the cases. As for the number actually attempting to earn 25 or more credits, Group A had 97.8%, Group B had 88.2% and Group C had 89.2%, all of whom attempted to earn 25 or more credits their first year. This would mean that about 4.8% of Group A, 4.1% of

TABLE 21

S.C.A.T.-T. BY DECILES, WITH MEAN  
G.P.A. OF EACH DECILE RANGE  
GROUPS A, B, AND C (ONE YEAR)

SCAT-T BY DECILES	A PERCENT	A NUMBER	A MEAN G.P.A.	B PERCENT	B NUMBER	B MEAN G.P.A.	C PERCENT	C NUMBER	C MEAN G.P.A.
90-99	0.3	(1)	1.6	0.0	(0)	0.0	0.2	(1)	3.2
80-89	0.8	(3)	3.2	0.0	(0)	0.0	0.0	(0)	0.0
70-79	0.5	(2)	2.6	0.7	(1)	0.0	0.2	(1)	2.2
60-69	0.3	(1)	0.6	1.3	(2)	2.0	0.0	(0)	0.0
50-59	12.2	(46)	1.9	27.8	(42)	1.8	3.3	(18)	2.4
40-49	22.3	(84)	1.9	31.1	(47)	1.8	17.2	(93)	2.2
30-39	14.9	(56)	1.7	16.6	(25)	1.8	15.4	(83)	2.1
20-29	26.3	(99)	1.7	14.6	(22)	1.4	35.0	(189)	2.0
10-19	21.0	(79)	1.5	8.0	(12)	1.3	25.7	(139)	1.7
00-09	1.3	(5)	1.1	0.0	(0)	1.1	3.0	(16)	1.6
TOTAL NO.	100.0	(376)		100.0	(151)		100.0	(540)	
NO DATA		(17)			(5)			(21)	
MEAN SCAT-T	31.98			40.36			27.00		

TABLE 22

SCAT-T (BY DECILES) TO MEAN G.P.A.  
GROUPS A & B (TWO YEAR)

SCAT-T BY DECILES	A PERCENT	A NUMBER	A MEAN G.P.A.	B PERCENT	B NUMBER	B MEAN G.P.A.
90-99	.0	(1)	1.6	0	(0)	0.0
80-89	0	(3)	3.1	0	(0)	0.0
70-79	0	(2)	2.5	0	(1)	0.0
60-69	0	(1)	1.1	0	(1)	2.0
50-59	12	(45)	2.0	27	(40)	1.8
40-49	22	(81)	1.9	31	(46)	1.8
30-39	15	(55)	1.8	17	(25)	1.9
20-29	25	(95)	1.7	14	(21)	1.5
10-19	21	(78)	1.6	7	(11)	1.3
00-09	1	(5)	1.1	0	(0)	0.0
TOTAL NO.		(366)			(145)	
NO DATA		(10)			(6)	
MEAN G.P.A.			1.77			1.73

TABLE 23

G.P.A.--A, B, AND C--ONE YEAR

G.P.A. RANGE	A PERCENT	A NUMBER	A MEAN SCAT-T	B PERCENT	B NUMBER	B MEAN SCAT-T	C PERCENT	C NUMBER	C MEAN SCAT-T
3.5-3.99	0.3	(1)	43.0	0.0	(0)	0.0	1.5	(8)	31.9
3.0-3.49	3.4	(13)	49.2	1.3	(2)	39.5	5.2	(28)	33.6
2.5-2.99	7.9	(30)	37.8	6.7	(10)	44.0	17.5	(95)	31.9
2.0-2.49	22.1	(84)	33.3	20.7	(31)	44.0	27.6	(150)	28.0
1.5-1.99	26.6	(101)	30.9	29.3	(44)	42.7	17.7	(96)	24.4
1.0-1.49	17.6	(67)	28.2	23.3	(35)	35.2	15.8	(86)	23.1
0.5-0.99	12.9	(49)	30.9	9.3	(14)	41.8	7.2	(39)	24.7
0.0-0.49	9.2	(35)	29.2	9.3	(14)	34.9	7.7	(42)	24.1
TOTAL NO.	100.0	(380)		100.0	(150)		100.0	(544)	
NO DATA		(13)			(6)			(17)	

TABLE 24

## G.P.A. CHANGE BY CATEGORIES A1 TO A2 AND B1 TO B2

	A PERCENT	A NUMBER	B PERCENT	B NUMBER
+2.0	0.0	(0)	2.1	(2)
+1.9	0.4	(1)	0.0	(0)
+1.8	0.8	(2)	0.0	(0)
+1.7	0.4	(1)	0.0	(0)
+1.6	0.4	(1)	0.0	(0)
+1.5	0.8	(2)	0.0	(0)
+1.4	0.4	(1)	0.0	(0)
+1.3	0.4	(1)	1.0	(1)
+1.2	1.6	(4)	1.0	(1)
+1.1	0.8	(2)	4.2	(4)
+1.0	2.0	(5)	1.0	(1)
+0.9	1.2	(3)	3.1	(3)
+0.8	1.2	(3)	5.2	(5)
+0.7	2.0	(5)	4.2	(4)
+0.6	2.0	(5)	1.0	(1)
+0.5	4.7	(12)	2.1	(2)
+0.4	4.4	(11)	10.4	(10)
+0.3	4.0	(10)	4.2	(4)
+0.2	7.1	(18)	5.2	(5)
+0.1	7.5	(19)	6.3	(6)
0.0 NO CHANGE	7.1	(18)	7.3	(7)
-0.1	5.9	(15)	6.3	(6)
-0.2	9.1	(23)	2.1	(2)
-0.3	5.9	(15)	1.0	(1)
-0.4	4.4	(11)	4.2	(4)
-0.5	5.1	(13)	3.1	(3)
-0.6	2.8	(7)	2.1	(2)
-0.7	3.6	(9)	2.1	(2)
-0.8	2.8	(7)	1.0	(1)
-0.9	1.2	(3)	0.0	(0)
-1.0	1.2	(3)	3.1	(3)
-1.1	1.2	(3)	6.3	(6)
-1.2	2.8	(7)	2.1	(2)
-1.3	0.4	(1)	1.0	(1)
-1.4	0.4	(1)	1.0	(1)
-1.5	1.6	(4)	0.0	(0)
-1.6	0.8	(2)	0.0	(0)
-1.7	0.4	(1)	0.0	(0)
-1.8	0.0	(0)	2.1	(2)
-1.9	0.4	(1)	2.1	(2)
-2.0	1.2	(3)	2.1	(2)
TOTAL NUMBER	100.0	(253)	100.0	(96)
NO DATA		(140)		(60)
MEAN CHANGE	0.06		0.11	

TABLE 25

G.P.A. AND PERSISTENCE  
GROUPS A AND B--2 YRS., GROUP C--1 YR.

	A NUMBER	A MEAN G.P.A.	B NUMBER	B MEAN G.P.A.	C NUMBER	C MEAN G.P.A.
4 Sem.	(177)	2.01	(62)	1.94		
3 But Less Than 4	(13)	1.46	(8)	1.33		
3 Sem.	(53)	1.39	(20)	1.57		
2 But Less Than 3	(18)	1.52	(9)	1.35		
2 Sem.	(76)	1.46	(33)	1.48	(454)	2.07
1 But Less Than 2	(20)	1.08	(3)	0.68	(21)	1.21
1 Sem.	(25)	0.55	(14)	0.93	(66)	0.95
Less Than 1	(0)	0.00	(0)	0.00	(1)	0.00
TOTAL NUMBER	(382)	1.77	(149)	1.73	(542)	1.98
NO DATA	(10)		(6)		(17)	

$N = 531$ ;  $\chi^2$  A/B = 0.22;  $df = 14$ ; NS

$N = 924$ ;  $\chi^2$  A/C = 0.04;  $df = 14$ ; NS

$N = 791$ ;  $\chi^2$  B/C = 0.07;  $df = 14$ ; NS



TABLE 26

CREDITS ATTEMPTED--CREDITS EARNED AT 2.00+ G.P.A.  
GROUPS A, B, AND C, ONE YEAR

PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.			
1-33						1.1	3	0.4	1	1.1	3	2.9	8	3.6	10	75.4	208
1-33						2.3	1			2.3	1			2.3	1	2.3	1
1-33						0.8	1			0.8	1			7.0	9	8.6	11
28-30										0.7	2	0.7	2	3.6	10		
28-30					2.3	1				2.3	1	9.3	4	9.3	4	23.3	10
28-30							1.6	2	0.8	1		1.6	2	5.5	7	70.3	90
25-27										0.4	1			0.4	1		
25-27										2.3	1	2.3	1	7.0	3	20.9	9
25-27														0.8	1		
22-24										0.4	1	2.5	7				
22-24										2.3	1	2.3	1				
22-24																	
19-21						0.4	1	0.4	1	0.4	1						
19-21										2.3	1						
19-21																	
16-18	1.1	3	0.4	1		0.4	1			2.5	7						
16-18																	
16-18																	
13-15																	
13-15						2.3	1										
13-15						0.8	1	1.6	2								
10-12						0.4	1										
10-12						2.3	1										
10-12																	
07-09			0.4	1													
07-09																	
07-09																	
04-06	0.4	1															
04-06																	
04-06																	
01-03																	
01-03																	
01-03																	
EARN	0	1-03	4-06	7-09	10-12	13-15	16-18	19-21	22-24	25-27	28-30	31-33					

TABLE 27

CREDITS ATTEMPTED--CREDITS EARNED AT 2.00+ G.P.A.  
GROUPS A AND B, TWO YEARS

CR. ATT.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.	PCT. NO.
B 67-69 A 67-69														
B 64-66 A 64-66														
B 61-63 A 61-63														
B 58-60 A 58-60														
B 55-57 A 55-57													2.2	1
B 52-54 A 52-54														
B 49-51 A 49-51														
B 46-48 A 46-48													0.8	1
B 43-45 A 43-45											2.2	1	2.4	3
B 40-42 A 40-42														
B 37-39 A 37-39								0.8	1		0.8	1		2.2 1
B 34-36 A 34-36													2.2	1
B 31-33 A 31-33							0.8	1					0.8	1 3.2 4
B 28-30 A 28-30								2.2	1		2.2	1	6.5	3
B 25-27 A 25-27							1.6	2			1.6	2	9.5	12
B 22-24 A 22-24								2.2	1		2.2	1		
B 19-21 A 19-21													2.2	1
B 16-18 A 16-18														
B 13-15 A 13-15							2.2	1			1.6	2		
B 10-12 A 10-12							2.2	1						
B 07-09 A 07-09														
B 04-06 A 04-06														
B 01-03 A 01-03														
CR. EARN	0	1-03	4-06	7-09	10-12	13-15	16-18	19-21	22-24	25-27	28-30	31-33		

PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO. PCT. NO.

						0.8	1	0.8	1	0.8	1	2.2	1	4.0	5	1.6	2	4.3	2	0.8	1
								2.2	1			4.3	2								
								0.8	1	4.8	6	8.7	11	2.4	3						
		2.2	1									2.2	1								
						1.6	2	0.8	1	3.2	4	6.3	8	11.9	15						
2.2	1					2.2	1	6.5	3	4.3	2	4.3	2	2.2	1						
								2.4	3	3.2	4	4.8	6								
		2.2	1	2.2	1	2.2	1			2.2	1										
		0.8	1	0.8	1			0.8	1			3.2	4								
		4.3	2			2.2	1														
		1.6	2					1.6	2	0.8	1										
								0.8	1												
		0.8	1	1.6	2	0.8	1														
		2.2	1	6.5	3																
	0.8	1	1.6	2																	
2.2	1																				

34-36 37-39 40-42 43-45 46-48 49-51 52-54 55-57 58-60 61-63 64-66 67-69

Group C and 27.8% of Group B actually attempted, but failed to earn 25 or more credits their first year. If the success area is reduced from 25-33 credits to between 28 and 33 credits, then the percent for each group changes. 85.9% of Group A, 81.2% of Group C and 27.9% of Group B attempted and earned between 28 and 33 credits during their first year at Macomb County Community College.

Table 27 indicates the number and percent of those students who had grade point averages over 2.0 for a full two years and the number of credits they attempted and actually earned.

The students who had a G.P.A. of 2.0 or above and earned 55 or more credits are located in the box in the upper right hand corner. Group A had 60.7% of their students who actually earned this number of credits, whereas Group B had 26.1% of their students in this category. Of those in Group A who earned 2.0 and attempted to earn 55 or more credits, 5.5% did not make it; in Group B, 14.0% who attempted to earn 55 or more credits did not succeed in doing so.

Table 28 compares the mean SCAT-T score and mean credits earned for each group in relation to grade point average ranges.

Group B earned less credits in every grade point average range than either Group A or C. The differences between Groups A and B and Groups B and C are statistically significant.

Table 29 compares mean credits attempted, earned and the corresponding grade point average of each Group within each SCAT-T decile range for one year.

The difference between credits attempted and credits actually earned is greater for Group B than either Groups A or C. Except for one decile range, the grade point average for Group B is lower than that for Groups A and C. The difference between Groups A and B and Groups B and C are larger at the lower decile ranges, both in grade point average and credits attempted and earned. It is in these lower decile ranges where the majority of Groups A and C fall.

TABLE 28

MATRIX COMPARING G.P.A. CATEGORIES TO  
MEAN SCAT-T AND MEAN CREDITS EARNED  
ONE YEAR, GROUPS A, B, AND C

	MEAN SCAT-T			MEAN CREDITS EARNED		
	A MEAN SCAT-T	B MEAN SCAT-T	C MEAN SCAT-T	A MEAN CR. EARNED	B MEAN CR. EARNED	C MEAN CR. EARNED
3.5-3.99	43.0	0.0	31.9	31.0	0.0	29.8
3.0-3.49	49.2	39.5	33.6	29.0	28.0	31.0
2.5-2.99	37.8	44.0	31.9	29.5	25.3	29.8
2.0-2.49	33.3	44.0	28.0	28.5	23.5	27.8
1.5-1.99	30.9	42.7	24.4	27.4	21.5	25.8
1.0-1.49	28.2	35.2	23.1	21.2	17.5	21.7
0.5-0.99	30.9	41.8	24.7	13.2	10.0	13.4
0.0-0.49	29.2	34.9	24.1	2.0	0.9	1.9

## MEAN SCAT-T

A/B;  $\chi^2 = 50.8$ ;  $df = 14$ ;  $p < .001$

A/C;  $\chi^2 = 0.68$ ;  $df = 14$ ; NS

B/C;  $\chi^2 = 45.11$ ;  $df = 14$ ;  $p < .001$

## MEAN CREDITS EARNED

A/B;  $\chi^2 = 24.69$ ;  $df = 14$ ;  $p < .025$

A/C;  $\chi^2 = 0.16$ ;  $df = 14$ ; NS

B/C;  $\chi^2 = 23.43$ ;  $df = 14$ ;  $p < .05$

TABLE 29

MEAN CREDITS ATTEMPTED/EARNED RELATED TO SCAT-T  
DECILE RANGES. GROUPS A, B, AND C, ONE YEAR.

SCAT-T DECILE RANGES	GROUP A		GROUP B		GROUP C	
	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER
90-99	.3	(1)	0.0	(0)	.19	(1)
80-89	.8	(3)	0.0	(0)	0.0	(0)
70-79	.5	(2)	0.7	(1)	.19	(1)
60-69	.2	(1)	1.3	(2)	0.0	(0)
50-59	12.2	(46)	27.8	(42)	3.3	(18)
40-49	22.3	(84)	31.1	(47)	17.2	(93)
30-39	14.9	(56)	16.6	(25)	15.4	(83)
20-29	26.3	(99)	14.6	(22)	35.0	(189)
10-19	21.0	(79)	8.0	(12)	25.7	(139)
00-09	1.3	(5)	0.0	(0)	3.0	(16)
TOTAL NUMBER	100.0	(376)	100.0	(151)	100.0	(540)
MEAN	31.98		40.36		27.00	

## Discussion

### Part I - Reasons for Measurements

Just as the number and percent of students who persist a given length of time does nothing to describe the students' actual accomplishments while at Macomb, simple numbers representing overall grade point averages also does not indicate what was accomplished. This is the reason for relating the students' grade point averages to the actual credits attempted and earned.

### Part II - Conclusions and Academic Achievement

Group A had a slightly higher grade point average than Group B at the end of the first year. Group A had a mean grade point average of 1.70; whereas Group B had a grade point average of 1.65. With about 66% of Group A's students under 2.0 and 71% of Group B's under 2.0, both groups have quite similar patterns of success. Group C's difference stands out as being statistically significant. Group C's students are under the 2.0 grade point average. Just considering grade point average, Groups A and B demonstrate that the patterns of grades between Groups A and B, that is, the percentage of students in any one grade point average range, are not too different. This pattern continues when Groups A and B are compared as to numbers and percents of students in each range of the grade point averages during their second year at Macomb. In Group A, about 66% of the students fell below the 2.0 G.P.A. range and Group B, 69%. In other words, even though there are fewer students and the ECD students are taking liberal arts courses, the percentage of students in each grade point retains a pattern similar to year one. The mean grade point averages for both Groups A and B, although higher than the previous year, are still about as far apart as previously.

Of course, both Groups A and B began with significantly different SCAT-T scores, and Group A should have a higher percentage of students earning lower grade point averages than Group B if SCAT-T were used as a predictor of grades. Yet, the opposite is true, a slightly higher percent of Group A students actually earned higher grade point averages. However, the simple measure of grade point averages does not really discriminate between Groups A and B. One possible conclusion and one that could lead to further research is that no matter what students were part of a group they would end up with a given percentage in certain G.P.A. ranges because there is an established system of grading that would tend to influence any results.

If the grades earned by students in either group both their first and second year tend to be quite similar, there are several possible variables that should be considered. First, there is no information about the perceptions that instructors have about grades--that is, do the grades of any given group of instructors tend to form a bell-shape curve no matter what class or group they happen to be instructing? And what role does the

students' perception of himself play in the grading process? Barring any extreme emergencies, do most students' grades over the period of two years tend to remain stable? The idea that both teachers and students tend toward structured patterns of grading based on pre-conceived decisions about what is possible or impossible within a given course, needs to be further investigated.

When actual grade changes were charted, it was found that the mean grade change for Group A was slightly less than that for Group B. The similar grade point average pattern for both groups indicates that there was very little change from year one to year two for either group. It is possible that there is a relationship between what is accomplished during the first year and what is then accomplished the second. Even though Group A, for example, began with less of a chance to obtain a passing grade but did so their first year, they then continued their success into the second year; so it was with Group B, their pattern of grades, established in the first year, did not change drastically their second year. Group C actually began with even lower SCAT-T scores than either Group A or B and then earned, during its first year, even higher grades than either Groups A or B. If this pattern of success carries over into the Group C's second year it will certainly add to the theory that the first year's accomplishments are of vital importance.

Moving on from the simple measure of grade point averages to relating this measure to the SCAT-T deciles for the first year for all three groups and year two for just Groups A and B, indicates that in the lower SCAT-T deciles where there are the majority of ECD students, groups A and C were more successful than Group B. That is, if the same student could have entered the ECD Program and the liberal arts program, his chances for success in the ECD Program would be considerably higher than his chance for success in the liberal arts course--he would have earned fewer credits with a lower grade point average. In fact, the mean SCAT-T score for those students in Group B who earned a grade point average between 2.0 - 2.49 and 2.5 - 2.99 in year one is 44 for both ranges, but for Group A it is 33 and 37 and for Group C it is 28 and 31.9 respectively. The students in Groups A and C who earned the same grades as those in Group B had significantly lower SCAT-T mean scores. The comparison with Group B also indicates that in the liberal arts area these same students would have had to have a much higher SCAT-T to have earned the same grades.

The grade point average related to credits attempted and earned discriminates between the three groups more than the previous measurements. When the students earning G.P.A.'s of 2.0 or above are abstracted from the groups and compared, then Group B's students who maintained a passing grade point average much like the students in Groups A and C are found to be less successful than a simple measure of grades indicated. Considering that the difference between attempting and actually earning is a measure of failure, even though the student keeps up his grades, then Group B had 30.1% of their students attempting but failing to earn between 25 and 33 credits compared to Groups A and C with 5.6% and 4.1% respectively. Even the total number of students in each group who



actually did earn one year's worth of credits in one year indicates that Group B students did not approach the success of Groups A and C. With Group A students having a success rate of 92.2%, Group C with 85.1% and Group B with 58.1%, the quality of the student's accomplishments during their first year at Macomb is evident. Just maintaining their grades and persisting are separate measures, but put together they indicate the extent of the students' success at Macomb.

Naturally, the question of whether the ECD students in Group A actually continued their success rate into the second year must be answered. Again, isolating all the students who maintained a 2.0 G.P.A. or above for two years and comparing them in terms of credits attempted and earned indicates that Group A was successful at a higher rate than Group B. The percentage of students who actually earned 55 or more credits was 60.7% for Group A and 26.1% for Group B. Again the failure rate, those attempting 55 or more credits but not making it is different with Group A students failing in 5.5% of the cases and Group B failing in 14% of the cases. In both comparisons, for one year and for two, as many Group B students attempted to earn as many credits as Groups A and C, but their failure rate cut down their attempts to succeed. In other words, Group A began in 1965 with statistically significant difference in their pre-college tests which would indicate that in comparison to Group B, they should have earned fewer credits at a lower grade point average and more students would have dropped; and the difference between their attempts at earning credit and their actual accomplishments would be much larger than that of Group B. Even if Group A had kept up with Group B, this would have been an important success, but to actually achieve considerably more in the way of earning credits at a successful grade point average, is an indication that their first year treatment had an influence that was powerful enough to have changed predictable events, events that actually did govern the success and failure of the comparison group.

The final matrix that compares all three groups as to their one year accomplishments in attempting and earning credits at a particular grade point average in relation to their SCAT-T scores, indicates that if the students from Groups A and C had entered into the liberal arts program and had done approximately as well (or poorly) as those in Group B, then half of Group A and over half of Group C would have ended their first year as failures. Their lack of credits earned and low grade point averages would have made graduation in two years very unlikely and their pattern of low grades and few credits would have made their second year at college no more successful than the first.

## GRADUATION RATE

### Definition

Those students who earn a degree from Macomb on or before June, 1968 will be counted as having graduated.

### Hypothesis

It is hypothesized that a higher percentage of students in Group A will graduate than those in Group B.

### Results

Table 30 compares the graduation rate of Groups A and B.

TABLE 30

GRADUATES

	<u>Group A -- ECD</u>			<u>Group B -- Control</u>			
	June, 1967	August, 1967	February, 1968	June, 1967	August, 1967	February, 1968	June, 1968
19	Associate in Arts			Associate in Arts			
	5	2	8	2	1	1	0
3	Associate in Business			Associate in Business			
	2	3	0	0	0	0	0
4	Associate in General Studies			Associate in General Studies			
	0	1	3	0	0	0	0
0	Associate in Health Science			Associate in Health Science			
	0	0	0	1	0	0	1
5	Associate in Science			Associate in Science			
	0	1	1	1	1	0	0
0	Associate in Technology			Associate in Technology			
	0	0	1	0	0	0	0
<u>Sub-Total</u>							
31 (7.9%)	7 (1.8%)	7 (1.8%)	13 (3.3%)	4 (2.5%)	2 (1.3%)	1 (.6%)	1 (.6%)
<u>Total</u>	58 (14.8%)			8 (5.1%)			

TABLE 31

GRADUATION RATE--A, B, AND C AS OF JUNE, 1968  
 ACCORDING TO SCAT-T DECILE RANGES\*

SCAT-T DECILE RANGES	A PERCENT NUMBER (3 YEARS)	B PERCENT NUMBER (3 YEARS)	C PERCENT NUMBER (2 YEARS)
90-99	0	0	0
80-89	0	0	0
70-79	0	0	0
60-69	0	0	0
50-59	17.4 (8)	2.4 (1)	16.7 (3)
40-49	20.2 (17)	10.6 (5)	15.1 (14)
30-39	10.7 (6)	8.0 (2)	12.0 (10)
20-29	17.2 (17)	0	12.7 (24)
10-19	8.9 (7)	0	12.9 (18)
00-09	0	0	12.5 (2)
NO DATA	(3)	0	0
TOTAL NO.	14.8 (58)	5.1 (8)	12.7 (71)

The percentages are computed on the basis of the number of students in each decile range.

\*Groups A and B have had one "extra" year to complete the graduation requirements while Group C has taken only the normal two years.

## Discussion

Group B's significantly higher pre-entrance scores in SCAT and Co-op English should have been reflected in their higher rate of graduation. However, Group A tripled the graduation rate of Group B.

The hypothesis that more students entering the ECD Program would graduate than those who entered the liberal arts program was upheld.

When a student earns a degree he has, in a sense, achieved more success than if he had earned just as many credits without gaining a degree. It is this honor that has meaning to others, and it expands the students' educational and vocational choices far more than a collection of credits.

If these students who enter the ECD Program represent the average student who enters all areas of the college, then this higher graduation rate indicates that the community college can find better ways to meet student needs.

When the number of graduates from all three groups A, B and C are related to SCAT-T decile ranges, there are several possible conclusions. It is significant, for example, that the ECD graduates are not clustered in the higher decile ranges, and that the number of graduates in each range appears to be more related to the total number of students in that range than the test itself. This may indicate that there are several variables related to success other than those being tested. It could further suggest that educational improvements or innovations do not have to begin with content changes, based on the idea that low pre-college test scores signify a need for remediation. Low test scores could just as easily be interpreted as signifying low self-image and a history of failure.

## Redirection

Based on the situation at Macomb, such as the Study of 100, the term "unrealistic goals" meant that the majority of students in the lower ranges of SCAT-T would fail to earn enough credits at a transferable G.P.A. within a reasonable length of time and would become discouraged and drop out. Therefore, unrealistic meant that these students had no real chance to succeed based on past statistics. One main goal of the ECD Program would be to assist students in choosing vocations other than those that required a minimum of a liberal arts degree. In this manner, the ECD Program would better serve the actual needs of their students rather than just continuing to fail them as had been done in the liberal arts transfer program.

## Hypothesis

It was the hypothesis of the ECD Program that (1) the Orientation class with its emphasis on testing, group and individual counseling as well as vocational research projects would cause a higher percentage of Group A (ECD) students than those in Group B (liberal arts) students to leave the transfer program at the end of one year and enter a technical or occupational program, either at Macomb or at another institution and (2) that more ECD students than liberal arts would actually indicate at the end of one year that they had reconsidered their original education goals and had decided to lower them.

## Results

At the end of their first year, all the students were asked to indicate what they considered was their vocational or occupational goal. This statement was compared to their statements made on their entering application forms. Then these choices were compared as to whether there was any change at all and then whether this change indicated they would need more, less or the same amount of college education as previously.

Table 32 compares Group A, B and C as to change at the end of one year and Table 33 compares A and B at the end of two.

Both tables show that the difference between the three groups is not significant. The hypothesis is, therefore, not accepted.

## Discussion

### Part I - Reasons for Measuring

The rationale for being concerned with redirection was based on the hypothesis of the original proposal (1 and 2) written before the creation of the ECD Program and the earlier studies that clearly demonstrated the high rate of failure of students who scored in the lower SCAT-T deciles. The proposal stated that ECD should "...so provide additional testing and explanation of student ability profiles to facilitate more realistic educational and vocational decisions." It was assumed, therefore, that because Macomb County Community College students had failed in the past to make it

TABLE 32

## REDIRECTION--A, B, AND C AT END OF ONE YEAR

	A PERCENT	A NUMBER	B PERCENT	B NUMBER	C PERCENT	C NUMBER
Yes +	2.4	(7)	14.4	(17)	6.7	(27)
Yes -	26.6	(79)	17.8	(21)	7.4	(30)
No , Same	71.0	(211)	67.8	(80)	85.7	(348)
TOTAL NUMBER	100.0	(297)	100.0	(118)	100.0	(406)
NO DATA		(96)		(38)		(155)

TABLE 33

REDIRECTION--SAME, UP, DOWN--GROUPS A AND B, END OF SECOND YEAR

	A PERCENT	A NUMBER	B PERCENT	B NUMBER
SAME	71.0	(211)	67.8	(80)
UP	2.4	(7)	14.4	(17)
DOWN	26.6	(79)	17.8	(21)
TOTAL NUMBER	100.0	(297)	100.0	(118)
NO DATA		(96)		(38)

in the regular liberal arts transfer courses, that it was necessary to have them change their goals so they would be more in line with what the institution considered were attainable and realistic for them. All of these judgments were predictions based on past performance. Therefore, in a sense, it was a hypothesis that depended on students not changing their academic performance, but continuing in the same manner as students within the same test range had done previously.

## Part II - Conclusions

Because the original hypothesis was based on students' achieving in a particular fashion, it was in a sense dependent on the outcome of another hypothesis. Therefore, once this first hypothesis was disproved, the term "unrealistic goals" had to be redefined. That is, students in the lower SCAT-T decile ranges and who entered the ECD Program succeeded academically by earning more credits with higher grades than was previously predicted. Their achievements proved, then, that the hypothesis based on these predictions must be reconsidered. It no longer was unrealistic to expect students who pre-tested in the lower decile range to earn enough transfer credits in two years to graduate. To then continue to push toward redirection based on the premise they would not do so would be to ignore what was actually happening. Therefore, the definition of "unrealistic goals" has to be changed and based on what happens to students in the ECD Program, not on what would happen to them in another situation. It may be that the solutions to the problems of persistence and academic achievement actually change the problems in other areas. The data gained from evaluating the ECD Program will provide a means to more precisely discriminate which students who enter the program will need redirection and which students will not.

Another aspect of this problem that could be taken into consideration is the concept of success. If success can be defined as achieving goals that are predetermined, then changing these goals can be seen as failure. If a student enters into a liberal arts program with hopes of graduating and then is convinced he should be in a one year program doing something else, then has he actually been successful? One answer may be that because someone else has decided he should actually be pursuing a career in marketing indicates that a successful matching of student to program has been accomplished. However, in a recent study by James S. Coleman, Equality of Educational Opportunity, he states:

"Despite the very large achievement differences between whites and Negroes at the 9th and 12th grades, those Negroes who gave responses indicating a sense of control of their own fate achieved higher on the tests than those whites who gave the opposite responses. This attitude was more highly related to achievement than any other factor in the student's background or school."

This would appear to indicate that setting one's own goals and working toward them is an integral part of actually achieving these goals. To be told that certain goals are unrealistic or unattainable, then, actually works toward making the goals just that. If a program takes on the ob-



jective of redirecting unrealistic goals, then this, if fully and carefully defined, would indicate that the students were completely predictable entities, one-dimensional and easily manipulated.

If the program had set redirection as a guiding policy, rather than a possible goal, it would have been structured in an entirely different manner. Assuming students cannot succeed academically can be a prophecy that could actually control the outcome of the program. If the ECD Program had decided that the majority of students could not succeed in a college program, the whole thrust of the program would have been changed. There would have been an entirely changed set of measurements and curricular objectives. In other words, a set, pre-determined definition of "unrealistic goals" can actually deny other possibilities and change the behavior of the teachers and the students.

### Student Evaluations of the Faculty and the Program

One measure of a program's success are the student's reactions to the faculty and the entire program. In addition to providing the faculty with concrete evidence of student reaction, it also provides the students with concrete evidence that their participation in the program is an actual reality and that evaluation is a two-way street. It was hypothesized that (1) the students would give high ratings to questions about student-faculty relations and (2) the majority of students would also rate the entire program as helpful. Tables 34 and 35 were extracted from the Program Evaluations of the last 2 1/2 years. These evaluations are given to the students at the end of each semester and used by the faculty to direct further changes in the program.

#### TABLES

Discussion: The two hypotheses were upheld by the program evaluations. Obviously there are limitations to an evaluation written and administered by those who are being evaluated, but there are also benefits. The fact that the program evaluations are done rather quickly and changed in some way each semester is more of a benefit than a draw back. The changes reflect changes in the program and provide a means for perceiving these various success or failure attempts. The data from the program evaluations is readily available for immediate feedback to the faculty so that the students' impressions are valid and useful rather than mere history. The positive reactions of the students should be taken within this context. They are immediate and perhaps generalized, but nonetheless indicative of what the program has done. Likewise, the teachers are able to have immediate returns on their efforts.

TABLE 34

STUDENT PERCEPTION OF THE FACULTY-STUDENT RELATIONSHIPS

	DO YOU FIND THIS HELPFUL?		DO YOU LIKE IT?			
	VERY	SOMEWHAT	NOT AT ALL	VERY MUCH	SOMEWHAT	NOT AT ALL
	(Numbers represent percentages)					
<u>January, 1966</u>						
The student-faculty relationships	69.0	28.0	3.0	67.0	28.0	5.0
<u>May, 1966</u>						
The student-faculty relationships	66.0	31.0	3.0	67.0	29.0	4.0
<u>February, 1967</u>						
Faculty availability	91.1	4.2	4.8	68.3	27.8	3.9
Informal contacts between faculty and students	67.2	29.4	3.4	68.8	27.5	3.7
Faculty-student relationships in general	67.1	30.7	2.2	69.1	28.5	2.0
	VERY	SOMEWHAT	NOT AT ALL	VERY MUCH	SOMEWHAT	NOT AT ALL
	(Numbers represent percentages)					
<u>May, 1967</u>						
Faculty availability	60.7	28.9	9.1	62.0	28.8	7.0
Informal contacts between faculty and students	62.0	28.9	8.6	67.6	22.6	8.4
Faculty-student relationships in general	60.2	30.5	8.4	66.0	25.1	7.0

Table 33 Continued

	DO YOU FIND THIS HELPFUL?				DO YOU LIKE IT?			
	<u>VERY</u>	<u>SOME- WHAT</u>	<u>SLIGHTLY</u>	<u>NOT AT ALL</u>	<u>VERY MUCH</u>	<u>SOME- WHAT</u>	<u>SLIGHTLY</u>	<u>NOT AT ALL</u>
	(Numbers represent percentages)							
<u>January, 1968</u>								
Faculty availability	56.9	33.9	6.6	2.6	55.0	33.8	9.2	2.0
Informal contacts between faculty and students	60.4	27.7	10.1	1.9	64.7	25.7	7.9	1.7
Formal faculty-students contacts	36.5	39.6	16.9	7.0	38.4	34.8	20.4	6.3

TABLE 35  
STUDENT REACTION TO THE TOTAL ECD PROGRAM

	DO YOU FIND THIS HELPFUL?		DO YOU LIKE IT?			
	<u>VERY</u>	<u>SOMEWHAT</u>	<u>NOT AT ALL</u>	<u>VERY MUCH</u>	<u>SOMEWHAT</u>	<u>NOT AT ALL</u>
	(Numbers represent percentages)					
January, 1966	48.0	45.0	7.0	40.0	51.0	9.0
May, 1966	66.0	32.0	2.0	53.0	37.0	10.0
February, 1967	66.2	29.2	4.5	59.1	33.5	7.4
	(Numbers represent percentages)					
	<u>VERY</u>	<u>SOMEWHAT</u>	<u>NOT AT ALL</u>	<u>VERY MUCH</u>	<u>SLIGHTLY</u>	<u>NOT AT ALL</u>
	(Numbers represent percentages)					
May, 1967	52.9	40.5	5.3	49.3	40.8	7.2
January, 1968	52.9	37.4	7.5	50.3	37.3	9.9
			1.3			2.7
			2.3			2.5

## STUDENT EVALUATIONS OF THE PROGRAM

Evaluations of the entire program have evolved from a simple reactions to the major aspects of the program to a more detailed evaluation form. The program evaluations are completed by all the students at the end of their first and second semesters and are immediately tabulated so that all the instructors have access to the results within a few weeks after the evaluation. When changes are made in the curriculum, there is an attempt made to relate these changes to the students' responses on the evaluations.

It is hypothesized that (1) areas that receive extreme negative reactions will be dropped or changed so that the next evaluation will reflect a more positive reaction; (2) the changed program evaluations will reflect some of the curriculum changes made during the past 2½ years.

The following tables, number 36 through 40 are the Program evaluations from the first year, January, 1966, May, 1966, January, 1967, and January, 1968.

### Discussions, Part I.

The earlier program evaluations divided the student reactions between very, somewhat and not at all. This meant that there could be an entire area of student opinion that was, in reality, right in the middle. Because these evaluations are used by instructors to make changes, it was decided to use the four divisions, very, somewhat, slightly and not at all so that student opinion could be more easily determined.

### Part II.

Certain aspects of the ECD Program have received a consistent positive reaction. Student-faculty relations is an example of an area that has received a positive reaction since the beginning. The total reaction to the ECD Program has remained fairly high and the percentage of students who have a totally negative reaction remains confined to certain individual details, rather than being generalized.

There are some examples of curriculum change evident in the changed reactions on the program evaluations. One is the beginning reaction to optional plays and concerts evident on the second program evaluation. The next program evaluation asked the same question and the negative reaction had dropped considerably, and by the end of the second semester, this negative reaction had become even smaller. After the first semester, the Humanities area organized ticket sales and increased the available options.

In the first two program evaluations, the decrease in negative reactions to the Communications came after a complete overhaul of the course. Orientation class began with rather high negative reactions which changed to much higher positive reaction. Again, a great deal was done to improve the course. There are other examples, but the use of the program evaluation as an impetus and director of change has been extensive.

TABLE 36

SUMMARY OF RESPONSES ON STUDENT PROGRAM  
EVALUATION QUESTIONNAIRES - JAN., 1966 (Fall Sem.)  
GROUP I

	DO YOU FIND THIS HELPFUL?			DO YOU LIKE IT?		
	<u>VERY</u>	<u>SOMEWHAT</u>	<u>NOT AT ALL</u>	<u>VERY MUCH</u>	<u>SOMEWHAT</u>	<u>NOT AT ALL</u>
	Numbers represent percentages					
1. The lectures in:						
(a) Hum.	42	46	12	29	50	21
(b) Nat. Sci.	76	20	4	27	50	23
(c) Soc. Sci.	50	38	12	42	40	18
(d) Com.	20	42	38	15	50	35
2. The small group sessions:						
(a) Hum.	40	48	12	39	46	15
(b) Nat. Sci.	59	36	5	58	34	8
(c) Soc. Sci.	48	41	11	45	19	18
(d) Com.	42	42	16	35	47	18
3. Attending all your classes with the same students	48	39	13	47	39	14
4. Optional Plays and Concerts	--	--	--	--	--	--
5. The movies and slides presented in your classes:						
(a) Hum.	56	32	12	43	44	3
(b) Nat. Sci.	66	28	6	64	31	5
(c) Soc. Sci.	54	41	5	61	34	5
(d) Ori.	37	50	14	33	53	14

4

Table 36 (cont'd)	DO YOU FIND THIS HELPFUL?			DO YOU LIKE IT?		
	<u>VERY</u>	<u>SOMEWHAT</u>	<u>NOT AT ALL</u>	<u>VERY MUCH</u>	<u>SOMEWHAT</u>	<u>NOT AT ALL</u>
	Numbers represent percentages					
6. Interrelatedness of material	43	42	15	36	40	24
7. Orientation:						
(a) The Orientation class in general	43	43	14	31	47	22
(b) Knowing test scores	44	42	13	38	45	17
(c) Study skills improvement	39	45	15	27	49	25
(d) Vocational planning	44	41	15	30	46	24
8. Textbooks:						
(a) Soc. Sci.	72	26	2	43	48	9
(b) Nat. Sci.	39	39	22	33	43	24
(c) Hum.	25	49	26	17	48	35
(d) Com.	34	46	20	27	50	23
(e) Ori.	17	47	36	15	41	44
9. Exams:						
(a) Hum.	29	50	21	23	45	32
(b) Nat. Sci.	56	34	10	47	37	16
(c) Soc. Sci.	53	43	4	47	42	11
(d) Com.	30	52	18	20	54	26
10. Total ECD Program experience	48	45	7	40	51	9
11. The student--faculty relationships	69	28	3	67	28	5
12. The Student Advisory Council	26	48	27	26	52	22



TABLE 37

SUMMARY OF RESPONSES ON STUDENT PROGRAM  
EVALUATION QUESTIONNAIRES - MAY, 1966 (Spring Sem.)  
GROUP II

	DO YOU FIND THIS HELPFUL?			DO YOU LIKE IT?		
	<u>VERY</u>	<u>SOMEWHAT</u>	<u>NOT AT ALL</u>	<u>VERY MUCH</u>	<u>SOMEWHAT</u>	<u>NOT AT ALL</u>
	Numbers represent percentages					
1. The lectures in:						
(a) Hum.	32	61	7	18	54	28
(b) Nat. Sci.	35	49	16	22	49	29
(c) Soc. Sci.	84	15	1	77	22	1
(d) Com.	43	40	17	38	40	22
2. The small group sessions:						
(a) Hum.	37	53	10	24	59	17
(b) Nat. Sci.	33	48	19	31	37	32
(c) Soc. Sci.	71	24	5	74	19	7
(d) Com.	86	11	3	68	28	4
3. Attending all your classes with the same students	47	42	11	49	31	20
4. Optional Plays and Concerts	22	45	33	28	42	30
5. The movies and slides presented in your classes:						
(a) Hum.	48	45	7	39	55	6
(b) Nat. Sci.	51	40	9	46	42	12
(c) Soc. Sci.	69	26	5	72	21	7
(d) Ori.	19	48	33	17	38	45

Table 37 (cont'd)	DO YOU FIND THIS HELPFUL?			DO YOU LIKE IT?		
	<u>VERY</u>	<u>SOMEWHAT</u>	<u>NOT AT ALL</u>	<u>VERY MUCH</u>	<u>SOMEWHAT</u>	<u>NOT AT ALL</u>
	Numbers represent percentages					
6. Interrelatedness of material	65	28	7	60	34	6
7. Orientation:						
(a) The Orientation class in general	29	51	20	20	54	26
(b) Knowing test scores	65	27	8	58	35	7
(c) Study skills improvement	26	49	26	28	46	26
(d) Vocational planning	34	42	24	31	41	28
8. Textbooks:						
(a) Soc. Sci.	70	28	2	54	38	8
(b) Nat. Sci.	28	31	41	16	35	49
(c) Hum.	32	51	17	18	54	28
(d) Com.	53	38	9	40	47	13
(e) Ori.	18	40	42	14	44	42
9. Exams:						
(a) Hum.	30	57	13	16	59	25
(b) Nat. Sci.	20	45	35	14	36	50
(c) Soc. Sci.	72	26	2	56	37	7
(d) Com.	66	33	1	45	46	9
10. Total ECD Program experience	66	32	2	53	37	10
11. The student--faculty relationships	66	31	3	67	29	4
12. The Student Advisory Council	16	44	40	16	45	39

TABLE 38

ECD PROGRAM EVALUATION 150  
FEB., 1967 (Fall, Sem.)

	DO YOU FIND THIS HELPFUL?		DO YOU LIKE IT?				NO RES.*
	VERY SOMEWHAT	NOT AT ALL	VERY MUCH	SOMEWHAT	NOT AT ALL	NO EVL.*	
	(Numbers represent percentages)						
<b>I. Humanities</b>							
A. Lectures	40.6	7.3	24.9	56.1	19.0	4	10
B. Discussion groups	58.3	6.0	50.0	40.4	9.6	2	11
C. Slides and Records	61.3	2.6	56.5	37.1	6.4	2	10
D. Texts and reading material	29.1	10.1	13.3	51.5	38.4	0	11
E. Trips to museum and churches	52.3	14.5	61.4	27.5	11.1	41	15
F. Exams	31.4	10.5	12.5	59.7	27.8	21	14
G. Attendance at plays, concerts, movies, etc.	40.6	18.7	57.9	31.6	10.5	34	20
H. Total course in Humanities	54.2	5.9	47.7	43.3	9.0	1	15
<b>II. Natural Science</b>							
A. Lecture	64.1	6.5	37.9	43.9	18.2	6	18
B. Lab sessions	49.7	7.7	40.6	43.8	15.6	6	18
C. Movies	48.7	6.7	47.7	43.2	9.0	11	21
D. Transparencies and filmstrips	34.5	8.8	26.3	58.6	14.8	17	24
E. Texts & reading material	38.8	10.4	20.5	57.1	22.4	10	24
F. Programed texts	55.6	10.3	41.3	39.6	19.1	16	22
G. Exams	36.0	11.8	16.6	49.6	33.7	19	19
H. Audio-tutorial unit on mitosis and meiosis	43.0	18.9	32.8	37.5	26.4	22	22
I. Total course in Nat. Sci.	53.1	7.0	42.8	42.8	14.5	11	21

\*Not In Percents

Table 38 (cont'd)

	DO YOU FIND THIS HELPFUL?		DO YOU LIKE IT?				
	VERY SOMEWHAT	NOT AT ALL	VERY MUCH	SOMEWHAT	NOT AT ALL	NO EVL.*	NO RES.*
	(Numbers represent percentages)						
<b>III. Social Science</b>							
A. Lectures	67.5	28.2	4.3	62.2	11.0	2	4
B. Discussion groups	63.3	31.8	5.0	60.7	10.1	0	5
C. Movies	66.4	29.0	45.8	71.9	2.2	6	6
D. Transparencies	25.7	60.0	14.3	23.8	16.3	74	36
E. Programed Material (160)	36.1	45.4	18.6	32.2	17.2	233	157
F. Exams	38.1	51.2	10.6	20.4	22.2	10	13
G. Texts & reading material	48.0	48.7	3.3	32.0	10.6	0	9
H. Total course in Soc. Sci.	65.5	32.4	2.0	62.6	4.4	0	6
<b>IV. Communications</b>							
A. Large group sessions	17.0	50.7	32.2	16.7	33.8	8	11
B. Discussion groups	57.8	35.8	6.4	48.5	11.1	0	15
C. Movies	23.8	52.4	23.8	26.7	24.1	100	21
D. Texts & reading material	33.4	53.3	13.3	27.5	17.7	4	14
E. Programed material (EDL Work Clues)	20.2	53.9	25.9	17.3	27.8	152	52
F. Use of overhead Projector	18.3	53.8	28.0	16.2	30.4	92	30
G. Imromptus	53.0	36.7	10.3	34.7	22.3	6	17
H. Total course in Com.	51.3	41.2	7.9	40.0	14.3	3	11
<b>V. Orientation</b>							
A. Presentation of material concerning college regulations and facilities	43.3	43.5	13.0	35.3	17.0	24	78

\*Not In Percents

Table 38 (cont'd)

	DO YOU FIND THIS HELPFUL?		DO YOU LIKE IT?				
	VERY SOMEWHAT	NOT AT ALL	VERY MUCH	SOMEWHAT	NOT AT ALL	NO EVI.*	NO RES.*
	(Numbers represent percentages)						
B. Knowing your ability & interest test scores, to show strengths and weaknesses	47.3	18.0	44.8	37.8	17.3	22	79
C. Presentation of study skills material	25.3	21.8	22.9	52.5	24.5	54	79
D. Educational-Vocational planning	40.8	19.8	36.5	44.4	19.0	43	82
E. Career investigations	34.9	29.3	32.0	39.8	28.0	69	87
F. Availability of counselor for individual conferences	58.6	7.8	58.3	32.0	9.5	39	85
G. The total courses in Orientation	33.4	18.8	31.0	44.9	24.0	12	81
<u>VI. Block Scheduling</u>							
A. Attending all classes with the same students	57.5	11.9	57.5	30.1	12.4	1	5
B. All courses held within a four to six hour block of time	82.4	3.6	84.4	11.9	3.7	3	8
C. Total Block Scheduling approach	68.2	4.0	69.5	26.3	4.2	2	10
<u>VII. Interrelations Among Courses</u>							
A. Writing the same paper for two or more courses	50.3	14.0	52.3	33.1	14.7	73	17

\*Not In Percents

Table 38 (cont'd)

	DO YOU FIND THIS HELPFUL?		DO YOU LIKE IT?					
	VERY	SOMEWHAT	NOT AT ALL	VERY MUCH	SOMEWHAT	NOT AT ALL	NO EVL.*	NO RES.*
B. Using common writing methods for various courses	60.6	34.7	4.7	53.8	39.8	6.3	12	10
C. Having the instructors emphasize the relationships between their course and other courses within the program	61.2	33.0	5.8	59.5	34.1	6.4	7	9
VIII. <u>Faculty-Student Relations</u>								
A. Faculty availability	91.1	4.2	4.8	68.3	27.8	3.9	15	12
B. Informal contacts between faculty and students	67.2	29.4	3.4	68.8	27.5	3.7	14	7
C. Faculty-student relationships ingeneral	67.1	30.7	2.2	69.1	28.5	2.0	5	5
IX. <u>Student Participation in Evaluation</u>								
A. Life aims papers (for 160 students only)	18.2	57.6	24.2	20.0	54.7	25.3	143	225
B. Evaluation of faculty	56.4	38.0	5.7	55.8	39.9	4.3	10	36
C. Evaluation of ECD Program	58.3	33.6	8.2	56.4	35.6	8.0	10	26
X. <u>Total Reaction to ECD Program</u>	66.2	29.2	4.5	59.1	33.5	7.4	6	26

\*Not In Percents



TABLE 39  
 ECD PROGRAM EVALUATION 160  
 MAY, 1967 (Spring Semester)

	DO YOU FIND THIS HELPFUL?				DID YOU LIKE IT?				NO* RES.	
	(Numbers represent percentages)									
	VERY	SOME- WHAT	SLIGHTLY	NOT AT ALL	VERY MUCH	SOME- WHAT	SLIGHTLY	NOT AT ALL		
I. <u>Humanities</u>										
A. Lectures - content	41.1	42.5	11.7	4.7	22.1	47.1	18.7	12.1	6	49
B. Team lecturing system	32.6	39.6	16.0	11.8	28.3	37.4	16.0	18.2	13	51
C. Discussion groups	35.9	37.6	17.6	8.8	36.2	33.7	17.3	12.8	5	51
D. Slides & Records	45.3	35.0	15.7	3.9	42.9	32.3	18.0	6.8	6	55
E. Textbooks & reading materials	13.2	44.4	29.7	12.6	9.6	36.0	36.0	18.3	12	54
F. Trips to museums & churches	48.0	28.4	15.6	8.0	46.7	31.2	13.4	8.8	18	50
G. In class exams	26.1	50.8	16.5	6.6	16.6	45.3	26.6	11.5	8	56
H. Take-home exams	46.7	29.8	13.6	9.9	39.6	26.9	14.2	19.2	12	51
I. Attendance at plays, movies, concerts, etc.	51.2	29.9	11.1	7.8	58.4	23.0	9.9	8.7	18	51
J. Scrapbooks	10.2	21.7	28.8	39.3	10.6	21.1	26.8	41.5	52	56
K. Creative project	24.9	30.2	27.4	17.5	29.1	32.0	22.2	16.8	12	53
L. Total course in Humanities	44.0	40.7	12.0	3.3	38.8	39.7	14.0	7.5	5	52
II. <u>Natural Science</u>										
A. Lectures	64.4	25.4	6.9	3.3	38.4	43.6	13.4	4.6	4	54
B. Lab Sessions	48.1	34.4	13.9	3.6	43.6	36.0	13.8	6.5	4	54

\*Not in percents

	DO YOU FIND THIS HELPFUL?				DID YOU LIKE IT?				NO* RES.	
	VERY	SOME- WHAT	SLIGHTLY	NOT AT ALL	VERY MUCH	SOME- WHAT	SLIGHTLY	NOT AT ALL		NO* EVL.
	(Numbers represent percentages)									
C. Movies	25.2	44.9	22.6	7.3	23.0	43.8	23.6	9.6	9	55
D. Transparencies & filmstrips	22.6	41.2	29.0	7.3	17.7	41.5	29.7	11.1	11	55
E. Textbooks & readings	39.4	39.4	16.1	5.1	19.6	43.8	28.3	8.4	7	55
F. Programed Texts	42.5	26.9	18.6	12.0	28.5	34.4	19.6	17.5	8	58
(a) Body Structure & Function	43.7	32.9	16.8	6.6	32.4	34.6	20.2	12.8	18	57
(b) Photosynthesis	25.9	32.7	22.1	19.3	14.8	32.6	27.0	25.7	16	57
G. Exams	42.5	44.6	9.5	3.4	24.5	48.1	18.9	8.4	6	56
H. Receiving unit objectives	48.9	32.7	12.9	5.5	42.6	35.7	15.1	6.6	22	64
I. Silent Spring term paper	19.9	37.1	28.0	15.0	16.2	31.4	28.7	23.6	24	65
J. Total course in Natural Science	54.7	36.0	6.6	2.7	42.6	42.9	10.2	4.3	4	58
<b>III. Social Science</b>										
A. Lectures	43.5	35.8	14.5	6.2	44.4	28.9	15.8	10.9	0	8
B. Discussion groups	46.7	37.8	12.2	3.3	41.3	32.9	18.8	7.0	0	9
C. Movies	44.3	40.2	13.7	1.8	45.4	38.2	12.5	3.9	5	10
D. Transparencies	23.2	43.5	26.7	6.7	19.5	43.5	26.4	10.6	58	12
E. Programed Material (Vietnam)	69.5	20.5	7.6	2.4	63.8	21.6	9.0	5.5	14	11
F. Exams	30.0	46.3	18.6	5.1	19.5	46.1	23.4	10.9	0	7
G. Textbook & reading materials	28.7	44.7	21.8	4.8	18.9	44.5	27.7	8.8	3	10
H. Experience projects	45.4	34.3	15.0	5.3	36.8	34.2	22.4	6.7	2	9
I. Total course in Social Science	49.5	38.2	11.3	1.0	38.1	46.3	11.1	4.5	0	7

\*Not in percents



	DO YOU FIND THIS HELPFUL?				DID YOU LIKE IT?					
	VERY	SOME- WHAT	SLIGHTLY	NOT AT ALL	VERY MUCH	SOME- WHAT	SLIGHTLY	NOT AT ALL	NO* EVI.	NO* RES.
(Numbers represent percentages)										
<u>IV. Communications</u>										
A. Large group sessions	13.3	30.8	34.3	21.6	13.7	28.8	31.4	26.2	16	34
B. Discussion groups	41.9	38.4	14.1	5.6	33.8	39.1	17.0	10.1	3	30
C. <u>Short Story</u>										
<u>Masterpieces</u>	35.1	45.9	13.8	5.1	39.9	35.1	16.7	8.2	6	33
D. <u>Time Magazine</u>	30.3	35.9	23.5	10.2	28.0	36.4	24.3	11.3	7	30
E. <u>Guest speakers</u>	40.7	35.8	17.4	6.1	45.1	30.2	15.9	8.8	32	35
F. Analysis approach to writing	37.4	41.2	13.3	8.1	30.0	39.4	18.0	12.6	6	29
G. Total course in Communications	42.3	45.2	8.3	4.2	30.4	48.5	13.8	7.3	3	29
<u>V. Block Scheduling</u>										
A. Attending all classes with the same students	48.8	33.2	11.1	6.9	45.8	30.2	14.3	9.8	2	13
B. All courses held within a four to six hour block of time	75.5	19.6	3.5	1.4	82.8	11.7	4.5	0.8	4	17
C. Total Block Scheduling Approach	57.5	34.6	5.4	2.5	63.2	28.3	5.6	2.9	3	17
<u>VI. Interrelations Among Courses</u>										
A. Writing the same paper for two or more courses	57.1	27.5	9.4	6.0	56.3	25.9	8.1	9.7	13	17

\*Not in percents

	DO YOU FIND THIS HELPFUL?		DID YOU LIKE IT?						
	VERY	SOME- WHAT	SLIGHTLY NOT AT ALL	VERY MUCH	SOME- WHAT	SLIGHTLY	NOT AT ALL	NO* EVI.	NO* RES.
	(Numbers represent percentages)								
B. Using common writing methods for various courses	52.3	37.5	7.3	57.4	29.2	9.1	4.3	8	15
C. Having the instructors emphasize the relationships between their courses within the program	53.6	30.6	12.5	47.8	33.6	12.9	5.6	8	13
VII. <u>Faculty-Student Relations</u>									
A. Faculty availability	80.7	44.9	8.1	62.0	28.8	7.0	2.2	5	13
B. Informal contacts between faculty and students	62.0	28.9	8.6	67.6	22.6	8.4	1.4	6	15
C. Faculty-student relationships in general	60.2	30.5	8.4	66.0	25.1	7.0	1.9	4	14
VIII. <u>The Programed Learning Center</u>	35.6	29.4	17.0	22.9	29.9	24.6	22.6	10	16
IX. <u>The Total ECD Program</u>	52.9	40.5	5.3	49.3	40.8	7.2	2.7	1	15

\*Not in percents

TABLE 40

ECD PROGRAM EVALUATION 150  
FALL, 1967

	DO YOU FIND THIS HELPFUL?				DID YOU LIKE IT?				NO* RES.	
	VERY	SOME- WHAT	(Numbers represent SLIGHTLY NOT AT ALL	VERY MUCH	SOME- WHAT	SLIGHTLY NOT AT ALL	NO* EVI.			
I. <u>Humanities</u>										
A. Lecture.....	47.9	36.7	13.0	3.4	31.0	44.2	14.9	9.9	3	12
B. Discussion groups.....	60.0	27.4	8.2	4.4	52.8	29.7	11.3	6.3	4	13
C. Slides and records.....	61.1	27.8	8.0	3.1	54.4	29.6	11.1	5.0	5	14
D. Textbooks and reading material..	18.1	43.7	32.6	5.7	14.5	36.0	35.2	14.2	10	16
E. Trips to museums and churches...	45.2	32.5	15.6	6.8	45.9	28.2	16.2	9.7	8	16
F. In class exams.....	35.9	46.5	14.6	3.0	23.0	45.9	22.4	8.7	7	14
G. Attendance at plays, concerts, movies, etc.....	46.4	29.2	15.2	9.1	49.7	26.3	12.9	11.1	9	14
H. Term project.....	34.9	36.8	17.7	10.5	36.6	32.8	17.9	12.7	21	14
I. Take-home exams.....	38.8	28.8	13.8	18.5	41.7	29.1	14.3	14.8	131	47
J. Scrapbooks.....	23.2	33.9	19.9	22.9	25.1	32.2	19.9	22.8	73	24
K. Outside lecturers.....	43.2	32.0	14.8	10.0	47.3	31.9	13.2	7.6	56	22
L. Total course in Humanities.....	54.0	32.8	8.8	4.4	51.8	30.1	12.0	6.0	5	13
II. <u>Natural Science</u>										
A. Lectures.....	50.3	32.5	12.3	5.0	32.3	36.7	18.1	12.9	4	17
B. Lab sessions.....	47.9	32.1	16.4	3.6	44.9	33.3	15.2	6.6	3	14
C. Movies.....	45.4	36.5	15.3	2.8	46.6	34.0	14.1	5.2	4	14
D. Transparencies and filmstrips...	29.9	42.0	22.3	5.8	26.8	44.7	19.7	8.8	23	22
E. Textbooks.....	45.1	38.8	12.1	4.0	26.6	41.1	22.1	10.3	6	14
F. Exams.....	31.6	44.2	17.7	6.4	16.8	40.5	23.8	18.9	9	16
G. Receiving unit objectives (at the end of each chapter).....	39.8	33.7	17.4	9.1	29.2	35.0	24.3	11.6	33	23
H. Total course in Natural Science.	42.3	38.9	13.9	4.9	35.3	36.9	15.7	12.0	4	13

\*Not in percents

DO YOU FIND THIS HELPFUL?

DID YOU LIKE IT?

	DO YOU FIND THIS HELPFUL?				DID YOU LIKE IT?				NO* EVI.	NO* RES.	
	VERY	SOME- WHAT	SLIGHTLY NOT AT ALL	VERY MUCH	SOME- WHAT	SLIGHTLY NOT AT ALL	VERY MUCH	VERY MUCH			
<b>III. Social Science</b>											
A. Lectures.....	62.1	28.8	7.4	1.8	35.0	10.0	49.4	10.0	5.7	2	7
B. Discussion Groups.....	58.2	29.1	10.1	2.5	29.5	10.8	52.6	10.8	7.2	1	6
C. Movies.....	59.0	27.9	11.2	1.9	26.6	8.9	61.8	8.9	2.7	19	12
D. Exams.....	39.5	45.6	11.3	3.6	47.4	17.3	27.2	17.3	8.1	7	9
E. Textbooks.....	41.0	35.4	17.4	6.2	36.0	23.6	30.1	23.6	10.4	3	9
F. Readings Book.....	40.5	38.1	16.2	5.2	39.9	18.8	33.8	18.8	7.5	9	13
G. Written Experience.....	33.1	41.2	18.8	7.0	41.2	21.8	28.8	21.8	8.2	33	25
H. Guest Speakers.....	54.3	26.9	10.8	8.0	26.7	9.5	59.1	9.5	4.7	69	31
I. Field Trips.....	31.7	25.4	10.1	32.8	33.1	11.0	46.3	11.0	9.6	203	67
J. Other reading material (novels, etc.).....	34.4	38.1	17.1	10.4	30.7	20.9	39.7	20.9	8.7	78	43
K. Total course in Social Science.	56.5	36.0	6.3	1.3	34.8	7.1	55.5	7.1	2.6	1	11
<b>IV. Communications</b>											
A. Large group sessions.....	19.4	36.9	26.0	17.7	35.7	24.2	16.7	24.2	23.4	5	4
B. Small group sessions.....	55.3	33.1	9.6	2.0	32.0	11.9	51.5	11.9	4.6	4	5
C. "What I Meant To Say Was".....	12.3	33.9	30.6	23.1	34.0	23.9	12.2	23.9	30.0	20	5
D. Use of other readings or books.	43.8	40.2	13.1	2.8	35.3	15.6	43.6	15.6	5.5	4	8
E. Student Symposiums or Group Discussions.....	43.7	35.5	13.4	7.5	34.0	16.0	41.8	16.0	8.2	13	6
F. Journals.....	28.0	29.3	22.0	20.7	25.3	20.1	29.8	20.1	24.8	12	3
G. Impromptus.....	35.9	38.9	16.4	8.8	36.6	23.5	28.1	23.5	11.7	24	10
H. Out of class writing.....	28.3	45.3	19.4	7.1	38.6	24.0	26.7	24.0	10.7	26	5
I. Approach to writing (four-point criteria).....	48.9	28.8	13.0	9.3	31.3	19.5	34.4	19.5	14.9	4	3
J. Use of class time for help in writing.....	51.9	27.9	15.8	4.4	32.5	16.1	46.5	16.1	4.9	16	5
K. Workshop.....	29.2	36.0	16.7	18.2	38.6	21.2	26.6	21.2	13.7	94	60
L. Total course in Communications.	39.5	46.1	13.1	1.3	45.3	13.7	36.6	13.7	4.5	6	6

\*Not in percents

	DO YOU FIND THIS HELPFUL?			DID YOU LIKE IT?			NO* RES.		
	VERY	SOME- WHAT	(Numbers represent percentages) SLIGHTLY NOT AT ALL	VERY MUCH	SOME- WHAT	SLIGHTLY		NOT AT ALL	NO* EVI.
<u>V. Orientation</u>									
A. Presentation of material concerning college regulations and facilities.....	52.8	32.3	11.0	42.9	36.3	12.4	8.5	6	20
B. Knowing your ability and interest test scores, to show strengths and weaknesses.....	55.8	30.5	10.5	54.2	29.1	10.5	6.2	6	22
C. Presentation of study skills material.....	33.2	39.4	21.4	32.1	40.2	19.1	8.6	19	19
D. Educational-Vocational planning.	46.9	34.0	12.5	47.6	35.5	10.5	6.4	16	23
E. Availability of counselor for individual conferences.....	64.7	24.8	7.0	65.2	23.8	7.2	3.9	16	23
F. Group counseling sessions.....	44.5	34.0	15.0	47.2	33.1	13.7	6.0	36	26
G. The total course in Orientation.	45.4	36.1	13.2	47.0	30.9	15.6	6.6	8	20
<u>VI. Block Scheduling</u>									
A. Attending all classes with the same students.....	45.9	32.8	11.3	41.3	27.2	11.0	20.4	9	8
B. All courses held within a four to six hour block of time.....	74.9	19.9	2.8	78.4	16.0	3.1	2.6	3	9
C. Total block scheduling approach.	65.3	25.4	5.7	66.8	22.1	7.0	4.2	3	10
D. Having more than one instructor for one course.....	30.2	19.3	19.0	33.0	17.2	15.4	34.4	93	28
<u>VII. Interrelations Among Courses</u>									
A. Writing the same paper for two or more courses.....	42.2	28.8	13.2	41.7	28.1	11.4	18.9	29	13
B. Using common writing methods for various courses.....	46.5	38.0	11.2	45.8	35.0	12.1	7.0	17	11

\*Not in percents

	DO YOU FIND THIS HELPFUL?			DID YOU LIKE IT?				NO* EVI. RES.
	VERY	SOME-- WHAT	(Numbers represent percentages) SLIGHTLY, NOT AT ALL	VERY MUCH	SOME-- WHAT	SLIGHTLY NOT AT ALL	NO* EVI. RES.	
<b>VIII. <u>Faculty-Student Relations</u></b>								
A. Faculty Availability.....	56.9	33.9	6.6	55.0	33.8	9.2	11	15
B. Informal contacts between faculty and students.....	60.4	27.7	10.1	64.7	25.7	7.9	14	18
C. Formal faculty-students contacts.....	36.5	39.6	16.9	38.4	34.8	20.4	24	27
<b>IX. <u>The Program Learning Center</u></b>								
A. Math.....	27.2	23.7	19.4	16.4	21.6	22.8	23	19
B. Communications.....	28.7	26.3	16.2	24.4	28.6	19.2	101	69
X. <u>The Total ECD Program</u>	52.9	37.4	7.5	50.3	37.3	9.9	4	218
			2.3			2.5		204

\*Not in percents

## INNOVATIONS

New developments in the curriculum can be seen, for example, in the increasing number of aspects of team integration that have been added to the program evaluation form. The first two evaluation forms merely asked about student reactions to the "interrelatedness of material" whereas the succeeding evaluations detailed the various manners in which this interrelatedness was actually put into practice. Increased efforts on the part of the various areas to relate to community activities is evident in the changed program evaluations as well.

The overall increase in details being evaluated is indicative of a faculty that is continually more aware of what they are doing, coupled with a willingness to expose these efforts to student evaluations. The changes are evidence that students' reactions are part of the motivation behind the curriculum additions and deletions.

An experimental program should have faculty that are willing to innovate and experiment with a variety of educational concepts. Their attempts at change should be encouraged and rewarded so that the program has a continuing process of change and development.

When faced with an educational situation that is unstructured and open to experimentation, it is hypothesized that community college instructors will respond by developing new and creative approaches to instruction, new instructional materials and be willing to remain flexible enough to continue experimenting and changing even after the initial start has been made.

Much of what has been covered previously, program evaluations and the Team, indicates the changes being continually made in the ECD Program. These changes are in response to student evaluations as well as the product of a faculty placed in a program that sets as one of its goals--experimentation. The program accepts that there is value in maintaining an aura of "newness" so that all students that enter the program feel that their comments and evaluations are actually considered and used as well as making the students sensitive to the idea that they are more important than they would normally be, simply by virtue of being enrolled in ECD.

One concrete example of a busy faculty is the instructional material that has been developed by the various instructors in ECD. The very first faculty to publish nationally were those in the ECD Program.

The following is a list of innovative activities carried out by the ECD faculty over the past years:

1. The development of a total program designed by community college personnel to meet the general education needs of community college students.
2. The creation by faculty of an entire one year curriculum as a coherent whole including a variety of curricular and extra-curricular experiences.
3. The development of broad interdisciplinary courses in communications, humanities, natural science, and social science.

4. The coordination and integration of subject matter and assignments among the various courses comprising the program.
5. The formation of faculty teams composed of instructors from each subject area who have the same groups of students and meet weekly to promote coordination of efforts, faculty interaction, and better understanding of students.
6. The creation of a relatively independent administrative unit with a distinct identity within the larger college.
7. The utilization of a block scheduling system with two major features:
  - a. Students are able to register for a package of courses which form a relatively compact schedule.
  - b. Students attend all of their classes with the same group of students.
8. The systematic utilization of small group discussion and laboratory sessions of about twenty students (10 hours per week) in conjunction with large group sessions of about sixty students (6 hours per week).
9. The involvement of faculty members in the observation of other faculty members in classroom teaching situations.
10. The development by faculty members of a faculty evaluation system, which includes student, administration, and colleague evaluations, based upon observation of classroom teaching.
11. The utilization of students' opinions, determined through both formal and informal means, for program and course evaluations.
12. The development of communications courses which combine composition and speech skills improvement through the use of subject matter from other disciplines in a service-centered approach.
13. The stimulation of informal interaction between students and faculty through their participation in activities such as attending plays, concerts, exhibits, field trips and engaging in informal athletic competition.
14. The preparation by program faculty members of appropriate textbooks and other instructional materials.
15. The development of a first semester orientation course which provides general program and college information, supplemental testing, group and individual educational-vocational counseling.
16. The completion of a profile sheet by each student which includes a variety of test scores (SCAT, Co-op Eng., Kuder).



17. The systematic effort to inform students of various educational and vocational opportunities commensurate with their abilities and interests.
18. The assignment of a vocational exploration project which includes general research, interviews and/or observations of persons in the occupational area.
19. The exploration and utilization of programmed instruction materials within the regular curriculum and on a supplemental basis in cooperation with the Programed Learning Center.
20. The formulation of operational objectives, performance criteria and appropriate measurement indicators for each unit of each course.
21. The exploration of the audio-tutorial approach to supplement other forms of instruction.
22. The development and continuation of a program evaluation procedure which is longitudinal in nature.

## TEAMS

Block scheduling of students means that a group of instructors, one or two from each area, all have the same students. These instructors are known as a Team. The Team meets once a week during the semester to develop methods of integrating the material from the courses, arranging activities, speakers or field trips, planning team teaching experiences, devising means of assisting individual students, or planning any number of possible experiences for the students. There are no specific guidelines provided for the teams, nor any specific educational goals that must be met. The Team is allowed to be as innovative or creative as is possible within the very broad outlines of the total program and individual subject areas. Each Team is encouraged to choose a Chairman and to keep track of their activities. Other than that, the Team has free reign to experiment.

It is hypothesized that (1) one means to keep experimentation and innovation as a continuing activity within a program is to have an area of the program that is not structured or pre-planned; (2) the attempts made at providing integrated assignments, speakers, trips, etc. makes the ECD Program appear to be a more unified and powerful force than it would be if each individual subject area were operating separately and independently; (3) faculty from the different areas working together are better able to determine what kinds of assignments would be best suited to the students during the progress of the semester.

The data to indicate that the Team concept has provided a means for continual innovation, a unified environment and better coordination of assignments will be two-fold: first, the students' evaluations of the Team as they are contained in the Program Evaluations and second, a sampling of the material produced by some of the Teams, themselves.

Table 41 indicates the responses to Team activities from the last two and one-half years. There is a small negative reaction to all of the questions asked.

The following examples of course, subject and concept integration are representative samples of what has been done during the past two and one-half years. They were developed by different Teams at different times for different sets of students. These efforts obviously offer suggestions for future integration, but the Teams do not use them as set guidelines. Each Team begins each semester with a "clean slate" as far as what can be attempted and done.

(1) One team had all their students visit the Ford Rouge Plant and tour its assembly lines. The students then were required to write a paper. For: (a) Humanities, the students had to decide if the architecture of the plant fulfilled the concept that "form follows function"; (b) Social Science, the students observed the working conditions of the assembly line worker and related this to the Diego Rivera mural at the Detroit Institute of Arts, and the quotation "The problem with modern production and the assembly line is that the worker has no control over his working conditions.

TABLE 41  
RESPONSE TO TEAM ACTIVITIES

	DO YOU FIND THIS HELPFUL?			DO YOU LIKE IT?		
	<u>VERY</u>	<u>SOMEWHAT</u>	<u>NOT AT ALL</u> (Numbers represent percentages)	<u>VERY MUCH</u> represent percentages)	<u>SOMEWHAT</u>	<u>NOT AT ALL</u>
<u>JANUARY, 1966</u> Interrelatedness of material	43.0	42.0	15.0	36.0	40.0	24.0
<u>MAY, 1966</u> Interrelatedness of material	65.0	28.0	7.0	60.0	34.0	6.0
<u>FEBRUARY, 1967</u> Interrelation Among Courses						
a. Writing the same paper for two or more courses.....	50.3	35.7	14.0	52.3	33.1	14.7
b. Using common writing methods for various courses.....	60.6	34.7	4.7	53.8	39.8	6.3
c. Having the instructors emphasize the relationships between their course and other courses within the program.....	61.2	33.0	5.8	59.5	34.1	6.4

Table 41--p. 2  
Response to Team Activities

	DO YOU FIND THIS HELPFUL?				DO YOU LIKE IT?			
	VERY	SOME- WHAT	SLIGHTLY	NOT AT ALL	VERY MUCH	SOME- WHAT	SLIGHTLY	NOT AT ALL
<u>MAY, 1967</u> Interrelations Among Courses								
a. Attending all classes with the same students.....	57.1	27.5	9.4	6.0	56.3	25.9	8.1	9.7
b. Using common writing methods for various courses.....	52.3	37.5	7.3	3.0	57.4	29.2	9.1	4.3
c. Having the instructors emphasize the relationships between their courses within the program.....	53.6	30.6	12.5	3.3	47.8	33.6	12.9	5.6
<u>JANUARY, 1968</u> Interrelations Among Courses								
a. Writing the same paper for two or more courses...	42.2	28.8	13.2	15.9	41.7	28.1	11.4	18.9
b. Using common writing methods for various courses.....	46.5	38.0	11.2	4.3	45.8	35.0	12.1	7.0

He is at the total mercy of the line. The work is mechanical, meaningless, degrading... robbed of creativity and purpose. As a result, he becomes bitter, cynical and sub-human. The system that created such a condition is to be wholly condemned."; (c) Natural Science, the students observed the environmental pollution and determined what the Ford plant was doing to solve the problem; and finally (d) Communications, wrote this report so that it fit into the organizational pattern that the students were using. The Communications instructor graded the whole paper and then forwarded the separate questions to each individual area for grading.

(2) One Team began meeting together several weeks before their classes were scheduled to begin and devised a coordinated plan for all areas, (social science, communications, natural science, humanities and orientation) that would encourage the maximum amount of integration in the areas of critical thinking, skill development and content. They included in their plan several instances of team teaching, such as the first symposium that included all the teams' instructors on a panel. The purpose of their discussion was to have the students recognize that human feelings about something as simple as a satirical record can be very divergent, which led to a discussion of differing backgrounds and personalities as related to different responses. The large group discussion with the panel then broke up into small discussion groups with the respective instructors continuing the discussion. Then in the following weeks, each area moved on from this point to a discussion of objectivity (a) communications using their organized pattern of writing to assist students in writing clear viewpoints about their own feelings; (b) social science studying the family as the basic source of understanding human feelings; (c) humanities increasing the students' awareness that the language of art and music communicate human feelings; and (d) orientation encouraging the expression of student feelings in relation to their new status as college students.

(3) As part of their integration during the semester, one team collected essay answers from the three areas, social science, natural science and humanities immediately after their first fifth-week exam. Several answers were culled from all the exams and arranged in order of less acceptable to most acceptable. Then these answers were duplicated and given to each student during a communications lecture. The organization or lack of organization of each answer was related to the organized pattern of writing that was being practiced in communications. The main point of the exercise was to assist the students in learning how to connect the organized method of writing they were already using in communications to writing better answers to essay questions in the other areas. This exercise led to a discussion by the instructors at a later team meeting as to how better questions could be written so as to make it easier for students to understand just what was desired by the instructor.

(4) Several teams assign books in common and then have the students deal with the book in some manner that brings in most of the areas. One team had their students, near the end of the semester, read Brave New World. The questions assigned were structured by the communications instructor and there was a question for each area: (a) "How did the Brave New World solve the problems of race? Base your answer on the novel. Then

decide what parts of the solution you agree or disagree with and base this answer on information gained in class, from readings, speakers and your own experience."; (b) "What was the official view of science in Brave New World? Again, this answer depends on the novel. Do you agree or disagree with this view based on information gained in classes, from readings, speakers, and your own experiences. (c) Find (in the novel) a description of one of the official buildings or homes of the inhabitants of the Brave New World. Carefully sketch an actual picture of the building or homes based on the written description of it in the novel. Then write out a statement that explains why you pictured it in that manner. Decide whether this building (apartment, etc.) would or would not, in your personal opinion, be a good place to live or work. Base your opinion on information gained in class, from readings, speakers, and your own experiences." The purpose of these questions, then, was to have the students develop a viewpoint based on their semester's work and justify this by summarizing their readings, experiences, etc.

(5) Realizing that one of the students' reading problems is to separate and discuss what they are reading from their personal feelings and prejudices, one team developed a means of coordinating with the communications area so that all the areas could agree on a method of analyzing the various readings. The following questions which were assigned by the social science area are an example of these skills: (a) A definition, in order to be precise, must indicate what it is not as well as what it is; (b) A definition, if precise, is limited to a particular time and place; (c) An abstract label (such as "important problem") needs to be carefully defined by the author; (d) All labels are arbitrary divisions of reality, but their interrelationships must be made clear; (e) Before using a category, the author must make the reasons for the division very clear; (f) Predictions are always viewpoint and to be valuable must be directly connected to the present. Many of the terms used in these questions are those also used in communications. Once the students have gone over a reading, for social science, humanities or natural science, and considered these questions or those similar to them, then the discussions about the readings could more easily concentrate on what is actually written rather than everybody's personal views about the topic.

### Discussion

These rather sketchy discussions of the various projects indicates the far-ranging possibilities inherent in the open-ended team structure. Skill development enters into the various projects and the team assignments and projects that are planned for the beginning weeks of the first semester are more simply organized than those which come near the final weeks. All areas benefit for example, when students are more able to write clear answers to essay questions, while students benefit when instructors are more careful to word their questions in a manner that assists the students to think in an organized way.

## SECOND YEAR QUESTIONNAIRE

In order to gain some further information about the first ECD group and the comparison group at the end of the second year after starting college, questionnaires were sent out to every student that had enrolled in September, 1965 in either the ECD program or in the comparison group. All the other data that we had on these students was almost completely confined to that information available within the institution. We had no data concerning those students who had dropped, or transferred, at the end of one, two or three semesters, nor did we have any other means for obtaining some information about the future plans of students who still were attending Macomb. The questionnaire, then, had several purposes: (1) to determine where students were who had left Macomb; (2) to determine some of the reasons why students had left; (3) to determine the future plans of those students who had left; (4) to determine the future plans of those students still attending Macomb or just graduating; (5) to gain some insight into the students' present attitudes about college, whether they had left, transferred or were still attending Macomb; (6) to determine the students' attitudes about faculty and faculty-student relations at Macomb; and (7) to determine their present vocational plans in comparison to earlier choices and their reasons for any change.

The questionnaire was divided into three main sections; (a) the first section merely asked for some simple descriptive data, name, present address, activities during the past year; (b) the second section was to be filled in only by those students who had not attended college during the past year; and (c) the third section was just for those students who had attended college during their second year.

It was hypothesized that the students who had entered the ECD Program their first year would (1) be less likely to drop out of college than the students in the comparison group; (2) be more likely to make some change in their vocational plans than the comparison group; (3) be more likely to have a positive attitude about their college experience, no matter how long they had remained, than those in the comparison group; (4) be more likely to have a higher opinion of their first year faculty and faculty-student relations than those in the comparison group; and (5) be more likely to indicate that they have made some change in their ideas, values or attitudes as a result of attending college than the comparison group; (6) be more likely to remain active in extra-curricular activities than the comparison group. There were no hypothesis concerning some of the data asked for, but the questionnaires did provide some insights into: (1) the number of students who dropped, but had intentions of returning to college; (2) the reasons given by students for dropping in relation to their present attitudes about their college experience; (3) the types of jobs held by the students who dropped out and their vocational plans; and (4) the types of subjects and courses that students felt were most helpful and/or well-liked.

Data and Tables

The following table indicates the number and percent of students in both Group A (ECD) and Group B (comparison group) that returned the questionnaires and the number and percent answering the second section (section B) and the third section (Section C).

	Total rec'd	(non-attenders) Completed Sec. B	(attenders) Completed Sec. C	Number of forms sent
Group A	52% (206)	13% (55)	38% (151)	393
Group B	64% (100)	21% (33)	42% (67)	156

Question #3: Number of students attending college during the preceding year.

	Summer 1966	Sept.-Jan., 1966-67	Feb.-June, 1967	Total
Group A (ECD)	24% (50)	76% (157)	68% (141)	206
Group B (Comparison)	22% (22)	67% (67)	63% (63)	100

Question #3: Number of students attending particular institutions during the preceding year.

Attending College, Summer, 1966

College	Group A	Group B
Macomb	100% (50)	95% (21)
University of Michigan		(1)
Total	(50)	(22)



Sept.-Jan. 1966-67

<u>College</u>	<u>Group A</u>	<u>Group B</u>
Macomb	90% (142)	89% (59)
Wayne State University	4% (7)	0
Michigan State University	1% (2)	0
Northern Michigan University	0 (1)	0
Eastern Michigan	1% (2)	3% (2)
Out of State	1% (3)	3% (2)
University of Michigan	0	1% (1)
Michigan Lutheran	0	1% (1)
Ferris	0	1% (1)
Total	(157)	(66)

Feb.-June, 1967

<u>College</u>	<u>Group A</u>	<u>Group B</u>
Macomb	89% (127)	84% (53)
Wayne State University	5% (8)	0
Michigan State University	1% (2)	0
Northern Michigan	0	0
Eastern Michigan	1% (2)	4% (3)
Western Michigan	0 (1)	0
University of Michigan	0	1% (1)
Michigan Lutheran	0	1% (1)
Ferris	0	1% (1)
Out of State	1% (2)	6% (4)
Total	(142)	(63)

Question #4: Are you working at a full-time job at the present?

	Group A	Group B
Yes	65% (127)	65% (65)
No	34% (68)	34% (34)
Total	(195)	(99)

The question also asked the student to name the job. The list is too varied to be included here, so will be found in the appendix.

Question #5: If you are not attending college and not working, what are you presently doing? Service \_\_\_ Marriage \_\_\_ Other (please explain) \_\_\_\_\_.

	Group A		Group B
Service	70% (26)		69% (16)
Marriage	18% (7)		13% (3)
Other - Wayne State part-time	2% (1)	Nursing	4% (1)
Vacationing	5% (2)	Vacationing	4% (1)
Recuperating from surgery	2% (1)	Helping at home	4% (1)
		Waiting for service	4% (1)
Total	(37)		(23)

This ends the section of the questionnaire that was to be filled out by all students, regardless of whether they were still in school. The following section, Section B, is to be filled out only by those students who did not attend college during the past year, 1966-67. As indicated previously, 55 students in Group A and 33 students in Group B filled in this part of the questionnaire.

Question #6: Why did you decide to not return to college? Because each student answered in an individual manner, the reasons are worded as closely as possible to what was actually stated.

Reasons	Group A	Group B
1. Service - joined or was drafted	45% (22)	31% (10)
2. Didn't like Macomb; Macomb caused problems; not useful to me personally	6% (3)	3% (1)
3. College in general is not for me or not useful for me	18% (9)	6% (2)
4. Illness	6% (3)	6% (2)
5. Money	6% (3)	28% (9)
6. Doing poorly	6% (2)	2% (1)
7. Married	12% (6)	15% (5)
8. Went on to other type of training	2% (1)	3% (1)
Total	(32)	(48)

Question #7: What job plans do you have at the present time?

Job Plans	Group A	Group B
1. None	40% (21)	32% (8)
2. Named a particular industry or corporation	0	20% (5)
3. Service	19% (10)	4% (1)
4. Named a particular vocation, not a place	23% (12)	32% (8)
5. Still attending training school	0	8% (2)
6. Stay where I am	17% (9)	0
7. Go back to school	0	4% (1)
Total	(52)	(25)

Question #8: Are these plans different from those you had when you entered college two years ago? Yes \_\_\_\_\_ No \_\_\_\_\_

	Group A	Group B
Yes	69% (37)	80% (25)
No	30% (16)	19% (6)
Total	(53)	(31)

Question #9: Do you plan to return to college in the future? Yes \_\_\_\_\_  
 No \_\_\_\_\_ When \_\_\_\_\_

<u>Group A</u>			<u>Group B</u>		
<u>Yes</u>	<u>No</u>	<u>Undecided</u>	<u>Yes</u>	<u>No</u>	<u>Undecided</u>
36	11	3	26	4	3
<u>When</u>			<u>When</u>		
1967		29% (10)	1967		35% (5)
1968		20% (7)	1968		28% (4)
1969		17% (6)	1969		14% (2)
1970		2% (1)	1970		7% (1)
1971		5% (2)	1971		7% (1)
after service		11% (4)	after service		7% (1)
now or soon		11% (4)	now or soon		0
Total		(34)			(14)

Question #10: What are your present feelings about your college experience? These categories are worded as closely as possible after the actual wording of the students' responses.

Response	Group A	Group B
1. Positive - a rewarding experience, enjoyed it, liked it, found it fun, etc.	69% (29)	54% (13)
2. Waste of time, poor, didn't like it, didn't get what I wanted out of it, etc.	19% (8)	20% (5)
3. No comment, undecided about it	4% (2)	8% (2)
4. Made mistakes in college, it was my fault, etc.	4% (2)	16% (4)
5. Against ECD	2% (1)	0
Total	(42)	(24)

Question #11: If you had it to do over again, would you (a) attend college \_\_\_\_\_ (b) not attend college, but work \_\_\_\_\_ (c) drop out of college \_\_\_\_\_.

Response	Group A	Group B
1. Attend college	85% (46)	81% (27)
2. Not attend college, but work	11% (6)	15% (5)
3. Drop out of college	3% (2)	3% (1)
Total	(54)	(33)

Question #13: Do you think you are a different person now than you were before you attended college? Yes \_\_\_\_\_ No \_\_\_\_\_ If you answered yes, then in what ways are you different?

Response	Group A	Group B
1. Yes	72% (40)	74% (23)
2. No	27% (15)	25% (8)
Total	(55)	(31)

In what ways are you different? These answers are patterned as closely as possible after the students actual comments.

Responses	Group A	Group B
1. More mature, grew up, more self-assured, better outlook, accept more responsibility, etc.	58% (17)	40% (9)
2. Saw the value of education	10% (3)	13% (3)
3. Am more educated now	31% (9)	36% (8)
4. Gained new and different experiences	0	4% (1)
5. Nothing	0	4% (1)
Total	(29)	(22)

Question #14: Would you have stayed in college if some things had been changed? Yes \_\_\_\_\_ No \_\_\_\_\_

Response	Group A	Group B
1. Yes	73% (38)	78% (25)
2. No	26% (14)	21% (7)
Total	(52)	(32)

Question #15: What would have made you stay in college? These answers, as the ones previously mentioned, are based on the wording of the responses on the questionnaire.

Responses	Group A	Group B
1. If I had studied, been interested, tried harder, not worked or gotten better grades	28% (12)	25% (6)
2. If college had been better, or classes, teachers or schedules had been better	30% (13)	8% (2)

## Question #15--continued

Responses	Group A	Group B
3. No draft, service	21% (9)	25% (6)
4. More money	2% (1)	33% (8)
5. Personal reasons--family moving, marriage, transfer, etc.	16% (7)	8% (2)
Total	(42)	(24)

Question #16: At this point, what do you remember as the best or worst features of your college experience?

Responses (best)	Group A	Group B
1. Teachers (individuals and as a group)	10% (3)	23% (3)
2. Classes (as a group)	13% (4)	38% (5)
3. Teacher-student relations	17% (5)	7% (1)
4. Other students	10% (3)	0
5. EGD	3% (1)	0
6. College education over all	20% (6)	7% (1)
7. Specific classes	20% (6)	23% (3)
8. Clubs	3% (1)	0
Total	(29)	(13)

Responses (worst)	Group A	Group B
1. Classmates	4% (1)	0
2. Classes	4% (1)	0
3. ECD	17% (4)	0
4. Registration	0	20% (2)
5. Faculty	8% (2)	10% (1)
6. Overall college	30% (7)	30% (3)
7. Personal problems that resulted from attendance	21% (5)	20% (2)
8. Specific classes	13% (3)	20% (2)
Total	(23)	(10)

Question #17: During the past school year, have you participated in any clubs, organized athletics, or have you attended any cultural events?  
 Yes \_\_\_\_\_ No \_\_\_\_\_

Response	Group A	Group B
Yes	43% (20)	22% (6)
No	56% (26)	77% (21)
Total	(46)	(27)

Type of activity	Group A	Group B
1. Clubs	23% (9)	44% (4)
2. Athletics	23% (9)	22% (2)
3. Cultural events	46% (18)	22% (2)
4. No response	7% (3)	11% (1)
Total	(39)	(9)



## SECOND YEAR QUESTIONNAIRE

Part C - for those who were in college during their second year.

Part C was filled in by those students who had attended college during the year 1966-67. In Group A, of the 206 who returned their questionnaires, 151 filled in Part C; in Group B, of the 100 who returned their questionnaires, 67 filled in Part C.

Question #18: Did you graduate from Macomb in June, 1967? Yes \_\_\_\_\_  
 No \_\_\_\_\_ If not, indicate the institution you did attend. \_\_\_\_\_

Responses	Group A	Group B
Yes	25% (62)	8% (6)
No	46% (114)	53% (37)
Schools attended, if didn't graduate		
Macomb	20% (51)	30% (21)
Wayne	2% (7)	1% (1)
Eastern	0 (2)	1% (1)
Michigan	0 (1)	0
Michigan State University	0 (1)	0
Northern	0 (1)	0
Western	0 (1)	0
DIT	0	1% (1)
Out of State	1% (3)	2% (2)
<b>Total</b>	<b>(243)</b>	<b>(69)</b>

Question #19: Did you earn enough credits to graduate in June, 1967?  
 Yes \_\_\_\_\_ No \_\_\_\_\_

Responses	Group A	Group B
Yes	27% (41)	10% (7)
No	72% (108)	89% (60)
Total	(149)	(67)

Question #20: Do you plan to complete graduation requirements before September, 1967? Yes \_\_\_\_\_ No \_\_\_\_\_ When do you expect to complete graduation requirements?

Responses	Group A	Group B
Yes	5% (12)	1% (2)
No	43% (104)	54% (60)
No response or unknown	14% (35)	5% (6)
August, 1967	1% (3)	0
January, 1968	11% (27)	10% (11)
June, 1968	5% (12)	8% (9)
September, 1968	2% (5)	0 (1)
January, 1969	0	0 (1)
June, 1969	4% (8)	4% (5)
August, 1969	0	0 (1)
January, 1970	0 (1)	0
June, 1970	1% (3)	0
June, 1971	0 (1)	0 (1)
Uncertain	5% (13)	5% (6)
Transfer	2% (7)	2% (3)
After service	0 (1)	2% (3)
Never	2% (6)	0 (1)
Total	(238)	(110)

Question #21: Do you plan to transfer to another college or university? Yes\_\_\_\_, No\_\_\_\_ If so, where? Have they accepted you? Yes\_\_\_\_  
No\_\_\_\_

Responses	Group A	Group B
Yes, plan to transfer	75% (115)	71% (47)
No, do not plan to transfer	16% (24)	22% (15)
No response or undecided	7% (11)	6% (4)
<b>Total</b>	<b>(150)</b>	<b>(66)</b>

Where do you plan to transfer?	Group A	Group B
Wayne State University	50% (56)	30% (19)
Michigan State	6% (7)	6% (3)
University of Michigan	0 (1)	6% (3)
Eastern	12% (14)	12% (6)
IBM	0	2% (1)
Western	9% (11)	6% (3)
Ferris	2% (3)	4% (2)
Oakland	4% (5)	4% (2)
Central	2% (3)	2% (1)
Northern	0 (1)	8% (4)
DIT	0 (1)	0
Michigan Tech.	0	2% (1)
Out of state	6% (7)	8% (4)
Detroit Business	0 (1)	0
Lawrence Institute	0 (1)	0
<b>Total</b>	<b>(111)</b>	<b>(49)</b>

Question #22: If you are transferring to a college or university, what major do you plan on entering?

Responses	Group A	Group B
Business (Accounting, Management, Administration, Marketing, office work, stock-broker, etc.)	23% (36)	26% (17)
Education	13% (20)	20% (13)
Psychology-counseling	6% (10)	1% (1)
Social science	5% (9)	3% (2)
Mass communication (disc jockey, announcer, T.V., etc.)	1% (2)	6% (4)
Science	4% (7)	0
Engineering	1% (2)	11% (7)
English	1% (3)	0
Law	0	9% (6)
Mathematics	1% (3)	0
Art	5% (9)	3% (2)
Political Science-Economics	1% (2)	0
History	3% (6)	0
Dentist Technician	1% (1)	0
Mortuary Science	1% (2)	0
Physical Education	1% (2)	0
Music	2% (4)	0
Conservation	1% (2)	0
Dentistry	0	1% (1)
Technician	0	1% (1)
Physical Therapists	0	1% (1)
Uncertain	1% (3)	9% (6)
No response	19% (30)	3% (2)
<b>Total</b>	<b>(153)</b>	<b>(63)</b>

Question #23: At this time, what vocation do you plan to enter?

<u>Responses</u>	<u>Group A</u>	<u>Group B</u>
Education	41% (47)	26% (13)
Business (marketing, accounting, management, etc.)	36% (42)	34% (17)
Social work	3% (4)	4% (2)
Engineering	1% (2)	16% (8)
Psychology (clinical or counseling)	7% (8)	2% (1)
Social sciences	3% (4)	0
Art	2% (3)	4% (2)
Law	1% (2)	12% (6)
Music	1% (2)	0
Forestry	1% (2)	0
Mortuary Science	1% (2)	0
Airline Stewardess	1% (2)	0
Mass Communications	0 (1)	6% (4)
Dentist Technician	0 (1)	0
Science Research	1% (2)	0
FBI	0 (1)	0
Free lance writer	0 (1)	0
Medical Librarian	0 (1)	0
Interior Designer	0 (1)	0
Horticulture	0 (1)	0
Occupational Therapy	0 (1)	1% (1)
Welding Technology	0 (1)	0
Ministry	0 (1)	0
Museum work	0 (1)	0

## Question #23, continued

Responses	Group A	Group B
Dentist	0	1% (1)
Variable	0 (1)	0
Uncertain	7% (12)	9% (6)
No response	4% (7)	3% (2)
Technician	0	1% (1)
<b>Total</b>	<b>(153)</b>	<b>(64)</b>

Question #24: Is this different from the vocation you planned to enter when you began two years ago? Yes \_\_\_\_\_ No \_\_\_\_\_ If this choice is different, why do you think you have changed?

Response	Group A	Group B
Yes	34% (51)	39% (27)
No	59% (89)	56% (39)
No response	6% (9)	4% (3)
<b>Total</b>	<b>(149)</b>	<b>(69)</b>

Why change	Group A	Group B
Learned about vocation and like it now	23% (10)	20% (5)
Learned more about self and own interests	25% (11)	37% (9)
Specific courses influenced me	16% (7)	8% (2)
Finally made a decision	9% (4)	4% (1)
Dissatisfied with previous vocation	6% (3)	8% (2)
Enjoy subject	2% (1)	0

## Question #24, continued

Why change	Group A	Group B
Do not qualify	9% (4)	8% (2)
Other reasons	4% (2)	12% (3)
Teacher's influence	2% (1)	0
Total	(43)	(24)

Question #25: Please list the courses that you have taken during the past two years that you believe were most helpful to you as a student.

1.                      2.                      3.                      4.

Responses	Group A	Group B
Psychology	14% (70)	13% (28)
Social Science (ECD)	12% (61)	0
English	8% (44)	16% (33)
Humanities (ECD)	6% (31)	0
Speech	5% (28)	8% (17)
Natural Science (ECD)	5% (27)	0
Business Law	4% (21)	1% (3)
Accounting	3% (18)	5% (11)
History	3% (17)	5% (11)
Sociology	3% (17)	4% (9)
Art	2% (13)	1% (3)
Management	2% (13)	0 (1)
Communications (ECD)	2% (12)	0
Orientation (ECD)	2% (11)	0
Economics	2% (10)	7% (15)
Literature	1% (8)	0
General Business	1% (8)	0 (2)
Math	1% (8)	5% (11)
Political Science	1% (6)	10% (21)
Marketing	1% (6)	0 (1)
Philosophy	1% (5)	0
Botany	0 (4)	0
Biology	0 (4)	1% (3)
General Science	0 (4)	0
Chemistry	0 (3)	2% (6)
Physical Education	0 (4)	0
Sales Promotion	0 (3)	0
Business	0 (2)	0
Acting	0 (1)	0 (2)
Foreign Languages	0 (1)	2% (6)
Typing	0 (3)	0 (1)

## Question #25, continued

Responses	Group A	Group B
Zoology	1% (6)	0 (1)
Business Math	0 (4)	0
Music	0 (4)	0
All EGD courses	0 (4)	0
Drafting	0 (2)	0 (1)
Logic	0 (2)	0
Anatomy	0 (1)	0
Geography	0 (1)	0 (2)
Internship	0 (1)	0
Shorthand	0 (1)	0
Personal Development	0 (1)	0
Salesmanship	0 (1)	0
All business courses	0 (1)	0
Physics	0 (1)	1% (3)
Physical Science	0	1% (3)
Antagomic	0	0 (1)
Nursing	0	0 (2)
Data Processing	0	0 (2)
Trig	0	0 (1)
Calculus	0	0 (1)
Eng. Drawing	0	0 (1)
Bible Survey	0	0 (1)
<b>Total</b>	<b>(493)</b>	<b>(203)</b>

Question #26. Please list the courses that you think had the greatest influence on your ideas or changed your thinking the most.

Responses	Group A	Group B
Psychology	15% (59)	16% (23)
Social Science	13% (51)	0
Humanities (EGD)	10% (39)	0
Natural Science	5% (21)	0
English	5% (20)	12% (17)
Sociology	4% (18)	7% (10)
Communications (EGD)	4% (16)	0
Speech	4% (16)	7% (10)
Business Law	3% (15)	0 (1)
History	3% (13)	5% (8)
Art	3% (12)	1% (2)



## Question #26, continued

Responses	Group A	Group B
Accounting	2% (11)	2% (4)
Economics	2% (11)	6% (9)
Logic	2% (11)	0
General Business	2% (9)	0 (1)
Math	2% (8)	4% (16)
Political Science	2% (8)	11% (16)
Orientation	1% (7)	0
Literature	1% (6)	0
Zoology	1% (6)	0
Philosophy	1% (5)	1% (2)
Marketing	1% (4)	0
Biology	1% (4)	1% (2)
Management	0 (3)	0 (1)
Botany	0 (2)	0 (1)
Physical Science	0 (2)	1% (2)
Physical Education	0 (2)	0 (1)
Music	0 (2)	0
Physics	0 (1)	2% (4)
Eng. Drawing	0 (1)	1% (2)
Geography	0 (1)	0 (1)
Acting	0 (1)	0 (1)
Foreign Language	0 (1)	0
Salesmanship	0 (1)	0
Sales Promotion	0 (1)	0
Calculus	0	2% (3)
Data Processing	0	1% (2)
Bible Survey	0	1% (2)
Metal Processing	0	0 (1)
Basic Engineering	0	0 (1)
None	0	2% (4)
<hr/>		
Total	(388)	(137)

## Breakdown of Questions 25 and 26.

1. At the end of their second year (of 119 answering) the following numbers found ECD courses most helpful in this order.

(1) 49  
 (2) 37  
 (3) 25  
 (4) 17  


---

 128

2. The following numbers found ECD courses most influential in this order.

(1) 39  
 (2) 24  
 (3) 23  
 (4) 20  


---

 106

Questions 27, 28 and 30 were included in the section of the Questionnaire to be filled in by students who had completed more than one year of college. The answers to these questions were often long and could be analyzed in a variety of ways. However, questions 27 and 28 were based on the hypothesis that students who had been part of ECD would evidence more confidence and, further, would indicate that their ideas, attitudes or values had changed more often than those who had simply taken liberal arts courses.

The content analysis was based on these hypotheses and used phrases from the students' own answers.

#### Question 27.

How have you changed as a student during the past two years? (For example, when you entered college did you worry about being a success academically? Do you still have this worry? Do you feel that you are a potentially successful student? Do you feel more self-confident in classes than you did when you first entered college? Do you like being a student more or less now than you did when you first entered?)

Response	Group A	Group B
1. Used to be unsure, afraid; didn't think I'd make it; Now I think (think, feel) I can (will, am able) to finish college.	67% (77)	62% (38)
2. In some classes I'm more sure; a particular teacher or class helped me.	9% (10)	12% (7)
3. Feel the same way about school; Still know I'll have trouble, problems; difficulties. Same as always.	14% (16)	10% (6)
4. No meaning.	10% (12)	16% (10)
Total	(115)	(61)

#### Question 28

What experiences have you had at college that you think have had the greatest influence on your values, ideas, attitudes? (For example, do you think you feel differently now, at the end of two years, about other people and groups who are different from you, racially, religiously or politically? Do you behave differently toward your family and friends now? Are you interested in different ideas now?)

Response	Group A	Group B
1. Have changed my ideas because of knowing, meeting different people, teachers, taking certain classes or all classes.	68% (77)	44% (26)
2. One class teacher, person may (might) have changed me a bit, <u>learned</u> one new thing. I'm still basically the same-- feel the same about most things.	12% (14)	15% (9)
3. I'm the same person, can't see any change at all. No difference.	11% (13)	26% (15)
4. No meaning.	9% (10)	15% (9)
<b>Total</b>	<b>(114)</b>	<b>(59)</b>

## Question 30

What advice would you give to new students just entering Macomb?

Response	Group A	Group B
1. Watch out for studies. Study more. Realize MCCC is really college or college level work.	63% (76)	50% (31)
2. Work less at outside jobs.	6% (7)	8% (5)
3. Join social groups--be more active socially. Get involved.	2% (3)	10% (6)
4. Know which classes - teachers to take - avoid. Certain classes or programs.	16% (19)	8% (5)
5. No meaning.	13% (16)	24% (15)
<b>Total</b>	<b>(121)</b>	<b>(62)</b>

Question #31: How would you rate all the faculty you had during your first year at Macomb?

Excellent	Good	Average	Below Average	Poor
<u>Responses (Year I)</u>			<u>Group A</u>	<u>Group B</u>
Excellent			20% (31)	11% (8)
Good			50% (75)	45% (31)
Average			25% (38)	35% (25)
Below Average			4% (6)	5% (4)
Poor			0	0
<hr/>				
Total			(150)	(68)

<u>Responses (Year II)</u>			<u>Group A</u>	<u>Group B</u>
Excellent			17% (24)	20% (12)
Good			60% (84)	54% (32)
Average			17% (25)	16% (10)
Below Average			3% (5)	5% (3)
Poor			0% (1)	3% (2)
<hr/>				
Total			(139)	(59)

Question #33: How would you rate student-faculty relations during your first year at Macomb?

Excellent      Good      Average      Below Average      Poor

Question #34: How would you rate student-faculty relations during your second year at Macomb?

Excellent      Good      Average      Below Average      Poor

<u>Responses (Year I)</u>	<u>Group A</u>	<u>Group B</u>
Excellent	35% (52)	7% (5)
Good	36% (54)	37% (25)
Average	18% (28)	35% (24)
Below Average	8% (12)	14% (10)
Poor	1% (2)	4% (3)
<b>Total</b>	<b>(148)</b>	<b>(67)</b>

<u>Responses (Year II)</u>	<u>Group A</u>	<u>Group B</u>
Excellent	21% (30)	11% (7)
Good	38% (53)	40% (24)
Average	28% (40)	35% (21)
Below Average	7% (10)	8% (5)
Poor	3% (5)	3% (2)
<b>Total</b>	<b>(138)</b>	<b>(59)</b>

## DISCUSSION OF SECOND YEAR QUESTIONNAIRE

### Part I

The conclusions from the questionnaire are divided into five parts: First will be the section dealing with just those students who left during or before the end of the first year and did not return for a second year; second will be the section dealing with the students who attended college after their first year; third will be a comparison of the two sections; fourth will be a summary statement about the entire questionnaire, and the fifth section will discuss the personal interviews using the second year questionnaires.

### Part II - Section B

As was discussed in an earlier section on Persistence, both the ECD and Liberal Arts group did not differ significantly in their overall persistence in college. Yet, in comparing Question #6 as to why they did not return to college, the questionnaire indicates that the students in both groups left for pretty much the same reasons. The category, "doing poorly" received an extremely small response (obviously, many of the students who did not return their questionnaire may be those who left after failing). When asked if they intend to return, then the majority of both groups answered yes and even indicated a precise date for that return. These positive feelings about college continue into Question #10 when the majority state that college was a "...pleasant, rewarding experience..." and Question #11 when the majority indicate they would, if they had it to do over again, attend college. Finally, the majority answer that they would (in Question #12) recommend Macomb to others like themselves. Both groups, ECD and Liberal Arts, are consistently the same in their responses. This similarity continues into Question #13, when both groups have a majority stating that they think they are a different person now after having attended college and list reasons for this change.

Finally, a majority of both groups indicate that they would have stayed in college if "some things" had been different, although they differed as to what "things" should have been different. These items in Question #15 do not correspond to the reasons given in Question #6. The students contradict themselves as to why they left. For example, "doing poorly" received very little response in Question #6 (6% and 2%) but the category that stated "If I had studied, been interested, tried harder, not worked or gotten better grades." had a higher response in Question #15 (25% and 28%). At this point, it would be difficult to draw any significant conclusions, except perhaps to suggest that if a student intends to return to college he would be unlikely to state that he left originally because he "failed." Instead, he might be more likely to indicate that outside factors were instrumental in forcing him to drop.

When both groups were asked to list the best and worst features of their college experience, many did not answer and the categories were quite varied. The only conclusion would be that the environment at Macomb is

varied and diffused so that the details of the college environment are of less importance to a student than his life outside the college or his individual feelings about himself.

There was a difference between ECD and liberal arts students when responding to Question #10 asking about their present feelings about college. 69% of the ECD students and 54% of the liberal arts comparison group placed themselves in the category of a "positive--a rewarding experience, enjoyed it, liked it, found it fun, etc."

One difference between the ECD and Liberal Arts group evident in this section are the responses to Question #17. More students in Group A (who had entered the ECD Program) indicated they had participated in some form of organized activity during the previous year than those in Group B. Cultural events is the type of activity that received the majority of responses from the former ECD students. The response does uphold the hypothesis that ECD students would continue to be more involved even after leaving the program.

#### Part II - Section C

Using just the responses to Question #18, over twice as many ECD students indicated they graduated than students who had entered the Liberal Arts program. Interestingly enough, even though a smaller percentage of the Liberal Arts students did not graduate and a smaller percent have definite plans for graduation, their responses indicate that almost three fourths (47) of them still anticipate transferring. If this number, 47, is taken as a statement that these students have definite plans, then a comparison is possible between this and the numbers who indicate when they expect to graduate. In Group B, counting the 6 students who graduated in June, 1967 and those who plan to graduate on or before June, 1968, there are 28 students; yet in Group A, (ECD) 115 (77%) of whom stated they had plans of transferring, there were 116 who stated they had graduated in June, 1967 or would graduate on or before June, 1968.

In Question #21, 49 students in Group B indicated that they knew what school they will transfer to; Group A (ECD), on the other hand, has 111 students stating a definite choice of a school. Just relating these plans back to an earlier section on Persistence would demonstrate certain inconsistencies. For example, not considering grade point averages, 40 students in Group B earned between 25 and 33 credits their first year and 16 earned 55 or more their second year. In Group A, 230 students earned between 25 and 33 credits in year one, and 92 students earned 55 or more credits their second year. Some of these students did not return the questionnaire, but the discrepancies between plans and accomplishments are evident. Group B students (Liberal Arts), percentage-wise, are similar to Group A when it comes to planning transfer; however, the actual number who know when they will graduate or who have enough credits to do so indicates that these plans are, at the end of two years, still very hopeful rather than realistic. Group A students, however, demonstrate a much closer connection between plans and accomplishments.

As to college majors or vocational choices, both Groups A and B are very similar. Likewise, Groups A and B indicate a like percentage of change of vocational choices.

The classes listed by the students as the most helpful or as having had the most influence have a pattern of responses that is, again, the same for both groups; in fact, both groups list Psychology at the top of both lists.

One manner of measuring these responses is to determine how many former ECD students, at the end of two years, listed ECD courses among the four "most helpful" and "most influential." As the breakdown of Questions 25 and 26 (page 230) indicates, almost 40% of them listed an ECD course as a first choice under both categories. Since these students have had an intervening year of classes either at Macomb or another college, this response would tend to indicate that their first year courses had a stronger effect than would be expected.

When asked to rate their first and second year faculty and student-faculty relations, the hypothesis that ECD students would be more positive about their first year than the Liberal Arts Group B does hold up. The Group A (ECD) students also rate their second year student-faculty relations lower than their first year; Group B, however, gave their second year faculty and student-faculty relations a higher rating than the first.

Question #27, based on the hypothesis that students who had spent a year in ECD would evidence more self-confidence than students who entered the liberal arts program, proves this to be an untenable hypothesis; a majority of both groups appear to feel more confident at the end of their second year. Obviously, the students answering this question are those students who did attend college their second year; and a better analysis would have included students who dropped out of college before their second year.

Question #28, on the other hand, does demonstrate a difference between Groups A and B. The hypothesis that Group A would indicate that they perceived a change in their feelings, attitude or values more frequently than those in Group B, is upheld by the percentages. A much more precise content analysis would have to be made of these answers if any further conclusions were to be drawn. For example, for those indicating they did change, do they more often indicate it was due to other students, the teachers, or the college environment?

The final content question, #30, was not based on any particular hypothesis, and both groups have a large majority indicating that "To study" is the one piece of advice they would give to new students. It is probably safe to assume that this advice is what they would also give to themselves. This advice seems, perhaps, obvious. However, considering that the majority of students in both groups earned C or below in high school, it may be that this lesson is more of a discovery than it appears to be on the surface.



## Part II (Compare B and C)

There are one or two interesting differences evident between all the students who filled in Section B and all those who filled in Section C. In other words, placing together the responses given by both ECD and Liberal Arts students who did not attend college their second year and comparing them to all the students who did attend college their second year.

Question #8 in Section B and Question #24 in Section C both ask the students to indicate whether they have, since they began attending college, changed their vocational choice. Those students who had left college during their first year or before starting their second year had a higher percentage of change indicated. 73% of those answering Section B stated they had made a change in their vocation; whereas, merely 35% of those who filled in Section C stated they had made such a change. Those students still in college have not had to "enter a vocation" yet; those who have left college have perhaps already faced some type of choice. Also, those students who are successfully working towards an original goal are not so likely evidently to make a change in their plans.

When answering Question #13 in Section B and Question #28 in Section C, a majority of both groups indicate that they are a different person now after having attended college. Those answering Section B and C were positive in their attitudes expressed about their college experience. For example, Groups A and B in Section B when asked in Question #16 to list the worst features of their college experience, only 33 students out of a possible 88 even responded; and in Section C, Question #31-34, only a very small percent of both groups indicated their faculty or student-faculty relations were below average or poor. Both ECD and liberal arts students tended to have positive reactions, rather than negative.

It appears that the students who remained in college were less likely to see themselves as "different" from what they were than those who dropped out. The basis for this would be the results from Questions #13 (answered by students who had dropped) and #28, (answered by those who had remained). 74% of the liberal arts students and 72% of the ECD students answered "yes" when asked if they thought they were a different person now than when they had entered college. Yet, 67% of the ECD students and 44% of the liberal arts students were placed in the category "Have changed my ideas because of certain classes or all classes." in Question #28.

This idea of "different" was not defined in Question #13 for the drop-outs, so when asked to explain it, they tended to see themselves as different in terms of "more mature, or self-assured" as well as "more educated." Question #28 (answered by those who had stayed in college) did define different but in terms of a change in attitudes and values in relation to other races, religions, etc. Therefore, the idea of being a "different" person may be too general in the two questions to actually be comparable.

The question not asked, and one that would be important, is what the students think about themselves. Just feeling positively about the insti-

tution is one thing, but feeling positively about themselves after failing to achieve is another. It might be that in this area, a greater difference would be found between those that stayed in college for two years and those who did not.

If a judgment were made simply on the basis of the responses to like questions as this questionnaire, it would be difficult to discriminate between the students who dropped out and those who stayed, except in the area of vocational choice and this may be a temporary difference.

#### SUMMARY OF QUESTIONNAIRE

To summarize, then, three of the original hypotheses were supported by the results of the Second Year Questionnaire and two were not. Number one, dealing with simple persistence, was not upheld because a similar percentage of both groups tended to remain in college. Hypothesis number two, stating that ECD students would be more likely to make a change in their vocational plans than the liberal arts students was not supported by the evidence. What was found was that the greatest change in vocational choice was made by students who had dropped out of college.

The final four hypotheses, numbers four, five and six, did appear to have some validity.

Hypothesis number three, dealing with the idea that former ECD students would have a more positive attitude about college than the liberal arts comparison group is borne up by Question #10 (asked of the drop-outs) but not proved or disproved by any questions asked of the liberal arts comparison groups. 69% of the ECD students but only 54% of the liberal arts students indicated that they saw their college experience as a "rewarding or good experience." However, the students who stayed in college did not differ, overall, when rating their faculty or faculty-student relations. These students were not asked a question calling for a rating of their total college experience.

Hypothesis number four, the idea that ECD students who had stayed in college for two years would give a higher rating to their first year faculty and student-faculty relations than the liberal arts students, is more valid for the student-faculty relations than just faculty. However, the results show that the liberal arts students give a considerably higher rating to their second year faculty, so the slightly higher rating given to first year faculty by the ECD students may be more significant considering that they have been exposed to an entire year of new faculty. The liberal arts students also rate their second year student-faculty relations higher than their first, so the reverse trend of the ECD student is more important in comparison than considered alone. It is also evident that the first year ECD Program was powerful enough to change the pattern that the liberal arts students demonstrated, rating the second, or more recent experience, as higher than the first. Therefore, the faculty-student relationships in the ECD Program were perceived by the majority of the students as being good or excellent.

Hypothesis number five, which states that ECD students would be more likely to indicate that they had made some change in their ideas, values or attitudes than the comparison liberal arts students, is justified by the results of a content analysis of Question #28. However, this question was only asked of the students who had stayed in college. The students who dropped out were just asked to indicate whether or not they thought they were a different person now than when they entered college. Both ECD and liberal arts students answered "yes" to this in about 75% of the cases.

The final hypothesis was that former ECD students' involvement in activities after leaving college would be higher than that of former liberal arts students. The results obtained from Question #17 (asked of the drop outs) show 22% of the former liberal arts students but 43% of the ECD students had been involved in some type of activity.

## SECOND YEAR QUESTIONNAIRE - INTERVIEWS

As part of the total evaluation procedure, a 10% random sample of the first ECD and liberal arts comparison group was set aside for personal interviews. There were 40 ECD and 16 liberal arts students who were notified to make appointments for interviews. Each student who appeared for an interview was reimbursed \$2.00. 22 ECD students came in for interviews and 5 of the liberal arts group. The number of ECD students, over half, is a useful sample; the small number of liberal arts students is, of course, limiting.

### Hypothesis

It was hypothesized that (1) the ECD students would evidence a more positive attitude about their college experience than the comparison group; (2) the ECD students would be more realistic about what they had accomplished and their future plans than the liberal arts group; (3) the ECD students who stayed in college would give their first year faculty and faculty-student relations a higher rating than their second year faculty and faculty-student relations; (4) the ECD students would feel more confident and would attribute their confidence to having been enrolled in the ECD program; (5) more ECD students than liberal arts students would feel they had changed their views and attitudes since beginning college and would attribute these changes to the ECD program; and (6) the ECD students would continue (during their second year) to remain involved in extra curricular or community activities, and would attribute their interest in involvement to the ECD program.

### Results - Second Year Interviews - Students not in School Their Second Year.

Of the 27 students who were interviewed, ten had not returned to college for part or all of their second year. Of this, seven (7) were former ECD students and three (3) had entered the liberal arts program.

Of the seven former ECD students, four (4) of them indicated they had left college for reasons such as health, draft or lack of money, or change in vocational interests. Of the other three, one left because he "felt he was getting behind and might fail" and the other two took a full-time job because they felt they "weren't getting anywhere" in college. One of the liberal arts group left because of being an "academic failure," another left because of lack of money and ambition, and the third left because he stayed with his summer job. All seven of the ECD group and the three Control group students indicated they intended to return to college. All of the ECD students had a definite date for returning whereas, only one of the three liberal arts students had a date in mind, which was after "4 years in the air force."

The seven ECD students all expressed positive feelings about their college experience, two of whom wished they were back and all but one would recommend Macomb to other students. Of the three Control group, two felt Macomb had been a waste of time and the other remembered it as a "wild time," but all three would recommend Macomb to others.

All the students, ECD and liberal arts, indicated they believed they were a different person after attending college. The reasons were similar-- realizing need of education, a developed interest in education, and matured.

Eight of the ten indicated they had changed their vocational plans, and the two who had not made a definite change were not sure whether they would change or not.

### Discussion

Much like the students who just filled in a questionnaire by mail, the ECD and liberal arts students who left school before their second year are quite similar, the only noticeable difference being in the area of plans to return to college and overall attitude toward their college experience.

The main difference between the students in ECD and liberal arts was in the recorded comments. The ECD students were positive in their reactions to college and the ECD program. Some of the remarks by ECD students about their experience were:

- \* "It was a good learning experience...would like to come back."
- \* "Good--didn't realize how much it benefitted me until out a semester."
- \* "Liked it. ECD was fun."
- \* "Enjoyed it, liked ECD."
- \* "I'd give anything to be back in college."
- \* "Beneficial--solidified my goals. Very quickly learned student-faculty relations encouraged counseling closeness."

The one negative comment by a student was directed against the administration and not the ECD program.

The three liberal arts students, on the other hand, stated the following remarks about their college experience:

- \* "Wild time, pinochle; very informal atmosphere."
- \* "Mixed emotions--didn't seem like a real college."
- \* "Waste of time for me, no interest."

These same liberal arts students, when asked to list the best features of their college experience mentioned:

- "A teacher's interest."
- "An English teacher took interest."
- "Break from high school."

These three students, even though they indicated they would return to college but had no definite date in mind, would tend to lead to the conclusion that the negative aspects of their experience outweighed whatever it was they liked. Their negative comments are generalized and vague, but two of the positive statements actually mentioned a person who helped them.

The SCAT-T scores of these three students demonstrates that two of the three had SCAT-T scores of 42, and one a score of 28. The three students ended up at the end of two semesters with G.P.A.s of .14, .00 and .88. Yet a SCAT-T of 42 is above the mean SCAT-T of all the comparison group students that entered the liberal arts classes. There is, therefore, no definite clue available as to just why anyone of these three left Macomb. The only possible idea might come from the one student who had entered a technical institute part time. His feeling was expressed in the quote, The "interest of the teachers at Oakwood (Technical Institute) toward me as a person with goals and future...is what made my time there beneficial."

The ECD group had many positive memories of their college experience and these memories were more precise and limited than those of the liberal arts group.

If a program accomplishes its goal of presenting a powerful and unified environment for the students, then even those students who have not been in touch with the program for a year will have some clear memories of it. Such is the case with the seven ECD students who listed favorite classes, teachers, organization, such as small discussion groups, and the curriculum in Orientation and Social Science. The only liberal arts student who emphasized details was the one who mentioned the technical institute. The other two remembered college as good because of its "break from high school" with some "teachers interested" and poor because of "testing in classes" and "cafeteria and environment."

As it was hypothesized, the ECD students appeared to have more positive attitudes about their college experience than the liberal arts students. However, the hypothesis that ECD students would be more likely to feel they have changed their views and attitudes than the liberal arts students, the response indicated that both groups felt they were a different person after their college experience.

The ECD students definite plans to return to college as compared to the liberal arts students lack of plans could be construed as evidence that of increased self-confidence and a more realistic approach to the future. The liberal arts students vague and generalized reaction to the question about future plans might demonstrate their lack of self-confidence in relation to college.

## SECOND YEAR INTERVIEWS - STUDENTS WHO WERE IN SCHOOL SECOND YEAR

### Results

There were 15 ECD and 2 liberal arts students who came in for interviews. All of the 17 students had either transferred their second year or stayed at Macomb. Five of the former ECD students spent their second year at another college\* and the rest of the ECD and liberal arts students stayed at Macomb.

All but two of these 17 students indicated that after two years they feel much more confident and sure of themselves. The two students who mentioned they were still worried had low grade point averages. The liberal arts students both indicated their confidence. As one liberal arts student stated, "Last year, more effort equaled better grades hence more confidence in classes and I like being a student more now." This quote pretty much sums up how the other 15 described their feelings at the end of two years. Evidently, achieving success and feeling confident are essentially synonymous and simply being in a program doesn't make you more or less confident-- achieving success does that. The question would then be, do the students who were interviewed attribute their success to the college or to themselves. Of the 15 ECD students interviewed, 12 made some reference to the assistance given to them because of ECD or listed some of their ECD courses as the most helpful they had taken. In fact, of the 15 interviewed, 11 of the students listed as first an ECD class as the course that helped them the most. Some of the comments were:

- \* "Could not ask more of ECD faculty."
- \* "ECD allowed chance to become used to college before meeting very critical barrier that would have failed me."
- \* "Would repeat ECD."
- \* "ECD gives confidence by being easy.. School becomes fun."

The two liberal arts students listed as first the courses they took in their field: the nursing student mentioned anatomy and the business student, general business. The nursing student indicated that her "racially mixed classes encouraged positive thinking regarding Negroes." and the business student felt he had not changed. The liberal arts students made no mention during their interview of the college or any aspect of the college as being influential in their achievements or success.

Of the ECD students, 6 rated their first year faculty as higher than their second year; 8 of them rated both years as the same, good and excellent; and one rated his first year as average and second year as good. Nine of the ECD students rated their first year student-faculty relations as better their first year than the second; and six rated both years' student-faculty relations as equally good or excellent. The two liberal arts students followed the pattern of the questionnaire filled in by mail, neither student rated their first year faculty or student-faculty relations as excellent.

---

\*Northern - 1; Ferris - 1; Wayne - 1; U. of M. - 1; Cleary College - 1.

Eight (8) of the ECD students and both liberal arts students indicated they were planning, at the end of two years, on entering the same vocation as they had picked when entering college.

All 17 students indicate they are going to transfer, 16 to a four-year institution and one to a two-year business course. Two of the 17 students graduated from Macomb and both were former ECD students. One other former ECD student planned to graduate from Macomb in January of the following year; all the rest of the students were just going to transfer.

Twelve (12) of the 15 ECD students believed they had changed some of their views, attitudes or ideas during the past two years. Both of the liberal arts students did not feel they, personally, had changed their views or attitudes. The only statement that might be interpreted in this manner is the remark by the nursing student which was previously quoted.

This is similar to the pattern found in the questionnaires filled in by mail; the liberal arts students indicated a change in attitude in fewer cases than did former ECD students.

Some of the comments made by the former ECD students indicated they remembered many detailed aspects of the ECD program. For example, the following areas of the program were favorably mentioned more than once by the 15 students:

1. Faculty interest in students - (6)
2. Integration of content or papers - (3)
3. Small classes - (4)
4. "School can be fun" - (2)
5. Block scheduling - (2)

The two liberal arts students did not mention any specific aspects of their college experience. The nursing student stated, "Enjoy college - feel it is a good institution."

### Discussion

Perhaps both the interviews and the mailed in questionnaire indicate that a student who stays in college for two years is more similar to another student who succeeds in the same way, than he would be to a student who drops out; and the same would be true for all students who dropped out of college. However, if the purpose of investigating is to find out what impressed the successful student or influenced him to be successful, then the interviews with the former ECD students indicate that they were able to recall details of the ECD program, details that were consciously planned at the inception of the program. As mentioned in the section describing interviews with the students who dropped out, before the second year, the ability to recall details of the ECD program indicates the program was powerful enough to leave, even after the students had had a year of other courses at Macomb or another school, a continued clear impression.



ECD students, even after a year, although they do not differ from successful liberal arts students in perceiving themselves as more self-confident, are more likely to attribute this confidence to the ECD program in part or as a whole, than the liberal arts students are likely to indicate their success is due to their first (or second) year college experience.

This would further support the idea that the program was a definite positive influence in the lives of these students, and different enough so that it stands out from other educational experiences.

Because more ECD students than liberal arts students stated they had changed their attitudes and/or values, this gives further evidence to support the hypothesis that this would happen.

## INTRODUCTION TO MULTIPLE REGRESSIONS

The following list of variables were used to construct several multiple regressions.

- |                           |                        |
|---------------------------|------------------------|
| a. H. S. Rank             | j. OAIS - SA           |
| b. Co-op Eng. V           | k. OAIS - EA           |
| c. Co-op Eng. S           | l. OAIS - SS           |
| d. Co-op Eng. E raw score | m. OAIS - BS           |
| e. Father's Education     | n. Employment          |
| f. Mother's Education     | o. SCAT V              |
| g. OAIS - AP              | p. SCAT Q              |
| h. OAIS - IQ              | q. Involvement         |
| i. OAIS - CP              | r. Grade Point Average |

For the ECD Groups, A and C, and the liberal arts Group B, the variables can, for discussion purposes, be divided into four groups. The first group would be those variables such as age, high school rank, mother's and father's education, SCAT scores, which can not be changed nor modified after entrance. The second group would be the O.A.I.S.<sup>1</sup> scores which tend to measure the attitude or approach that a student has toward his education. Employment and involvement (items which can be manipulated during the year), measures of what a student does during the year would be in the third group and the final and fourth group would be made up of variables, such as G.P.A. and credits earned, measures of accomplishments at the end of one or two years. The variables for Group B (the liberal arts group) are the same, except there are no O.A.I.S. scores.

With such organization, the questions that the multiple regression discussion could deal with are: (1) What types of variables, unchangeable (group one) or changeable (group three) are most related to the measures of success in group four?; (2) What are the relationships between the personality measurements (group two) and success?; (3) What are the differences between Groups A and B for their second year as to importance of changeable and unchangeable variables in predicting G.P.A., etc.?; (4) What are the differences between males and females in both Groups A, B and C as to their predictability or lack of it?; (5) What are the differences between year one and two for Group A as to the role of the several variables?; (6) What can the ECD Program learn as to what can actually be done to improve success?; (7) What overall conclusion can be drawn about predicting success?.

There is one main limitation on the measurements of G.P.A., credits earned and persistence. All three of these measurements are one-dimensional. The grade point average is deceiving for a student could have a high G.P.A. and yet have earned very few credits; he could also have earned quite a few credits but have a low grade point average. Persistence is also rather limited in that just staying in school gives no indication of how many courses or what kind of grades the student has.

---

<sup>1</sup>Opinion, Attitude, and Interest Survey, A Guide to Personality and Interest Measurement by Benno G. Fricke.

## PROBLEM: G.P.A. AS THE DEPENDENT VARIABLE

With the G.P.A. as the dependent variable the correlations are higher for ECD students than for those enrolled in Liberal Arts. For males and females in ECD, the top four steps contain only one variable that is unchangeable, mother's education (males) and high school rank (female). Both the males and females have involvement and two O.A.I.S. scores in the top four steps. Involvement is a score that is based on the number of groups, clubs, cultural events and activities that the students attended. It is obviously a variable that can be encouraged or discouraged within the program. The O.A.I.S. Scores are non-intellective, but measure personality traits. This would tend to indicate that a student's Grade Point Average was more related to his personality and involvement in the program than to pre-college grades or tests of ability. SCAT-Q, for example, is thirteenth out of the fourteen steps and the SCAT Verbal score is sixth. The Achiever Personality score is important in both the male and female multiple regressions.

The liberal arts multiple regression, using GPA as the dependent variable, has within the top four steps, three variables that are unchangeable. The variables, involvement (for males) and employment (for females), are the two that could be manipulated. The correlations for the liberal arts students are much lower than those for the ECD. This difference may be due to the fact that no personality scores were used. The liberal arts students did not take the O.A.I.S. tests. The one year multiple regression for both ECD groups is very similar to that for the second year both in the pattern of variables and the correlations. The G.P.A. for ECD students appears to be as predictable the second year as the first and based on many of the same variables.

The personality measures of the O.A.I.S. test, Achiever Personality and Intellectual Quality appear to be more important the second year than the first year in predicting grades.

The fact that these personality measures and involvement are "significant" indicators for predicting grades for ECD students does offer hope for the possibility that a program can be developed that can actually change the expected. A student's chances for achievement as based on the entering tests, need not be relevant to what actually happens. If predications of academic success were related only to unchangeable variables then there would be little reason to set up a program based on increasing students' chances for success. However, the low correlations for liberal arts and the importance of the involvement and personality should encourage further experimentation. This philosophy is further upheld by the importance of high school rank because high school grades are based on a variety of factors, some of which are related to the student's personality.

TABLE 42

## A MALES 2 YEARS

DEPENDENT VARIABLE - G.P.A. - 2 YEARS

	ENTERED VARIABLE	MULTIPLE CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Mother's Ed.	.437	67.140	285
Step #2	O.A.I.S.-IQ	.522	32.064	284
Step #3	Involvement	.570	21.609	283
Step #4	O.A.I.S.-AP	.589	9.627	282
Step #5	High Sch. Rank	.606	9.201	281
Step #6	SCAT-Verbal	.619	7.331	280
Step #7	Employment	.627	4.392	279
Step #8	Father's Ed.	.631	2.599	278
Step #9	O.A.I.S.-CP	.635	1.947	277
Step #10	O.A.I.S.-SA	.636	1.197	276
Step #11	O.A.I.S.-SS	.641	2.573	275
Step #12	O.A.I.S.-BS	.642	.496	274
Step #13	SCAT-QUANT.	.643	.378	273
Step #14	O.A.I.S.-EA	.643	.019	272

Variance Accounted for (F-Squared)--41%

Tables 42 through 47 depict the step-wise regression of selected variables related to G.P.A. In addition to the multiple correlation at each step, the F ratio and degrees of freedom are indicated. The interpretation of the F ratio is as follows: In general, any F ratio equal to or greater than 2.50 is considered to be significant at the .05 level.

TABLE 43

A FEMALES 2 YEARS

DEPENDENT VARIABLE - G.P.A. - 2 YEARS

	ENTERED VARIABLE	MULTIPLE CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Involvement	.499	34.078	103
Step #2	O.A.I.S.-A.P.	.576	12.716	102
Step #3	O.A.I.S.-C.P.	.616	7.677	101
Step #4	High Sch. Rank	.644	6.051	100
Step #5	O.A.I.S.-B.S.	.663	4.509	99
Step #6	O.A.I.S.-I.Q.	.676	2.987	98
Step #7	S.C.A.T.-Verbal	.678	.547	97
Step #8	Father's Ed.	.680	.384	96
Step #9	Employment	.681	.229	95
Step #10	O.A.I.S.-S.A.	.681	.223	94
Step #11	O.A.I.S.-E.A.	.682	.178	93
Step #12	SCAT-Quant.	.683	.117	92
Step #13	O.A.I.S.-S.S.	.683	.086	91
Step #14	Mother's Ed.	.683	.056	90

Variance Accounted for (R-Squared) - 47%

TABLE 44

## A &amp; C MALES

DEPENDENT VARIABLE - GPA - 1st YEAR

	ENTERED VARIABLE	MULTIPLE CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Involvement	.418	225.637	685
Step #2	OAIS - IQ	.549	52.629	684
Step #4	Mother's Ed.	.579	34.199	683
Step #5	OAIS - AP	.612	15.712	681
Step #6	SCAT-Verbal	.619	9.449	680
Step #7	Employment	.624	6.251	679
Step #8	SCAT-Quant.	.627	4.274	678
Step #9	Father's Ed.	.628	1.584	677
Step #10	O.A.I.S.-C.P.	.629	1.468	676
Step #11	O.A.I.S.-S.A.	.630	.899	675
Step #12	O.A.I.S.-E.A.	.630	.325	674
Step #13	O.A.I.S.-S.S.	.630	.072	673
Step #14	O.A.I.S.-B.S.	.630	.064	674

Variance Accounted For (R-Squared) - 40%

TABLE 45

## A &amp; C FEMALES

DEPENDENT VARIABLE - GPA - 1 YEAR

	ENTERED VARIABLE	MULTIPLE CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Involvement	.553	116.095	263
Step #2	High Sch. Rank	.596	20.064	262
Step #3	OAIS - AP	.610	7.039	261
Step #4	OAIS - IQ	.622	6.087	260
Step #5	SCAT-Quant.	.627	2.448	259
Step #5	OAIS - SS	.630	2.065	258
Step #7	Mother's Ed.	.633	1.242	257
Step #8	SCAT - Verbal	.635	1.114	256
Step #9	Employment	.636	.529	255
Step #10	OAIS - EA	.636	.312	254
Step #11	OAIS - BS	.637	.383	253
Step #12	OAIS - SA	.638	.333	252
Step #13	OAIS - CP	.638	.184	251
Step #14	Father's Ed.	.638	.026	250

Variance Accounted for (R-Squared) 41%

TABLE 46

B MALES 2 YEARS

DEPENDENT VARIABLE - GPA - 2 YEARS

	ENTERED VARIABLE	MULTIPLE CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	SCAT-Verbal	.252	8.645	128
Step #2	Involvement	.339	7.450	127
Step #3	SCAT-Quant.	.388	5.294	126
Step #4	Mother's Ed.	.395	.738	125
Step #5	High Sch. Rank	.398	.329	124
Step #6	COOP Eng. S.	.399	.130	123
Step #7	COOP Eng. V.	.400	.093	122
Step #8	Employment	.400	.058	121
Step #9	Age	.400	.003	120
Step #10	Father's Ed.	.400	.000	119
Step #11	COOP Eng. Exp. Raw Score	.400	.000	118

Variance Accounted For (R-Squared) = 16%



TABLE 47

## B FEMALES 2 YEARS

DEPENDENT VARIABLE - GPA - 2 YEARS

	ENTERED VARIABLE	MULTIPLE CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Employment	.383	4.123	24
Step #2	Mother's Ed.	.484	2.648	23
Step #3	Age	.528	1.334	22
Step #4	COOP Eng. S.	.549	.677	21
Step #5	High Sch. Rank	.562	.449	20
Step #6	COOP Eng. Exp. Raw Score	.585	.761	19
Step #7	SCAT - Quant.	.594	.281	18
Step #8	Involvement	.598	.126	17
Step #9	SCAT - Verbal	.600	.063	16
Step #10	Father's Ed.	.601	.035	15
Step #11	COOP Eng. V.	.603	.047	14

Variance Accounted for (R-Squared) - 36%

## PROBLEM: CREDITS EARNED IS THE DEPENDENT VARIABLE

Credits earned is similar to persistence. In order to earn credits, a student must remain in college. Yet some students may remain in college but drop several classes and earn, ultimately, very few credits. To earn credits, then, is one measure of success. Again, the ECD correlations for both year one and year two are higher than those for the liberal arts comparison group. The personality measures and involvement are also important variables for both years. The liberal arts comparison group for both males and females contains two variables within the top four that are changeable --involvement and employment; this was not the case when grade point averages were used as the dependent variable.

For the ECD males, the pattern of variables for year one is similar to that for year two. For the females it is not; father's education is much less important for the second year than it was in the first. For both the male and female ECD students, the Achiever Personality score became more important in the second year than the first; whereas the Intellectual Quality score lessened in importance from year one to year two. The Achiever Personality score is said to measure "personality factors associated with the traditional criterion of academic success" but "...scores from Achiever Personality have a negligible correlation with scores from ability tests."<sup>1</sup> The Intellectual Quality score, on the other hand, measures "personality factors associated with intelligent behavior and an intellectual orientation", but the I.Q. scale "...was designed to provide scores which correlate highly with scores from ability tests."<sup>2</sup>

This could be interpreted as the idea that it is not possible to predict persistence or success on the basis of merely ability--that measured ability actually decreases in importance. The multiple regressions using G.P.A. as the dependent variable have the same pattern evident; the achiever personality becomes more important the second year.

Credits Earned represents time put in at the college and this can partially account for employment and involvement being related. The longer a student stays in school the more clubs and activities he is likely to become involved in. The students who dropped out of school did not fill in the questionnaire concerning employment. Those who stayed were represented as having worked, whereas those who left became 'no data' and could, therefore, skew these relationships. However, the top variable for the liberal arts females is age and would presumably suggest that the older females are more likely to remain in college. For males, the low correlation and importance of the variable, Co-op English Expression (Raw score), might indicate that the ability to use correct grammar might have some influence on persistence in liberal arts courses, or to word it differently, using language correctly is one criterion of success in liberal arts classes.

---

<sup>1</sup>P. 2 O.A.I.S. Interpretation Leaflet, O.A.I.S. Test Program, Fall, 1964.

<sup>2</sup>Ibid.

For ECD females, the O.A.I.S. interest score, Biological Science increases in importance from year one to year two. This score indicates an interest in subjects such as anatomy, farming, veterinary science and science and zoology. Why this is related to persistence might possibly be explained by suggesting that these subjects are not those usually associated with homemaking and girls with these interests are more likely in college with a particular goal in mind, other than marriage.

The following tables, 48 through 53, depict the step-wise regression of selected variables related to credits earned. In addition to the multiple correlation at each step, the F ratio and degrees of freedom are indicated. The interpretation of the F ratio is as follows: In general, any F ratio equal to or greater than 2.50 is considered to be significant at the .05 level.

TABLE 48

A MALES 2 YEARS

DEPENDENT VARIABLE -- CREDITS EARNED - 2 YEARS

	ENTERED VARIABLE	MULTIPLE CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Involvement	.512	101.083	285
Step #2	Mother's Ed.	.561	21.998	284
Step #3	High Sch. Rank	.575	6.439	283
Step #4	OAIS - AP	.587	6.117	282
Step #5	OAIS - IQ	.597	5.134	281
Step #6	COOP ENG. EXP. Raw Score	.607	5.291	280
Step #7	Father's Ed.	.610	1.775	279
Step #8	Employment	.614	2.192	278
Step #9	SCAT - Quant.	.616	1.265	277
Step #10	OAIS - SA	.618	.950	276
Step #11	OAIS - SS	.621	1.462	275
Step #12	OAIS - CP	.622	.573	274
Step #13	OAIS - EA	.623	.779	273
Step #14	COOP ENG. V.	.624	.399	272
Step #15	COOP ENG. S.	.625	.751	271
Step #16	SCAT - Verbal	.625	.135	270
Step #17	OAIS - BS	.626	.114	269

Variance Accounted For (R-Squared) - 39%

5

TABLE 49

## A FEMALES 2 YEARS

DEPENDENT VARIABLE - CREDITS EARNED - 2 YEARS

	ENTERED VARIABLE	MULTIPLE CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Involvement	.523	38.709	103
Step #2	OAIS - BS	.605	14.835	102
Step #3	OAIS - AP	.624	3.926	101
Step #4	OAIS - SS	.634	2.146	100
Step #5	COOP ENG. V.	.636	.496	99
Step #6	COOP ENG. S.	.643	1.497	98
Step #7	Employment	.645	.364	97
Step #8	OAIS - SA	.647	.369	96
Step #9	SCAT - Quant.	.649	.360	95
Step #10	Father's Ed.	.650	.391	94
Step #11	OAIS - EA	.652	.331	93
Step #12	OAIS - IQ	.653	.172	92
Step #13	OAIS - GP	.653	.105	91
Step #14	High Sch. Rank	.654	.101	90
Step #15	Mother's Ed.	.654	.016	89
Step #16	SCAT - Verbal	.654	.017	88
Step #17	COOP ENG. EXP. Raw Score	.654	.000	87

Variance Accounted For (R-Squared) - 43%

TABLE 50

## A &amp; C MALES

DEPENDENT VARIABLE - CREDITS EARNED - 1 YEAR

	ENTERED VARIABLE	MULTIPLE CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Involvement	.575	337.926	685
Step #2	Mother's Ed.	.647	104.064	684
Step #3	OAIS - IQ	.657	15.816	683
Step #4	High Sch. Rank	.664	10.596	682
Step #5	OAIS - AP	.668	6.936	681
Step #6	COOP ENG. V.	.671	4.496	680
Step #7	Father's Ed.	.673	3.651	679
Step #8	OAIS - EA	.674	1.936	678
Step #9	OAIS - CP	.675	2.318	677
Step #10	Employment	.676	.905	676
Step #11	COOP ENG. EXP. Raw Score	.676	.750	675
Step #12	SCAT - Quant.	.677	.213	674
Step #13	OAIS - BS	.677	.215	673
Step #14	OAIS - SA	.677	.208	672
Step #15	OAIS - SS	.677	.452	671
Step #16	SCAT - Verbal	.677	.118	670
Step #17	COOP ENG. S.	.677	.042	669

Variance Accounted For (R-Squared) - 46%

TABLE 51

## A &amp; C FEMALES

DEPENDENT VARIABLE - CREDITS EARNED - 1st YEAR

	ENTERED VARIABLE	MULTIPLE CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Involvement	.575	129.836	263
Step #2	Father's Ed.	.617	21.141	262
Step #3	OAIS - EA	.636	10.278	261
Step #4	OAIS - BS	.642	3.563	260
Step #5	High Sch. Rank	.646	2.200	259
Step #6	Employment	.649	1.943	258
Step #7	OAIS - AP	.652	1.472	257
Step #8	SCAT - Quant.	.655	1.675	256
Step #9	OAIS - IQ	.656	1.069	255
Step #10	COOP ENG. S.	.659	1.742	254
Step #11	COOP ENG. V.	.661	.798	253
Step #12	SCAT - Verbal	.663	1.282	252
Step #13	OAIS - SS	.663	.255	251
Step #14	OAIS - CP	.663	.060	250
Step #15	Mother's Ed.	.663	.019	249
Step #16	COOP ENG. EXP. Raw Score	.663	.008	248
Step #17	OAIS - SA	.663	.005	247

Variance Accounted For (R-Squared) = 44%



TABLE 52

B MALES 2 YEARS

DEPENDENT VARIABLE - CREDITS EARNED - 2 YEARS

	ENTERED VARIABLES	MULTIPLE CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Involvement	.332	15.862	128
Step #2	COOP ENG. EXP. Raw Score	.375	4.522	127
Step #3	Employment	.389	1.502	126
Step #4	High Sch. Rank	.398	1.122	125
Step #5	SCAT - Verbal	.406	.921	124
Step #6	Age	.413	.878	123
Step #7	COOP ENG. S.	.420	.796	122
Step #8	SCAT - Quant.	.423	.383	121
Step #9	Mother's Ed.	.425	.303	120
Step #10	COOP ENG. V.	.426	.079	119
Step #11	Father's Ed.	.426	.035	118

Variance Accounted For (R-Squared) - 18%

TABLE 53

## B FEMALES 2 YEARS

DEPENDENT VARIABLE - CREDITS EARNED - 2 YEARS

	ENTERED VARIABLES	MULTIPLE CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Age	.451	6.117	24
Step #2	Involvement	.562	3.790	23
Step #3	Employment	.647	3.872	22
Step #4	Mother's Ed.	.677	1.557	21
Step #5	COOP ENG. S.	.737	3.742	20
Step #6	High Sch. Rank	.754	1.058	19
Step #7	Father's Ed.	.772	1.220	18
Step #8	SCAT - Quant.	.780	.592	17
Step #9	COOP ENG. V.	.782	.108	16
Step #10	SCAT - Verbal	.785	.173	15
Step #11	COOP ENG. EXP. Raw Score	.785	.020	14

Variance Accounted For (R-Squared) - 62%

## PROBLEM: PERSISTENCE - THE DEPENDENT VARIABLE

The inclusion of "credits earned" in the multiple regression with Persistence as the dependent variable for ECD Groups A and B caused the correlations to be incorrect. Credits earned and persistence are enough alike to be almost interchangeable. As a result, the relationships between Persistence and the other variables are unrealistic and difficult to interpret.

The liberal arts multiple regression did not include credits earned as an independent variable. As a result, the pattern is similar to that for multiple regression with credits earned as the dependent variable.

The pattern of variables for the ECD students is very different for males and females. The females for the second year have unchangeable variables in the top five steps and four of the top five in year one. The males, on the other hand, have fewer unchangeable variables. This would tend to imply that the female ECD students were less influenced by the program than males when it came simply to staying in school. As for the liberal arts students, age, employment and involvement are among the top four variables for males and females. Employment and involvement, as mentioned previously, have a built in relationship to persistence, so age appears to be the most important independent variable for both. Age is not even listed within the fourteen steps for the ECD students. It might be speculated that the tight structure of the ECD program provides something that is needed for younger students so that the importance of age is neutralized.

The following tables, 54 through 59, depict the step-wise regression of selected variables related to persistence. In addition to the multiple correlation at each step, the F ratio and degrees of freedom are indicated. The interpretation of the F ratio is as follows: In general, any F ratio equal to or greater than 2.50 is considered to be significant at the .05 level.

TABLE 54

A MALES 2 YEARS

DEPENDENT VARIABLE - PERSISTENCE 2

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Credits Earned-2 Yrs.	.831	635.722	285
Step #2	High School Rank	.835	6.319	284
Step #3	O.A.I.S.-I.Q.	.838	5.421	283
Step #4	Involvement	.841	4.664	282
Step #5	O.A.I.S.-B.S.	.843	2.158	281
Step #6	O.A.I.S.-E.A.	.844	2.295	280
Step #7	COOP Eng. S.	.845	2.225	279
Step #8	Employment	.847	2.161	278
Step #9	O.A.I.S.-S.A.	.847	.745	277
Step #10	Father's Ed.	.848	.731	276
Step #11	O.A.I.S.-C.P.	.848	.460	275
Step #12	COOP Eng. Exp.(Raw Score)	.848	.371	274
Step #13	Mother's Ed.	.848	.098	273
Step #14	O.A.I.S.-A.P.	.848	.096	272
Step #15	SCAT-Verbal	.848	.050	271
Step #16	COOP Eng. V	.848	.141	270
Step #17	O.A.I.S.-S.S.	.848	.040	269
Step #18	SCAT - Quant.	.848	.022	268

Variance Accounted For (R-Squared) - 72%

TABLE 55

## A FEMALES 2 YEARS

DEPENDENT VARIABLE - PERSISTENCE 2

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Credits Earned-2 Yrs.	.845	258.030	103
Step #2	SCAT-Quant.	.857	7.424	102
Step #3	SCAT-Verbal	.866	6.761	101
Step #4	Father's Ed.	.869	1.972	100
Step #5	COOP Eng. Exp.(Raw Score)	.872	1.715	99
Step #6	O.A.I.S. - S.A.	.874	1.543	98
Step #7	Involvement	.875	1.113	97
Step #8	High School Rank	.877	1.175	96
Step #9	COOP Eng. V	.878	.913	95
Step #10	O.A.I.S. - CP	.879	.925	94
Step #11	Employment	.880	.710	93
Step #12	O.A.I.S. - AP	.881	.726	92
Step #13	O.A.I.S. - IQ	.882	.447	91
Step #14	Mother's Ed.	.882	.272	90
Step #15	COOP Eng. S	.883	.231	89
Step #16	O.A.I.S. - EA	.883	.171	88
Step #17	O.A.I.S. - BS	.883	.001	87
Step #18	O.A.I.S. - SS	.883	.001	86

Variance Accounted For (R-Square) = 78%

TABLE 56

## A &amp; C MALES 1 YEAR

## DEPENDENT VARIABLE - PERSISTENCE 1

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Credit Earned-1 Yr.	.732	789.295	685
Step #2	High School Rank	.733	2.862	684
Step #3	COOP Eng. Exp.-Raw Score	.734	2.686	683
Step #4	O.A.I.S. - SA	.735	2.106	682
Step #5	O.A.I.S. - AP	.736	1.700	681
Step #6	COOP Eng. S	.737	1.212	680
Step #7	Mother's Ed.	.737	.543	679
Step #8	SCAT - Verbal	.737	.415	678
Step #9	OAIS - BS	.737	.317	677
Step #10	OAIS - CP	.737	.340	676
Step #11	Employment	.737	.270	675
Step #12	Father's Ed.	.737	.179	674
Step #13	Involvement	.738	.077	673
Step #14	OAIS - SS	.738	.077	672
Step #15	COOP Eng. V.	.738	.018	671
Step #16	OAIS - IQ	.738	.014	670
Step #17	OAIS - EA	.738	.001	669
Step #18	SCAT - Quant.	.738	.000	668

Variance Accounted For (R-Squared) = 54%

TABLE 57

## A &amp; C FEMALES 1 YEAR

## DEPENDENT VARIABLE - PERSISTENCE 1

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Credits Earned-1 Yr.	.783	418.022	263
Step #2	High School Rank	.793	10.844	262
Step #3	Father's Ed.	.798	5.149	261
Step #4	OAIS - SS	.802	4.442	260
Step #5	COOP Eng. Exp. Raw Score	.804	2.998	259
Step #6	SCAT - Quant.	.806	2.773	258
Step #7	OAIS - EA	.808	2.280	257
Step #8	COOP Eng. S.	.809	1.379	256
Step #9	Employment	.810	.887	255
Step #10	Involvement	.811	.650	254
Step #11	SCAT - Verbal	.811	.344	253
Step #12	OAIS - AP	.811	.377	252
Step #13	Mother's Ed.	.812	.375	251
Step #14	OAIS - IQ	.812	.164	250
Step #15	OAIS - BS	.812	.215	249
Step #16	COOP Eng. V.	.812	.021	248
Step #17	OAIS - GP	.812	.022	247
Step #18	OAIS - SA	.812	.003	246

Variance Accounted For (R-Squared) - 66%



TABLE 58

B MALES 2 YEARS

DEPENDENT VARIABLE - PERSISTENCE 2

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Father's Ed.	.288	11.552	128
Step #2	Age	.328	3.571	127
Step #3	Employment	.365	3.651	126
Step #4	Involvement	.394	3.308	125
Step #5	COOP Eng. Exp. Raw Score	.412	2.163	124
Step #6	High School Rank	.419	.805	123
Step #7	SCAT - Quant.	.424	.654	122
Step #8	COOP Eng. V	.426	.234	121
Step #9	SCAT - Verbal	.431	.675	120
Step #10	COOP Eng. S.	.432	.140	119
Step #11	Mother's Ed.	.432	.028	118

Variance Accounted For (R-Squared) - 19%

TABLE 59

## B FEMALES 2 YEARS

## DEPENDENT VARIABLE - PERSISTENCE 2

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Involvement	.372	3.860	24
Step #2	Age	.474	2.556	23
Step #3	Employment	.535	1.910	22
Step #4	COOP Eng. S	.589	1.947	21
Step #5	Mother's Ed.	.689	4.862	20
Step #6	SCAT - Verbal	.705	.861	19
Step #7	High School Rank	.724	1.012	18
Step #8	Father's Ed.	.750	1.513	17
Step #9	COOP Eng. Exp. Raw Score	.758	.422	16
Step #10	COOP Eng. V	.762	.203	15
Step #11	SAAT - Verbal	.762	.010	14

Variance Accounted For (R-Squared) - 58%

## SCAT-T AND COOP ENG. EXPRESSION (RAW SCORE) AS DEPENDENT VARIABLE

The inter correlations between the SCAT-T and the Coop English obviously make for similarities among all the groups. However, there appear to be greater differences between all the males (ECD and liberal arts) and all the females than there are differences between ECD and liberal arts. The correlations for males are most similar, whereas the females have less consistency.

Overall, the I. Q. score of the O.A.I.S. has more relationship to the Coop English Expression score than it has to the SCAT-T for ECD students, yet the grades tend to be more related to SCAT-T. For the liberal arts students, their grades are also more related to SCAT-T than they are to the Coop English Expression score. The correlations based on test scores are higher for the liberal arts students than the previous correlations based on other dependent variables.

For all the males there are very low correlations between COOP English Expression and grades but second year grades are among the top three variables when SCAT-T is the dependent variable. For all the females, second year grades were less related to the SCAT-T score, but especially so for ECD females. The liberal arts females have a high correlation between age and Coop English Expression. This may be partially due to the difference between the girls who enter immediately after high school and the women who enter college later.

All this may point to the multiple factors involved in testing, and the limited use of tests for prediction. When tests have inter correlations which are different for males and females and show variations over a period of time, then knowing what the tests can, will or should predict may have no relationship to what actually happens unless the intervening educational experience is structured to fulfill the prediction. In other words, the push of a program should, perhaps, begin with the idea that it can partially reverse the prediction of the tests. If it doesn't, then what has it done that all other education hasn't already proved?

TABLE 60

## A MALES - 2 YEARS

DEPENDENT VARIABLE - SCAT - TOTAL

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	COOP ENG. S	.638	195.641	285
Step #2	COOP ENG. V	.698	44.187	284
Step #3	G.P.A. - 2 Yrs.	.712	11.544	283
Step #4	O.A.I.S. - CP	.724	10.358	282
Step #5	COOP ENG. EXP.	.735	9.797	281
Step #6	Raw Score High School Rank	.744	7.983	280
Step #7	O.A.I.S. - IQ	.747	2.990	279
Step #8	O.A.I.S. - AP	.749	1.726	278
Step #9	O.A.I.S. - EA	.751	2.172	277
Step #10	Father's Ed.	.752	.758	276
Step #11	Mother's Ed.	.754	2.018	275
Step #12	Employment	.755	.577	274
Step #13	O.A.I.S. - SA	.755	.378	273
Step #14	O.A.I.S. - BS	.755	.263	272
Step #15	O.A.I.S. - SS	.755	.078	271
Step #16	Involvement	.755	.023	270

Variance Accounted For (R-Squared) - 57%

Tables 60 through 71 depict the step-wise regression of selected variables related to SCAT-T and Co-op English. In addition to the multiple correlation at each step, the F ratio and degrees of freedom are indicated. The interpretation of the F ratio is as follows: In general, any F ratio equal to or greater than 2.50 is considered to be significant at the .05 level.

TABLE 61

## A FEMALES - 2 YEARS

DEPENDENT VARIABLE - SCAT TOTAL

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	COOP Eng. V	.488	32.196	103
Step #2	COOP Eng. S	.539	7.495	102
Step #3	COOP Eng. Exp. Raw Score	.579	6.915	101
Step #4	Mother's Ed.	.597	3.242	100
Step #5	High School Rank	.610	2.377	99
Step #6	OAIS - AP	.621	2.224	98
Step #7	Involvement	.627	1.203	97
Step #8	Employment	.630	.589	96
Step #9	OAIS - EA	.631	.277	95
Step #10	OAIS - CP	.633	.402	94
Step #11	OAIS - BS	.637	.658	93
Step #12	GPA - 2 Yrs.	.639	.434	92
Step #13	Father's Ed.	.640	.218	91
Step #14	OAIS - SA	.641	.131	90
Step #15	OAIS - IQ	.641	.035	89
Step #16	OAIS - SS	.641	.040	88

Variance Accounted For (R-Squared) - 41%

TABLE 62

## A &amp; C MALES - 1 YEAR

## DEPENDENT VARIABLE - SCAT TOTAL

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	COOP Eng. S	.596	377.641	685
Step #2	COOP Eng. V	.664	103.968	684
Step #3	COOP Eng. Exp. Raw Score	.678	24.015	683
Step #4	OAIS - IQ	.684	11.430	682
Step #5	High School Rank	.690	9.663	681
Step #6	GPA - 1 Yr.	.691	1.848	680
Step #7	Involvement	.693	3.711	679
Step #8	OAIS - BS	.694	1.363	678
Step #9	OAIS - CP	.694	.972	677
Step #10	OAIS - SS	.695	1.625	676
Step #11	Employment	.695	.639	675
Step #12	Father's Ed.	.696	.962	674
Step #13	Mother's Ed.	.697	1.645	673
Step #14	OAIS - SA	.697	.221	672
Step #15	OAIS - EA	.697	.127	671
Step #16	OAIS - AP	.697	.074	670

Variance Accounted For (R-Squared) - 49%

TABLE 63

## A &amp; C FEMALES - 1 YEAR

## DEPENDENT VARIABLE - SCAT TOTAL

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	COOP Eng. V.	.493	84.256	263
Step #2	COOP Eng. S	.528	13.174	262
Step #3	GPA - 1st Yr.	.545	6.765	261
Step #4	OAIS - BS	.560	6.147	260
Step #5	Mother's Ed.	.560	2.635	259
Step #6	OAIS - IQ	.570	1.673	258
Step #7	High School Rank	.573	1.381	257
Step #8	OAIS - AP	.576	1.266	256
Step #9	OAIS - SA	.578	1.033	255
Step #10	OAIS - CP	.579	.568	254
Step #11	COOP Eng. Exp. Raw Score	.580	.363	253
Step #12	Employment	.581	.181	252
Step #13	OAIS - EA	.581	.170	251
Step #14	OAIS - SS	.582	.328	250
Step #15	Involvement	.582	.055	249
Step #16	Father's Ed.	.582	.038	248

Variance Accounted For (R-Squared) - 34%

TABLE 64

## B MALES - 2 YEARS

DEPENDENT VARIABLE - SCAT - TOTAL

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	COOP Eng. Exp. Raw Score	.515	46.218	128
Step #2	COOP Eng. V	.553	7.430	127
Step #3	GPA - 2 Yrs.	.573	4.137	126
Step #4	COOP Eng. S	.582	2.109	125
Step #5	Involvement	.588	1.270	124
Step #6	Employment	.588	0.087	123
Step #7	High School Rank	.589	.087	122
Step #8	Age	.589	.033	121
Step #9	Father's Ed.	.589	.018	120
Step #10	Mother's Ed.	.589	.000	119

Variance Accounted For (R-Squared) - 35%



TABLE 65

## B FEMALES - 2 YEARS

DEPENDENT VARIABLE - SCAT TOTAL

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	COOP Eng. S	.633	16.048	24
Step #2	COOP Eng. Exp. Raw Score	.698	3.858	23
Step #3	Employment	.729	2.088	22
Step #4	COOP Eng. V	.740	.758	21
Step #5	GPA - 2 Yrs.	.746	.416	20
Step #6	Involvement	.751	.329	19
Step #7	High School Rank	.752	.053	18
Step #8	Father's Ed.	.752	.018	17
Step #9	Mother's Ed.	.753	.029	16
Step #10	Age	.753	.007	15

Variance Accounted For (R-Squared) - 57%

TABLE 66

## A MALES - 2 YEARS

DEPENDENT VARIABLE - COOP ENG. EXP. - RAW SCORE

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	SCAT - Verbal	.469	80.527	285
Step #2	SCAT - Quant.	.544	30.491	284
Step #3	SCAT - Total	.629	46.493	283
Step #4	O.A.I.S. - IQ	.653	15.006	282
Step #5	O.A.I.S. - SA	.655	1.659	281
Step #6	O.A.I.S. - CP	.656	.719	280
Step #7	Father's Ed.	.657	.615	279
Step #8	Employment	.659	1.253	278
Step #9	O.A.I.S. - EA	.660	.668	277
Step #10	O.A.I.S. - BS	.661	.469	276
Step #11	O.A.I.S. - AP	.662	.833	275
Step #12	O.A.I.S. - SS	.662	.129	274
Step #13	Involvement	.662	.076	273
Step #14	Mother's Ed.	.663	.108	272
Step #15	GPA - 2 Yrs.	.663	.066	271
Step #16	High School Rank	.663	.007	270

Variance Accounted For (R-Squared) - 44%

TABLE 67

## A FEMALES - 2 YEARS

DEPENDENT VARIABLE - COOP ENG. EXP. RAW SCORE

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	SCAT - Quant.	.229	5.679	103
Step #2	SCAT - Total	.300	4.209	102
Step #3	OAIS - IQ	.319	1.348	101
Step #4	High School Rank	.329	.753	100
Step #5	OAIS - EA	.333	.296	99
Step #6	OAIS - AP	.340	.524	98
Step #7	GPA - 2 Yrs.	.347	.502	97
Step #8	OAIS - CP	.350	.215	96
Step #9	OAIS - BS	.354	.338	95
Step #10	OAIS - SS	.356	.098	94
Step #11	OAIS - SA	.357	.143	93
Step #12	Father's Ed.	.359	.104	92
Step #13	Mother's Ed.	.363	.331	91
Step #14	Involvement	.364	.077	90
Step #15	Employment	.364	.002	89
Step #16	SCAT - Verbal	.364	.000	88

Variance Accounted For (R-Squared) - 13%

TABLE 68

## A &amp; C MALES - 1 YEAR

DEPENDENT VARIABLE - COOP ENG. EXP. - RAW SCORE

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	SCAT - Verbal	.447	170.859	685
Step #2	SCAT - Quant.	.534	82.339	684
Step #3	SCAT - Total	.588	62.796	683
Step #4	OAIS - IQ	.597	11.701	682
Step #5	OAIS - AP	.604	8.565	681
Step #6	OAIS - SS	.607	3.727	680
Step #7	Mother's Ed.	.608	1.743	679
Step #8	GPA - 1st Yr.	.609	1.078	678
Step #9	Involvement	.610	.756	677
Step #10	Employment	.610	.386	676
Step #11	OAIS - EA	.610	.241	675
Step #12	OAIS - BS	.610	.487	674
Step #13	OAIS - CP	.611	.157	673
Step #14	Father's Ed.	.611	.078	672
Step #15	OAIS - SA	.611	.023	671
Step #16	High School Rank	.611	.018	670

Variance Accounted For (R-Squared) - 37%

TABLE 69

## A &amp; C FEMALES - 1 YEAR

DEPENDENT VARIABLE - COOP. ENG. EXP. - RAW SCORE

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	SCAT - Verbal	.278	21.942	263
Step #2	High School Rank	.287	1.454	262
Step #3	OAIS - BS	.295	1.402	261
Step #4	Employment	.300	.834	260
Step #5	Mother's Ed.	.305	.817	259
Step #6	OAIS - CP	.309	.749	258
Step #7	OAIS - EA	.318	1.683	257
Step #8	OAIS - SS	.324	1.091	256
Step #9	OAIS - SA	.332	1.469	255
Step #10	SCAT - Total	.338	1.204	254
Step #11	SCAT - Quant.	.349	2.054	253
Step #12	GPA - 1st Yr.	.349	.034	252
Step #13	Involvement	.349	.041	251
Step #14	Father's Ed.	.349	.030	250
Step #15	OAIS - AP	.349	.020	249
Step #16	OAIS - IQ	.349	.004	248

Variance Accounted For (R-Squared) - 12%

TABLE 70

## B MALES - 2 YEARS

DEPENDENT VARIABLE - COOP ENG. EXP. Raw Score

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	SCAT -Total	.515	46.218	128
Step #2	SCAT - Verbal	.535	3.636	127
Step #3	SCAT - Quant.	.564	5.995	126
Step #4	Father's Ed.	.569	1.094	125
Step #5	Involvement	.575	1.171	124
Step #6	Employment	.576	.286	123
Step #7	High School Rank	.577	.225	122
Step #8	Age	.578	.186	121
Step #9	Mother's Ed.	.578	.077	120
Step #10	GPA - 2 Yrs.	.579	.008	119

Variance Accounted For (R-Squared) - 33%

TABLE 71

## B FEMALES 2 YEARS

DEPENDENT VARIABLE - COOP ENG. EXP. RAW SCORE

	ENTERED VARIABLE	MULTI CORRELATION	F-LEVEL	DEGREE OF FREEDOM
Step #1	Age	.798	42.057	24
Step #2	SCAT - Total	.860	9.017	23
Step #3	High School Rank	.877	2.959	22
Step #4	Mother's Ed.	.887	1.599	21
Step #5	Employment	.894	1.278	20
Step #6	Father's Ed.	.895	.144	19
Step #7	GPA - 2 Yrs.	.895	.108	18
Step #8	Involvement	.896	.032	17
Step #9	SCAT - Quant.	.896	.013	16
Step #10	SCAT - Verbal	.896	.003	15

Variance Accounted For (R-Squared - 80%)

## SUMMARY OF THE MULTIPLE REGRESSIONS

The multiple regressions obviously give no definitive answers to the questions, but rather suggest directions that can be interpreted in relation to the other data obtained. It was noted in previous sections on persistence and grades that the first and second years are quite similar. Students appear to behave in much the same manner their second year as they did their first year. The multiple regressions using grades and credits earned as the dependent variables uphold this idea. This offers encouragement to a first year program such as ECD to feel that the student's first year in college can actually influence his future behavior more than any other.

The higher correlations for the ECD students might give further proof to the idea that the environment provided by the ECD Program was more unified and consistent than that provided to the liberal arts students. If the environment is so organized to provide more students with more success and does so, then the behavior of the students should be more easily predicted than it would be if the environment is diverse and fragmented. These higher correlations do not indicate what it is in the program that makes for success, it merely gives more confirmation that if a program wishes to reach predetermined goals, it must make sure that all areas of the educational experience are actually so structured as to implement them.

The importance of the personality scores, Intellectual Quality and Achiever Personality offer the program further evidence that often success is, within obvious limits, closely tied to a student's attitude or expectations. It certainly suggests that a program can make some effort to build into their organization a means for assisting their students in understanding and experiencing the role of the "successful student." This may be done by offering several avenues for achieving success and making success more easily achievable during the early weeks of the program.

Overall, the multiple regressions make it evident that even with all the variables it is difficult to predict success based on pre-college information on any given student. It would seem that increased predictability of the student's success is more related to the program he enters than what he did before entering.



## SUMMARY

The final summary of the total two year evaluation of the ECD Program can be considered in two ways: First, the evaluation of the two groups of ECD students in relation to the original goals of the program and second, the comparison of both groups of ECD students to the liberal arts students. Many of the original goals set forth at the onset of the ECD Program in September, 1965 might be quite different from the goals that would be set up by any individual instructor or groups of instructors teaching liberal arts courses; to make a comparison between the students taking liberal arts courses and ECD students as to the achievement of these goals would actually prove nothing. However, as to accomplishing those goals which are shared by the entire college, such as meeting the academic needs of the students who attend, a comparison between the two groups can help evaluate both the ECD Program and the liberal arts.

Nine out of ten students who enter Macomb indicate that they wish to take a course of study that will ultimately lead to transfer to a senior institution. This means that these students wish to earn as many credits as possible with as high a grade point average as possible within as short a time as possible. Any hold up, such as repeating courses, not receiving credit, being forced to drop courses, etc., is a deferment of these goals, no matter what the reasons are for them. Again, any individual instructor might disagree that these are not the goals he has for his classes, but taken as a whole the institution sets this as its reason for existence.

If students are to achieve any of their goals, they must persist, both in their classes and at the college. When Macomb students attended the college during the afternoon and evening hours only, the drop out rate from college (as indicated by a study quoted in the first section of this report) approached the 50% rate. However, this study which begins in September, 1965 covers only students who attended college during the day. When persistence is a simple measure of whether a student stays in college or not, then the ECD students and the students enrolled in liberal arts courses persist at about the same rate, both in their first year and in their second year. When persistence is measured as the number of credits attempted and earned, then the differences between students enrolled in the ECD Program and those taking liberal arts courses are apparent. When all the students are compared as to the number earning one year's credit (between 25 and 33 credits in two semesters) then about 2/3 of the students enrolled in ECD achieved this goal, whereas, about 1/4 of those in the liberal arts group did so. When the ECD students left the program and took liberal arts courses their second year, they continued to maintain their lead over the liberal arts group. Almost 1/4 of the original 393 students who entered the ECD Program earned 55 or more credits at the end of two years; in the liberal arts group, about 1/10 of the students had earned this number of credits at the end of two years. When the ECD students and the liberal arts students are compared in relation to their entering SCAT-T scores, ECD students are found to have earned more credits in all decile ranges, but this is especially evident for those students who scored in the lower decile ranges. The mean SCAT-T scores for both ECD groups were 31 and 27; whereas the mean SCAT-T score for

the liberal arts group was 40. In other words, even though the ECD Program began with students with lower scores, they earned more credits in a shorter length of time than those in the liberal arts group.

Interestingly enough, grades, measured simply as numbers of students earning above or below a C (or 2.0) tend not to discriminate between ECD and non-ECD students. However, when the grades are related to credits attempted and earned, again the differences are evident. Separating out the students in both ECD groups and the liberal arts group who earned an average of C or better and then comparing them as to how many attempted and earned between 25 and 33 credits indicates that the ECD students were more successful. More than 90% of the first year ECD students and over 80% of the second year ECD students who maintained a C or above average earned between 25 and 33 credits their first year compared to 50% of the liberal arts students. When the ECD students and liberal arts students are compared as to percentages of students with C or better averages who earned 55 or more credits their second year, then the ECD group's success is more than twice that of the liberal arts group. At the end of two years, more than 60% of the ECD students with C or better grade averages earned 55 or more credits; whereas 26% of the liberal arts students did so. As mentioned above, the statistically significant differences between the ECD students SCAT-T scores and the SCAT-T scores of students in the liberal arts group would suggest that fewer ECD students would persist in college and earn fewer credits at lower grades; yet the opposite is true--the ECD students stayed in school and earned more credits with higher grades than the students who were in the comparison group. As a result, when compared as to percent, about three times as many ECD students as liberal arts students graduated from Macomb at the end of two years.

The differences between the ECD students and the liberal arts students in relation to the pre-college tests increased when the students earning grades of C or better were compared. For example, the mean SCAT-T scores for ECD students with grades of C or better at the end of one year were 33 for those with a G.P.A. between 2.0 and 2.4 and 37 for those with a G.P.A. between 2.5 and 2.99 whereas the mean SCAT-T for the liberal arts students with C or better was 44.

As to the attainment of the other goals of the ECD Program, such as redirection, attitude change and increased involvement, the comparisons are not as clear cut nor discriminating as the ones above, and these are also the goals set exclusively by the ECD Program and not necessarily endorsed by the college as a whole. Comparisons with the liberal arts students gives some insight into what influence the program is having on the ECD students by assuming that the liberal arts students represent the normal reaction or behavior, and any deviation from this would be the result of the program.

Redirection, helping students to change their vocational choices based on the idea that students have unrealistic goals, was set up as one of the aims of the program and ECD and liberal arts students were compared as to the percent of students indicating a change in vocational choice. The results indicated that there was very little difference between the ECD

students and the liberal arts group. The second year questionnaire (sent out to all the first year ECD students and the liberal arts comparison group) appeared to indicate that the greatest amount of vocational change was made by students, ECD and liberal arts, who left college after their first year. The students who indicated the least amount of change in vocational choice were those who had stayed in college their second year. Redirection, then, has ceased to become a useful goal. If the students who change do so because they drop out of college, then the goal of assisting students in achieving academic success would solve or neutralize the problem of redirection.

Improved student-faculty relations were seen as a definite goal of the ECD Program at the very beginning. The program evaluation, filled out by students give consistently high ratings to the student-faculty relations. The second year questionnaire further upheld this goal by comparing the liberal arts and ECD students ratings of their faculty-student relations for both first and second year. The liberal arts students rated their second year faculty higher than their first; former ECD students gave higher ratings to their first year student-faculty relations.

Involvement, overall, has proved to be a significant factor. It was a definite goal of the ECD Program to encourage students to participate in clubs, activities and attend cultural or political events. The liberal arts students were not so encouraged and some of the clubs on campus are only open to students with a C or better average. This would make involvement impossible for many students. However, the measurement of involvement proved to be an important predictive variable in the multiple regressions and former ECD students answering the Second Year Questionnaire indicated that they continued to remain more involved than the liberal arts students, even after leaving college.

The program evaluations that have been administered at the end of every semester have provided feedback that gives direction to curriculum changes. The changes in student responses as well as the changes made in the evaluation instrument itself indicate that change has taken place. The program evaluation serves the double purpose of evaluating what has gone on as well as serving as an impetus for change.

The program evaluations are just part of the total program's push to continue to be experimental and innovative. In addition to this, there are student evaluations of the faculty as well as a complete ongoing study of the ECD students' accomplishments. The program's independence of all other departments assists in making experimentation possible as well as a faculty that is rewarded according to their involvement in the total program.

The block scheduling of students and the teams that share the same 100 or so students provide the program with another area of possible innovation because they have no set goals. This can make possible a myriad of projects and increase faculty participation in continual innovation. These evaluations and experimentations are also reflected in the area reports.

The only concrete evidence that former ECD students perceive themselves as having changed their views and attitudes is from the second year questionnaire and was only asked of students who attended college their second year. The results indicate that more former ECD students than liberal arts students believed they had changed their views and attitudes.

The majority of students in the ECD Program who were successful--that is, those that did not drop out of their classes and earned passing grades, were students who, if they had done as well (or as poorly) as those in the liberal arts group, would have not been so successful. The program provided students with a successful experience who would not have had this success if they had entered the liberal arts program. The ECD students who persisted into their second year continued to achieve ahead of the liberal arts comparison group. This pattern, indicated by the small amount of grade change from year one to year two, and further demonstrated by the similarity of the first and second year multiple regressions, forms some evidence for concluding that success is an impetus for more success; a successful academic experience can lead to further achievement.

## RECOMMENDATIONS AND CONCLUSIONS

The conclusions drawn from the entire progress report may have more value if they are arranged as recommendations so to be useful to anyone else interested in adopting a basic educational program or even to those who might wish to adapt for use just a few of the aspects or suggestions for already existing programs. Therefore, the following recommendations are based on the written evaluation, some current research and intuitive insights that have resulted from three years of developing the ECD Program.

### I

As discussed in the beginning section of this Progress Report, it is not any single factor in isolation that can have a decisive effect on students but it is the combination of factors that makes the difference. If any program wishes to influence its students and teachers enough to change expected behavior, then the environment provided by that program must be unified and powerful. All aspects of the organization must work toward the same goals with many open lines of communication and the students must be able to see this organization as unified and working for their benefit.

Accepting the idea of a powerful, unified environment in theory means, in our opinion, accepting some form of block scheduling and faculty teams as a means of organization. The block scheduling, having students attend all their classes within a block of time with the same students, makes the faculty teams a possibility. This means that four or five faculty members share the same 120 students. If these faculty members do any coordinating whatsoever, their unity will be perceived by all the students in their blocks. Any individual students' problems are more quickly noticed and handled in this type of situation because it increases the lines of communication among the faculty and between the students and faculty. If any individual student has a problem with one class, he has at least three instructors who can help him with his problem in addition to the one teaching the class.

When it comes to the content of the general education courses, the team structure assists in furthering the goal of influencing the students. Many of the regular liberal arts courses tend to organize their class around either areas of knowledge or blocks of time, with week one being approximately as difficult as week eighteen. When a faculty team attempts to work at some form of coordination, different forms of organization are more likely. The trend in the ECD Program has been to leave the organizational patterns based on the content and move toward organization more related to critical thinking skills. In this type of structure, the work in week one may be more simple and more easily handled than that given at the end of the course. A basic organization which underlies all the classes is made more possible because of the team structure which presents a more total picture to the students

than would be feasible with separate liberal arts courses.

If the educational experience is to cause any real changes in the students' attitudes or values or, to put it another way, if the material taught in the courses is to have some lasting impact, then the integration of subject matter in a variety of ways is an effective means to that end. Just to memorize factual information or ideas can be done in almost any educational setting, but having students learn how to question information and ideas as well as perceive differing viewpoints requires careful planning. If the information contained in the various classes is handled in a manner related to critical thinking, the concept of varying viewpoints can be more easily conveyed. In this manner, the students can become aware of the unimportance of simply remembering isolated pieces of information and more concerned with understanding how the pieces of information fit together.

To develop an atmosphere of innovation and experimentation requires that an educational program find some middle ground between stability and change. The ECD Program has attempted to find this middle ground by setting up program and course goals as the area of stability and having the teams remain open-ended and unstructured so as to provide a means for experimentation and innovation.

As a final word about the block scheduling and faculty teams, it would be the ECD Program's recommendation that the teams, in order to be effective and play a major role in the development of a total environment, must touch on all areas of the program. The faculty teams should not, for example, be set up and used for predetermined tasks that inhibit the possible creativeness of the team structure and limit it to just "doing the job." It is not the particular project planned and executed by the team that makes the difference, but rather the unity and integration.

## II

Helping students persist in college and in their classes requires that the program find means to encourage individual commitment, especially so in a community college that has limited physical facilities. The majority of students that entered the ECD Program were uninvolved in school-related activities in high school. Therefore, it seemed to be an essential goal for ECD to structure into the program student involvement--involvement in the classroom, in the college, in the community and in cultural and political events. This involvement assists in making the college experience very different from the high school, it assists in keeping the students in school and it provides areas other than the classroom for students to be successful.

Lecture classes for large groups of students makes it possible for many students to remain aloof and detached from the classroom environment; whereas small discussion groups that avoid any lecturing and concentrate on student participation force the students to become involved in the content. The discussion groups are not small lectures where students respond with the "right" answers, but a class that attempts to have students share their

views and ideas. Therefore, each student can be brought into the class.

When the lines of communication between the students and faculty are only set up to run one way--from the faculty to the student, then it makes it relatively easy for the students to avoid commitment and involvement in their education. One means found by the ECD Program to assist in expanding communication was to have the students evaluate their instructors and the entire program at the end of both semesters. In this way students must consider their own reactions to the program and faculty rather than just concentrate on the various faculty's reaction to them. The process of evaluation further affirms that the students are part of the program, a part that can influence and change the program in much the same way as the faculty. It might also be theorized that it changes faculty behavior knowing that they and their courses will be evaluated and this increases their involvement as well.

The majority of ECD students indicate that they have had, before entering college, very little contact with cultural or political events. To hope that they will change this behavior simply as a result of being in college seems unrealistic. Therefore, the Humanities class took the lead in assigning students to attend cultural events. The other classes have all organized projects at one time or another that have sent the students out into the community. The students are not "forced" to feel in any particular way about their experiences, but rather are encouraged to handle them in a critical manner just as they do the content of their classes. In this way, the classes attempt to use the local community in as many ways as possible. This does add new instructional material each semester and encourages spontaneous creativity on the part of the students and the faculty --a further push toward involvement.

Another area of student involvement found to be helpful was the athletic teams set up along block lines. These teams played one another and the faculty. The students in ECD were given any help possible in organizing any group in which they were interested and encouraged to join campus-wide groups.

Involvement and commitment do not just happen in a program, they must be part of the structure so that students cannot avoid it. If a student has never played the role of the involved student, he is not going to initiate any change, the change must happen to him.

### III

Many programs that are devised to help the academically poor students set as one of their goals redirection of the students' unrealistic vocational goals. The ECD Program was no exception. However, the past three years have provided the program with much evidence that the goal of redirection is itself unrealistic and should be dropped.

To use a term such as "redirection" tends to obscure the many implications such a plan of action contains. Perhaps the most important implication is that the students entering the program are bound for failure if they follow their own plans and the success depends on following someone else's advice. It further implies that there is some direct connection between certain test scores and certain vocations. If a program is built on these assumptions, then it would be difficult to claim that it was, at the same time, helping students achieve success--the two goals are not compatible.

The data from the Second Year Questionnaire demonstrates that the students who changed their vocational choice were those that dropped out of college, and the students who did not change were those that remained and were successful. It would appear to be rather absurd to admit your incapability of reaching a desired goal at the same time that you are successful in your college work.

Therefore, the ECD Program makes it possible for students to become aware of different occupations, but does not work at redirection. The program works at making the student's educational experience successful and productive--their choices of future vocations may then become reality.

#### IV

The problem of redirection leads into the next recommendation. The ECD Program began by offering courses that earned college credit within the institution and were transferable to any other college or university. This is dissimilar to many programs offered to these types of students. However, offering remedial courses that do not carry credit is again a plan of action that contains destructive implications. It means that the students are so incapable that they must first have a trial run before they can even attempt college work. It further implies that there is some agreement across the board as to just what college-level work actually is and that there is some means of ascertaining just who can or cannot do it. Such is not the case. To offer college courses to students is a form of affirmation of their ability and contains expectations of success; whereas offering them non-credit courses does the opposite.

#### V

When a student is involved in the program and participates in a variety of activities, "success" can be based on a broader range of behavior than if it were just based on academic achievement in one class. Success, accomplishing some set goal or goals, should be achievable by all the students in many different ways. There are several avenues to success open to ECD students and no one method is used to make an ultimate judgment for a grade.

ECD courses are so structured that academic success is more easily gained during the early weeks of the course. The small discussion groups



avoid any sessions that require students to give the right responses to questions asked by the instructor. The writing in communications, for example, is ungraded for several weeks and certain writing done for the course is graded only on amount, rather than quality. Redirection of the students' vocational or educational goals is not the aim of the program. The students are accepted as they are because the program is based on the assumption that all the students can do the work.

Therefore, it is our program's recommendation that the total push for success should permeate all areas of the program and it should be within the grasp of all the students. The role of successful college students has never been tried out by any of the students nor have they been unsuccessful students. They have what has been described as "instability of self-esteem." (p. 12, ACT Research Reports, Nov., 1966, No. 16, Rodney W. Skoger and Larry A. Braskamp). This first year, especially the first weeks, have the special advantage of helping students learn what it is to be successful. Perhaps, the ECD Program could characterize its philosophy by stating that the old cliché "college should be tough at the beginning so that the poor students will then be dropped out of school and the good students can get down to work," is completely opposed to our whole approach. ECD begins with the poor student and spends the first weeks convincing them that they CAN make it.

## VI

It is difficult to recommend the kind of faculty required for a program such as ECD. The value of a faculty member is not evident in the number or type of degrees he has nor is it always a matter of simply hiring young teachers. There is one recommendation that the ECD Program might make and that is at hiring, the faculty should be apprised of the fact that the program is experimental and requires more personal involvement than other areas of the college. What is most important in obtaining a good faculty is an organized and unified program. Faculty appear to be as influenced by a strong environment as students. When faculty are being continually evaluated by students, their attitudes toward students will be different than if there was no feedback whatsoever. The ECD faculty are evaluated by their peers and by the Program Director as well. This increased the overall pressure on the faculty.

Each instructor is a member of his area, his team and, of course, the total ECD Division. He has certain responsibilities to all three of these groups, and the groups, in turn, attempt to initiate innovation and experimentation. There are regular weekly meetings which all faculty attend. There is really no way for a faculty member to ignore or evade the atmosphere of the ECD Program. In the past, faculty members who did not wish to become so involved moved to other areas of the college. Those who remained tend to increase the intensity of their commitment which, in turn, influences the new faculty. Therefore, it is not so much finding the perfect faculty members as it is providing an atmosphere that develops perfect faculty.

## VII

Having constant and ongoing evaluation is the recommendation that ties together all aspects of the program, both time-wise and space-wise. Time-wise, evaluation of the students who have gone through the program gives a picture of what the program has done, and suggests directions based on the past accomplishments or failures; space-wise, by coordinating and unifying the program's goals, evaluation furnishes all areas with a means for checking their position relative to the total picture. Without evaluation, a program cannot fight fragmentation and disorder. In one sense, evaluation is part of the unified environment and one means for developing involvement on the part of the faculty and students. There would be no means available for a successful program to withstand personnel change, to communicate its philosophy nor to follow new directions unless it had an ongoing evaluation procedure. An unevaluated program's existence would be momentary and would fail to use its resources in as efficient manner as possible.

An overall evaluation program serves at least two functions--it gives feedback information to the program and it collects objective data for those outside the program. The internal feedback should be continuous. However, the objective data needs to be gathered over a period of time. It is our recommendation that a new program operate for at least two years before writing any formal evaluations of its accomplishments even though evaluation procedures should begin with the first day of the program. This kind of commitment is much easier at the beginning than it is at any later date.

## VIII

Finally, all the above recommendations depend on the role the governing institution plays in the development and growth of an experimental program.

It is necessary, our experience indicates, that an experimental program should be completely autonomous. The faculty should be hired by, and responsible to, the director of the program, not to any other departments of the college. Likewise, there should not be budget ties between the program and any other department.

An experimental program should be guaranteed at least three years of operation at its inception and its continuance should not be dependent on proving more than any other department or division of the college. In other words, what is demanded of an experimental program in the way of justification should also be demanded of all departments. If the new program is supported by the college administration, then these problems may not arise. However, what is new is frequently questioned and criticized in a manner unlike that used for the older, more established departments.

What we have been describing in the preceding pages is a program that not only strives for total unity, but one that seeks to be different. It works at being different from the viewpoints of the students, the faculty and the rest of the college. Noninvolvement, for example, was the pattern of behavior for the majority of entering students, so this was one aspect of the program that was stressed. This was a startling change for the students, as well as the faculty. One major change can set the stage for many others, as well as providing concrete evidence that the new educational experience is not simply the old one in a new setting. A new physical setting can have influence for only a short length of time.

The philosophy that is often quoted in relation to the Community College's open door policy is, "Every student has a right to try to be a success in college." This leaves out the vital dimension--the college's responsibility. It tends to place the entire blame (or praise) on the student. It gives a picture of college courses being separate and equal units parceled out to those with ability. This philosophy also leaves the impression that the other aspects of education--personality, drive, motivation, emotions, etc. have nothing really to do with educational responsibility. But as the above recommendations indicate, the ECD Program is more oriented to the non-academic areas than the academic skills.

**APPENDICES**

## RESPONSES TO GROUP B - SECTION A QUESTIONNAIRE

Question #3: Check the times and places you attended college during the past year.

Those who attended college during the past year (February-June, 1967) indicated that they attended at the following institutions:

Macomb County Community College	53
University of Michigan	1
Ferris	1
Eastern Michigan University	3
Asbury	1
Pillsbury B. College - Minnesota	1
University of Arizona	1
Miami Dade	1
Michigan Lutheran	1
Total	63

---

Question #4: Are you working at a full time job at the present? Yes \_\_\_\_\_  
No \_\_\_\_\_ Please specify what kind of job it is.

Kind of job specified by those who indicated they have a full-time job.

Construction Laborer	3
Draftsman	1
Chrysler Corporation	3
Cadillac Steel	1
Apprentice Cable Splicer	1
U. S. Custom's Broker	1
Die Maker Apprentice	2
Cabinet Maker	1
Lifeguard	2
Tool Company	1
Service	6
Truck Driver	2
Cook - Management	2
Sales	4
Assembly	1
Factory	1
Meat Cutter	1
Meat Packer	1
General Motors	1
Steel Mill	1
Machine Shop	1
Nurses Aid	4
Merchandise Handler	1
Stock Boy	3

Structural Steel Detailing	1
Office Clerk	3
Receiving and Purchasing	1
Secretary	1
Service Repair	1
Apprentice Funeral Director	1
Supervisor - Mail and Supply	1
Grocery Man	2
Landscape	1
Data Processing Trainee	1
Industrial Waste and Sewage Treatment	1
Installer of Central Office Equipment	1
Baker	1
Turbine Test Engine	1
Air Defense Missile Technician	1
No Response	1
<b>Total</b>	<b>65</b>

---

No - Do not have a full-time job.	34
<b>Total</b>	<b>34</b>

---

Question #5: If you are not attending college and not working, what are you presently doing? Service\_\_\_ Marriage\_\_\_ Other (please explain).

Response to what are you presently doing.

Nursing	1
Service	16
Vacationing	1
Helping around house	1
Marriage	3
Waiting for service	1
<b>Total</b>	<b>23</b>

---

No response	77
-------------	----

---

#### GROUP B - SECTION A

Question #3: Check the times and places you attended college during the past year.

Summer, 1966

Macomb County Community College	21
University of Michigan	1
Total	22

---

No response to question	26
-------------------------	----

---

September-January, 1966-67

Macomb County Community College	59
University of Michigan	1
Ferris	1
Eastern Michigan University	2
Asbury	1
Pillsbury B. College - Minnesota	1
Michigan Lutheran	1
Miami Dade	1
Total	67

---

## GROUP A - SECTION A

Question #3: Check the times and places you attended college during the past year.

Summer, 1966

Macomb County Community College	50
---------------------------------	----

---

September-January, 1966-67

Macomb County Community College	142
Wayne State University	7
Michigan State University	2
Northern Michigan University	1
Eastern Michigan University	2
University of Dayton	1
Northwood Institute	1
University of Miami	1
Total	157

---

February-June, 1967

Macomb County Community College	127
Wayne State University	8
Michigan State University	2
Northern Michigan University	1
Eastern Michigan University	2
Northwood Institute	1
University of Miami	1
Total	141

---

Question #4: Are you working at a full time job at the present? Yes \_\_\_  
 No \_\_\_ Please specify what kind of job it is.

Kind of full time job specified

Landscaping	2
Construction	4
Crafts for Recreation Department	1
Assembly of circuit breakers	1
Material handler - Chrysler Corporation	1
Machinist	4
Recreation Department Supervisor	1
Service	5
Mailman	1
Painter	1
Secretarial-typist	4
Mechanic	1
Produce clerk	3
Beautician	2
Clerk in market	1
Sales	9
Beauty school	1
Clerk typist	3
Nurses Aid	1
Maintenance	3
Emergency room attendant	1
Auto worker	2
Stock boy	1
Spray painter	1
Instructor (YMCA)	1
Clerk	1
Music Instructor	1
Plate making for printing company	1
Driver for laundry	1
Auto parts sales	1
Drafting	2
Technical assistant	1
Assistant manager	2
IBM operator	1



Lumber yard	1
Carpentry	1
Post Office	1
Apprentice Manager (funeral home)	1
Bank Teller	1
Medic	1
Restaurant	1
Office work	1
Lab Technician	1
Foreman	2
Bench hand	1
Accounting	1
Baker	1
City worker	1
Sailmaking	1
Laborer	7
Orderly	1
Shipping Department	1
Assistant foreman	7
Inspector	1
Consumer Finance	1
Supervisor of medical records	1
Training for interior decorating	1
Butcher	1
Management trainee	1
Assistant treasurer	1
Retail	1
Interior Decorator	1
Government	1
Gas dock attendant	1
Microfilm operator	1
Payroll	1
Pick up and delivery	1
Bank adjuster	1
Construction	1
Cashier	1
General office	2
Machine operator	1
Unskilled	1
Otis Electric Company - helper	1
Laundry	1
Machine operator	1
Assistant produce manager	1
Women's City Club	1
<b>Total</b>	<b>127</b>

---

Number indicating that they do not have a full time job

<b>Total</b>	<b>68</b>
--------------	-----------

---

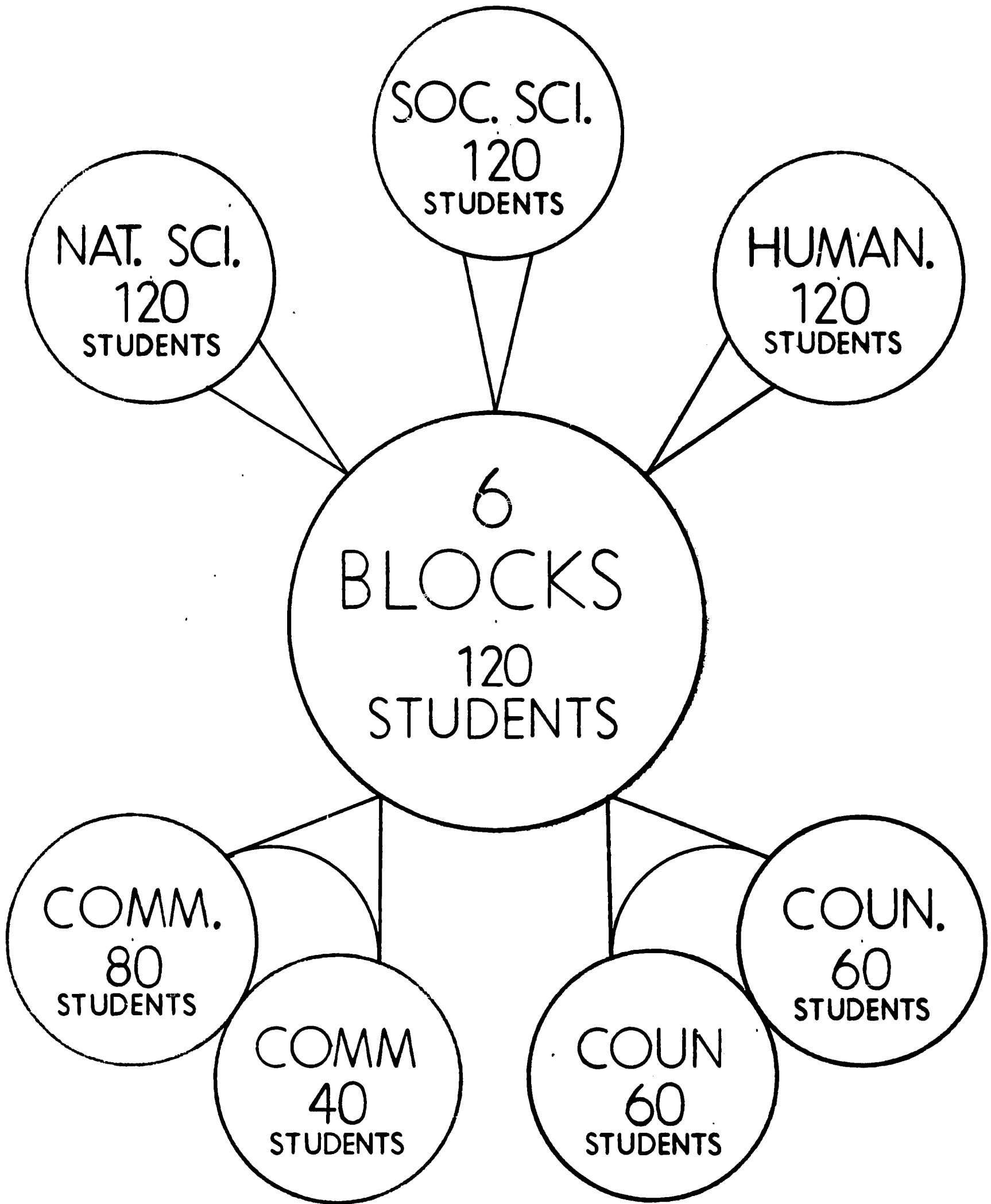
Question #5: If you are not attending college and not working, what are you presently doing? Service \_\_\_\_\_ Marriage \_\_\_\_\_ Other (please explain)

Responses of those not attending college or working full time.

Wayne State University part-time	1
Service	26
Marriage	7
Vacationing	2
Recuperating from operation	1
Total	37

---

# VERTICAL TEAM STRUCTURE



## SAMPLE BLOCK SCHEDULES

Time	M	T	W	Th	F
1-2	C. 150 (6010) F 312-1	C. 150 F 312-1	C. 150 F 312-1		C. 150 F 312-1
2-3	S.S. 150 (6013) E 309	O. 150 (6014) D 316			S.S. 150 E 309
3-4	N.S. 150 (6012) B 311	H. 150 F 309	N.S. 150 B 311	H. 150 F 309	N.S. 150 B 309
4-5	H. 150 (6011) B 211				N.S. 150 B 309
5-6		S.S. 150 B 211		S.S. 150 B 211	

Time	M	T	W	Th	F
7-8	S.S. 160 (6048) E 309	S.S. 160 B 211	S.S. 160 E 309	S.S. 160 B 211	
8-9	C. 160 (6045) E 312	C. 160 E 312	C. 160 E 312	C. 160 B 211	
9-10	N.S. 160 (6047) B 311	N.S. 160 B 309	N.S. 160 B 311		
10-11		N.S. 160 B 309			
11-12	H. 160 (6046) B 211		H. 160 F 309	H. 160 F 309	

MACOMB COUNTY COMMUNITY COLLEGE  
Teaching Effectiveness Rating Scale

	(instructor)	(course)	(block)	(lecture)	(discussion)			No Evidence
	CIRCLE THE APPROPRIATE RESPONSE							
CHARACTERISTICS	Excellent	Good	Average	Below Average	Poor			
1. Knowledge of subject.....	5	4	3	2	1	0		
2. Organization and presentation of subject matter..	5	4	3	2	1	0		
3. Stimulation of student interest in the subject...	5	4	3	2	1	0		
4. Effectiveness of techniques used to present subject matter in lectures.....	5	4	3	2	1	0		
5. Relationship between examinations and assigned material.....	5	4	3	2	1	0		
6. Methods of determining the final grade for the class.....	5	4	3	2	1	0		
7. Promptness in returning student papers and exams.	5	4	3	2	1	0		
8. Thoroughness in checking student papers and exams.	5	4	3	2	1	0		
9. Instructor's enthusiasm for subject.....	5	4	3	2	1	0		
10. Instructor's speech characteristics.....	5	4	3	2	1	0		
11. Encouragement of student involvement in discussion.....	5	4	3	2	1	0		
12. Encouragement of student questions.....	5	4	3	2	1	0		
13. Clarity and thoroughness of explanations.....	5	4	3	2	1	0		
14. Tolerance of difference of opinion.....	5	4	3	2	1	0		
15. Sense of humor.....	5	4	3	2	1	0		
16. Fairness in treatment of students.....	5	4	3	2	1	0		
17. Interest in students; willingness to help resolve individual learning problems.....	5	4	3	2	1	0		
18. Encouraging students to think and solve problems.	5	4	3	2	1	0		
19. Overall evaluation of the instructor.....	5	4	3	2	1	0		

What do you believe makes this instructor an effective teacher?

What could be done to increase this teacher's effectiveness?

DIVISION OF BASIC EDUCATION

ECD Program  
Evaluation - 150

Block Number \_\_\_\_\_

Did you find this HELPFUL education-  
ally? Did you LIKE it?

Circle the appropriate response. Note that there is a column for No Evidence. This could be used if you think these particular activities are not taking place.

I. Humanities

	Very	Somewhat	Slightly	Not at all	Very much	Somewhat	Slightly	Not at all	No Evidence
1. Lecture.....	4	3	2	1	4	3	2	1	0
2. Discussion groups.....	4	3	2	1	4	3	2	1	0
3. Slides and records.....	4	3	2	1	4	3	2	1	0
4. Textbooks and reading material.....	4	3	2	1	4	3	2	1	0
5. Trips to museums and churches.....	4	3	2	1	4	3	2	1	0
6. In class exams.....	4	3	2	1	4	3	2	1	0
7. Attendance at plays, concerts, movies, etc. ....	4	3	2	1	4	3	2	1	0
8. Term project.....	4	3	2	1	4	3	2	1	0
9. Take-home exams.....	4	3	2	1	4	3	2	1	0
10. Scrap-books.....	4	3	2	1	4	3	2	1	0
11. Outside lectures.....	4	3	2	1	4	3	2	1	0
12. Total course in Humanities.....	4	3	2	1	4	3	2	1	0

II. Natural Science

1. Lectures.....	4	3	2	1	4	3	2	1	0
2. Lab sessions.....	4	3	2	1	4	3	2	1	0
3. Movies.....	4	3	2	1	4	3	2	1	0
4. Transparencies and filmstrips.....	4	3	2	1	4	3	2	1	0
5. Textbooks.....	4	3	2	1	4	3	2	1	0
6. Exams.....	4	3	2	1	4	3	2	1	0
7. Receiving unit objectives (at the end of each chapter).....	4	3	2	1	4	3	2	1	0

## DIVISION OF BASIC EDUCATION

ECD Program  
Evaluation - 150  
Page 2

Block Number \_\_\_\_\_

	Did you find this <u>HELPFUL</u> education- ally?				Did you <u>LIKE</u> it?					
	Very	Somewhat	Slightly	Not at all	Very much	Somewhat	Slightly	Not at all	No Evidence	
8. Total course in Natural Science.....	4	3	2	1	4	3	2	1	0	
<b>III. Social Science</b>										
1. Lectures.....	4	3	2	1	4	3	2	1	0	
2. Discussion Groups.....	4	3	2	1	4	3	2	1	0	
3. Movies.....	4	3	2	1	4	3	2	1	0	
4. Films.....	4	3	2	1	4	3	2	1	0	
5. Textbooks.....	4	3	2	1	4	3	2	1	0	
6. Readings Book.....	4	3	2	1	4	3	2	1	0	
7. Written Experience.....	4	3	2	1	4	3	2	1	0	
8. Guest Speakers.....	4	3	2	1	4	3	2	1	0	
9. Field Trips.....	4	3	2	1	4	3	2	1	0	
10. Other reading material (novels, etc.).	4	3	2	1	4	3	2	1	0	
11. Programmed Material.....	4	3	2	1	4	3	2	1	0	
12. Total Course in Social Science.....	4	3	2	1	4	3	2	1	0	
<b>IV. Communications</b>										
1. Large Group Sessions.....	4	3	2	1	4	3	2	1	0	
2. Small Group Sessions.....	4	3	2	1	4	3	2	1	0	
3. "What I Meant To Say Was".....	4	3	2	1	4	3	2	1	0	
4. Use of other readings or books.....	4	3	2	1	4	3	2	1	0	
5. Student Symposiums or Group Discussions.....	4	3	2	1	4	3	2	1	0	
6. Journals.....	4	3	2	1	4	3	2	1	0	
7. Impromptus.....	4	3	2	1	4	3	2	1	0	

	Did you find this <u>HELPFUL</u> education- ally?				Did you <u>LIKE</u> it?				
	Very	Somewhat	Slightly	Not at all	Very much	Somewhat	Slightly	Not at all	No evi- dence
8. Out of class writing.....	4	3	2	1	4	3	2	1	0
9. Approach to writing (four-point criteria).....	4	3	2	1	4	3	2	1	0
10. Use of class time for help in writing.....	4	3	2	1	4	3	2	1	0
11. Workshop.....	4	3	2	1	4	3	2	1	0
12. Total Course in Communications.	4	3	2	1	4	3	2	1	0
V. Orientation (Please do not mark if you dropped this course or did not enroll in it.)									
1. Presentation of material con- cerning college regulations and facilities.....	4	3	2	1	4	3	2	1	0
2. Knowing your ability and interest test scores, to show strengths and weaknesses.....	4	3	2	1	4	3	2	1	0
3. Presentation of study skills material.....	4	3	2	1	4	3	2	1	0
4. Educational-Vocational planning.	4	3	2	1	4	3	2	1	0
5. Availability of counselor for individual conferences.....	4	3	2	1	4	3	2	1	0
6. Group counseling sessions.....	4	3	2	1	4	3	2	1	0
7. The total course in Orientation.	4	3	2	1	4	3	2	1	0
8. The paperback, Chapman, <u>So You're A College Freshman. The paper- back, <u>Freshman Seminar Guidebook.</u></u>	4	3	2	1	4	3	2	1	0
VI. Block Scheduling									
1. Attending all classes with the same students.....	4	3	2	1	4	3	2	1	0



DIVISION OF BASIC EDUCATION

ECD Program  
Evaluation - 150  
Page 4

Block Number \_\_\_\_\_

Did you find this  
HELPFUL education- Did you LIKE it?  
ally?

	Very	Somewhat	Slightly	Not at all	Very much	Somewhat	Slightly	Not at all	No Evidence
2. All courses held within a four to six hour block of time.....	4	3	2	1	4	3	2	1	0
3. Total block scheduling approach...	4	3	2	1	4	3	2	1	0
4. Having more than one instructor for one course.....	4	3	2	1	4	3	2	1	0
<b>VII. Interrelations Among Courses</b>									
1. Writing the same paper for two or more courses.....	4	3	2	1	4	3	2	1	0
2. Using common writing methods for various courses.....	4	3	2	1	4	3	2	1	0
<b>VIII. Faculty-Student Relations</b>									
1. Faculty Availability.....	4	3	2	1	4	3	2	1	0
2. Informal contacts between faculty and students.....	4	3	2	1	4	3	2	1	0
3. Formal faculty-student contacts...	4	3	2	1	4	3	2	1	0
<b>IX. The Programed Learning Center</b>									
1. Math.....	4	3	2	1	4	3	2	1	0
2. Communications.....	4	3	2	1	4	3	2	1	0
<b>X. The Total ECD Program.....</b>									
1. What are the good points of the ECD Program?	4	3	2	1	4	3	2	1	0
2. What suggestions would you make for the improvement of ECD?									

MACOMB COUNTY COMMUNITY COLLEGE  
Division of Basic Education

ECD Program  
Evaluation - 160

Block Number \_\_\_\_\_

Circle the appropriate response

Did you find this HELPFUL education-ally?

Did you LIKE it?

Note that there is a column for No Evidence. This could be used if you think these particular activities are not taking place.

I. Humanities

	Very	Somewhat	Slightly	Not at all	Very much	Somewhat	Slightly	Not at all	No Evidence
1. Lectures - content.....	4	3	2	1	4	3	2	1	0
2. Discussion groups.....	4	3	2	1	4	3	2	1	0
3. Slides and records.....	4	3	2	1	4	3	2	1	0
4. Textbooks and reading materials.....	4	3	2	1	4	3	2	1	0
5. Trips to museums and galleries.....	4	3	2	1	4	3	2	1	0
6. In class exams.....	4	3	2	1	4	3	2	1	0
7. Unit projects.....	4	3	2	1	4	3	2	1	0
8. Attendance at plays, movies, concerts, etc.....	4	3	2	1	4	3	2	1	0
9. Scrapbooks.....	4	3	2	1	4	3	2	1	0
10. Guest speakers.....	4	3	2	1	4	3	2	1	0
11. Total course in Humanities.....	4	3	2	1	4	3	2	1	0

II. Natural Science

1. Lectures.....	4	3	2	1	4	3	2	1	0
2. Lab sessions.....	4	3	2	1	4	3	2	1	0
a. Dissection.....	4	3	2	1	4	3	2	1	0
b. Experiments.....	4	3	2	1	4	3	2	1	0
c. Practical exam.....	4	3	2	1	4	3	2	1	0
d. Quizzes.....	4	3	2	1	4	3	2	1	0
3. Movies.....	4	3	2	1	4	3	2	1	0
4. Transparencies.....	4	3	2	1	4	3	2	1	0

	Did you find this <u>HELPFUL</u> education-ally?				Did you <u>LIKE</u> it?					
	Very	Somewhat	Slightly	Not at all	Very much	Somewhat	Slightly	Not at all	No Evidence	
5. Filmstrips.....	4	3	2	1	4	3	2	1	0	
6. Textbooks and reading materials....	4	3	2	1	4	3	2	1	0	
7. Ecological Unit.....	4	3	2	1	4	3	2	1	0	
a. Ecology hand-out.....	4	3	2	1	4	3	2	1	0	
8. Exams.....	4	3	2	1	4	3	2	1	0	
9. Receiving unit objectives.....	4	3	2	1	4	3	2	1	0	
10. Total course in Natural Science....	4	3	2	1	4	3	2	1	0	
<b>III. Social Science</b>										
1. Lectures.....	4	3	2	1	4	3	2	1	0	
2. Discussion groups.....	4	3	2	1	4	3	2	1	0	
3. Films.....	4	3	2	1	4	3	2	1	0	
4. Guest Speakers.....	4	3	2	1	4	3	2	1	0	
5. Field Trips.....	4	3	2	1	4	3	2	1	0	
6. Programed Material.....	4	3	2	1	4	3	2	1	0	
7. Exams.....	4	3	2	1	4	3	2	1	0	
8. Textbook and reading materials....	4	3	2	1	4	3	2	1	0	
9. Written/or experience projects.....	4	3	2	1	4	3	2	1	0	
10. Total course in Social Science.....	4	3	2	1	4	3	2	1	0	
<b>IV. Communications</b>										
1. Large group sessions.....	4	3	2	1	4	3	2	1	0	
2. Discussion groups.....	4	3	2	1	4	3	2	1	0	
3. <u>Short Story Masterpieces</u> .....	4	3	2	1	4	3	2	1	0	

Did you find this HELPFUL education-  
ally? Did you LIKE it?

	Very	Somewhat	Slightly	Not at all	Very much	Somewhat	Slightly	Not at all	No Evidence
4. <u>Newsweek</u> Magazine.....	4	3	2	1	4	3	2	1	0
5. Analysis approach to writing.....	4	3	2	1	4	3	2	1	0
6. Handbook for Analysis.....	4	3	2	1	4	3	2	1	0
7. Grapes of Wrath.....	4	3	2	1	4	3	2	1	0
8. Use of sample themes.....	4	3	2	1	4	3	2	1	0
9. Occupational project (speech and paper).....	4	3	2	1	4	3	2	1	0
10. Poetry.....	4	3	2	1	4	3	2	1	0
11. Journal.....	4	3	2	1	4	3	2	1	0
12. Total Course in Communications.....	4	3	2	1	4	3	2	1	0
<b>V. Block Scheduling</b>									
1. Attending all classes with the same students.....	4	3	2	1	4	3	2	1	0
2. All courses held within a four to six hour block of time.....	4	3	2	1	4	3	2	1	0
3. Total Block Scheduling Approach.....	4	3	2	1	4	3	2	1	0
<b>VI. Orientation (Please do not mark if you did not enroll in this or dropped it.)</b>									
1. Educational-Vocational Planning for second year of college.....	4	3	2	1	4	3	2	1	0
2. Availability of counselor for individual conferences.....	4	3	2	1	4	3	2	1	0
3. Interviews with people actually in the field which you wish to enter...	4	3	2	1	4	3	2	1	0
4. Investigation of a specific field of occupation.....	4	3	2	1	4	3	2	1	0
5. Writing the technical report on an occupation.....	4	3	2	1	4	3	2	1	0

Did you find this HELPFUL education-ally? Did you LIKE it?

	Very	Somewhat	Slightly	Not at all	Very much	Somewhat	Slightly	Not at all	No Evidence
6. The unit on reading senior college catalogs.....	4	3	2	1	4	3	2	1	0
7. The experience of making out a personal resume.....	4	3	2	1	4	3	2	1	0
8. The paper-back textbook, Chapman, <u>Your Attitude is Showing</u> .....	4	3	2	1	4	3	2	1	0
9. The paper-back, <u>Freshman Seminar Guidebook</u> .....	4	3	2	1	4	3	2	1	0
10. The rapid-reading sequence in the Programed Learning Center.....	4	3	2	1	4	3	2	1	0
<b>VII. Interrelations Among Courses</b>									
1. Writing the same paper for two or more courses.....	4	3	2	1	4	3	2	1	0
2. Using common writing methods for various courses.....	4	3	2	1	4	3	2	1	0
3. Having the instructors emphasize the relationships between their course and other courses within the program.....	4	3	2	1	4	3	2	1	0
<b>VIII. Faculty-Student Relations</b>									
1. Faculty availability.....	4	3	2	1	4	3	2	1	0
2. Informal contacts between faculty and students.....	4	3	2	1	4	3	2	1	0
3. Formal faculty-student contacts.....	4	3	2	1	4	3	2	1	0
IX. The Programed Learning Center.....	4	3	2	1	4	3	2	1	0
X. The Total ECD Program.....	4	3	2	1	4	3	2	1	0
1. What are the good points of the ECD Program?									
2. What suggestions would you make for the improvement of ECD?									

## FOLLOW-UP QUESTIONNAIRE

## SECTION A

1. Name \_\_\_\_\_ Phone No. \_\_\_\_\_
2. Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_
3. Check the times and places you attended college during the past year.  
 Summer, 1966 \_\_\_\_\_ Where \_\_\_\_\_  
 September-January, 1966-67 \_\_\_\_\_ Where \_\_\_\_\_
4. Are you working at a full time job at the present? Yes \_\_\_\_ No \_\_\_\_  
 Please specify what kind of job it is \_\_\_\_\_
5. If you are not attending college and not working, what are you presently doing? Service \_\_\_\_\_ Marriage \_\_\_\_\_ Other (please explain) \_\_\_\_\_

IF YOU DID NOT ATTEND COLLEGE DURING THE PAST YEAR, (1966-67) PLEASE FILL IN THE FOLLOWING SECTION B. IF YOU HAVE ATTENDED COLLEGE DURING THE PAST YEAR, PLEASE TURN TO PAGE 2 AND COMPLETE SECTION C IMMEDIATELY FOLLOWING.

## SECTION B

6. Why did you decide to not return to college? \_\_\_\_\_  
 \_\_\_\_\_
7. What job plans do you have at the present time? \_\_\_\_\_
8. Are these plans different from those you had when you entered college two years ago? Yes \_\_\_\_ No \_\_\_\_
9. Do you plan to return to college in the future? Yes \_\_\_\_ No \_\_\_\_ When \_\_\_\_
10. What are your present feelings about your college experience? \_\_\_\_\_  
 \_\_\_\_\_
11. If you had it to do over again, would you (a) attend college \_\_\_\_\_ (b) not attend college, but work \_\_\_\_\_ (c) drop out of college \_\_\_\_\_.
12. Would you recommend Macomb County Community College to other students like yourself? Yes \_\_\_\_ No \_\_\_\_
13. Do you think you are a different person now than you were before you attended college? Yes \_\_\_\_ No \_\_\_\_ If you answered yes, then in what ways are you different? \_\_\_\_\_  
 \_\_\_\_\_
14. Would you have stayed in college if some things had been changed? Yes \_\_\_\_ No \_\_\_\_

15. What would have made you stay in college? \_\_\_\_\_  
\_\_\_\_\_
16. At this point, what do you remember as the best or worst features of your college experience? \_\_\_\_\_  
\_\_\_\_\_
17. During the past school year, have you participated in any clubs, organized athletics, or have you attended any cultural events? Yes \_\_\_ No \_\_\_  
Please list.
- |    |    |    |
|----|----|----|
| 1. | 2. | 3. |
| 4. | 5. | 6. |

## SECTION C

IF YOU HAVE ATTENDED COLLEGE DURING THE LAST SCHOOL YEAR, 1966-67, ANSWER THE FOLLOWING QUESTIONS.

18. Did you graduate from Macomb in June, 1967? Yes \_\_\_ No \_\_\_ If not, indicate the institution you did attend. \_\_\_\_\_
19. Did you earn enough credits to graduate in June, 1967? Yes \_\_\_ No \_\_\_
20. Do you plan to complete graduation requirements before September, 1967? Yes \_\_\_ No \_\_\_ When do you expect to complete graduation requirements? \_\_\_\_\_
21. Do you plan to transfer to another college or university? Yes \_\_\_ No \_\_\_ If so, where \_\_\_\_\_. Has the college or university accepted you as a student? Yes \_\_\_ No \_\_\_
22. If you are transferring to a college or university, what major do you plan on entering? \_\_\_\_\_
23. At this time, what vocation do you plan to enter? \_\_\_\_\_
24. Is this different from the vocation you planned to enter when you began college two years ago? Yes \_\_\_ No \_\_\_ If this choice is different, why do you think you have changed? \_\_\_\_\_
25. Please list the courses that you have taken during the past two years that you believe were most helpful to you as a student.
- |    |    |    |    |
|----|----|----|----|
| 1. | 2. | 3. | 4. |
|----|----|----|----|
26. Please list the courses that you think had the greatest influence on your ideas or changed your thinking the most.
- |    |    |    |    |
|----|----|----|----|
| 1. | 2. | 3. | 4. |
|----|----|----|----|

27. How have you changed as a student during the past two years? (For example, when you entered college did you worry about being a success academically? Do you still have this worry? Do you feel that you are a potentially successful student? Do you feel more self-confident in classes than you did when you first entered college? Do you like being a student more or less now than you did when you first entered?)

---

---

---

---

28. What experiences have you had at college that you think have had the greatest influence on your values, ideas, attitudes? (For example, do you think you feel differently now, at the end of two years, about other people and groups who are different from you, racially, religiously or politically? Do you behave differently toward your family and friends now? Are you interested in different ideas now?)

---

---

---

---

29. What experiences would have made your college years more beneficial?

---

---

---

30. What advice would you give to new students just entering Macomb?

---

---

---

31. How would you rate all the faculty you had during first year at Macomb?

Excellent      Good      Average      Below average      Poor  
(circle one)

32. How would you rate all the faculty you had your second year at Macomb?

Excellent      Good      Average      Below average      Poor  
(circle one)



33. How would you rate student-faculty relations during your first year at Macomb?

Excellent      Good      Average      Below average      Poor  
(circle one)

34. How would you rate student-faculty relations during your second year at Macomb?

Excellent      Good      Average      Below average      Poor  
(circle one)

35. Additional comments.

Student No. \_\_\_\_\_

Name \_\_\_\_\_

Group \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

ITEM	C	ITEM	C	ITEM	C	ITEM
Grouping		SCAT V		2nd Sem. ECD		
Age		SCAT Q		3rd Sem. Enroll.		
Sex		SCAT T		3rd Sem. Prog.		
Transfer		Pre Co-op Eng. V.		4th Sem. Enroll.		
Ed. Prog. Plans		Pre Co-op Eng. S.		4th Sem. Prog.		
Vocational Plans		Pre Co-op Eng. Ex.%		Graduation		
H. S. Recomm.		Pre Co-op Eng. Ex.		Assoc. Degree		
H. S. Rank		Post Co-op Eng. V.		Total Fac. Involv.		
H. S. G.P.A.		Post Co-op Eng. S.		Student Emp. Total		
Est. of Success		Post Co-op Eng. Ex.%		Planned Occup.		
H. S. Program		Post Co-op Eng. Ex.		Continue Coll.		
Father's Occup.		O.A.I.S.	AP			
Mother's Occup.			IQ	Act Stan. Scores		
Father's Ed.			CP	Eng.		
Mother's Ed.			SA	Math		
Prev. Coll. Exp.			EA	Soc. Sci.		
Socio-Econ. Level			MO	Nat. Sci.		
			BU	Comp.		
			HU	Coll. Bound %		
			SS	Eng.		
			PS	Math		
			BS	Soc. Sci.		
		EDL Pre-Test		Nat. Sci.		
		EDL Post Test		Comp.		

ITEM 1st S.	C	ITEM 3rd S.	C	ITEM 5th S.	C	ITEM 7th S.	C
S.S. 150							
N.S. 150							
Comm. 150							
Hum. 150							
Ori. 150							
Courses Drop.		Courses Drop.		Courses Drop.		Courses Drop.	
Hrs. Compl.		Hrs. Compl.		Hrs. Compl.		Hrs. Compl.	
Credits Earned		Credits Earned		Credits Earned		Credits Earned	
H.P. 1st S.		H.P. 3rd S.		H.P. 5th S.		H.P. 7th S.	
H.P.A. 1st S.		H.P.A. 3rd S.		H.P.A. 5th S.		H.P.A. 7th S.	
ITEM 2nd S.	C	ITEM 4th S.	C	ITEM 6th S.	C	ITEM 8th S.	C
S.S. 160							
N.S. 160							
Comm. 160							
Hum. 160							
Courses Drop.		Courses Drop.		Courses Drop.		Courses Drop.	
Hrs. Compl.		Hrs. Compl.		Hrs. Compl.		Hrs. Compl.	
Credits Earned		Credits Earned		Credits Earned		Credits Earned	
H.P. 2nd S.		H.P. 4th S.		H.P. 6th S.		H.P. 8th S.	
Total Credits		Total Credits		Total Credits		Total Credits	
Cum. H.P.		Cum. H.P.		Cum. H.P.		Cum. H.P.	
Cum. H.P.A.		Cum. H.P.A.		Cum. H.P.A.		Cum. H.P.A.	