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ABSTRACT

The booklet contains 18 articles, essentially journalistic efforts topically organized according to the categories overview, research, education, human growth and development, and support, which describe the Mountain-Plains Program, a regional program in comprehensive family career education in Montana. Article titles and their authors are: Educational Needs in Rural Areas, Michael Fenenbock; What is "Career Education"?, T. R. Flores; Mountain-Plains: Some Unique Qualities, Rowan W. Conrad and Michael C. Fenenbock; Mountain-Plains: A Missing Link in Education, Rowan W. Conrad; Key Research Concepts Reviewed, David A. Coyle; Testing at Mountain-Plains, Robert Pollack; Educational Directions, Bruce C. Perryman; Education for Today, Richard H. Mutterer; Math for Careers, William Connors and Richard Berg; Career Training Featuring Communication Skills, Jon K. Gormley; Mobility and Transportation Training, Walt Osland; Career Guidance at Mountain-Plains, Richard Manley; Mountain-Plains Counseling Program Methods, Rowan W. Conrad; The Community Development Program at Mountain-Plains, Chuck Schank; Mountain-Plains Job Development and Placement Services, George Faith; Student Recordkeeping Design at Mountain-Plains, Gary Smith and Luther Robison; and Student Placement, James West. (JR)

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• EDUCATION TOMORROW:  
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from mountain-plains\*



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**EDUCATION TOMORROW:**  
**A Collection Of Articles From Mountain-Plains**

**Edited and Compiled  
by  
Michael C. Fenenbock**

## TABLE OF CONTENTS

	Page
<b>OVERVIEW</b> . . . . .	1
Educational Needs in Rural Areas Michael Fenenbock . . . . .	2
What is "Career Education"? T. R. Flores . . . . .	6
Mountain-Plains: Some Unique Qualities Rowan W. Conrad and Michael C. Fenenbock . . . . .	8
Mountain-Plains: Not Just Another Vocational Education Program Bruce C. Perryman and T. R. Flores . . . . .	16
A Missing Link in Education Rowan W. Conrad . . . . .	21
<b>RESEARCH</b> . . . . .	25
Key Research Concepts Reviewed David A. Coyle . . . . .	26
Testing at Mountain-Plains Robert Pollack . . . . .	30
<b>EDUCATION</b> . . . . .	33
Educational Directions Bruce C. Perryman . . . . .	34
Education For Today Richard H. Mutterer . . . . .	37
Math For Careers William Connors and Richard Berg . . . . .	39
Career Training Featuring Communication Skills Jon K. Gormley . . . . .	42
Mobility and Transportation Training Walt Osland . . . . .	44
<b>HUMAN GROWTH AND DEVELOPMENT</b> . . . . .	46
Career Guidance at Mountain-Plains Richard Manley . . . . .	47
Mountain-Plains Counseling Program Methods Rowan W. Conrad . . . . .	50
The Community Development Program at Mountain-Plains Chuck Schank . . . . .	53

TABLE OF CONTENTS (Cont.)

	Page
<b>SUPPORT</b> . . . . .	.56
<b>Mountain-Plains Job Development and Placement Services</b> <b>George Faith</b> . . . . .	.57
<b>Student Recordkeeping Design at Mountain-Plains</b> <b>Gary Smith and Luther Robison</b> . . . . .	.60
<b>Student Placement</b> <b>James West</b> . . . . .	.63

## FORWARD

This collection of articles offers the reader an introduction to many of the central topics of comprehensive family career education as practiced at Mountain-Plains.

The collection is intended to be a general introduction to both the Mountain-Plains Program and the concepts which engine its success. The articles are essentially journalistic efforts and while the program's success may be documented on an increasingly firm research base, these articles are not specifically intended for the education or research professional.

A number of articles contained in this collection were originally prepared for the program's external newsletter National Model IV, while others were prepared for dissemination through a variety of outlets. The authors are all past or present members of the Mountain-Plains staff.

Readers who wish to explore more fully questions raised here, or to acquaint themselves with other aspects of the program, are encouraged to contact Mountain-Plains directly.

Michael Fenenbock  
Editor

## OVERVIEW

## EDUCATIONAL NEEDS IN RURAL AREAS

By

Michael Fenenbock  
Editor/Information Services

Any attempt to trace the evolution of Model IV, from its conception and implementation through its functioning maturity, must be viewed in the context of the project's pragmatic, innovative, and adaptive approach to social problem solving.

In the late 1960's there arose three seemingly unconnected developments which, when synthesized, laid the groundword from which the Model IV project took root. The sudden closing of a large Air Force Base posing a serious economic threat to Northeastern Montana; a renewed determination on the part of progressive educators to affect an alternative approach to educational problems; and a continuing concern for the social and economic failures of rural Americans.

In 1969, as a direct result of the closing of the air base, Eastern Montana College was awarded a Department of Health, Education and Welfare grant to conduct a feasibility study to determine a potential use for the site. The air base, located nineteen miles north of Glasgow, Montana, represented great potential in terms of the availability of services and facilities.

At about the same time educators were searching out new approaches to past educational failures. The previous decade saw hundreds of private and federally funded programs disperse isolated services to disadvantaged individuals in the hope of bettering their situation. The majority of these projects, whether offering health or housing advantages, educational or employment opportunities,



either dealt in only one type of service or were directed toward only one member of a family--usually in terms of short-run economic goals. As a consequence, the concept of career education, particularly family regional residential career education, began receiving enthusiastic support as a potential solution to accumulated educational failures.

The late 1960's also saw a renewed concern with the continuing social and economic crisis of rural agricultural America; those citizens forced to compete in a market place which had become increasingly urban and industrial. There was a growing need to provide rural Americans with new tools and approaches to problem solving, an approach which would have as its result new skills and new opportunities as well as bringing about a heightened appreciation and satisfaction with their personal lives.

Inevitably, those administering the Eastern Montana College grant, those interested in developing a career approach to education, and those concerned for the future of the rurally disadvantaged, discovered the opportunity each had to offer

In April of 1971, a proposal for the creation of Mountain Plains was released by the U.S. Office of Education, a grant of \$4 million was awarded, articles of incorporation were filed, key staff positions were filled, and the career education demonstration project began to take shape. The first task was an extensive inquiry into the target population of the six state region in order to establish the specific needs of rural families and allow eligibility criteria to be ordered. The second task was the renovation of air base facilities.

The program adopted a comprehensive approach designed to provide services

aimed at the total family, a program which could provide complete diagnostic, tutorial, and individualized services. The broad program objective was to provide for each student's potential growth, strengthening the total family, as well as providing a basis for future economic and social productivity. The premise underlying the Model IV structure was a firm belief that family oriented career education in a residential setting represented an effective way of improving the employability, standards of living, participation in community affairs, and life satisfaction for the disadvantaged.

During its early development phase Model IV went through a difficult period of adaptation, a period of designing means to fit ends. Approaches were applied to each situation on a trial and error basis, those that proved functional were retained, those that did not were discarded. Offices were established in each of the six state capitals to coordinate recruitment, placement, and job development. Consultants were engaged to search general problem areas and assist Mountain-Plains staff in providing additional impetus to the program. Physical problems had to be overcome as student families began to arrive at the center, such items as housing, transportation, supply requisition, medical and recreational facilities. The focus of such elements of the project as counseling and career guidance had to be delineated and the structure's initiated.

Following the development and start-up period, the project moved through an organizational phase. Data collection facilities and an overall research design were implemented, enabling the program to begin testing its hypothesis through a preliminary measurement of program effect. Instructors involved themselves with the development of curriculum which would coincide with Model IV's unique

individualized learning situation. A preliminary cost analysis was undertaken to determine the economic feasibility of reproducing the effort. Scheduling problems and the collection of accurate research data required the initiation of an innovative recordkeeping system.

By late 1973, the project began to reach maturity, growth was stable, problem areas predictable, success more observable. Administrative structures and management operations had become integrated and functional. The social and economic return to each of the six states was becoming a measurable entity while research indicated areas of adjustment and further refinement. Presently the character of the program has established itself and all that remains is the process leading to final assessment.

What does the future hold for Model IV? Bruce Perryman, Mountain-Plains Executive Director, says, "This alternative educational delivery system exhibits enormous potential for future educational projects and we hope to be able to perfect and document a model program which can be implemented anywhere in the nation." Certainly, any program which comes into existence in answer to needs must, in the end, be judged in light of increased response to those needs.

## WHAT IS "CAREER EDUCATION"?

By

T. R. Flores  
Deputy Director

The U.S. Office of Education has recently adopted a definition of Career Education. This move has been hailed by several professional organizations and educators as commendable and productive. I wonder?

Approximately two years ago Sydney Marland, then Commissioner of Education, officially presented the term Career Education to the educational public and indicated that a definition of the term should be "forged through debate." Several definitions of Career Education were proposed over the following two year period but none with the legitimacy afforded the recent definition by the U.S. Office of Education. Even with the new U.S. Office of Education definition available, it is probably still fair to say that no consensus has yet formed among educators concerning what Career Education really is.

Perhaps the reason for this continuing failure of consensus is that Career Education is not a type of education but a movement within education. Possibly the broad acceptance of the term Career Education among educators reflects a recognition that the field of education in general has not been responsive during the two previous decades to societal needs, particularly labor market needs. Perhaps the term Career Education has been accepted by educators as the title of a movement bringing education back into perspective. There exists much evidence that during the 50's and 60's the educational goals of self actualization and appreciation and understanding of our culture were over emphasized. Those educators who accepted Career Education and continue to accept it as a necessary movement

within the field of education would maintain that now we must move toward a new balance emphasizing more strongly education for the purpose of career preparation.

It is human nature to seek a definition for every term. The result is both academically essential and invaluable for planning and implementation of programs.

Career Education, as with any other term, requires a definition. However, I suggest that the U.S. Office of Education is in error in defining Career Education as a type of education. Career Education is one of the objectives of education. That objective should be emphasized more than it is at particular levels of education and with particular groups, for example in post-secondary education and with adults. To isolate Career Education from education in general may cause unhealthy competition for resources and may end in the concept itself losing credibility. Let's allow the concept of Career Education to lead us back toward a new balancing of educational objectives rather than toward a further division of our national educational efforts.

## MOUNTAIN-PLAINS: SOME UNIQUE QUALITIES

By

Rowan W. Conrad  
Affective Evaluation Specialist  
and  
Michael C. Fenenbock  
Editor/Information Services

Mountain-Plains Education and Economic Development Program, Inc., is a non-profit corporation chartered by the state of Montana and funded through the National Institute of Education for a five year cycle of research and development under the designation "Career Education Model IV".

While the Model IV design has specific applicability for a rural disadvantaged population, nonetheless we have developed a number of unique qualities which have general application across the full spectrum of education. Before turning to a discussion of these unique aspects it is necessary to place them in context through a brief overview of the Mountain-Plains design.

The population Mountain-Plains deals with is defined as rural disadvantaged. The number one selection criteria for program entry is un/underemployment, and the program is regional in scope--taking in six northcentral states. Nebraska, the Dakotas, Montana, Wyoming and Idaho. Charged with designing an educational model we have been able to start, not with an existent school system, but with buildings on an Air Force Base, some money, and an idea, which has enabled us to include in the design a relatively unique synthesis of components that many

educators have been arguing belong in educational systems.

There has been talk among educators about broadening the scope of public education, taking into account the whole family and not just the child in the public school. In this vein, at Mountain-Plains we focus on the whole family--not just the head of household.

Field offices in each of the six states recruit students through contacts with a variety of referral agencies. Generally the criteria that recruitment focuses on in terms of student selection include reading and math levels, psychological functioning (including alcohol problems), and medical problems. Additionally, as student educational stipends are limited, a financial analysis of each potential student family enables Mountain-Plains to avoid placing students in an untenable position as regards current debts.

Program selection is also a preguidance situation, in that the overall nature of the program is explained; including the fact that Mountain-Plains is not merely a technical training program--other essentials such as personal/family and comprehensive career development, counseling, and parent effectiveness training are required. Occupational areas available at Mountain-Plains are explained, enabling those with no interest to select themselves out. Having satisfied the above, students are admitted to Mountain-Plains and relocation expenses paid to Glasgow Air Force Base which provides the facilities for the program.

During seven days of orientation, information sessions extend the preguidance initiated at the selection point by "fine-tuning" information about the program. In the latter stages of orientation students complete a variety of pretests which are used in educational plan development and/or research. Following orientation, the student enters three weeks of what is called core curriculum. This core curriculum is the only "all-for-everybody" part of the Mountain-Plains Program. The axis of this core curriculum is Career Guidance. The need for guidance, in fact, was the cause for creating the core curriculum. One cannot individualize instruction without assessment and guidance and one cannot do guidance eight hours a day. Intensive developmental career guidance, including awareness, exploration and choice are the critical center of the core curriculum; although other important general need areas such as health education, consumer education, parent effectiveness training, and home management training are also addressed.

Following the adoption of a career choice, students proceed into their specific career preparation program. The preparation program includes: foundation education (math and English), equivalency testing for the high school certificate, (at the student's option), the chosen occupational preparation area (e.g., automotive, marketing and distribution, electrical) and counseling. Personal/family therapeutic counseling may or may not have started during core curriculum depending on whether or not a need for immediate counseling had been expressed or identified.

At the final stages of occupational preparation students go into the Career Guidance World of Work program which includes resume writing, role playing such as



a mock interview with video-tape feedback, and employee attitude discussions. Exit orientation and job placement round out the catalog of program activities.

It is within this overall framework, that we can best illustrate the unique qualities of the Mountain-Plains Program. Unique not in terms of any one single item being "new" but rather in terms of all of these components being together in one place.

First, much of the environment is under Mountain-Plains control. Mountain-Plains rents the housing and controls payment of the scholarship/stipend. The payment method is a vital element: Students get up to \$85 a week for their participation, but the scholarship is not paid gratis. Students get time cards ("real world" simulation) that are stamped in the various classes. They are paid for actual hours of attendance. When one reviews the poverty/manpower programs of the 60's it seems many students arrived, merely maintained and were seen only for payline. At Mountain-Plains, if a student shows up only for payline, it's a futile effort. In effect, Mountain-Plains has a "real-token" token economy.

Second, occupational areas are derived from job market projections in the six-state areas. This avoids training students for careers where no jobs are available. Areas of training also avoid the "sabertooth" traditionalism approach. Rather than standard classes, each career field has been analyzed, and all classroom subjects and levels are career specific and relevant.

Third, Mountain-Plains employs an open entry/open exit system. Families enter and leave the program every week--an average of about six in and six out. There is no semester system, no quarter system, and no summer session. Students can schedule entry at any time during the year.

Fourth, Mountain-Plains places a unique emphasis on the family. Hindsight shows us that, particularly in working with the disadvantaged, to deal with one individual in a family and expect to get and maintain gain is difficult tending to impossible. Taking a single individual, placing him/her in an artificial environment, teaching him/her, say, carpentry, and then shoving him/her back into a family interpersonal environment that is unchanged, is to pre-assure a high failure rate. Working with only one member of the family promotes instability and tends to decrease life satisfaction and not to increase employability (a contention which has a solid theory and research base). As life satisfaction and employability are Mountain-Plains' stated goals, and those of manpower/poverty programs generally, the family approach is felt to be a program design essential.

Fifth, at Mountain-Plains instruction is individualized/independent. Students test in at particular levels. When career goals are chosen in Career Guidance, it is possible to develop educational plans which allow each individual to enter at his/her own level and progress at his/her own rate in order to acquire the skills needed to succeed in a chosen career. Likewise, the student chooses, directly or indirectly, programs to assist his personal and family development. As a consequence, students have basic control over their own education--a

desirable end at any level and an absolute essential for adult education.

Sixth, at Mountain-Plains, there is a separation of guidance and counseling. Traditionally, when guidance and counseling programs are joined together one or the other always seems to get slighted depending on the individual preference of the counselor. At Mountain-Plains, in recruiting staff for career development/guidance we look for different competencies than when recruiting staff for personal/family development counseling.

Seventh, Mountain-Plains uses only criterion referenced testing. No attainment testing is normative. No grade system is in use. Can X student take the carburetor out of the car, put the carburetor kit on it, put the carburetor back on the car, get the car running, get the carburetor tuned, and do it in a reasonable length of time? Criterion referenced attainment--no grades and no failures--the student is there until he/she does it. Not only does this allow Mountain-Plains to state with some certainty what a student can do, but it also allows a student who comes in with a degree of ability, and/or experience, and/or intelligence to zip through the program in as little as three months, whereas the student who comes in with less ability, intelligence, or whatever, may take a year to complete the same essentials. For these two students the educational plans that are written will be different simply because they will need different things. No "sabertooth" curriculum, no all-for-everybody. Enter at your own level, go at your own rate, exit when you prove that you can do it. Under other systems an instructor can "pass" a student just to get him out of his class. At Mountain-Plains, the instruc-

tor validates skill, not relative skill.

Eighth, Mountain-Plains uses a completion reward system. A counseling example may help illustrate. The criterion for counseling completion is essentially the professional judgment of the Career Guidance Counselor or the Therapeutic Counselor as regards the student's ability to function productively both within the family unit and in a job situation. Consequently, counseling is required. At first glance it may seem both distasteful and ethically questionable to require students to attend counseling. Mountain-Plains justifies this requirement for a number of reasons: First, it is explained to students before they enroll that counseling is part of the pie and they have to eat the whole thing. Second, the requirement is not absolute--students do not have to come to counseling, but if they don't, it costs them a chunk of money when they leave. All students receive a completion reward based on how much they complete plus pay for any vacation/sick time that is unused. Conversely, everytime a student doesn't finish something, the reward shrinks. Thus, a student does not have to go to counseling, but if he/she doesn't, it decreases the completion reward.

Ninth, Mountain-Plains develops adjuncts to environmental control. Mountain-Plains is a "company town", controlling pretty much the whole environment except the hobby shop and the bar. So we have a "Skinner Box", but since we're humanitarians, we have Carl Rogers living in our "Skinner Box". We try to be warm, and empathetic, and to employ a lot of unconditional positive regard--we put William Glasser in our "Skinner Box", too. We don't want to focus on the past.

An opportunity now exists, for, "Don't give me your sob story, Jack, that was yesterday, today you've got this chance, what are you going to do with it?"

Glasser, Rogers, and Skinner blend better than many would suppose.

In summary, the essential points to understand about the overall Mountain-Plains Program are that the program is developmental, eclectic, pragmatic, and effective.

At Mountain-Plains we don't care who developed an idea or technique, or what their philosophical perspective is. The question we ask is: Will it work for us in terms of helping a very tough population develop abilities that allow them to achieve success in employment and satisfaction in life? What is found to be effective at Mountain-Plains with a tough population should prove effective with "normal" student populations. Within the year, Mountain-Plains procedures and products should become generally available to educators for application and/or adaption in various educational settings.

## MOUNTAIN-PLAINS: NOT JUST ANOTHER VOCATIONAL EDUCATION PROGRAM

By

Bruce C. Perryman  
Executive Director  
and  
T. R. Flores  
Deputy Director

Mountain-Plains has been criticized by those not completely familiar with program operation and objectives, for being "just another vocational education program." Others have categorized the project, saying, "Mountain-Plains is a typical vocational education program." Obviously, there is misunderstanding surrounding Mountain-Plains and perhaps it is time to set the record straight. Some contrasts may be illustrative of differences between Mountain-Plains' educational approach and vocational education.

First and foremost let it be understood that there are a number of possible ways in which this nation can educate its people. Vocational education, by its own concurrence, is one segment of the educational process; it has been, and seems to wish to remain so. The goal of vocational education is job skill training for immediate employment and the satisfaction of labor market demand for skilled manpower. As such, vocational education has met, and continues to meet, a national need for trained manpower while meeting, to at least some degree, the educational needs of significant numbers in our population.

The common assumption underlying vocational education, at whatever level and whatever quality, has always been that all a person needs in order to deal with the

American labor market are performance job skills required by the particular occupation he or she chooses to enter.

Mountain-Plains, by definition and design, (the project is classified by both the Office of Education and the National Institute of Education as Career Education Model IV) recognizes that success in ones adult working life involves much more than just job skills for a specified job. On the contrary, as Kenneth B. Hoyt and others have stated, success in ones adult working life requires good mental and physical health, human relations skills, a commitment to honest work as the source of income, and a willingness to accept the discipline of the work place and to be motivated toward achievement in the work setting. It also requires all the basic skills of communication and computation - as well as a salable occupational skill in demand by the job market. Mountain-Plains deals with these additional practical considerations. Mountain-Plains is a comprehensive educational activity, specifically directed toward the entire family unit, and specifically designed to assist families in the areas mentioned above. For example, programs and services provided for families in attendance at Mountain-Plains includes such items as Career Guidance, required for both adults; a career development program for the head-of-household and optionally for the spouse, which includes foundation education in math skills and communication skills, occupational preparation, and work experience, family and individual counseling for both head-of household and spouse, and, based on need, for older children, a family core curriculum designed to provide both head-of-household and spouse with home management, health, consumer education, parenting, and community organization and recreation skills, basic contracted medical services and insurance coverage, financial support of the fam

ily while in the program; child development and care for preschool age youngsters, placement services; and supportive follow-on and transitional counseling after placement.

A further contrast between vocational education and Mountain-Plains may be made at the level of what each approach attempts to achieve with students. Vocational education, by definition, provides job skill training in order to prepare the student for a specific immediate job. Mountain-Plains, on the other hand, in addition to providing job skills, attempts to develop within the student, and the family, the practical requirements for success in work, whatever those individual requirements may be. Additionally, in the area of job skill development, Mountain-Plains prepares students for both vertical and horizontal mobility through the labor market by providing a broad-based knowledge of the student's chosen occupational area as well as communication and computation skills related to that occupational area.

Finally, Mountain-Plains is characterized by its educational philosophy as well as the methods it applies. Mountain-Plains offers a variety of resources to the student, the application of which is based upon each student's present abilities, education levels and goals. Each Mountain-Plains student is pretested to determine his or her preprogram level of achievement in terms of numerous objectives for student terminal performance. Based on these pretests, the student is then given credit for "prevalidating certain components of the program and/or certain curriculum packages within the program. The student then proceeds, in each area he or she requires, through the use of individualized curriculum developed by Mountain-Plains. This curriculum allows the student to proceed at his or her own best pace and with con-



tinuing incremental positive reinforcement through the use of self-administered and instructor administered post tests. Individual plans are written for each student which recognize these existing skill levels as noted by pretests, and which allow the regular review of progress. Completion of the Mountain-Plains Program, is defined as validation in all required program areas by both adults, including the requirement for validation in an occupational skill for the head-of-household. Validation is based upon the achievement of competency or performance objectives as determined by post tests.

In conclusion, we should note that the Mountain-Plains family career education program is looking forward to a redefinition of the basic aims of education. Mountain-Plains would offer the hypothesis that the United States is moving away from what has been a segmented educational philosophy and system, i.e. vocational education, college preparatory, general education, to what Mountain-Plains would term an evolutionary educational sequence. The term education in this sequence would not be prefaced by the words career, or vocational, or college, or general, etc. It would simply be called education, and it would be comprehensive in nature, in reaction to individual needs, and continuous through life. To the extent possible within a single program, that philosophy of education has been implemented here. ...

M. P. Feldman, then program officer for the Ford Foundation, in a speech delivered in 1968, indicated precisely the goals of a comprehensive educational system: the first is to identify the talent and learning style of the individual; the second purpose would give him knowledge of the world in which he lives in both physical and

social terms, a third purpose is to develop the skills needed to sustain and advance his life so that he may be a productive and creative individual in society; the fourth is to satisfy the search for the individual person's own life values. Mountain-Plains has attempted to implement these ideals and, we suggest, we have succeeded to the point that Mountain-Plains is not "just another vocational education program."

## A MISSING LINK IN EDUCATION

By

Rowan W. Conrad  
Affective Evaluation Specialist

The past two centuries have witnessed the explosive growth of man's technological capabilities. Problems and dreams of previous eras have been respectively resolved and realized. So successful has technological problem solving been that we have come to look for technological solutions to all problems. Yet evidence grows that the roots of today's problems are not amenable to technological solution - at least not in the traditional sense. Rampant world inflation is fueled by a political decision to stretch oil prices beyond the elastic limit of the world economic system. Food supplies can no longer be maintained for all peoples despite miracle rice, mechanization and fertilizers. In the area of education, job training has failed to remedy problems of the disadvantaged and, despite ever improving curricula and instructional material, the dropout rate continues high, while school achievement, if anything, is decreasing.

Our traditional problem solving methodology is not proving successful today. Why? Reviewing Eric Erickson's work for Commentary (September, 1974), University of Michigan psychologist David Gutman concludes that, ". . . Americans continue to seek for impersonal solutions to personal problems." In a similar vein, Beatrice Rubens looks at the potential and performance of vocational education in the July, 1974 edition of Manpower and states that ". . . basic literacy and good work attitudes may be more important for employment than occupational skills." In his book, Programs to Employ the Disadvantaged, Harvard Economist Peter Doeringer concludes that, "Current programs for improving vocational skills among the urban

disadvantaged must be viewed with some skepticism," while Miskimins and Baker in a 1973 study supported by the U.S. Department of Labor conclude more bluntly that, [with respect to impact on disadvantaged status]; ". . . there is no documentation to substantiate their [traditional vocational programs] purported value." And, finally, Dr. Edwin L. Herr of the Pennsylvania State University, in a third party external evaluation report for the National Institute of Education on the Mountain-Plains Program states that ". . . employability problems are principally comprised of deficits in human relations, interpersonal, and self-identity skills rather than technical skills. This is not to say that the latter are unimportant but rather that unresolved problems in psychological identity and attitudes making up "people problems" frequently limit the acquisition and use of technical skills and must be given high priority with [disadvantaged populations]." (Dr. Herr could have added the fact that psychological problems also inhibit the productive use of technological skills already mastered).

It would be possible to continue to cite the mounting research evidence and expert opinion in the area, but the consensus is clear, 1) we continue to seek impersonal solutions to personal problems; 2) current practices, in neither general nor vocational education, are proving to be distinguishing variables in adult success nor do they impact "poverty"; and 3) problems with current programs are centered in adherence to monotonic approaches which ignore the affective domain.

What, then, needs to be added to educational practice? We suggest a multi-dimensional approach focusing upon the individual as a unique developing personality who is, as Don Hoyt says (NASPA Journal, 1968) not well-rounded, but naturally lumpy. This would require educational institutions and programs to

broaden their perspective(s) to include: 1) comprehensive career guidance to assist the individual in discovering and further developing his most positively prominent lumps so that he/she may develop a positive, appropriate (and thus valuable and valued) technological (vocational) identity as well as career (as opposed to merely job) awareness, and general World of Work sophistication; 2) comprehensive developmental personal and family counseling to aid the student in resolving problems and in developing internalized values, a positive self-concept, and integrating identity components (Social Science taught personally rather than in academic abstract); 3) selection of technical training areas that takes into account the occupational abilities, values, and interests of prospective student populations as well as job market projections; 4) a curriculum which takes account of current knowledge/skill and allows entry into education at one's current competency level and further allows progress at one's own rate in an individualized fashion; 5) social opportunities to significantly participate in governance of the student social community and otherwise practice and "try on" roles; 6) placement activity to enable a student to enter into an appropriate employment situation which considers all aspects of employee marketing; 7) teachers trained to deal with students (people with lumps) rather than homogenized subjects (math, educational psychology, etc.); and 8) a general developmental institutional environment which facilitates positive personal and vocational development as described by such theorists as Erickson, Maslow, Super, and Ginzberg.

The time has come to stop, as Ryan puts it, "Blaming the Victim". Rather, the culprit is a mass educational practice not attuned to our best current knowledge about either educational development or the successful adult social and vocational interaction that education supposedly fosters. The time has come to look at the

hard issues - to stop using the bandaid prescriptions of adding A/V curriculum, adapting another textbook, installing computerized instruction, or hiring another counselor. A/V curriculum can be valuable, but is more often gimmicky; textbooks do require periodic updating, but in no way change overall educational practice; computerized instruction is a valuable tool, but is a technical improvement - not an educational reform; more counselors are badly needed, but with the current conditions obtaining in most institutions (phenomenal workloads, and an overall environment that regards counseling as a luxury apart from the institution rather than a necessity which is an integral part of it), cannot be truly effective.

Today and in the years ahead the question for education and educators is not "what should we do?" It is rather whether we can escape decades of habit and vested interest and implement known educational "answers" such as those outlined above. (Answers which are finding support not only in education, but in such widely divergent fields as Labor Economy and Clinical Psychology.) The saying goes, "where there is a will there is a way". In the current situation the ways are largely known--some of them since the early decades of this century. What has been lacking is the will. Without the will to rebuild the educational engine--with all that an overhaul costs--vehicles for education will probably continue to limp along periodically adding, under various pseudonyms, another can of STP.



## KEY-RESEARCH CONCEPTS REVIEWED

By David A. Coyle

Director, Research Services

The research task of Model IV is to develop, test, and report the potential value of a residential career education program for improving the economic and human viability of rurally disadvantaged families.

The success of the program will be measured in terms of both society and family. For society, a major criterion of success is the level of economic return to society as calculated through cost-benefit analysis. For the family, the criteria are economic viability, productive employment, and life satisfaction. Family economic viability is defined as family economic growth and development. Success, in this area, is measured in terms of: the ability to secure employment, maintain employment, and progress in employment; effective interaction with economic and related social aspects of society; and effective family management.

The experimental design adopted by Mountain-Plains is pretest/post test with a randomly selected control group to account for the competing hypotheses of maturation and history. Research Services staff randomly select control group families, at the conclusion of the recruitment/screening process, from that pool of applicants qualified for program participation. The ratio of selection was one control family to one experimental family until a minimally valid control population was achieved. Currently, the control group is accreted at a rate of one control family for every six experimental families.



The research design for the Mountain-Plains Program extends over a five-year time span and is conceptualized in four phases: feasibility, development, program testing, and phase-out. Each phase yields answers to specific research questions. Once the program enters its final stable mode, wherein programmatic modifications cease, data derived from the student family through-put during that mode will be used to test the program's effect.

The overriding research question addressed by Model IV - What is the value of a comprehensive residential career education program for improving the economic and human viability of rurally disadvantaged families? - will be answered at the conclusion of the final testing of program effect phase. However, for purposes of operational research design, that question has yielded a set of subsidiary questions susceptible to research treatment: (a) Have people who have experienced the program treatment been helped, and may these improvements be attributed to the program experience? (b) What are the contributions of the various program production components to the improvements discovered? (c) What is the payback to society?

Program evaluation addressing these questions is conducted by the Mountain-Plains Research Services Division at two distinct levels -- internal and external. Internal evaluation is based on internal terminal student performance objectives. Since the entry level of students varies considerably, the measurement of terminal performance in itself is not sufficient to determine total system effect on each student. Consequently, during selection and orientation, data is collected which enables the staff to build an entry profile and to initiate student data files. As program components are completed additional data is collected and added to each student file, from which an

exit profile is eventually compiled. Elements of this data profile permit internal formative and summative evaluation by program component.

External evaluation has the objective of determining pre/post program effects on student families. As standards, measurable criteria have also been determined for student post-program status. Data is collected on student status both prior to and, in accordance with a regular schedule, following participation in the program.

Student change is then compared with control group change to determine the degree of change attributable to the Mountain-Plains Program. Data collection on exited students and control group families occurs at the time of exit of the student family, three months post-exit, six months post-exit, eighteen months post-exit, and at two years after exit.

Both evaluation systems provide for a formative and summative evaluation of the program and, to the degree that external behavior can be related to an individual program component, of program components. This is accomplished through the aggregation, at intervals, of student achievements by program components in terms of terminal performance objectives and post-program performance.

The basic statistical model employed by Research Services is the Multi-Variate Analysis of Variance. However, the research design encompasses other tests for differences as well as measures of association, statistical independence, descriptive statistics, and test construction procedures.

We recognize that we have been offered a unique research opportunity. Inevitably, many valid and intriguing research questions must go unaddressed due to lack

of time and resources. However, to the degree that we are able to capitalize on the opportunity that we do have, our conclusions should be nationally relevant and of considerable interest to shapers of public policy as well as educators throughout the country. We will begin public reporting on our interim findings in the very near future. Early indications are that significant differences are discernible, and we are looking forward to increasing interaction with colleagues throughout the professional community as our body of knowledge grows.

## TESTING AT MOUNTAIN-PLAINS

By

Robert Pollack  
Test & Measurement Specialist

Since Mountain-Plains is a research-oriented program, testing is of the utmost importance. Test scores are used as experimental variables in order to determine the effectiveness of different program areas. There are four major program areas that make extensive use of testing and since the nature and scope of the tests used in each area are unique the areas will be dealt with separately.

Currently, the counseling program uses two standardized personality tests to assess its impact on the Mountain-Plains student population: The "Personal Orientation Inventory" (POI) and the "Sixteen Personality Factor Questionnaire" (16PF). The POI is purported to be a measure of "self-actualization" while the 16 PF gives a wide range profile on 16 factors of personality.

Under development is a "Student Inventory" which is a checklist asking students the degree of difficulty they have encountered with each of 49 areas. The areas were chosen because they reflect concerns of prior Mountain-Plains students. All three of these tests are given on an entry/exit basis in the Test Center.

The Mountain-Plains Career Guidance Department uses three standardized test batteries to assist students in their career choices. They are: the "Ohio Vocational Interest Survey" (OVIS) which is used to assess student interest; the "General

"Aptitude Test Battery" (GATB) which is used to assess aptitude with regard to spatial visualization, motor skills, verbal ability and numerical ability; and the "Minnesota Importance Questionnaire" (MIQ) which is used to assess student values as related to specific occupational areas. All three test batteries are administered to students during program orientation.

Both the Math and English components of Foundation Education make use of the Comprehensive Test of Basic Skills (CTBS) which is a standardized achievement battery having both English and Math sub-tests. The Math Department also uses tests prepared for use by Individualized Learning for Adults (ILA) as an integral part of their curriculum.

Communication Skills is currently preparing a set of cognitive, multiple choice tests to be used with their curriculum currently under development at Mountain-Plains. The CTBS and Math tests are administered to students during program orientation.

One aspect of the Mountain-Plains Program is the development of a curriculum product that is useful with our specific student population. As a means of assessing the validity of that curriculum product, a test construction program was initiated in January of 1974. This program was designed to produce cognitive, multiple choice tests referenced to the LAP level of curriculum. These tests are related to the behavioral objectives of the LAPs and are criterion referenced in nature. This means that they are designed to determine how well our students are meeting the

behavioral objectives of the curriculum. They are not designed to determine who our "best" students are, which is the function of normatively referenced testing.

Since the tests are referenced to objectives at the LAP level, they are also used for diagnostic purposes. After a student has pretested for his curriculum area, the student planner utilizes the pretest results to plan a program designed to meet each student's individual needs. These cognitive tests are given to students on a pre/post basis in the Test Center.

In the event a student is unable to satisfactorily complete a performance test, the cognitive test results should indicate which areas he needs to master before being retested.

Along with cognitive tests, Mountain-Plains is developing performance tests at the unit level of curriculum. These performance tests will be used to validate students through the curriculum.

The ultimate goal of all curriculum area tests is to validate the relationship between our written curriculum and the student's ability to do the kinds of things we are teaching here at Mountain-Plains.

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## EDUCATIONAL DIRECTIONS

By

Bruce C. Perryman  
Executive Director

In an operative sense Career Education Model IV and the Mountain-Plains Program effort may be seen as an alternative educational delivery system, as an expression of the latest technology available to educators. Social and economic needs demand that educators be constantly expanding their awareness of educational technology, a technology progressing so rapidly it often seems yesterday's "new ideas" are today obsolete. This mounting wave of advancement in the field of education threatens to engulf educators unless the social implications of educational utilization stimulate and carry them to similar heights. Indeed, "stimulate" seems a conservative description when we recognize that education is the prime source of man's progress and that its use is core to virtually every facet of our lives.

Advances in educational technology, and the way in which society utilizes them, may well determine the progress we make toward universal goals. These new educational approaches are tools, tools which society must apply to its needs, tools which are applicable to both problems experienced in underdeveloped portions of the world as well as problems experienced in underdeveloped segments of our own society. If a world free from war, possessing decent standards of living, equality of dignity, and self-government are recognized as goals which require a revolution, then let it be a revolution, not of arms and wars, but of education. A revolution of violence, which many have promoted-- makes a dream of peace more distant than ever. Let it be a revolution which can promise the



underprivileged a "super" age surpassing anything yet experienced. Because nothing contributes more to rising productivity and living standards, over both the short and the long run, than education.

Any quick overview of our nation's present social and economic environment will establish the specific educational priorities of today. New human resource development programs need to be applied if current social and economic threats are to be stemmed; Programs which are directed toward filling occupational vacancies of long standing duration, vacancies that presently contribute to the inflationary rise; Programs which are directed toward career-education and the re-establishment of family stability as an adjunct to occupational stability; Programs which can reduce skill and occupational continuity shortages through support of search, mobility, education, job restructuring, and the reduction of artificial barriers to employment.

In an expanding economy, skilled employees are able to adjust to occupational change and cross training with little difficulty. Indeed, industry often provides the impetus and training needed to convert already skilled employees to new job requirements. It is the unskilled, the uneducated, and the inexperienced which are left to drag on society and the economy. This valuable human resource can no longer be left to lag behind. During times of high inflationary trends the main focus of human resource development programs should be on restructuring the skills of these multi-problem individuals.

Concern for the equity impact of inflation leads to a renewed appreciation of human resource programs such as Mountain-Plains. Programs that, through recruitment,

education, and mobility, can respond quickly to the family stability and occupational shortage crisis which today's high unemployment figures reflect.

At Mountain-Plains we are applying new educational approaches to the problem of human resource development and Career Education Model IV is proving itself to be a successful alternative, providing change in educational approach and impacting productivity and living standards.

## EDUCATION FOR TODAY

By

Richard H. Mutterer  
Director of Education Services

WANTED: Vertical and Horizontal Career Mobility

ONE APPROACH: Blending Adult Basic Foundation Education & Occupational Skill Education

As depicted in the popularity of Horatio Alger stories, Americans long have regarded education as a means of fostering vertical or upward career mobility. In our rapidly changing society, and in the current period of high unemployment, Americans increasingly expect educational programs to foster horizontal career mobility in order that workers may more easily move to a number of relatively similar types of work. How can an educational program foster both vertical and horizontal career mobility? In addition to utilizing the practice of career "cluster" occupational education programs, the Mountain-Plains Program utilizes instruction in Foundation Education Mathematics and Communication-Language Art skills to foster both types of mobility. The Mountain-Plains Program design predicts that entry level graduates of the program will climb career ladders in the graduates' chosen careers in direct relationship to motivation and ability to "update" and "upgrade" their skills. It is also predicted that the ability of the graduate to "update" and "upgrade" clearly is associated with the individual's communication and comprehension skills.

Additionally, it is predicted that graduates' horizontal career mobility will be closely related to a positive self-image and the ability to "keep in touch" with

societal changes. The foregoing "coping" skills and positive self-image are expected to be related to the graduates' ability to utilize the society's mathematical and language communication patterns.

Thus, in addition to family living classes, counseling, and occupational skill education, the Mountain-Plains Program conducts Foundation Education classes on a diagnostic/prescriptive basis related to a student's diagnosed level of proficiency, the student's career cluster choice, and a proficiency level which the program staff deems to be appropriate to future vertical and horizontal career mobility. These foundation classes average approximately fifteen percent of a student's total time in program. It is held that the classes are a bargain in that the rapid rate of student curriculum mastery, the high percentage of students graduating, and the favorable job retention and positive career mobility of graduates show significant gains in comparison to other programs which do not feature Foundation Education training.

Foundation Education classes are career related but are taught separate from the occupational skills classes by basic education specialists. There appears to be little problem in "transferring" what has been learned to career applications. Student schedules are weighted so that the majority of Foundation Education occurs during the first two months in the program. Foundation classes are completely individualized, self-pacing, and feature an average 18-1 pupil/teacher ratio and cost an average of \$1.30 per student scheduled hour.

## MATH FOR CAREERS

By

William Connors  
Coordinator, Education Services

and

Richard Berg  
Senior Math Instructor

Education has been the victim of mathematics "overkill" in secondary school systems throughout the nation. The actual mathematics course work required of all students and the mathematics necessary for survival in a career field are in no way compatible. In an education system oriented toward career training, mathematics should involve skills which are necessary rather than those which are nice but accessory. Mountain-Plains uses mathematical objectives only as validation for occupational preparation areas and only in relationship to the actual mathematical requirements necessary for career success in given occupations.

In identifying the mathematics skill levels employers feel are a necessary minimum for entrance into and progress through a particular career field, the Mountain-Plains instructional staff has been able to establish those basic mathematical skills necessary for the occupational training and future career success of a rural, disadvantaged student population.

The instructional staff at Mountain-Plains sets the necessary mathematical skills for each occupational area offered by the program as well as establishing a necessary skill level for successful placement in the job market. Students, having previously chosen an occupational area, are then required to fulfill only the basic requirements for that occupation.

It is Mountain-Plains' experience that mathematics, as used by the average man or woman in carrying their daily duties, comes down to nine basic concepts necessary for survival in a competitive society:

1. The ability to define terms and symbols and a basic grasp of operations. Understanding such items as greater than, less than, equal to, how to define basic operations, and the meaning of standard mathematical terms.
2. Numbers as they are used for location, quantity, order, and graphs. For use in locating room numbers, where we live, phone numbers, how many, numbers involved in certain occupations, and both order and simple graphs.
3. The use and understanding of measurements in the real world. Such things as distance, area, and tool size.
4. The practical use of estimates and approximations.
5. A grasp of variables as they relate to such basic formulas as area and volume.
6. The use of basic logic (almost common sense). Such items as where to start, how to begin, and how to know you are making progress.
7. A basic understanding of ratio and proportion as in the reading and making of blueprints, graphs, determining costs, and savings.
8. A general grasp of statistical mean, median, and samples.
9. A knowledge of such reference skills as the proper use of tables, catalogues, and parts manuals.

Integrating the use of mathematical texts and workbooks developed for occupational training with a constant input from various training areas within the program, the Mountain-Plains instructional staff has been able to stabilize the program's mathematics skill requirements. To date, feedback from the six-state region where Mountain-Plains students have been employed has been most positive and encouraging.

The educational importance of Mountain-Plains' approach lies in the fact that students are spending time only in mathematics that is required and not in mathematics that is nice. The student can now usefully allocate time in preparing for a career rather than wasting time on non-essential mathematics that is, of course, unless they feel a need for nice mathematics.

## CAREER TRAINING FEATURING COMMUNICATION SKILLS

By

Jon K. Gormley  
Senior Communication Skills Instructor

The sign on the second floor of Building 814 reads: Communication Skills.

Key to the Mountain-Plains design is the "mix" of occupational training and foundation education. Early student emphasis is directed toward foundation education and the building of functional skills necessary for a concentration on occupational training.

Communication Skills - reading, language, and study skills - are an integral aspect of foundation education. Facilitating the "mix" of occupational training and foundation education is the career choice each student makes. It is this career choice that determines which portion of the Communication Skills curriculum a student will be assigned.

Communication Skills curriculum is designed to accommodate students in grade equivalent levels ranging from grade 5 through grade 12. Students are placed in the curriculum on the basis of standardized, nationally normed tests, however, students are evaluated, in terms of their progress within the curriculum, on the basis of Mountain-Plains curriculum criterion referenced tests.

Curriculum is designed for self-pacing and utilizes individualized learning activity packages rather than commercial texts. These packages are field tested and include validated tests. Curriculum is composed of packages using some commercially prepared materials, however, the staff is currently developing an original Mountain-Plains package with minimal use of commercial materials. The new



curriculum will stress a functional approach to learning especially designed for the rurally disadvantaged.

Communication Skills stresses building strengths in those areas where the individual student lacks proficiency. Curriculum focus is on the relationship of communication skills to career choices. The Mountain-Plains emphasis is not on "general" communication skills, rather Mountain-Plains accentuates high level mastery of those skills necessary to career choices.

The average stay in the Communication Skills program is 55 instructional hours. During that period of time the average student progresses the equivalent of 3.6 grade levels. The average cost of the program is \$1.10 per student/teacher contact hour. In addition to their specific Mountain-Plains concentration, over 100 students have successfully completed the GED high school equivalency program.

## MOBILITY & TRANSPORTATION TRAINING

by

Walt Osland  
Senior Instructor

Mobility and Transportation is the mechanical instructional area of the Mountain-Plains program. Training in Mobility and Transportation is divided into three instructional fields: Small Engine Mechanics, Automotive Mechanics, and Support Welding.

Course work is comprehensive and each field offers instruction related to specific occupational areas. For Example, students in Small Engine Mechanics receive instruction in such areas as: basic small engines (four cycle, two cycle, and small rotary engines), motorcycles, snowmobiles, chain-saws, and outboard marine mechanics. Instruction in Automotive Mechanics is divided by career ladder steps, such as: lubeman, mechanics helper, light duty mechanic, front-end alignment, engine tune-up, engine repair, brake repair, automatic and standard transmission, auto air conditioning, and general mechanic. Instruction in Support Welding is designed to teach students the necessary basic techniques of arc and gas welding.

Students arrive with diverse backgrounds and a comprehensive pretest is administered to establish both cognitive and performance skill levels. Following the pretest, a student work plan is initiated. The work plan specifies the learning activity packages necessary for completion of the training program as indicated by the pretest and the students' career choice. (Students study foundation subjects such as mathematics and communication skills, in conjunction with their chosen career field.) Using the student work plan, instructors are able to estimate the approxi-

mate time a student will need to complete a specific area. Additionally, instructors monitor and work with each student on an individual basis enabling them to prepare personal student progress charts in order to record each student's rate of progress.

Currently, the length of time a student spends in an instructional area ranges from, five months in the specialized areas, and six months in Small Engines, to twelve months in General Mechanics. The cost per hour for instruction and administrative overhead ranges from, \$1.84 in Automotive Mechanics, and \$2.12 in Small Engines, to \$5.08 in Support Welding.

Mobility and Transportation instructors are highly qualified and come from a variety of backgrounds, which includes experience in both educational institutions and private industry.

Shop equipment used for instruction is up to date and of the same quality as equipment used "on-the-job" nationwide. This aspect of the program facilitates quick adjustment to job conditions and an early concern for quality work. Instruction and demonstration work is done on public, staff, and program, vehicles and engines, which enables instructional shop activity to represent, as close as possible, actual shop work.

Presently, over fifty students have completed the Mobility and Transportation area of instruction at Mountain-Plains and have obtained employment with garages, front-end and brake shops, motorcycle shops, snowmobile centers, and sporting centers. Some Mountain-Plains graduates have even established their own business.

**HUMAN GROWTH AND DEVELOPMENT**

## CAREER GUIDANCE AT MOUNTAIN-PLAINS

By

Richard Manley  
Supervisor, Career Guidance

### INTRODUCTION

The Career Guidance Department at Mountain-Plains is based upon a developmental model for vocational decision making. Within this model we have two principle foci: content and process. Content refers to information imparted about various occupations in the World of Work, while process focuses on the appropriate changes the individual makes within himself as a result of the guidance relationship.

To implement this model, Career Guidance is conceptualized and operated in three stages throughout which process and content are integrated: 1) Awareness and Exploration, 2) Career Planning and Monitoring and, 3) World of Work and Work Experience.

### AWARENESS AND EXPLORATION

Prior to beginning the Awareness stage, students must complete comprehensive testing in Career Guidance, including the Ohio Vocational Interest Survey and the General Aptitude Test Battery, as well as an orientation in which the goals and purposes of Career Guidance are explained.

Upon completion of orientation and testing, the student enters the Awareness stage in which he becomes familiar with the general content of the World of Work. Individualized guidance activities focus on the students' interests and abilities, his attitudes and values toward working with people, data, or things, and a general discussion on the stages of career planning.

After completing Awareness the student enters the Exploration stage where he begins to narrow career choices and becomes more cognizant of those occupations he likes or dislikes. During this stage, individualized guidance activities center around career clusters, career ladders, worker traits (work performed, worker requirements, training, temperament, and physical demands), employability and earnings.

As we facilitate the process of career guidance, emphasis is placed on the use of both group and individual guidance techniques. The group guidance process is used to provide specific information related to general occupations which the group members consider, while individual guidance techniques are used to aid students in integrating this information to their own self-structure. Thus, the knowledge the student receives about himself, as well as the occupations he is considering, leads to a more appropriate and positive vocational identity.

#### CAREER PLAN AND MONITORING

Reality testing occurs prior to the completion of Exploration. This means the student visits the occupational preparation areas of his particular interest. We schedule the student with instructional staff about their specific areas as well as witnessing the actual "doing" of their career choice. The student then returns to Career Guidance and discusses with his Guidance Counselor his impressions as well as the requirements of his chosen career.

When the decision is firm, an individualized educational plan is developed to begin the student at his current competency level and to lead him ultimately to the level of attainment required for his chosen career. Subsequently, the plan is monitored on a six-week basis; including not only review, revision, and updating, but also

student-counselor discussions of attitudes and values as they affect his chosen career. Structured feedback from instructors on motivation, performance, and attitude is a key element in the review.

#### WORLD OF WORK AND WORK EXPERIENCE

Approximately two months before the student completes his career program he makes final preparation to enter the World of Work. Guidance activities in the World of Work revolve around the preparation of the student leaving the school environment for permanent employment. Topics include: resume preparation, merchandising job talents, dress and grooming, employer/employee and co-worker relationships and, interviewing tips. Most of these topics encompass role playing situations with frequent videotaping for instant feedback.

After completing World of Work the student enters Work Experience. This involves short term (two to six weeks) employment, related to the students' occupational training. During this period, weekly group discussions with guidance staff enable the student to integrate all aspects of his educational experience with job performance.

#### SUMMARY

Our department is an all encompassing program in which we assist the students to gain knowledge about occupational requirements, as well as their own self-structure, and the integration of these into a career choice. Inherent in our program is an individualized educational plan and monitoring system for activities which focus on skills that assist the student in obtaining and maintaining employment.

## MOUNTAIN-PLAINS COUNSELING PROGRAM METHODS

By

Rowan W. Conrad  
Coordinator, Counseling Services

A root assumption underlying the Mountain-Plains Program is that employability problems are at least as much a function of personal/personality problems as they are a lack of technical skills. Therefore, Model IV pays a great deal of attention to personal variables throughout the program. These efforts are focused through the personal and family development counseling program. Major overall counseling objectives include social contact skills, self-confidence/self-concept, marital communication, and personal responsibility.

Research at Mountain-Plains has shown that student problems can be interpreted in terms of inappropriately resolved developmental tasks as described by Erik Erickson in *Childhood and Society*. This has been a major breakthrough in terms of interpreting multiple interacting problems, conceptualizing treatment strategy, and guiding an overall counseling program design. The organizing principle for personal and family developmental counseling at Mountain-Plains has therefore become an appropriate resolution of the developmental tasks of the adult transition, identity, and intimacy. Upon exit, students (average age 26) should be ready to negotiate the generativity stage without the burden of inappropriately resolved developmental tasks.

The overall counseling program is developmentally oriented as regards philosophy, eclectic in use of theory and technique, and client self-directed in terms of treatment



focus and setting. Entering students receive a group orientation, reviewing the role of counseling within the overall career education program of Model IV. The dual roles of counseling-problem resolution and personal/interpersonal skill development-are explained in terms of their relationship to career success. Subsequently, each family attends an individual session with a professional counselor who explains the specific objectives of the counseling program and the various treatment settings and options. An initial treatment cycle is then negotiated with the student. The underlying assumption is that the student is an expert on his needs and problems, whereas the professional counselor is an expert on processes for problem resolution and personal development. In negotiating treatment, the intent is that counselor and student interact their particular expertise to maximum benefit in selecting and applying a counseling program.

The desired outcome of the negotiation processes in the eclectic model is to arrive at the most productive (or at least a productive) combination of five major counseling variables; counselor, client, problem, setting, and approach. The only common element in treatment is the *Cognitive Group Cycle* which is selected by three-fourths of the students-usually as their initial treatment cycle.

Negotiated treatments vary widely and include the use of Transactional Analysis for alcoholics, Rational Behavioral Therapy, client centered approaches, Gestalt Therapy and biofeedback. Special training for professional counseling staff has included the Colorado Psychodrama Center, the Institute for Rational Therapy, the Menninger Foundation, and the Esalen Institute.

Once any negotiated treatment cycle is completed, counselor and student have a feedback and review session. Both either agree that the student's accomplishments

are sufficient to insure his future ability to hold a job, in which case the student is "scheduled out" of counseling, or problems needing further attention are identified and a new treatment cycle negotiated and scheduled. *To date, counselor and student have been unable to reach agreement through negotiation in only one percent of the cases.*

The counseling emphasis extends beyond the counseling center and its in-house programs. Personal/family counselors are constantly involved in informal consultation with instructors, Community Development Staff, and Career Guidance Counselors. (Model IV separates Career Guidance/Career Development Counseling from Personal and Family Development Counseling by department. Both departments are staffed with emphasis on different personal and educational attributes with a focus on diversified tasks and objectives.) Broad spectrum team approaches to problem resolution and personal development are standard procedure. This emphasis is intended to insure transmission of in-session gains to "real-world" settings.

A current program status review shows need analysis completed, basic operating design in place, and effective exercises/approaches identified. The Counseling Department at Mountain-Plains is now negotiating an operational phase wherein heavy emphasis is placed upon research documentation of effects and detailed program/procedure/technique/exercise description.

## THE COMMUNITY DEVELOPMENT PROGRAM AT MOUNTAIN-PLAINS

By

Chuck Schank  
Supervisor of Community Development

The Community Development Program aims at the maximum personal involvement of students in expressing themselves and their concerns for the benefit of the program and the community. We place our emphasis on the students off-hours and the importance of citizen-volunteer work. More specifically, we enable students to develop and extend their organizational skills and abilities, provide for experience in organized group activity, instruct in leadership training and community action process, and create understanding of the patterns of social organization which are characteristic of the World of Work and community life in the U.S. We accomplish this by structured experiences that are related to immediate program and community concerns, the student's future employment and his community life, and the total family use of leisure time. While there are several formal classes, most activities are of the "learning by doing" type and everything is strictly on a volunteer basis, employing and developing student talent and leadership. Staff contributions vary in kind but our aim is uniform--to help the student develop personal skills and abilities to the maximum extent for personal enjoyment and meaningful community participation.

Community Development as a field is not well-known. It is however, the third field of social work and a recognized professional practice. It encompasses such diverse operations as technical assistance in Pakistan to neighborhood organization in urban slums. Its general aim is helping people gain legitimate ends

through development of those resources--personal, social, and technical--that will help them accomplish those ends. Specifically, this may mean anything from community playgrounds to housing codes.

Community Development faces a challenge in the handling of social conflict. Our Program goal is the effective ability to constructively handle community problems. Consequently, we stress cooperative and collaborative processes that are available not only at Mountain-Plains but in every community.

While Community Development is not specifically involved in job training, our programmed activities carry implications for the World of Work. As people understand social structure they are better equipped to deal meaningfully with the inevitable issues of labor and management, modern large scale organization, or the social structure of a small town. Furthermore, as people gain a sense of pride and accomplishment in their community or other avocational pursuits, it transfers itself to the job.

To date we have a full recreation program which includes student management, by a staff of volunteers, of a family center. We have a student government organized on the basis of 11 neighborhood groups, each with a chosen leader, who, along with six state representatives chosen by state caucus, form a council. The council orders priorities, is a voice to program authorities as well as community officials and in turn communicates the concerns of those in places of authority to the student body. This is modeled after a grass roots form of community organization.

There are other groups and organizations at Mountain-Plains. For instance, an Indian Club to foster cultural identification; a Pleasingly Plump Club to help women reduce and enhance their employability; and groups holding a wide variety of interests ranging from model rockets to beadwork. Soon there will be a "Friends of Children" program offering emotional support and providing companionship for children who would benefit from such a relationship. Additionally, a Volunteers Income Tax Assistance program has been developed, with certain trained volunteers giving tax assistance to some 80 of their fellow students. The Awakening Generation Teen Club offers an opportunity for teens to form significant relationships and participate in meaningful group activities; formed a year ago the group has had an uninterrupted and active history in a program with rapid turnover. We also will be helping families very directly with the constructive use of leisure time through conducting family home workshops. Also, classes are held on aerobics and leadership training. Two pending programs are: a values-classification group on rural-urban life styles and one on behavior in the context of large-scale organizations. New programs are introduced as student interests and needs are identified.

In conclusion, the Community Development Program is varied. However, a single emphasis is pervasive. efforts are geared toward the citizen-volunteer and the cultivation of the volunteer association as a primary form of community life. Not every important job in America is a paid job; we are dependent upon the organized efforts of volunteers. In the Community Development Program people are prepared to fill this role.



MOUNTAIN-PLAINS JOB DEVELOPMENT  
AND PLACEMENT SERVICES

By

George Faith  
Field Services

Open entry, open exit at Mountain-Plains means that approximately 25 to 28 families will leave Mountain-Plains each month to be replaced by an equal number.

For the staff in the six state offices, this represents an unceasing sequence of job development and job placement. Every office can expect, at any given time, to have 4 to 6 families in each of the two functions (entry/exit).

The Mountain-Plains job development and job placement system has evolved over the past three years into a matrix of activities at predetermined intervals. The system has successfully resulted in job placement for 88.56% of completing students within the first three weeks following program exit. Follow-up conducted six months following student exit indicates that students remain in their job position or have advanced in their employment. Job development as practiced by Mountain-Plains is a continual ongoing effort clustered about the areas of instruction. It is not directed toward a specific individual but the realization that if auto mechanics is part of the program then some day an auto mechanic will be seeking placement assistance.

Job development begins with the creation of a receptive attitude toward Mountain Plains on behalf of potential employers as well as the identification of current or potential job openings. We have found that if we first sell the benefits of the program we may then discuss individuals. To avoid plowing barren ground the

## STUDENT RECORDKEEPING DESIGN AT MOUNTAIN-PLAINS

By

Gary Smith  
Controller  
and  
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Registrar

The unique educational purpose of Mountain-Plains, in conjunction with specific program demands, has resulted in the development of a comprehensive individualized student recordkeeping system.

In general, it was necessary for Model IV to design and implement a recordkeeping system capable of monitoring student progress, curriculum effectiveness, and instructional efficiency, while at the same time providing an accurate basis for an analysis of cost. This system had to provide data on the projected amount of student time required for the completion of educational goals, an accurate indication of time spent in pursuit of goals, and the specific information necessary for an individualized cost accounting system.

The Mountain-Plains recordkeeping design is structured around an automatic data process framework which allows for individualized recordkeeping and coordination and collection of all statistical information through a single department. Utilizing student pre-test/post-test data, the system enables Mountain-Plains to individually prescribe programs and identify and monitor potential program problems within individual curriculum areas. This is accomplished through the accurate measurement of such items as individual student entry profiles which iden-



tify particular deficiencies or problems, pre- and post-program levels of subject knowledge and skill, the time required for accomplishing the subject knowledge and skill change, and the level of subject retention upon leaving the center.

In addition to its monitoring function, the Mountain-Plains recordkeeping system provides, in computerizing form, such data sources for program use as: master and individual scheduling rosters; instructor rosters; a master record of estimated time, scheduled time, actual time, and progress for each student by individual curriculum area. This information and the cost accounting system provides for cost analysis by student contact hour.

One of the keys to the success of the Mountain-Plains Program is the reciprocal relationship existing between the recordkeeping system and each curriculum area. For example, the Data Center provides the program area of Career Guidance with all the pre-test information necessary to create an entry level profile, and, based on this determination of a student's entry level knowledge, Career Guidance is then able to insert the student in the program at a proper achievement level.

Of great overall value to the program is the recordkeeping system's accurate, instantaneous accounting of student progression through educational areas. This enables Mountain-Plains to identify those students experiencing difficulty as well as monitor potential academic failure prior to student withdrawal.

For example, a student in the career area of carpentry is scheduled and attends ten hours of instruction. However his progress (as measured against pre-deter-

mined internally arrived at standards) has only reached an equivalent six hours. A review of the record reveals that the student is behind a like number of hours in mathematics. On this basis a determination can be made that the student's problems in carpentry may stem from an inability to read and calculate the mathematical situations encountered. A solution may then be reached by scheduling more hours in mathematics while reducing the hours in carpentry.

This unique system of student recordkeeping has considerable replication potential for educational research projects as well as general education programs. It allows an educational program to keep in-depth records of student progress and performance in a non-graded individualized system, and is constructed to identify and control costs in relation to benefits, as well as providing accurate information on performance and efficiency by specific curriculum areas. At the same time it provides a record of student achievement in the form of a transcript.

The consequences of this innovative design in educational programs should enable educators and administrators to obtain closer monitoring of resource applications, identification of student needs, recognition of programmatic results, as well as providing a basis for cost/benefit analysis.

## STUDENT PLACEMENT

By

James West  
Placement Officer

At Mountain-Plains the Student Placement Office faces the satisfying challenge involved in providing placement assistance to each student who completes an occupational preparation area. Students are encouraged to utilize on-center employment services as early as their Career Exploration phase in Career Guidance and placement resources are available which provide such specific labor market information as prevailing wages in the six-state area. A placement bulletin board listing city, state, federal and private sector jobs is updated on a continuing basis. Students are encouraged to familiarize themselves with a variety of employment information including newspaper classified ads, job bank printouts from state employment service facilities, civil service announcements, and other job listings. An Area Information File is maintained to provide supplemental information regarding housing, educational facilities, and other related subjects. We have a priority obligation to provide the latest factual information available as a foundation for realistic expectations and placement plans and a constant effort is made to share, with interested students, the various techniques involved in a positive placement effort. A member of the state office staff in Nebraska phrased his approach this way, "We try to teach a man to fish rather than just give him a fish."

The step by step procedure for student placement involves close coordination between the Student Placement Office on center, the six Mountain-Plains State Offices, and the student. Formal placement efforts are initiated thirty days before a student completes his occupational preparation area. At that time a complete

Student Placement Packet is mailed to the State Office in the student's chosen state of relocation. A quick glance at the contents of this Student Placement Packet is illustrative of why we believe that the completing Mountain-Plains student is the most thoroughly screened potential employee any employer will have the opportunity to consider. The packet is composed of information from six departments and totals seven components, including (1) a Personal Data Sheet containing full education and work experience information; (2) a Job Interview Evaluation composed of a critique of the student's performance in a mock job interview and specific information regarding individual strengths and weaknesses as well as positive suggestions for improvement; (3) an Instructor Evaluation comprised of employer oriented evaluation including specific information about what the student is trained to do and how well he does it; (4) a Health Report reviewing the student's general health status; (5) a Financial Planning Forecast which encourages students to practice sound financial planning as they depart from Center and is also helpful in focusing in on realistic salary expectations; (6) a Transcript listing the student's completed courses; (7) an Employability Report which focuses on attitudes and involves four major concerns: overall employability; working environments; employer behavior; and unresolved problems. The utilization of the Student Placement Packet is determined by specific situations and, in our view, this type of flexibility is essential if the placement effort is to serve the best interests of the student.

As the student completes the final thirty days in occupational preparation, the State Office begins work on his or her specific job development. During this period the Student Placement Office on-Center is involved in relaying information to the State Office regarding student needs and, in turn, relaying information back

to the student from the State Office. Additionally, each Mountain-Plains student is encouraged to provide employment opportunity leads which may be followed up by the State Office. Often telephone conferences involving the State Office, the student, and the Student Placement Office are arranged in order to give the student an opportunity to discuss specific concerns with someone who has the latest area wide employment information.

Job interviews are a key element of successful job placement and the State Office schedules specific interviews to coordinate with the student's program completion date. Students are encouraged to take advantage of these interviews in order that they might be provided with an opportunity to concentrate on realistic entry-level employment opportunities. Students are also encouraged to give priority consideration to jobs which offer valuable work experience. We believe this approach makes room for growth allowing students to start with the successful completion of the Mountain-Plains Program, compliment that achievement with invaluable work experience, and stabilize their employment record. Later, a student may give priority consideration to opportunities for advancement, higher salaries, etc., but only after reaching a competitive plateau. Returning to the Center following the interview trip, students complete their exit processing and depart Mountain-Plains to begin a new career.

Other forums have listed several statistics that reflect on placement success at Mountain-Plains. However, as good as the numbers are, statistics lack depth when we seek to evaluate successful placement. At Mountain Plains we deal with real people, in real situations and often statistics fail to reflect human emotions A

former student sent the following note to the Student Placement Office to be shared with several departments:

I would like to take this opportunity to thank each of you for your help, and many kindnesses shown me while I was a student at Mountain-Plains. I am very appreciative of and thankful for what the program has done for me, made me a new person and shown me a better way of life. I cannot begin to repay you for your words and help, but I want you to know I am very grateful for it. I like my job and am doing quite well. I'm on contract with On-the-Job Training and everything is going smoothly. Again I thank you for your help in attaining all this.