DOCUMENT RESUME

ED 063 458 VT 014 908

AUTHOR	Lyle, Buel R.
TITLE	Pilot Occupational Education Programs for Small Rural and Suburban Arkansas Schools in Grades Five through Twelve. Interim Report.
INSTITUTION	Arkansas State Dept. of Education, Little Rock. Div. of Vocational, Technical and Adult Education.
SPONS AGENCY	Bureau of Adult, Vocational , and Technical Education (DHEW/OE), Washington, D.C.
PUB DATE	Jun 71
CONTRACT	OEC-0-70-5189(361)
NOTE	196p.
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	*Career Education; *Depressed Areas (Geographic); Developmental Programs; *Disadvantaged Youth; Intermediate Grades; Job Placement; *Occupational Guidance; Pilot Projects; Rural Schools; Secondary Grades; Student Attitudes; Suburban Schools; *Vocational Development
IDENTIFIERS	Exemplary Project in Vocational Education

ABSTRACT

To assist rural and small suburban schools in depressed areas in establishing occupational education programs for Grades 5-12, pilot programs were instituted in eight participating schools. The project worked to: (1) provide occupational orientation, (2) create favorable attitudes in marginal and disadvantaged students toward education and its contribution to the world of work, (3) relate classroom instruction to an immediate job, (4) provide vocational guidance and job placement, and (5) provide short intensive training for seniors with no previous occupational training. Each school employed a counselor and coordinator of cooperative education. Personnel from participating schools have attended in-service training sessions each quarter. Although comprehensive evaluation would be premature, preliminary findings show that all eight schools have begun to implement each objective. Reports from each of the local schools are included. (BH)

ED 063458

INTERIM REPORT

Project No. 0-361-0032
Contract No. OEC-0-70-5189(361)

Pilot Occupational Education Programs for Small Rural and Suburban Arkansas Schools in Grades Five Through Twelve

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

Buel R. "Buddy" Lyle
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Division of Vocational, Technical and Adult Education
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June 1971

VT014908

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STATE REPORT

Summary of the Report

Time Period covered by the report: July 1, 1970 to June 30, 1971

The purpose of this project is to assist rural and small suburban school districts (particularly those in depressed areas) in establishing occupational education programs for grades five through twelve. More specifically this project is designed to provide meaningful vocational education to youth by (1) providing occupational orientation (2) creating a favorable attitude in marginal students, slow learners, and socio-economically disadvantaged students toward the value of education and its contribution to the world of work (3) bridging the gap between education and the world of work by relating classroom instruction to an immediate job (4) providing occupational guidance and counseling during the last years of school and assisting in initial placement (5) providing short intensive training for seniors who have had no previous occupational training.

The objectives are being achieved through the following: (1) Eight schools were selected, with priority given to schools in depressed areas. (2) Each school employed a counselor and coordinator of cooperative education. (One school was unable to employ a suitable counselor.) (3) Personnel from participating schools have attended in-service training sessions each quarter.

It is intended that successful programs will continue and will serve as models for other small schools.

Body of the Report

a. Problem

It is important that the artifical separation that characertizes general and vocational programs be eliminated and that occupational orientation be integrated into the mainstream of the educational systems of the public schools.

Career development should be viewed as a pyramid offering a broad base of exploratory experiences for the world of work at the elementary and junior high school levels if present conditions of occupational illiteracy and unemployability are to be overcome.

Individuals begin forming attitudes regarding certain occupations early in life. It is important that youth are made aware of the ever-widening range of occupations and that a realistic perception of these occupations be developed in order that these youth may make an exploration of themselves in regard to a wide range of occupations. Youth should also be oriented to the fact that work is an integral part of life and a major ingredient for happiness.

After creating an awareness of the world of work, it is important that the teacher help the student see the occupational relevancy of

subject matter being studied. As the student sees that English, math, science and social studies contribute to his ultimate world of work, education becomes a practical and meaningful goal. All his education becomes vocational in nature.

At the junior high school level, some youngsters do not have the tolerance or ego-strength to proceed through a series of experiences that are meaningless to them personally. Interest is awakened in the ninth, tenth, or eleventh grades when they can get their hands on the tangible and the concrete. Therefore, experiences which are timely and immediate to the questions which they are asking themselves must be designed for these grades.

Basically, Arkansas is a rural state consisting of many small trade centers. Students attending school in these small trade centers are receiving basic academic education with some receiving training in home economics, vocational agriculture and business education. One of the major resources in these communities is agriculture, but mechanization has created a manpower surplus in production agriculture. Due to mechanization and in some communities, to change from an agricultural to a related agricultural or non-agricultural base, it is essential that present programs in vocational education be implemented and/or expanded to include occupational orientation beginning early in the student's school career and continuing to graduation, with guidance and counseling services which facilitate realistic occupational choices as early as possible. The capstone of this orientation and counseling should be an interdisciplinary general cooperative education program in which students can receive intensive job-related instruction in school and actual work experience in their chosen occupations.

Of great concern are the schools in designated socio-economically depressed areas. These areas consist largely of under-employed or unemployed people, with a high per cent of school dropouts and a low income index resulting in an inadequate tax base to provide adequate in-school programs. Too often such socio-economic situations perpetuate themselves.

It seems reasonable that a project of this nature should greatly alleviate economically depressed conditions by providing meaningful education to students who view education as being of little significance in earning a living. There appears to be an urgent need to strengthen training and job adjustment programs for these disadvantaged youth in order to make them productive workers and citizens. Moreover, there are many "regular" students attending these schools who will benefit from such a program.

Often employment opportunities are available to youth within their immediate area if they know about them and are equipped with entry level skills for the jobs. The proposed program is designed to meet these needs. In addition to this, highly organized and intensive courses in job attitudes and skills, combined with extensive counseling

and guidance, will be a valuable offering for seniors who have not previously had vocational training.

Due to limitations of money and training space, it appears that the most feasible approach to meeting most training needs in small schools is through cooperative education as a capstone to orientation.

New concepts proposed in this project involve planned occupational orientation beginning at the fifth grade level and progressing through the twelfth grade; general cooperative education offered to eleventh and twelfth grade students; short intensive training for seniors without previous occupational training; and intensive guidance, counseling and placement services for all students.

Occupational Orientation Beginning in the Elementary Grades - Previous research has been conducted by Goff (9)* which supports this new concept for schools involved in this proposal. Goff demonstrated in two elementary schools which differed socio-economically, that measurable increments in vocational knowledge, level of occupational aspiration and realism of occupational choice can be attained through a planned vocational guidance program. Results revealed that older elementary students exhibited greater vocational awareness.

Wellington and Olechowski (22)* found that even third graders showed an awareness of adults as working people, of specific jobs as having advantages and disadvantages and of the fact that the enjoyment of what one does is related to his interests. Also the children perceived that interests and abilities enter into an individual's choice of work.

Since schools to be selected for the project have not previously carried out a planned vocational guidance program, this proposed project will enable the teachers to incorporate occupational orientation into their studies and assist the students in exploring themselves individually in regard to the work world. Students can examine a wider range of occupations which will result in a broader meaning of work. As the student progresses through the grades this background of orientation will give more meaning to his studies; certain occupations of interest to the student will be studied in greater depth; and the career decision-making process will begin to develop.

General Cooperative Education - Several studies have been conducted regarding cooperative education for secondary students in which the students combine related classroom instruction with on the job work experience in a local business or industry. Cushman and others (6)* conducted a study of 103 cooperative work experience study students from 16 high schools. Findings of the project revealed that when

*See Appendix A

these students were compared with students in similar programs without work experience, the students in the cooperative education programs rated higher in technical knowledge, entry into curriculum-related employment following graduation, and entry into curriculum-related programs of advanced training.

In a pilot project at Paola High School, Kansas (2)* the findings revealed that 85 per cent of the students completing both years of the interdisciplinary program planned to work for the same employer in some capacity. Of those students in the project who attended college or trade school, 82 per cent used their senior year experience to finance education expenses.

Due to changes in employment opportunities and manpower needs, it is essential that present programs in vocational education be expanded to include general cooperative education programs to offer students a wider and more realistic choice of programs. It is anticipated that these programs will bridge the gap between education and work, equip the youth with proper work habits and provide them with marketable skills for employment. It is recognized that it will be necessary to provide extensive individual assistance to handicapped and disadvantaged students.

Short, Intensive Training for Seniors with Previous Occupational Training - There are certain competencies, common to all jobs, which can be made available to high school seniors in need of occupational training. Stevenson (19)* found that there were several competencies that employers rated as essential to employment regardless of the type of business or level of employment. These competencies include such factors as attitude toward work, employee-employer relations and personal appearance. Most cooperative education programs have included these basic skills as an essential part of the related instructional program.

Miller (14)* conducted a pilot research project for vocational guidance in economically underdeveloped areas. Guidance services were provided for non-college bound high school seniors, dropout youth and recent high school graduates currently unemployed. An evaluation of the project indicated definite success in stimulating leadership for the schools involved and adoption by other schools in Illinois and other states. Existing vocational education programs in Arkansas provide no planned approach for meeting the needs of the segment of population in local communities for which this proposal is designed. Failure in meeting the needs of these youth is costly to individuals and to society because of resulting high unemployment, delinquency and social disorganization.

*See Appendix A

The LEEP program (4)* was initiated in Georgia as a short-term program for youth who have separated themselves from school without the necessary skills for obtaining and maintaining a job. It was stated that 75 per cent of these students enrolled only after one or more personal contacts by the coordinator. Over 80 per cent of those placed in jobs were still working. Due to the success, Georgia plans to expand the number of pilot programs.

Such short-term training should be beneficial to high school students who either could not schedule vocational courses or who did not desire to pursue the regular vocational curriculum. This should be true regardless of whether the student enters directly into the work force or plans to obtain additional schooling.

Intensive Guidance, Counseling and Placement - In the past, vocational teachers have been concerned mainly with providing these services for students enrolled in their courses. All vocational teachers have been provided at least one period each day for counseling. The guidance and counseling of the non-vocational student has been left for the counselor or academic teacher to do. In many of the small schools, there are no counselors, and the only guidance provided for the non-vocational student comes from academic teachers.

Therefore, the concept of guidance and counseling is not new, but great emphasis will be placed on a concentrated effort of the counselor and all teachers on the secondary level to provide planned and meaningful guidance and counseling to all students in the last years of school. In order to do this it will be necessary to provide in-service training sessions to orient personnel. In-service training will provide techniques on helping the students to understand their capabilities and needs, sources of information, new instructional materials and help in other problem areas as they emerge.

South Carolina (21)* conducted a two-week summer institute for a group of 29 counselors on how they might better serve disadvantaged youth through individual and joint action projects. All the respondents indicated enthusiasm for continuing programs to serve disadvantaged youth.

The proposed project for the eight Arkansas schools will provide in-service training, not only for counselors, but for all secondary personnel involved with students in their last years of school.

In Montana (10)* fifteen certified secondary counselors participated in a project under which they were employed in various skilled and unskilled jobs. While employed they investigated characteristics, background and job experiences of successful and unsuccessful entry workers in three selected industries. Results of this study will be incorporated into the in-service training scheduled for school personnel.

*See Appendix A

Although counselors and some teachers have provided placement services to those students leaving school, a concentrated effort will be made to bring the counselor, academic teacher, vocational teacher, employment services and other manpower agencies together as a team which keep students informed of the employment trends and job vacancies.

b. Objectives

1. To initiate pilot occupational education programs for rural and small suburban Arkansas schools in grades five through twelve.

2. To broaden the occupational concept and awareness of youth by incorporating occupational orientation into the school curriculum beginning at grade five.

3. To create a favorable attitude in marginal students, slow learners, and socio-economically disadvantaged students regarding the value of education and its contribution to the world of work.

4. To bridge the gap between education and the world of work by relating classroom instruction to an immediate job through a general cooperative education program.

5. To provide intensive occupational guidance and counseling for all students during the last years of school and to assist in the initial placement of all students upon leaving school.

6. To provide short intensive training for seniors who have had no previous vocational training.

c. Project Design and Procedures Followed

This project involves a comprehensive occupational education program beginning in the fifth grade and continuing through the twelfth grade.

Eight schools in rural areas or small suburban areas were selected, with priority given to areas of high unemployment, schools with a high dropout rate and in areas identified as economically depressed.

Each school has been provided funds for a full-time coordinator and a full-time counselor to work on this project. All schools except one were able to hire people for these positions. Mountain Home was unable to find a counselor for their program.

Coordinators

The coordinator must have a Bachelor's Degree. Within three years after employment he must have nine semester hours in vocational education courses such as the following: Methods of Teaching Cooperative Classes; History and Principles of Vocational Education; Job Analysis; and Organization of Instructional Materials. Three semester hours in teaching cooperative classes shall be completed within the first year. (Forty clock hours in in-service training workshops may be substituted for the three semester hours.) The coordinator shall have had 2,000 hours of work experience accumulated in two or more occupational areas.

Counselors

The counselor must meet all certification requirements in the State of Arkansas except that he (she) may enter the program with as few as twelve hours of course work leading to the Master's Degree in Guidance and Counseling. He (she) must work toward full certification requirements by earning a minimum of twelve semester hours per year toward the Master's Degree.

Two Curriculum Specialists have been hired on a part-time basis. The Curriculum Specialists are graduate students at the University of Arkansas; one in Vocational Education, one in Guidance and Counseling. It has been the responsibility of the Curriculum Specialists to review research and other material and make this available to our local programs. (Refer to section on "Reports from Local Schools" for additional information regarding this topic.)

d. Results and Accomplishments

(Refer to section on "Reports from Local Schools" for information regarding this topic.)

e. Evaluation

(Refer to section entitled "Evaluation".)

f. Conclusions, Implications, and Recommendations

(Refer to section on "Reports from Local Schools" for information regarding this topic.)

Buel R. "Buddy" Lyle
Signature of Project Director

June 30, 1971
Date

APPENDIX A

APPENDIX A

Bibliography

1. A Demonstration System of Occupational Information for Career Guidance, Final Report, State University of New York, Albany, New York, 1968.

2. Agan, Raymond J., "The Development and Demonstration of a Coordinated and Integrated Program of Occupational Information, Selection, and Preparation in a Secondary School", Kansas State University, Manhattan, Kansas, 1968.

3. Becker, Harry A., "A Pilot Project to Develop a Program for Occupational Training for School Allienated Youth", Center for Vocational Arts, Norwalk, Connecticut.

4. Bottoms, Gene and Kenneth B. Matheny, "Occupational Guidance, Counseling, and Job Placement for Junior High and Secondary School Youth", A paper presented at the "National Conference on Exemplary Programs and Projects", --"1968 Vocational Amendments", Atlanta, Georgia, March 1969.

5. Circle, D. F., "The Career Information Service. A Guide to its Development and Use", Newton Public Schools, Massachusetts, 1968.

6. Cushman, Harold R. and Others, "The Development and Improvement of Directed Work Experience Programs in Expanded Vocational Education Offerings in Agriculture at the Secondary School Level", State University of New York, Ithaca, New York, 1968.

7. D'Costa, Ayres, David W. Wineforder and John G. Odgers, "Development of a system of Vocational Exploration Through the Use of the Dictionary of Occupational Titles and the Ohio Vocational Interest Survey", Division of Guidance and Testing, Ohio Department of Education, Columbus, Ohio, 1968.

8. Fisher, W. Holder, "A Comparative Study of the Employee Skills/ Training Acceptable to Employers under Varying Degrees by Labor Market Stringencies", Batelle Memorial Institute, Columbus, Ohio.

9. Goff, William and Others, Project P.A.C.E. (Preparing, Aspiring, Career Exploration), Dayton City School District, Dayton, Ohio, 1968.

10. Gorman, Robert E., "A Guidance Project to Investigate Characteristics, Background, and Job Experiences of Successful and Unsuccessful Entry Workers in Three Selected Industries", Montana University, Missoula, Montana, 1966.

11. Huffman, Harry, "Guidelines for Cooperative Education", The Center for Vocational and Technical Education, Ohio State University, Columbus, Ohio, 1967.

12. Leonard, G. E., "Developmental Career Guidance in Action, the First Year", Wayne State University, Detroit, Michigan.

13. Meyer, Warren G., Mary K. Klaurens and Richard D. Ashmune, "A Guide for Cooperative Vocational Education", University of Minnesota, Minneapolis, Minnesota, 1969.

14. Miller, Carroll H., "A Pilot Project for Vocational Guidance in Economically Underdeveloped Areas", Illinois State Office of the Superintendent of Public Instruction, Department of Guidance, Springfield, Illinois, 1968.

15. Ritter, T., "Project Vision: An Approach to a Model System of Occupational Employment Information", Indiana Manpower Research Association, Indianapolis, Indiana, 1967.

16. Schill, William John, "Concurrent Work Education Programs in the 50 States", Office of Education, Washington, D.C., 1965-66.

17. Sherman, Vivian S., "Guidance Curriculum for Increased Self-Understanding and Motivation for Career Planning, Planning and Development of Research Programs in Selected Areas of Vocational Education, Vol. 3, American Institute for Research in Behavioral Science, 1966.

18. Sjorgren, Douglas and Others, "The Identification of Common Behavioral Factors as Bases for Pre-Entry Preparation of Workers for Gainful Employment. Final Report", Colorado State University, Fort Collins and Nebraska University, Lincoln, Nebraska.

19. Stevenson, William W., "Characteristics and Competencies Desired by Employers in Agricultural Related Businesses", Oklahoma State University, Stillwater, Oklahoma.

20. Sutton, J., "Revised Instructional Program for Slow-Learners to Improve their Job Placement Opportunities: A Three Phase Study", Medford School District No. 549C, Oregon, 1967.

21. Sweeney, Thomas J., "A Developmental Program for Vocational Counselors Directed Toward Serving Disadvantaged Youth More Effectively", University of South Carolina, Columbia, South Carolina, 1966.

22. Wellington, John A. and Nan Olechowski, "Attitudes Toward the World of Work in Elementary School", The Vocational Guidance Quarterly, Vol. 14, Spring, 1966.

23. Whitfield, E. A. & Hoover, R., "Regional Center for Collection, Synthesis and Dissemination of Career Information for Use by Schools of San Diego County", San Diego County Department of Education, California, 1967.

24. Zikmund, Dale G., "Handbook on Planning and Conducting Cooperative Occupational Education Programs in Off-Farm Agricultural Occupations", Nebraska State Department of Education, Lincoln, Nebraska.

EVALUATION

EVALUATION REPORT
ON
PILOT OCCUPATIONAL EDUCATION PROGRAMS FOR SMALL RURAL AND SUBURBAN ARKANSAS SCHOOLS IN GRADES FIVE THROUGH TWELVE

Submitted by Southern State College

SUMMARY

This is a demonstration project being carried out in eight schools representative of the small schools in Arkansas. There is at least one school near each corner of the State and one located in east central Arkansas. The schools are located so as to represent the two types of communities in the State so far as population is concerned; all white and white and black mixed.

The purpose of this project is to assist rural and small suburban school districts (particularly those in depressed areas) in establishing occupational education programs for grades five through twelve. More specifically this project is designed to provide meaningful vocational education to youth by (1) providing occupational orientation (2) creating a favorable attitude in marginal students, slow learners, and socio-economically disadvantaged students toward the value of education and its contribution to the world of work (3) bridging the gap between education and the world of work by relating classroom instruction to an immediate job (4) providing occupational guidance and counseling during the last years of school and assisting in initial placement (5) providing short intensive training for seniors who have had no previous occupational training.

The objectives will be achieved through the following: (1) Eight schools will be selected with priority given to schools in depressed areas. (2) Each school will employ a counselor and coordinator of cooperative education. (3) Personnel from participating schools will attend in-service training sessions for orientation and initial preparation and in-depth workshops. (4) Occupational guidance and counseling will become a part of the entire school environment.

The programs have been operating in the eight schools only seven and one-half months. The shortness of the time precludes the reporting of all but a few conclusive results. The report from each school shows that a beginning has been made to implement each objective. Other school personnel and some parents have become involved in the programs. The programs are fully staffed except in the case of one school which was unable to employ a suitable counselor.

Based on the partial evaluation of the programs, the principal evaluator recommends that the programs be continued through the three full years.

CONTEXT

The eight project schools are located rather widely throughout the State so as to be representative of the two types of populations, almost pure white and white and black mixed. The two races comprise over 99% of the population in the seven counties that embrace the eight project schools. Population characterized as "0ther", according to the 1970 Census, consists of only 533 people out of a total population of 162,689 in the seven counties.

The schools were selected for the project because they were of the type which the project was designed to serve. They are small, rural, or suburban, which in this case really means urban since all but two are located in county-seat towns with a population of more than 2,500. Not one of the schools is located near a city.

Gentry, Benton County - northwest Arkansas - 1970 Census population of 15,319 with 144 blacks - 3.1% of population on Welfare June 1970 - A third quarter 1970 unemployment rate of 3.9%, is a small town of less than 2,500 population, 1970 school enumeration 867 all white. The principal industry is agriculture raising small grains, livestock, poultry, and fruits.

Harrison, Boone County - north central Arkansas - 1970 Census population of 19,073 - 49 blacks - 4.3% of population on Welfare June 1970 - A third quarter 1970 unemployment rate of 5.1%, is a town of 6,580 by 1960 Census - 1970 school enumeration of 2,375 all white. The principal industries are construction, manufacturing of both durable and nondurable goods, transportation, wholesale and retail trade, professional and related services, and personal services.

Valley Springs, also in Boone County less than six miles from Harrison-school district borders Harrison and includes some of the manufacturing plants of the county, is largely rural - 1970 school enumeration of 563 all white. The principal industry, in addition to those mentioned for Harrison, is agriculture consisting of livestock, poultry, and small grains.

Mountain Home, Baxter County - northeast Arkansas - 1970 Census 15,319-144 blacks - 2.8% of population on Welfare June 1970 - A third quarter unemployment rate of 4.1%, is a town of about 3,000 - 1970 school enumeration of 1,724 all white. The principal industries are agriculture, forestry, retail trade, and tourism because of the many lakes and other recreational facilities.

Wynne, Cross County - east Arkansas - 1970 Census population of 19,783 - 5,504 blacks - 5.2% of population on Welfare June 1970 - A third quarter 1970 unemployment rate of 3.8%, is a town of 4,922 by 1960 Census - 1970 school enumeration of 3,146 - 1,038 blacks. The principal industries are agriculture consisting of cotton and livestock, wholesale and retail trade, durable goods manufacturing, and transportaion.

Warren, Bradley County - southeast Arkansas - 1970 Census population of 12,778 - 4,018 blacks - 9.0% of population on Welfare June 1970 - A third quarter 1970 unemployment rate of 5.4%, is a town of 6,752 by 1960 Census - 1970 school enumeration is 2,125 - 857 blacks. The main industries are the manufacturing of durable and nondurable goods largely connected with lumbering, wholesale and retail trade, and business and repair services.

Magnolia, Columbia County - southwest Arkansas - 1970 Census population of 25,952 - 9,122 blacks - 7.0% of population on Welfare June 1970 - A third quarter 1970 unemployment rate of 5.4%, is a town of about 11,000 - 1970 school enumeration is 3,243 - 1,179 blacks. The main industries are agriculture consisting of livestock and poultry, lumbering, oil production, and manufacturing of durable and nondurable goods.

Hope, Hempstead County - southwest Arkansas - 1970 Census population of 19,308 - 6,393 blacks - 5.2% of population on Welfare June 1970 - A third quarter 1970 unemployment rate of 3.9%, is a town of 8,399 by 1960 Census - 1970 school enumeration is 2,893 - 1,153 blacks. The principal industries are manufacturing, agriculture consisting of livestock and cotton, wholesale and retail trade, personal services, and professional and related services.

The schools are organized according to the 6-3-3, 6-6, 5-3-4, or 6-2-4 plan. As with Arkansas schools, generally these schools have financial difficulties. Each has a bonded indebtedness ranging from $214,000 in Valley Springs to $1,200,000 in Wynne. The assessed millage is as follows: Magnolia 37, Hope 40, Warren 43 (tried twice to raise it but voters turned it down), Harrison and Valley Springs 45 each, Mountain Home 46, Wynne 49, and Gentry 52. Only two schools, Magnolia and Wynne, could be considered in "good" shape financially. These two finish each school year with a sizeable balance. All the others finish with either a very small balance or no balance.

Arkansas schools have many needs. A few of the outstanding ones show the necessity of this project. The dropout rate between grades one and twelve for the 1969 graduating class was 47.3, for the 1970 class it was 45.3. This, of course, is too high; so are the Welfare rolls. There is a need to eliminate the artificial separation that characterizes general and vocational education. Too many students, high school graduates as well as other school leavers, separate from the school with no realistic

plan to either enter the world of work or to continue a program of education. Too many students and parents feel that a college education is the only avenue of success for anyone regardless of his interests or aptitudes. Many marginal students feel that there is no use to try. These and many other needs should be met by improving the educational system.

Such needs led the General Cooperative Education Coordinator in the Arkansas State Department of Education and the Director of the Research Coordinating Unit, University of Arkansas, to propose this project and apply for a grant to implement it. The project was funded and the schools were selected as previously stated.

THE PROGRAM

This project has been in operation since the opening of the 1970 fall terms in the eight schools: Gentry, Harrison, Hope, Magnolia, Mountain Home, Valley Springs, Warren, and Wynne. Each school was requested to submit an interim report by May 15, 1971. Thus, the project has been in operation approximately seven and one-half months. This, of course, is too short a time for a very meaningful evaluation.

The purpose of the project as stated in the proposal is to provide meaningful occupational education to youth in small suburban school districts (particularly those in depressed areas). The objectives are: (1) To initiate pilot occupational information programs in grades five through twelve, (2) To broaden the occupational concept and awareness by incorporating occupational orientation into the school curriculum beginning at grade five, (3) To create a favorable attitude in marginal students, slow learners and socio-economically disadvantaged students regarding the value of education and its contribution to the world of work, (4) To bridge the gap between education and the world of work by relating classroom instruction to an immediate job through a general cooperative education program, (5) To provide intensive occupational guidance and counseling for all students during the last years of school, and to assist in the initial placement of all students upon leaving school, and (6) To provide short intensive training for seniors who have not had previous vocational training.

A General Cooperative Education coordinator and a counselor was added to the staff of each of the eight schools. The State Department of Education paid 100% of the salary of these personnel for the first year from the project fund. Each of the local schools will assume 25% of the salaries during 1971-72 and a greater proportion during each succeeding year and agrees to support the program 100% when the pilot project ends. The coordinator and the counselor in each school have used their own methods and procedures to implement the six objectives of the project. They have worked largely as a team. In each school the coordinator has initiated one or two classes in General Cooperative Education.

The classes range in size from 17 to 25. The counselor has assisted the coordinator in enrolling appropriate students for the GCE class or classes. They have worked together to interpret the project to the other teachers and counselors in the school and to involve as many as necessary in the program. This has been especially true in working with fifth and sixth grade teachers, with the teachers of occupational orientation classes and with other counselors in the school. The counselor in each school has usually been responsible for providing intensive occupational guidance and counseling for 11th and 12th grade students and the initial placement of seniors. In some of the eight schools this has been done quite well by the regular counselor and the work of the project counselor with respect to this objective has been considerably lessened.

EVALUATION

The programs in the separate schools have not been in operation long enough to yield very conclusive results. In November and December of 1970 the principal evaluator of the project visited each of the programs in the eight schools. They were just getting underway. It is fair to say as of that time the coordinators and counselors were engaged in interpreting the program in each school to administrators, teachers, counselors, parents, and to the community at large. They talked to the staff members in groups and individually, they appeared before civic groups and PTA, and they used the news media especially the newspapers and radio. At this time they were also busy in their attempts to get other staff members involved in certain aspects of the program. This observation can be considered a subjective type of process evaluation. It was too early then to engage in any product evaluation.

On February 4, 1971, the principal evaluator presented the Evaluation Design to the coordinators, counselors, and some administrators. A copy of this design is included as a part of this report. Due to the late approval of the project causing a delayed beginning of it in the schools, the Evaluation Design was submitted in terms of achievements to be obtained by June 30, 1972. It was designed so that parts of it could be used for a tentative or partial evaluation to accompany the interim report to be submitted by the director of the project on or before June 30, 1971.

An examination of the Evaluation Design will show that the evaluation is process oriented or product oriented according to the nature of the objective. The first, fourth, fifth, and sixth objectives are concerned with the establishment of programs and largely call for process evaluation. These are: to initiate pilot occupational education programs, to bridge the gap between education and the world of work by establishing general cooperative programs, to provide intensive occupational guidance and counseling, and initial placement for school leavers; and to provide short intensive training for seniors who have not had any vocational

education. Even though these objectives largely call for process evaluation, the Evaluation Design provides for product evaluation in some areas of objectives concerning GCE programs, occupational guidance and placement, and intensive training of seniors. The second and third objectives are concerned with changes in students and these call for product evaluation. They are: to broaden the occupational concept and awareness of youth and to create a favorable attitude in marginal students toward the value of education and its contribution to the world of work.

The coordinators' responses to the parts of the Evaluation Design not utilizing a test nor a questionnaire show each school has started occupational information programs in grades five through twelve by various means; courses, occupational units, and counseling interviews, using books and other materials, films, film strips, videotapes, field trips, and visiting speakers. As mentioned in the paragraph treating methods and procedures, each school has established a general cooperative program, a program of guidance and placement where necessary, and a plan for providing short intensive training to seniors who have not had any vocational education.

The reports show that programs have been initiated to broaden the occupational concept and awareness of youth and to create a favorable attitude in marginal students, but the instruments to be used in the evaluation must be approved by OE and administered to students on a pre-post basis before results can be obtained. It is the plan to use these instruments at the beginning and at the end of the school year 1971-72 for the purpose of measuring progress in these areas.

These instruments will be used with appropriate grades and groups on a sampling basis and the data will be treated statistically, by rankings, and other appropriate methods to assess changes in students, both from the standpoint of the mastery of subject matter and change of desires and attitudes.

REFERENCES

1. Byram, Harold M., Locally Directed Evaluation of Local Programs of Vocational Education, East Lansing, Michigan, Michigan State University.

2. Cochran, W. G., Sampling Techniques, New York, Wiley, 1963.

3. Coster, John K. and Morgan, Robert L., The Role of Evaluation in the Decision-Making Process, Raleigh, N.C., Center for Occupational Education, North Carolina State University at Raleigh.

4. Crawford, F. R., Introduction to Data Processing, Englewood Cliffs, N. J., Prentice-Hall, 1968.

5. DuBois, P. H., An Introduction to Psychological Statistics, New York, Harper-Row, 1965.

6. Koenker, R. H., Simplified Statistics, Illinois, McKnight, 1961.

7. Remmers, H. H.; Gage, N. L. and Rummel, J.F., A Practical Introduction to Measurement and Evaluation, New York, Harper-Row, 1965.

8. Slonim, M. J., Sampling in a Nutshell, New York, Simon and Schuster, 1960.

9. Stufflebeam, D. L., A Depth Study of the Evaluation Requirement, Columbus, Ohio, The Ohio State University.

10. Thorndike, R. L. and Hagen, E. P., Measurement and Evaluation in Psychology and Education, New York, 1961.

11. Tyler, L. E., Test and Measurements, Englewood Cliffs, N. J., Prentice-Hall, 1963.

12. Veldman, D. J., Fortran Programming for the Behavioral Sciences, New York; Holt, Rinehart and Winston, 1967.

EVALUATION DESIGN

EXEMPLARY PROJECT

EVALUATION DESIGN

OBJECTIVE A - To initiate pilot occupational information programs in grades five through twelve.

PERFORMANCE OBJECTIVE #1

By June 30, 1972, eight schools will have started occupational information programs in grades five through twelve as indicated by:

a. Teachers teaching a course in occupational information in grades 7 or 8 or 9 .

b. Teachers using occupational units in grades five and six or in secondary classes.

c. Teachers presenting occupational information in regular classes.

d. The teachers using the following teaching activities in the occupational courses or occupational units:

   1. Teachers using occupational films.
   2. Teachers using occupational tapes and/or occupational videotapes.
   3. Teachers involving students in making and/or using occupational films, tapes, and/or videotapes.
   4. Teachers using occupational speakers.
   5. Teachers organizing and conducting occupational field trips.
   6. Teachers involving students in planning and/or conducting occupational field trips.

e. Counselors providing occupational information through group techniques or individual interviews.

f. School provide occupational books and materials.

g. Obtaining and using local occupational information.

Data Collection Form: For Performance Objective #1 - a,d

Name of School_____

Occupational Information Course

Directions: Please provide the following information:

1. An occupational information course is offered in your school? Yes___ No___
2. If answer is Yes, please answer the following questions:

   Grade and level course is offered _____.

   Number of students in course _____.

Check the following activities that teacher uses in course:

a. ___teacher uses occupational films. How many?_____

b. ___teacher uses occupational tapes, and/or occupational videotapes.

c. ___teacher involves students in making and/or using occupational films, tapes, and/or videotapes.

d. ___teacher uses occupational speakers.

e. ___teacher organizes and conducts occupational field trips.

f. ___teacher involves students in planning and/or conducting occupational field trips.

g. ___other activities (Please explain).

Data Collection Form: Performance Objective #1 - b,d

Name of School_____

Occupational Units

Directions: Please provide the following information about the occupational units that are being taught in your school.

Grade Level and/or Class	No. of Students	Name of Unit	No. of Days Spent on Unit	Teaching Activity Used in Unit*
		Construction Workers		_____
		Office Workers		_____

*Place letter representing activity with number in parenthesis indicating the number of times it was used.

a. Teacher uses occupational films.

b. Teacher uses occupational tapes, and/or occupational videotapes.

c. Teacher involves students in making and/or using occupational films, tapes, and/or videotapes.

d. Teacher uses occupational speakers.

e. Teacher organizes and conducts occupational field trips.

f. Teacher involves students in planning and/or conducting occupational field trips.

g. Other activities (Please explain).

Data Collection Form: Performance Objective #1 - c

Name of School_____

Occupational Information in Regular Course

Directions: Please provide the following information about the occupational information that is being taught in regular classes.

Grade Level and/or Class	No. of Students	Occupational Topics in Class	No. of Days Spent on Unit	Teaching Activity Used in Class*

*Place letter representing activity with number in parenthesis indicating the number of times it was used.

a. Teacher uses occupational films.

b. Teacher uses occupational tapes, and/or occupational videotapes.

c. Teacher involves students in making and/or using occupational films, tapes, and/or videotapes.

d. Teacher uses occupational speakers.

e. Teacher organizes and conducts occupational field trips.

f. Teacher involves students in planning and/or conducting occupational field trips.

g. Other activities (please explain).

Data Collection Form: Performance Objective #1 - e,f,g

Directions: Would the counselor please answer the following questions:

1. Do you provide students occupational information in groups? Yes___ No___

   If the answer is Yes, please complete the following questions:

   a. How many times have you used group techniques this year? _____

   b. What was the average number of students involved in each group session? _____

   c. Were the students in the elementary school ____ high school _____ both ____?

2. Do you provide students occupational information in individual interviews? Yes ___ No ___

   If the answer is Yes, please complete the following questions:

   a. About how many individual interviews do you conduct in a month? _____

   b. About what percent of the students interviewed in a month are provided occupational information? _____

   c. About what percent of these were in elementary school _____?high school ____?

3. Does the school provide a file of occupational information and materials? Yes _____ No _____

   If the answer is Yes, please complete the following questions:

   a. Occupational file is located in counselor's office_____library_____ both places_____.

   b. Occupational file has local occupational information. Yes___ No___

   c. Students can look at occupational information: only in place where it is located_____; can check it out and take it home_____; can use it only in class_____.

   d. How much money did the school spend on occupational information this year? _____

OBJECTIVE B - To broaden the occupational concept and awareness by incorporating occupational orientation into the school curriculum beginning at grade five.

PERFORMANCE OBJECTIVE #2

The students in the exemplary schools will increase their occupational concepts and awareness as indicated by:

a. displaying a statistically significant gain in the score earned on a pre and post test of knowledge of occupations.

b. their pre and post rankings of occupations on the basis of (1) importance to society, (2) earnings of occupations, and (3) the student's choice.

c. the number of occupations that a student is able to list at the beginning and at the end of the year.

d. a more appropriate occupational aspiration as judged by the counselor.

Data Collection Form: Performance Objective 2 - a

Name of School_____

This collection form will be an objective test provided by the State Department of Education. The information collected by use of the objective test will be as shown below.

Table_____ An analysis of the gains made by students on a pre and post test of occupations for Objective 2 a.

Area	Pre test			Post test			Difference		t	Level * **
	N	M	S.D.	N	M	S.D.	M	S.D.		

*Significant at .01 level of confidence

**Significant at .05 level of confidence

Data Collection Form: Performance Objective 2 - b

Directions: Given below is a list of twenty occupations. Please rank these occupations according to their importance to society. No. 1 would be most important, No. 2 would be next important, and so on until you rank each of the occupations.

_____Banker

_____Carpenter

_____Truck Driver

_____Welder

_____School Teacher

Data Collection Form: Performance Objective 2 - b_2

Directions: Given below is a list of twenty occupations. Please rank these occupations according to the amount of money you think each one makes. No. 1 would be the occupation that makes the most money, No. 2 would be the one that makes the next highest amount and so on until you rank each of the occupations in terms of earnings.

_____Banker

_____Carpenter

_____Truck Driver

_____Welder

_____School Teacher

Data Collection Form: Performance Objective 2 - b_3

Directions: Given below are a number of occupations. Look at these occupations and rank them in terms of which ones you would like to do. The one you would like to do most rank No. 1. The one you would next like to do rank No. 2, and so on until all have been ranked.

_____Banker

_____Carpenter

_____Truck Driver

Data Collection Form: For Objective 2 - c

Directions: We would like you to list the occupations that you know something about. Please list all the jobs that you have learned something about from your counselor, in classes, studying occupational material, watching films, or visiting the job, or in other ways.

JOB

Data Collection Form: For Objective 2 - d

Directions: Assume that you could choose any job you wanted to when you finished high school. Please list those jobs that you think you would like to have and could be successful in them.

Data Collection Form: For Objective 2 - d

Directions: The below named student has indicated the jobs he would like to get when he completes high school. Taking into consideration the student's attitude, abilities, and school achievement, please rate the appropriateness of the student's choice.

Name of Student_____

Job	Job choice very unrealistice	Not likely to succeed in job but may with extra effort	Good choice for success in job	Very appropriate job choice

OBJECTIVE C - To create a favorable attitude in marginal students, slow learners, and socio-economically disadvantaged students regarding value of education and its contribution to the world of work.

PERFORMANCE OBJECTIVE #3

The marginal students will display increased favorable attitudes toward school and improved self-concept toward the world of work as indicated by:

a. the pre and post test scores on the School Sentiment Index.

b. the pre and post test score on the Choosing a Job Inventory.

c. decreasing dropout rate of marginal students.

d. an improvement in school grades.

Criteria for Identifying Marginal Student

MARGINAL STUDENT

A. Disadvantaged		B. Slow Learners	
Student	Title I	80 or below IQ	Grade Average Below C

Data Collection Form: Performance Objective 3 - c

Name of School_____

Directions: The definition of a dropout is any student who leaves school prior to graduation and fails to re-enroll or transfer to another school. Please provide the following information on students that dropped out of your school.

	No. of students that dropped out of school during school year		No. of students that completed school year but failed to return in fall		Total No. of dropouts	
Grade	Boys	Girls	Boys	Girls	Boys	Girls

Data Collection Form: Performance Objective 3 - d

Name of School _____

Directions: Please identify the marginal student using the criteria given you.

Then provide the following information on the marginal students.

All Marginal Students in Grade	Grade Point Average for 1970-71 School Year	
	Mean	S.D.
5		
6		
7		
8		
9		
10		
11		

OBJECTIVE D - To bridge the gap between education and the world of work by relating classroom instruction to an immediate job through a general cooperative education program.

PERFORMANCE OBJECTIVE #4

By June 30, 1972, each of the eight schools will offer a program to bridge the gap between education and the world of work as indicated by:

a. The establishment of a general cooperative education program.

b. Enrollment in the general cooperative education program of all eleventh and twelfth grade students that express a desire for cooperative training.

c. Positive results from a feedback questionnaire from the students.

d. Positive results from a feedback questionnaire from the employees.

Data Collection Form: Performance Objective-4a,b

Name of School_____

Results of survey given to all tenth and eleventh grade students, May, 1971.

Desired General Cooperative Education Program	Number of Students Desiring Program
Meat Cutter	3
Carpentry	2

Results of survey showing the extent General Cooperative Education programs being offered - submitted May, 1972.

General Cooperative Education Program being offered by School	No. of Students Enrolled
Bookkeeping	10

Data Collection Form: Performance Objective - 4b

Directions: The school would like to develop a cooperative education program in which a student would go to school part-time and work part-time. We would like to determine your interest in such a program. If you would like to participate in this program, please list the type of jobs you would like to obtain training. Put your first, second and third choice.

Data Collection Form: Performance Objective - 4c,d

(Questionnaire not yet developed)

OBJECTIVE E - To provide intensive occupational guidance and counseling for all students during the last years of school, and to assist in the initial placement of all students upon leaving school.

PERFORMANCE OBJECTIVE #5

The students in the exemplary programs will receive intensive guidance and counseling services during the eleventh and twelfth grades as indicated by:

a. An occupational plan booklet completed by each student.

b. A cumulative record completed for each student.

c. Records of student visiting various places of employment and the employment office.

d. Monthly counselor and/or teacher interview reports.

e. Record of at least one placement referral.

f. Follow-up reports on job placement.

g. Proper course scheduling consistent with student's goals.

h. Results of a student questionnaire.

i. Available follow-up information on high school dropouts and graduates.

Data Collection Form: Performance Objective 5 - a,b,c,d,e,f

Name of School_____

Directions: Please list all your 11th and 12th grade students. After reviewing each student's file, please check if data is in file as stated and/or place a number where appropriate.

Student	Occupational plan booklet completed	Cumulative record completed & up to date	No. of employers visited	Has visited State Employment Office	No. of counselor interview reports in file	No. of teacher interview reports in file	No. of placement referral cards in file	No. of placement follow-up reports in file	

Data Collection Form: Performance Objective 5 - g,i

Name of School_____

Directions: We need the following information on your 12th grade students and students that graduated in May 1970.

I. All twelfth grade students

A. No. that took vocational education courses during the current fiscal year_____.

B. Of the students in No. A, how many plan no post high school education_____. How many plan post high school education other than college_____, and how many plan to go to college_____.

C. No. that took no vocational education courses during the current school year_____.

D. Of the students in No. C, how many plan no post high school education_____, how many plan post high school other than college_____, and how many plan to go to college_____.

II. Please provide following information on students that graduated in the spring of 1970.

A. No. that went to work, married, or into military service_____.

B. No. that pursued post high school training other than college_____.

C. No. that went to college_____.

D. No. that no data is available_____.

III. Please provide the following information on those students who went to work after graduating in May 1970.

No. of Students	Employment by Occupational Area
_____	Professional & Technical
_____	Management
_____	Clerical
_____	Sales Workers
_____	Craftsman
_____	Operations
_____	Service Workers
_____	Laborers
_____	Farmers, Farm Workers
_____	Non-Farm Agriculture
_____	No Data Available

Data Collection Form: Performance Objective 5 - h

This will be a questionnaire provided by the State Department of Education and administered by the Evaluation Agency.

OBJECTIVE F - To provide short intensive training for seniors who have not had previous vocational training.

PERFORMANCE OBJECTIVE #6

Senior students will respond positively to short intensive training courses or units as indicated by:

a. Number who complete the training.

b. Number who are placed in jobs for which they were trained.

c. A feedback questionnaire from students.

Data Collection Form: Performance Objective-6 a,b

Directions: Please provide the following information for all senior students that participated in the short intensive vocational training program.

Type of Training	No. who took training	The number placed on jobs in area of training

REPORTS FROM LOCAL SCHOOLS

ERIC Full Text Provided by ERIC

INTERIM REPORT

Project No. 0-361-0032
Contract No. OEC-0-70-5189(361)

Pilot Occupational Education Programs for Small Rural and Suburban Arkansas Schools in Grades Five Through Twelve

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

Mabel Jordan
School District #19
Box 158

May 31, 1971

4. SUMMARY OF THE REPORT

A. This report is for July 1, 1970 to June 30, 1971.

B. Goals and objectives of the project.

1. To initiate pilot occupational education programs for rural and small suburban Arkansas schools in grades five through twelve.

2. To broaden the occupational concept and awareness of youth by incorporating occupational orientation into the school curriculum beginning at grade five.

3. To create a favorable attitude in marginal students, slow learners, and socio-economically disadvantaged students regarding the value of education and its contribution to the world of work.

4. To bridge the gap between education and the world of work by relating classroom instruction to an immediate job through a general cooperative education program.

5. To provide intensive occupational guidance and counseling for all students during the last years of school and to assist in the initial placement of all students upon leaving school.

6. To provide short intensive training for seniors who have had no previous vocational training.

C. Procedures followed.

The objectives will be achieved by (1) the school district employing a coordinator of cooperative education and a trained-experienced teacher for orientation classes (2) personnel from the school will attend conferences offered by state in preparation for this program (3) the school personnel will attend an in-service training session for orientation and preparation to acquaint the entire staff with the vocational program.

D. Results; Accomplishments.

This program will serve many students each year: (1) in particular it will concentrate on service for ALL seniors,--providing an intensive study of initial job application and problems. (2) Provide intensive training in classroom and through Training Station Experience for all G.C.E. students. (3) Provide a planned orientation to the world of work beginning with grades five. (4) This program could serve as a model for other schools.

E. Evaluation: will be continuous--It includes pretesting, past testing (Purpose to tell us what we need to do--then past testing to help determine what has been done). The real evaluation and results can only be measured in terms of the Student - improvements in their lives - physically, emotionally, morally, spiritually - both in occupational and social activities.

F. Conclusions and Recommendations.

Reviewing all eight phases of our program, we find they have each at its particular time been fulfilled. (as noted on page 11 of original project)

All objectives were attempted, many accomplished, and still others are being observed to measure results. Many favorable comments have been made by students expressing their appreciation of the preparation they have experienced through the program.

Recommendations - That a continuous effort be made to broaden the general program. That inovations in methods of presenting occupations be studied, and records kept by each school. Also study-outlines should be made for the individual school.

That all students, grades five through ten, be involved in at least a short introduction to occupations.

That grades eleven and twelve be directly involved in an intensive-type work experience.

5. BODY OF THE REPORT:

A. Problem areas toward which the project was directed - Vocational Competence to Students graduating from G.H.S. We had a definite need for a planned orientation, guidance, training and placement service for ALL students at the proper time to meet their needs.

Former students stated a very definite need for more occupation information as to jobs available for a vocational program.

This district has a terrific drop-out rate - especially grades eight through ten.

We are limited in class offerings, equipment, personnel and materials to properly educate and train students to enter the World of Work.

B. Goals and objectives of the project.

To provide occupational orientation programs beginning in the elementary grades.

Objective: Students in the Gentry Elementary School will gain knowledge of skills needed in occupations that are relevant to the area through the orientation program provided by the Gentry Schools as shown by the Teachers Constructed Pre-Post Test, of skills needed for selected occupations.

To provide awareness of job opportunities in the Area.

Objective: Eleventh and twelfth year students who have participated in the Occupational Program will know the most frequently available job opportunities of the area as shown by a Pre-Post Check list, provided by the Counseling Department.

To create interest and favorable attitudes towards education as it relates to the world of work.

Objective: Students participating in the Vocational Guidance and planned vocational program will develop positive responses toward school and learning as measured by a pupil attitude inventory.

To provide intensive occupational guidance and counseling for all students finishing school, and to assist in initial placement of students.

Objective: All students participating in intensive guidance and counseling will have a complete record and be able to use information for making decisions both immediate and long range.

To provide training programs for students in his field of interest, so he may have an actual working experience.

Objective: To bridge the gap between school and the world of work. By evaluating interest and abilities the student can be placed on a job congruent with abilities expressed and that have been evaluated by previous records.

C. Description of the General Project design and Procedures followed:

This project is designed to serve students from grade five on through high school and at least to their initial employment.

The objectives of the project are being achieved by initiating a comprehensive occupational education program beginning with grade five this year. In grades five and six only an introduction type program is carried on. In grade six, we had small group discussions which proved very interesting and informative to the students. Grade seven had no direct occupational training this year, except fourteen boys who participated in twelve weeks Vocation Study, we will be working with them for a six week period next year through the social studies department.

Grades eight and nine were given or participated in one semester of orientation and have studied many occupations that they did not know existed.

Grade ten took exploratory type studies: Most boys took the fourteen areas of Farm Mechanics. Girls and boys took Family Living and Typewriting.

Grades eleven and twelve were offered General Cooperative Education. The Co-ordinator conducted a two-week intensive "World of Work" study with all seniors.

D. Results and accomplishments of the Project.

It would be very difficult to list or even to imagine the results or accomplishments of this project. The Gentry program has been geared to the individual student. Attention this year has been especially focused on grades eight and nine (drop-out age); and on eleven and twelve (decision and work experience age).

A great change in attitudes, outlook on life and goals has been realized by the G.C.E. students. Some statements will be attached to this report to prove the worth of the program to individuals who participated. (These statements were on the back of G.C.E. Sentiment Index. They were strictly voluntary.)

Teachers in the school worked together better than ever before to help students see themselves as they were, then to help them make changes they desired and saw a need for.

The program offered orientation, created interest, gave guidance, improved attitudes, and provided work training experience for many students who would never have been reached any other way.

Student Population:

grade	No. in class	
5	65	Classroom teacher
6	59	Group discussions with Vocational Counselor
7	65	(only 14 in Vocational study)
8	58	One semester Vocational Orientation
9	47	One semester Vocational Orientation
10	51	All participated in Exploratory Vocational classes
11	60	6 on-the-job-training - others in Vocational classes (30).
12	43	All - Intensive two week "World of Work" 30 students involved in Work Experience.

QUOTES FROM STUDENTS

In my opinion this course is great. Due to problems beyond my control, I had to drop-out of school. I am now about to graduate. My situation was such that I had to work to survive. When I dropped out of school my grades were low and I was terribly dissatisfied with life in general. I had to find work one way or another, every place I came to and applied for a job was the same thing, the manager would look over my application and see I hadn't finished high school and had no particular training. It was always the same answer, "Sorry, I can't use you."

I came back to school, got in the vocational program, and now 2 weeks before graduation, I couldn't be happier. I can't put into words what I feel toward the help I have received from this program. It has given me a chance to get back in the human race, I feel like a part of society again. My grades are much better and I plan to further my education.

My morals, and living standards are much higher now, thanks to this class. I have learned to meet the public and feel comfortable in the presence of strangers. This and many other things I have learned in this class. I now have the confidence to step ahead and reach for higher things in life.

I feel that what I become in life will be because of this class, that someone cared.

Richard

This course has helped me a lot. I've changed a lot since the first of the year. I have a different outlook on life, it has helped me to understand myself and what I want to be.

I think every school should have this course, it would help a lot of people.

Jim

Our class work made me see a little more clearly what kind of person I really am. We didn't spend much time on any one subject but we did get the basic information we need to analyze ourselves and know better what we want from life. We also learned how, when, and where we should apply for jobs, and many other things that will help us all in life.

Charlotte

This class has been very helpful to me. Our classroom work has been very educational and efficiently handled. Not only have we learned about different jobs and how to get along with people, but we have learned a lot about ourselves; that somehow, we just couldn't see before. This class has been the chief influence in my decision to study the technical phase of industrial Electronics.

Tom

(These are quotes from some of the personal notes received at the close of the '71 school year)

Mabel Jordan, Teacher-Coordinator

Instructional Staff: Co-ordinator, Vocational Counselor, High School Counselor, Elementary Counselor, Agriculture and Home Economics Instructors, all qualified in Vocation.

Methods, Materials, Instruments and Techniques used: All classes used: Overhead projectors, films, speakers and field trips. Our material was very limited: SRA Kit, World of Work Kit; Occupational Outlook Handbook, and any other books and material we could locate to help on a particular area.

All in-service meetings planned in original project were met.

Co-ordinator, Counselor, and Administration participated in all state meetings in connection with the project.

The school held two planning and evaluation meetings with State Department heads of Vocational Education this year.

Visiting teams from Oklahoma State Department of Education and University of Arkansas have conferred with Administration and Vocational teachers of local school.

E. (is attached)

F. Conclusions, implications, and recommendations for the future.

Working again by grade level:

Grades five-six: More can be done toward job awareness. This age group is eager to know what people do to earn a living.

Grades 7-8: Offer a rotating class in all Vocational areas (business, agri, Home Economics and Vocational Orientation to other fields of service.)

Grades 9-10: Semester Courses - Exploratory: 14 areas Farm Mechanics, Plant and Animal Science; Home Making I, Consumer Education, Adult Living; Typewriting I and General Business.

Grades 11-12: Provided counselling for all students, Provided Training Stations or Educational Training for all desiring the program. Two classes offered in Direct Vocational Training: Job-Training and Office Education.

We are very pleased with the progress made this year. This school district feels it fills a need that could not be met by regular classroom instruction in the usual manner.

We have a definite need for more training stations. There are very few students who would not participate in G.C.E. if we had places for them to work.

This is to certify that the vocational program evaluation has been conducted in consultation with the administrator and the local advisory committee.

5-30-71
(Date)

Lonnie R. Edwards
(Advisory Committee Chairman)

Mabel O. Jordan
(Vocational Instructor and Evaluator)

Jack J. Efurd
(Superintendent)

I N T E R I M R E P O R T

Project No. 0-361-0032
Contract No. OEC-0-70-5189 (361)

Pilot Occupational Education Programs for Small Rural and Suburban Arkansas Schools in Grades Five Through Twelve

Exemplary Project in Vocational Education
Conducted Under
Park D of Public Law 90-576

Bruce Bevens, Project Coordinator
Harrison Public School District
Harrison, Arkansas

June 7, 1971

TABLE OF CONTENTS

Lists of Tables and Extra Materials

A. Body of the Report

B. Appendix

S U M M A R Y O F T H E R E P O R T

(A) Time Period Covered by the Report

July 1, 1970--May 28, 1971.

(B) Goals and Objectives

This report discusses the main objectives of the program, which are as follows:

(1) To initiate pilot occupational education programs for rural and small suburban Arkansas schools in grades five through twelve.

(2) To broaden the occupational concept and awareness of youth by incorporating occupational orientation into the school curriculum beginning at grade five.

(3) To create a favorable attitude in marginal students, slow learners, and socio-economically disadvantaged students regarding the value of education and its contribution to the world of work.

(4) To bridge the gap between education and the world of work by relating classroom instruction to an immediate job through a general cooperative education program.

(5) To provide intensive occupational guidance and counseling for all students during the last years of school and to assist in the initial placement of all students upon leaving school.

(6) To provide short intensive training for seniors who have had no previous vocational training.

The report states that these objectives are aimed at intensifying and broading the vocational aspects of education in the entire curriculum of the Harrison Public School system.

(C) Procedures Followed

The report states that the Coordinator taught three classes of Occupational Information in the ninth grade, but had no general cooperative related class. The GCE students were taught through the other vocational departments, this was done to see if this type of instructional method would be beneficial or a deterant to the project.

The report discusses the procedures used by the Coordinator and the Vocational Counselor to ready the elementary schools for an occupation unit and the procedures they used to work with the special education students and potential drop outs at the Junior High School level. It discusses their use of work experience jobs, used with these particular students.

The testing by the Vocational Counselor was described, as well as, her counseling activities at the elementary, Junior High School, and High School levels.

The student population, in relation to marginal students, students taking vocational subjects, and drop outs, was recorded in this section.

The vocational departments and teachers were listed, along with the members of the Exemplary Project advisory committee.

In the procedures section of the report the methods, materials, instruments, and techniques used are discussed in detail. These areas were discussed concerning the High School, Junior High School, and elementary levels, giving a list of films, books, and workbooks used and their publishers, authors, and the places to obtain them.

(D) Results; Accomplishments

This phase of the report discusses the general results and accomplishments of the project, and tells how the project has been favorably received, althrough the public relations has not been what it should have been.

It was realized that the innovative method of teaching the General Cooperative students was not a wholesome or workable situation for the project in Harrison, Arkansas.

The success of the Occupational Information classes in the ninth grade was discussed, as well as, the use of work experience jobs to encourage the special education students and other potential drop outs to stay in school.

The intensive occupational guidance and counseling in the senior high school was described and its success was projected through this description.

(E) Evaluation

The evaluation was outlined and its creator was named, as well as, his assistant and the guidelines he used. The time the evaluation was given was stated, as well as, the objectives and procedures of the evaluation.

Dr. Dolph Camp is the project evaluator who put together the methods to be used, and he devised the instruments to carry out the methods.

The instruments were given in grades, 5, 7, 8, and 10, and to the general cooperative students in the 11th and 12th grades.

(F) Recommendations and Conclusions

The conclusions and recommendations were divided into five parts: (1) High School, (2) Junior High School, (3) Elementary School, (4) General Project, and (5) General Project Continued.

(1) High School

This section of part (f) discusses the fact that the Coordinator will have a cooperative related class during the 1971 - 1972 school year. The Coordinator will teach only two classes of Occupational Information in the Junior High School, and the Vocational Counselor will teach the third class.

Discussed is the fact that the GCE students will have the VICA club, and that the previous I.C.T. students will be absorbed into the GCE program.

(2) Junior High School

This section discusses the concentration to be made on the special education students and other potential drop outs in Junior High School.

(3) Elementary Schools

This section discusses the plans for the unit of occupations to be taught in the fifth and sixth grades beginning in the 1971 - 1972 school year and the anxiousness of the faculty and students to receive this unit of instruction.

(4) General Project

This section is a description of the overall reception and value of the project to the community and entire school system.

The lessening of the load of extra duties of the Coordinator and the Vocational Counselor, is discussed, as well as, the proposed benefits of this strategy.

(5) General Project Continued

The use of new materials, more field trips and guest speakers is discussed for next year and the fact that a book will be used by the Occupational Information classes. There was no book used this year in those classes.

INTERIM REPORT

Body of the Report

A. The Exemplary Project in the Harrison Public Schools was directed at these following problem areas:

1. A subsidiary problem area at which this project was aimed, was that of the high drop out rate at the Junior High School level, the lack of occupational and vocational instruction and information, and the lack of counseling at this level.

2. The main problem area at which this project was aimed was the lack of a sufficient vocational training and occupational orientation from grades 5 - 12.

Though there are several very good vocational programs (Industrial Arts, Agriculture, Home Economics, Business Education and Distributive Education), there were areas that were not completely covered, especially cooperatively. There needed to be a stronger bond between all of these vocational programs.

Also, in the past, there have been some attempts by individual teachers throughout the system to incorporate occupational orientation into their classes, but there is need here for a systematic and uniform method to be implemented in order to get the ultimate benefits.

These problem areas are in effect the complete goals of the General Cooperative Education Exemplary Project.

A study made by the Harrison Public School system during the 1969 - 1970 school year, disclosed that 4.2% of the eighth and ninth grade students of the 1968 - 1969 school year terminated their education with no plans and no job prospects.

During the 1969 - 1970 school year the Ohio Vocational Interest Survey was checked by 184 nineth grade students and

174 tenth grade students in the Harrison Public Schools. This test indicated that less than half of the 368 students' highest tested interest agreed with their stated first occupational choice. This indicated that these two classes have a poor conception of the skills, knowledge and training needed in the various vocations. This, therefore; indicated a need for a more intensive program of occupational information in the Junior High School and elementary schools.

Goals and Objectives of the Project Objective

Objectives

1. To initiate pilot occupational education programs for rural and small suburban Arkansas schools in grades five through twelve.

2. To broaden the occupational concept and awareness of youth by incorporating occupational orientation into the school curriculum beginning at grade five.

3. To create a favorable attitude in marginal students, slow learners, and socio-economically disadvantaged students regarding the value of education and its contribution to the world of work.

4. To bridge the gap between education and the world of work by relating classroom instruction to an immediate job through a general cooperative education program.

5. To provide intensive occupational guidance and counseling for all students during the last years of school and to assist in the initial placement of all students upon leaving school.

6. To provide short intensive training for seniors who have had no previous vocational training.

These objectives are all aimed at intensifying and broading the vocational aspects of education in the entire curriculum of the Harrison Public Schools.

The objectives and goals of this project cannot be expected to be accomplished in one school year, but will, hopefully, be accomplished or substanially incorporated into the curriculum at the end of a three year period, 1970 - 1973.

General Project Design

C. In establishing occupational education programs for grades five through twelve, this project has been designed for rural and small suburban school districts, especially those in depressed areas. More specifically, this project has been designed to meet the objectives listed in part (B) of this report.

Procedure

I. Staff

To accomplish the project design as stated in the preceding paragraph, the Harrison Public School system hired a General Cooperative Education Exemplary Coordinator and a Vocational Counselor.

During the 1970 - 1971 school year the Coordinator taught three classes of Occupational Information to ninth grade students. This class was a semester course and was taught two semesters, therefore; involving 184 ninth grade students.

The Coordinator started the General Cooperative Education program in grades eleven and twelve. There were nineteen cooperative students in this program, however; there was no related GCE class, as such. The students were oriented and taught through the other vocational programs (Industrial Arts, Agriculture, Home Economics, and Business Education).

The Counselor and Coordinator have both been working with the elementary schools, readying the fifth and sixth grade teachers to teach a unit[1] on occupational orientation beginning in the 1971 - 1972 school year.

The Vocational Counselor and Coordinator have, also, been working with the special education students and potential drop outs in Junior High School in an attempt to make them aware of the vocational scene today and aware of the importance of vocational training and education, in general. Also, they have placed several of these students in work experience situations in an attempt to motivate more of an interest in training and education.

The Vocational Counselor has been involved in extensive testing of the elementary and Junior High School students, using achievement tests and interest surveys.

In addition to doing her regular counseling activities, the Vocational Counselor has been counseling individual students, as well as, groups of students on occupations.

1. Working with this Exemplary Project staff is the following vocational staff:

(1) Vocational Agriculture teacher--
John Adams

(2) Vocational Business Education teacher--
Mrs. Robbie Grace

(3) Home Economics teacher--
Mrs. Everett Horton

(4) Vocational Industrial Arts teacher--
Jim Lee

(5) Distributive Education Coordinator--
Gerald Collard

An advisory committee, comprised of five men from various phases of the working community, works with the program. The following is a list of the advisory committee:

(1) Eliah Roomsburg--Twin Lakes Vocational School

(2) Cloyd Baltimore--Arkansas Power and Light Engineer

(3) Robert McCorkindale--City Attorney

(4) Waldo Fowler--Farmer and Soil Conservation Engineer

(5) Doug Hudson--Owner of Hudson's Grocery Store.

II. Student Populations

(1) Marginal Students

Grade 5----------40
Grade 6----------46
Grade 7----------34
Grade 8----------33
Grade 9----------14
Grade 10----------18
Grade 11----------15

(2) Vocational Students including the students in the Industrial Arts, Agriculture, Home Economics, Business Education, Distributive Education, Industrial Cooperative Training (I.C.T.), and General Cooperative Education (G.C.E.).

(a) Occupation Information Students-----184
(b) Seniors----------121
(c) Juniors----------130
(d) Sophmores----------124
(e) Freshmen----------127

(3) Drop Outs

Grade 5----------0
Grade 6----------0
Grade 7----------0
Grade 8----------3
Grade 9----------16
Grade 10----------10
Grade 11----------7
Grade 12----------4

III. Methods and Materials and Instruments and Techniques

High School Level

As described in the staff section of Procedures, in part (c) of the body of the report, the General Cooperative

Training was handled through the various vocational departments, as there was no General Cooperative related class. The Coordinator met with the various cooperative students, individually, during specified times during the week.

These cooperative students were given related instructions during their regular vocational classes, concerning their job duties, job responsibilities and regular vocational orientation.

The High School Counselor gave a group intensive training to ten senior students on applying for a job, and he used handout sheets on "Do's[2] and Don't's[3] of Applying for a Job" and on "How to Start a New Job the Right Way".

Almost every course, including non-vocational courses, at the High School level includes some form of vocational and occupational orientation.

Junior High Level

As stated before, three classes of Occupational Information were taught to the ninth grade students. There were actually six individual classes, as each course was only one semester, therefore; more ninth grade students were able to take the course. No specific book was used, rather collective information was complied from the following books and workbooks:

Books:

(1) Keys to Vocational Decisions, edited by Walter M. Lifton, Science Research Associates, Chicogo, Illinois, 1964.

(2) Points for Decisions, T. L. Engle and Harold J. Mahoney, Harcourt, Brace, and World, Inc., New York, New York, 1961.

Workbooks:

(1) Life and You, Work and You, Success and You, and The Future and You, Palmer Publications, Easton, Pennsylvania, 1970.

(2) Suggested Teaching--Learning Approaches for Career Development in the Curriculum, D. E. Educators and Counselors in a Pilot Training Project, University of Minnesota, Summer, 1968.

(3) Teachers Guide to Group Vocational Guidance, Bruce Shertzer and Richard T. Knowles, Bellman Publishing Company, Cambridge, Massachuset, 1964.

(4) Vocational Orientation Teachers Guide, Vocational Teachers and Counselors, Arkansas Department of Education, Vocational-Technical Division, 1970.

The occupational information used for the class came from various companies, which offered free materials. These materials were obtained, both before the classes started, and after they began. The students were required to write for information to add to the information files. In addition to this information, briefs were purchased from the Career Development service of Palmer Publications.

Occupational Information was the main objective of this course, but attitudes and self-evaluation were as important an objective as the first.

The students in the Occupational Information classes wrote several essays concerning their attitudes, as well as, taking various self-evaluating surveys. Two of these surveys were "Rate Your Needs" and "Rate the Satisfactions You Need". Examples of the handouts they received on attitudes were the ones entitled "Dear Kid"[4] and "How to be Liked"[5], from the Vocational Orientation Teachers Guide.

Films[6] were used extensively in the Occupational Information classes.

In the Occupational Information classes the students had to make reports on various occupational interests and they had to interview people connected with these occupations.

These students were involved in the occupations in the community in other ways. They had to interview working women and find the reasons for them working and find their

opinion of women working. They, also, had to interview various other workers and find the educational requirements and training required for diverse jobs in the community.

The Special Education students in the seventh and eight grades were counseled, individually and in groups, by the Counselor and Coordinator, concerning occupations and attitudes. These students, also, have guest speakers, who speak to them concerning occupations.

Elementary School Level

The Counselor and Coordinator developed an unit[1] on vocational orientation for the fifth and sixth grade teachers, as a helpful guide in teaching an unit of vocational orientation, beginning the school year 1971 - 1972. Orientation had already begun in several of the elementary school classes, they used bullentin boards and had the students make occupational folders. This orientation had started as early as the third grade in some cases.

The Counselor has worked closely with the elementary teachers and has been testing the elementary students, using achievement tests and intelligence tests.

Results and Accomplishments

D., 1. The project has had promising results, in that the school, the students, and the community are becoming more aware of the need for vocational training at an early age.

The project is opening new doors at all levels of the school curriculum that have been closed, in the past.

2. The teachers in the elementary schools are anxious to incorporate the unit of occupations into their curriculum. The teachers of the Title I classes and the special education classes in the elementary schools are especially anxious to get their students involved in this phase of the project.

3. The cooperative phase of the project has started slowly, as it was done differently from the other cooperative classes in the exemplary project. We were experimenting to see if this new way would be workable and useable.

After a year of using this method, we were able to realize there was not close enough contact between the Coordinator and the cooperative students, nor between the Coordinator and the employees, because the Coordinator was too involved at the Junior High School and the elementary schools. By not having a class at the high school level, the Coordinator was not in close enough contact with the high school instructors, nor the rest of the high school student body. This cost precious public relations which will have to be intensified during the summer months and during the 1971 - 1972 school year.

Another method will be implemented into the project curriculum for the high school level for the 1971 - 1972 school year, which will be described in part (f) of this report.

4. The Junior High Occupational Information phase of the project had very good results. The ninth grade students involved in this class were very responsive. They became more familiar with the community and its job opportunities. The students, also, gained a new insight to the direction they were going, and many of them began to realize the importance of planning for their future occupations.

Many of the students attitudes toward work and life in general were changed, because of their newly gained insight into their ownselves, as well as, into the world of work.

5. By finding work experience jobs for many of the special education students and potential dropouts at the Junior High School level, the Coordinator and Counselor were able to reach many

of these students who would have, otherwise, lost complete interest in school and it's value.

These results were worth much in realizing the benefits and future value of this exemplary project.

Evaluation of the Project

E. The evaluation of this project was conducted during the month of May in the Harrison Public Schools. The methods of this evaluation were the effort of the project evaluator, Dr. Dolph Camp, who was assisted by Dr. Dean Andrews and the Arkansas State Department of Vocational Education. They, also, used the guideline in "Preparing Evaluation Reports: A Guide for Authors."

The evaluation [illegible] six procedure objectives, which covered the six main objectives of the Exemplary Project.

The evaluation covering this school year of 1970 - 1971 was conducted in grades five through twelve. There were seven instruments used in this evaluation from which results were derived. They are as follows:

I. Grade 5

1. Intermediate School Sentiment Index,
2. Choosing a Job Inventory,
3. The ranking of twenty occupations according to importance.

II. Grade 7

1. Secondary School Sentiment Index,
2. Choosing a Job Inventory,
3. The listing of as many occupations as possible in 40 minutes.
4. The listing of three occupations that the students would like to do upon the completion of high school.

III. Grade 8

1. The ranking of twenty occupations according to importance.

IV. Grade 10

1. Secondary School Sentiment Index,
2. Choosing a Job Inventory,
3. The listing of as many occupations as possible in 40 minutes.

V. Grades 11 and 12--GCE Students

1. GCE School Sentiment Index.

The results of this evaluation can be obtained through the Arkansas State Department of Vocational Education.

Conclusions, Implications, and Recommendations for the Future

F. I. High School

As stated in the (d) part of this report the cooperative phase of the project was limited in it's productivity, therefore; another method will be employed during the 1971 - 1972 school year. The Coordinator will have a related class with the GCE students, which will enhance the unification and stablization of this phase of the project. The Coordinator will teach two occupational classes instead of three, this will give him more time to coordinate. The third occupational class will be taught by the Vocational Counselor.

There was no club with the cooperative students this year, however; next year the G.C.E. students will take over the VICA club which is already in existence in the high school. This club will be for the I.C.T. students. The I.C.T. students will be absorbed by the GCE program for the school year 1971 - 1972.

II. Junior High School

There will be more involvement with the special education students and potential drop outs at the Junior High School level. Hopefully, this will decrease the drop out rate at this level even more.

There will be more involvement with the Occupational Information students, which will enhance the project and propagate the interest and knowledge in the area of occupations.

III. Elementary Schools

The elementary schools will start the units of occupations in the fifth and sixth grades. Both the faculty and students are already aware of and anxious for this new unit of the curriculum.

There is an increasing interest for this unit to be utilized in the lower grades. With the attitudes being quite optimistic, this unit will be implemented by many of the lower grade teachers.

IV. General Project

All in all, this project has been quite well received even though there hasn't been as much public relations utilized as the Coordinator and Vocational Counselor felt should be. Much more public relations will be formulated and utilized during the summer months, as well as, during the school year of 1971 - 1972.

The Coordinator and Vocational Counselor feel that with some of the extra load lessened, such as elementary testing by the Vocational Counselor and the Coordinator having less Occupational Information classes, and by adding the General Cooperative related class, the program will become

the success in the next year that it is deemed that it should be.

As stated before, with more public relations, a more organized situation, and with only those duties as prescribed by the project guidelines, the project Coordinator and Vocational Counselor will be able to boast of a program that is only success oriented.

V. General Project Continued

The project will capitalize on and use more materials, field trips and guest speakers in all of it's many phases.

The Occupational Information classes will be using a new book during the 1971 - 1972 school year called, Successful in the World of Work, published by McKnight and McKnight. This book will help fill in some of the attitudinal and informational gaps omitted by the regular classroom procedures used, when no book was used.

APPENDIX

ELEMENTARY GUIDE FOR VOCATIONAL ORIENTATION

GRADE 6

HARRISON PUBLIC SCHOOLS

1970-71

Bruce Bevens, Coordinator of Exemplary Program

Glenna Newman, Counselor of Exemplary Program

INTRODUCTION

This is merely a suggested guide for vocational orientation applicable to the sixth grade.

Throughout the years we, as educators, have deemphazised vocational training and skilled occupations. We are now trying to become more realistic in our attitudes about the world of work. Within our society there is a place for every working man. We must make it our job to enable each student to learn about various jobs, in order for him to make a wise decision as to his life's work.

This end can be achieved by various methods. One of these methods would be a separate unit on the world of work. Another method would be the coordination of economics and/or social studies and occupations. A third method would be the depiction of related occupations in the various subjects taught. One method might work better for one teacher or situation, whereas another might be better for another.

OBJECTIVES OF SIX WEEKS UNIT OF VOCATIONAL ORIENTATION

I. Develop a positive concept of self.

   A. Recognize and accept limitations.

   B. Grow in ability to understand self.

II. Create vocational interests at an early age.

III. Develop ability to make wise decisions and choices.

IV. Develop a positive attitude toward work and preparation for work.

V. Learn about job opportunities in community and nation.

VI. Provide many opportunities to express interests, exercise talents.

VII. Explore areas in which to develop new interests and talents.

VIII. Learn to value the dignity and importance of all types of work and skills.

CONTENTS

OCCUPATIONAL BOOKS BY INDUSTRIAL CLASSIFICATION

The following list contains only a few of the many books that may be used to enrich your classroom insturction in vocational orientation. The titles are listed alphabetically under each industry.

AGRICULTURE

Green, Carla, I Want To Be a Cowboy.

_____. I Want To Be a Dairy Farmer.

Hayes, Will, Biggest Pig.

Lenski, Lois, Corn Farm Boy.

_____. Little Farm.

MacMann, Elaine. Risky Business.

Martini, Teri. True Book of Cowboys.

Sootin, Baura. Let's To to a Farm.

COMMUNICATION

Buchheimer, Naomi. Let's Go to a Television Station.

_____. Let's Go to the Telephone Company.

Miner, Opal, and Sevrey, Irene. True Book of Communication.

CONSTRUCTION

Bate, Norman. Who Built the Bridge?

Burton, Virginia Lee. Mike Mulligan and His Steam Shovel.

Gringhuis, Dick (Richard H.). Big Mac.

Hurd, Edith Thacher. Benny the Bull-dozer.

Liang, Yen. The Skyscraper.

Urell, Catherine, and Chatfield, Jennifer. Big City Homes.

FINANCE, INSURANCE, REAL ESTATE

Elkin, Benjamin. The True Book of Money.

Rees, Elinor. At the Bank.

Sootin, Laura. Let's Go to a Bank.

FISHERIES

Hammond, Diana. Let's Go to a Harbor.

Greene, Carla. I Want To Be a Fisherman.

Schlein, Miriam. A Fisherman's Day.

FORESTRY

Brown, William L. and Rosalie M. The Forest Firemen.

_____. Whistle Punk.

Dobrin, Norma. About Foresters.

Hayes, Will. Biggest Pine Tree.

GOVERNMENT

Buchheimer, Naomi. Let's Go to a Firehouse.

_____. Let's Go to the United Nations Headquarters.

Colonius, Lillian, and Schroeder, G. W. At the Post Office.

Dillon, Ina K. Policemen.

_____ _____. I Want To Be a Space Pilot.

Lenski, Lois. Little Fire Engine.

Miner, Opal, and Sevrey, Irene. The True Book of Our Post Office and Its Helpers.

_____. The True Book of Policemen and Firemen.

MANUFACTURING

Allee, Vova Elwell. About the Vegetables on Your Plate.

Butler, Roger. Let's Go to an Automobile Factory.

Nighbert, Esther. The True Book of Cloth.

MINING

Greene, Carla. I Want To Be a Coal Miner.

SERVICES

Bemelmans, Ledwig. Madeline and the Gypies.

Berger, Knute, and others. A Visit to the Doctor.

Chase, Francine. A Visit to the Hospital.

_____. I Want To Be a Doctor.

_____. I Want To Be a Nurse.

_____. I Want To Be a Scientist.

_____. I Want To Be a Teacher.

Hammond, Diana. Let's Go to a Hospital.

Harmer, Mabel. The True Book of the Circus.

_____. Dr. Dick.

TRANSPORTATION

Colonius, Lillian, and Schroeder, G. W. At the Airport.

_____. I Want To Be a Pilot.

Lenski, Lois. Little Airplane.

Posell, Elsa Z. The True Book of Transportation.

_____. Giant Nursery Book of Things.

WHOLESALE AND RETAIL TRADE

Beim, Jerrold. Country Garage.

GENERAL

Lenski, Lois. We Live in the City.

_____. When I Grow Up.

AGRICULTURE*****LATER ELEMENTARY

Brewster, Benjamin. First Book of Cowboys.

_____. Plants That Feed Us.

Lenski, Lois. Corn-Farm Boy.

_____. Cotton in My Sack.

Selsam, Millicent Ellis. Plants We Eat.

Stefferud, Alfred. The Wonders of Seeds.

COMMUNICATION

Hogben, Lancelot Thomas. Wonderful World of Communication.

Simpson, Willma Willis. About News and How It Travels.

CONSTRUCTION

Bothwell, Jean. First Book of Roads.

Colby, Carroll Burleigh. Earthmovers.

Elting, Mary. Machines at Work.

Peet, Creighton. First Book of Bridges.

Zaffa, George J. Big Book of Real Building and Wrecking Machines.

FISHERIES

Freuchen, Peter. Whaling Boy.

Jackson, Mary Coleman. Climb to the Crow's Nest.

FORESTRY

Buehr, Walter. Timber: Farming Our Forests.

Coombs, Charles Ira. High Timber: The Story of American Forestry.

GOVERNMENT

Bergaust, Erik. First Men into Space.

_____. F. B. I.

Coy, Harold. First Book of Congress.

Elting, Mary. First Book of Firemen.

Floherty, John Joseph. Our F. B. I.: An Inside Story.

Schneider, Herman. Everyday Weather and How It Works.

MANUFACTURING

Foster, Joanna. Pages, Pictures and Print.

The Story of Aluminum. Prepared by Kaiser Aluminum and Chemical Corp.

Wormser, Sophie. About Silkworms and Silk.

MINING

Lenski, Lois. Camp Fire Girl.

Markun, Patricia Maloney. First Book of Mining.

SERVICES

Brewster, Benjamin. First Book of Baseball.

Commins, Dorothy Berliner. All About the Symphony Orchestra and What It Plays.

Gough, Catherine. Boyhoods of Great Composers.

Graham, Alberta Powell. Clara Barton, Red Cross Pioneer.

_____. Great Men of Medicine.

Pratt, Fletcher. All About Famous Inventors and Their Inventions.

TRANSPORTATION

Bendick, Jeanne. First Book of Airplanes.

_____. Trucks and Trucking.

Greene, Carla. A Trip on a Jet.

Hamilton, Russell. First Book of Trains.

SIX WEEKS UNIT

1st Week.....Health and Welfare Unit

2nd Week.....Farming, Ranching and Outdoor

3rd Week.....Driving Occupations

4th Week.....Business Occupations

5th Week.....Service Occupations

6th Week.....Evaluation

The ideas the students need to learn about each occupation studied:

1. Education and/or training required
2. Dress expected
3. Duties
4. Wages, salaries or fees
5. Attitudes
6. Future expectation

PROCEDURES AND ACTIVITIES

1. Students can interview parents about work.
2. Class can discuss books and relate occupations.
3. Students can write paper about what they want to be.
4. Cut out pictures from magazines depicting various jobs.
5. Make scrapbook depicting jobs in catagories.
6. Have students collect newspaper want ads on various occupations.
7. Have student collect various newspaper want ads on one specific occupation from different newspapers and compare the opportunities in different locales.
8. Have students depict, through role playing, different occupations.
9. Have students depict through role playing a job interview.
10. Make bulletin board on different occupations.
11. Make bulletin board on the various occupations that come under the specific occupational area being studied.
12. Have students find one occupation that is now or becoming obsolete and the reason why this has happened or is happening.

13. The class can survey sister's and mother's occupations. Discuss meaning of survey finding in comparison with the history of women in the world of work.

14. Discuss the occupations involved in the building of a school building.

15. Take students on a tour of some business or industry and have them describe the different occupations being utilized.

16. Have students interview a parent, grandparent or relative about what effect the Great Depression had on occupations and unemployment.

17. Have speakers come in and talk about their occupations to the class.

18. Have students identify and discuss jobs that require mobility. Discuss job transfers.

19. Have students interview parent to see how many times he has changed jobs in his lifetime.

20. Have class discuss what they feel is the difference between work and career.

21. Role Playing: Have students place themselves in an occupation or job setting and relate to the group what work means to them. (e.g. doctor, teacher, policeman, scientist)

22. Have students discuss their own attitude toward women working.

23. Ask those who have working mothers to raise their hands. Have these students interview their mothers to determine why they are working. Should women plan and prepare for a career.

24. Use occupation terms for spelling and definitions.

25. Use occupational briefs to show the different qualifications for jobs.

26. Let students write for free information on different occupations.

27. Let the students choose several occupations and draw themselves in each setting.

A SUGGESTED WEEKS PLAN

FIRST WEEK

Health and Welfare Occupations

OBJECTIVES:

Create an interest in occupations.

Develop ability to locate material about occupations and distinguish between fact and fiction.

PROCEDURES:

Introduce unit and discuss various parental occupations.

Students interview parents about work.

Discuss books and related occupations.

Role playing--including making uniforms, etc.

Papers on what I want to be.

Art--work related to materials studied.

Free reading on identifying jobs.

Oral and written reports on books and related jobs.

Cut out pictures in magazines depicting various jobs.

MATERIALS:

Library books

Students themselves

Community jobs in this area

EVALUATION:

Plan a test on the general information taught.

HEALTH AND WELFARE OCCUPATIONS

DAILY PLAN

MONDAY

DATE:

OBJECTIVES

Introduce unit and create an interest in occupations.

Distinguish the occupations related to Health and Welfare Occupations.

PROCEDURES

Oral-parents jobs and what students know about the world of work.

Write paper on what they want to be.

Art work related.

Check of library books.

MATERIALS

Library books.

EVALUATION

RESOURCES

Guess Speakers (all areas of work)

Library books

Field trips

Films

Magazines

Boys Life

Children's Digest

Young Miss

Highlights

Tapes and Recordings

"Our World of Work" S.R.A.

FILMS

All of the films listed below are available from the Arkansas Department of Education Film Library, Little Rock, Arkansas, 72201.

1. Our Shrinking World (d-j-s) 10 minutes (#1068)
2. Shy Guy (d-j-s-a) 16 minutes (#107)
3. Your Thrift Habit (e-j-a) 10 minutes (#464)
4. Getting the News (e-j) Color (#6115)
5. Money In the Bank--And Out (p-e) 15 minutes Color (#6144)
6. High School: Your Challenge 16 minutes (#5375)
7. How to Succeed in School 10 minutes (#1393)
8. Making the Most of School (e-j-a) 10 minutes (#455)
9. Don't Get Angry (e) 12 minutes (#5433)
10. Are You a Good Citizen (e-j-s) (#1044)

Some of the following occupations may be used for study:

HEALTH AND WELFARE OCCUPATIONS

ANTHROPOLOGIST

ARCHAEOLOGIST

ATHLETIC COACH

AUDIOLOGIST

BACTERIOLOGIST

BANKER

BIOLOGIST

CHIROPRACTOR

CLERGYMAN

COUNSELOR

COUNTY EXTENSION WORKER

CURRICULUM MEDIA ANALYST

DENTAL HYGIENIST

DENTAL TECHNICIAN

DENTIST

DENTIST'S ASSISTANT

DETECTIVE

DIETICIAN

ECONOMIST

ENTOMOLOGIST

F. B. I. AGENT

FIREMAN

FOREIGN SERVICE WORKER

FUNERAL DIRECTOR

GEOGRAPHER

HOME ECONOMIST

HOSPITAL ADMINISTRATOR

JUDGE

LAWYER

LIBRARIAN

MEDICAL RECORDS LIBRARIAN

MEDICAL X-RAY TECHNICIAN

MEDICAL TECHNICIAN

NURSE

OCCUPATIONAL THERAPIST

OPTOMETRIST

ORDERLY--NURSE AIDE

PERSONNEL INTERVIEWER

PHARMACIST

PHYSICAL THERAPIST

PHYSICIAN

POLICE OFFICER

PROBATION AND PAROLE OFFICER

PSYCIATRIST

PSYCHOLOGIST

PSYCHOMETRIST

RECREATION WORKER

RESEARCH LIBRARIAN

SAVINGS AND LOAN OFFICER

SCHOOL ADMINISTRATOR

SOCIAL WORKER

SOCIOLOGIST

SPEECH AND HEARING THERAPIST

TEACHER

TELEVISION TEACHER

URBAN PLANNER

VETERINARIAN

SERVICE OCCUPATIONS

ARMED FORCES FOR WOMEN

BAKER

BARBER

BEAUTICIAN

CHEF

CLERGYMAN

COMPANION

CURATOR

CUSTODIAN

DETECTIVE

DIETICIAN

DOMESTIC SERVICE WORKER

DRESSMAKER

DRIVER

FIREMAN

FOREIGN SERVICE WORKER

FUNERAL DIRECTOR

HOTEL-MOTEL MANAGER

HOUSEKEEPER

INSURANCE AGENT

INTERPRETER-LINGUIST

MAIL CARRIER

MAINTENANCE MAN

MEAT CUTTER

MERCHANT SEAMAN

MODEL

OCCUPATIONAL THERAPIST

ORDERLY-NURSE AIDE

PIANO TECHNICIAN (TUNER)

POLICE OFFICER

PUBLIC RELATIONS WORKER

RADIO AND T.V. REPAIRMAN

RADIO OPERATOR

RECEPTIONIST

ROOM CLERK

ROUTEMAN

SALES CLERK

SERVICE STATION ATTENDANT

SHIP PILOT

SHOW REPAIRMAN

STEWARD-STEWARDESS

TAILOR

TELEPHONE OPERATOR

TOLL COLLECTOR

TRAVEL AGENT

UPHOLSTERER

WAITER-WAITRESS

WAREHOUSEMAN

WOMEN IN THE ARMED FORCES

BUSINESS OCCUPATIONS

BUSINESS CONTACT

ADVERTISING MAN

ADVERTISING MANAGER

APPRAISER

ARCHITECT

AUCTIONEER

AUTOMOBILE SALESMAN

BANK CLERK

BANKER

BUILDING CONSTRUCTION TECHNICIAN

BUYER

CASHIER

CLAIMS ADJUSTER

COLLECTOR

CONTRACTOR

CREDIT MANAGER

CURATOR

DEMONSTRATOR

FLORIST

HOSPITAL ADMINISTRATOR

HOTEL--MOTEL MANAGER

INSURANCE AGENT

INSURANCE INVESTIGATOR

LAWYER

MARKET RESEARCH ANALYST

OCCUPATIONAL THERAPIST

PERSONNEL INTERVIEWER

PUBLIC RELATIONS WORKER

PURCHASING AGENT

RADIO ANNOUNCER

RECEPTIONIST

ROOM CLERK

ROUTEMAN

SALES CLERK

SALESMAN

SAVINGS AND LOAN OFFICER

SCHOOL ADMINISTRATOR

SCHOOL BUSINESS ADMINISTRATOR

SECRETARY

TICKET AGENT

TOLL COLLECTOR

TRAFFIC MANAGER

TRAVEL AGENT

FARMING, RANCHING AND OUTDOOR

AGRICULTURAL TECHNICIAN

AGRONOMIST

ARCHAEOLOGIST

ATHLETE, PROFESSIONAL

BOTANIST

DAIRYMAN

DIVER

ENTOMOLOGIST

FARMER

FISH AND GAME WARDEN

FISHERMAN

FLORIEST

FOREST RANGER

FORESTER AIDE

FRUIT GROWER

FUR FARMER

GAMEKEEPER

GEOLOGIST

GREENSKEEPER

HORTICULTURIST

HUNTING AND FISHING GUIDE

LANDSCAPE GARDENER

LINEMAN

NURSERYMAN

ORCHARD WORKER

POULTRY FARMER

RANCHER

RECREATION WORKER

ROOFER

SURVEYOR

SURVEYOR HELPER

TREE PRUNER

ZOOLOGIST

DRIVING OCCUPATIONS

TRAFFIC MANAGER

BUS DRIVER

LOCOMOTIVE ENGINEER

ROUTE MAN

TRUCK DRIVER

TAXI DRIVER

FARM MACHINE OPERATOR

CONSTRUCTION MACHINE OPERATOR

MECHANIC

DRIVING INSTRUCTOR

ENGINEER

SHIP PILOT

BUSINESS OCCUPATIONS

BUSINESS CLERICAL

ACCOUNTANT

BANK CLERK

BILLING MACHINE OPERATOR

BOOKKEEPER

CASHIER

CHECKER

COURT REPORTER

DATA PROCESSING PROGRAMMER

DATA PROCESSING SPECIALIST

DENTIST'S ASSISTANT

FILE CLERK

INTERNAL AUDITOR

KEY PUNCH OPERATOR

LEGAL SECRETARY

MAIL CARRIER

OFFICE CLERK

OFFICE MACHINE OPERATOR

PROOFREADER

RAILROAD CLERK

RECEPTIONIST

ROOM CLERK

SECRETARY

SECRETARY, LEGAL

SHIPPING CLERK

STATISTICAL CLERK

STENOGRAPHER

STOCK CLERK

TABULATING MACHINE OPERATOR

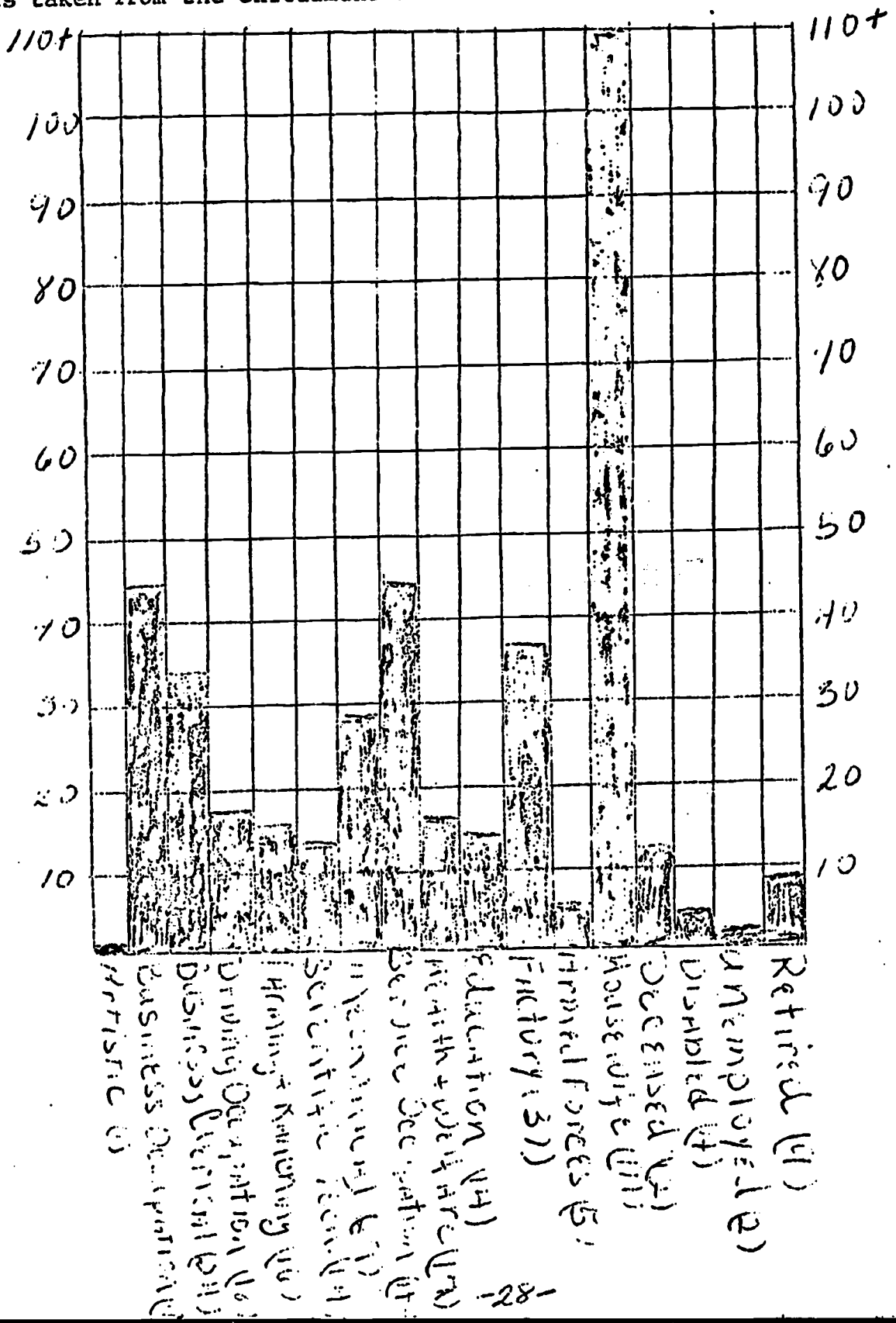
TELETYPE OPERATOR

TICKET AGENT

TIMEKEEPER

TYPIST

This chart shows the types and numbers of occupations held by 1970-71 sixth grade student's parents, this information was taken from the enrollment cards.



DISTRIBUTION OF CALIFORNIA MENTAL MATURITY I. Q. SCORES

SPRING 1971

HARRISON PUBLIC SCHOOLS

6th GRADE

SCORE INTERVAL	FREQUENCY	CUMMULATIVE FREQUENCY
140 and over	0	230
130-139	7	230
120-129	28	223
110-119	67	195
100-109	49	128
90-99	34	79
80-89	26	45
70-79	15	19
60-69	4	4
Below 60	0	0

SRA MATH ACHIEVEMENT

6th GRADE

FALL 1970

SCORE INTERVAL	FREQUENCY	CUMULATIVE FREQUENCY
9-5	1	201
9-3	2	200
9-1	2	198
8-8	1	196
8-6	7	195
8-3	2	188
8-1	5	186
7-8	4	181
7-6	6	177
7-4	5	171
7-2	7	166
6-9	9	159
6-7	12	150
6-5	8	138
6-4	5	130
6-3	11	125
6-1	9	114

SCORE INTERVAL	FREQUENCY	CUMULATIVE FREQUENCY
5-9	9	105
5-7	9	96
5-5	10	87
5-3	14	77
5-1	8	63
4-8	13	55
4-6	8	42
4-5	4	34
4-3	3	30
4-1	10	27
3-8	8	17
3-6	3	9
3-4	2	6
3-3	3	4
3-2	1	1

SRA READING ACHIEVEMENT

6th GRADE

FALL 1970

SCORE INTERVAL	FREQUENCY	CUMULATIVE FREQUENCY
11-1	4	202
10-8	1	198
10-1	6	197
9-7	5	191
9-3	5	186
8-9	7	180
8-6	8	173
8-3	7	165
8-1	14	158
7-7	4	144
7-5	8	140
7-3	4	132
7-1	8	128
6-8	9	120
6-6	10	111
6-4	4	101
6-2	6	97

SCORE INTERVAL	FREQUENCY	CUMULATIVE FREQUENCY
6-1	8	91
5-8	6	83
5-6	6	77
5-4	7	71
5-2	7	64
4-9	5	57
4-8	5	52
4-6	5	47
4-4	8	42
4-2	2	34
3-9	10	32
3-7	9	22
3-5	7	13
3-2	5	6
3-1	1	1

OCCUPATIONAL TERMS

1. VOCATION
2. CAREER
3. PERSONALITY
4. INTERVIEW (JOB)
5. TEAMWORK
6. INTERESTS
7. WANT ADS
8. EMPLOYMENT AGENCY
9. PROFESSIONAL WORKER
10. MANAGER
11. TECHNICAL
12. SKILLED WORKER
13. UNSKILLED WORKER
14. MECHANICAL
15. FARMING
16. COLLEGE
17. VOCATIONAL TECHNICAL SCHOOLS
18. JOB APPLICATION
19. MANUFACTURER
20. SOCIAL SECURITY
21. BUSINESS
22. AGRICULTURE
23. HEALTH OCCUPATIONS
24. SERVICE OCCUPATIONS
25. CO-WORKERS
26. CLERICAL OCCUPATIONS
27. ARTISTIC
28. ADVERTISEMENT
29. WHITE-COLLAR WORKER
30. BLUE-COLLAR WORKER
31. STATUS
32. ATITUDE
33. ABILITY
34. INFORMATION
35. ARMED SERVICES
36. GOVERNMENT OCCUPATIONS
37. SALES OCCUPATIONS
38. EDUCATION
39. EDUCATION
40. PROMOTION
41. SALARY
42. UNION
43. COUNSELOR

44. MANUAL OCCUPATIONS

45. PART-TIME JOB

46. TALENTS

47. WAGES

48. ON-THE-JOB TRAINING

49. OUTDOOR OCCUPATIONS

50. HOBBIES

51. GOALS

52. GRADES

53. DROP-OUTS

54. INTELLIGENCE

CONCLUSION

This proposed six weeks unit has been broken down into occupational areas that fit this community. These occupational areas were formulated after a lengthy research of the enrollment materials of all the elementary schools concerning parental occupations. This was done because the students are involved more directly with these occupations whether they realize it or not and because there is a considerable number of these students who will follow in their parents occupational footsteps.

However, there are also students who will aspire for occupations other than those included in this unit, thus those occupational areas should not be overlooked.

There are other materials not included in this unit that may be obtained through a coordinated effort of the elementary teachers, principals, and the Exemplary Project staff and research team.

We, the members of the Exemplary Project, are available whenever necessary for assistance in obtaining additional materials and for any other assistantship.

DOS FOR JOB SEEKERS

DO Stress your qualifications for the job opening.

DO Recount experience you have had which would fit you for the job.

DO TAlk and think, so far as possible, about the future rather than the past.

DO Indicate where possible, your stability, attendance record and good safety experience.

DO Remember that older employees are capable, dependable, trainable, careful, and steady.

DO Try to learn ahead of time about the company and its products.

DO Assume an air of confidence.

DO Approach the employer with respectful dignity.

DO Try to be optimistic in your attitude.

DO Maintain your poise and self-control.

DO Try to overcome nervousness or shortness of breath. (It helps to take a deep breath.)

DO Hold yourself erect.

DO Apply for a specific job or jobs.

DO Answer questions honestly and with straightforwardness.

DO Stress the contribution you can make to the enterprise.

DO Have available a list of former employers, time, and period of service.

DO Apply for the job in person.

DO Let as many people as possible know you are "Job Hunting."

DO Know the importance of getting along with people.

DO Recognize your limitations.

DO Make plenty of applications.

DO Indicate your flexibility and readiness to learn.

DO Be well-groomed and appropriately dressed.

DON'TS FOR JOB SEEKERS

DON'T Keep stressing your need for a job.

DON'T Discuss past experience which has no application to the job situation.

DON'T Apologize for your age.

DON'T Be untidy in appearance.

DON'T Be a know it all.

DON'T Cringe or beg for consideration.

DON'T Speak with muffled voice or indistinctly.

DON'T Be one of those who can do anything.

DON'T Hedge in answering questions.

DON'T Express your ideas on compensation, hours, etc. early in the interview.

DON'T Hesitate to fill out application, give references, take physical examination, or tests on request.

DON'T Hang around, prolonging interview, when it should be over.

DON'T Go to an interview without a record of your former work connections.

DON'T ARRIVE late and breathless for an interview.

DON'T Be a person who can't take instructions.

DON'T Depend upon the telephone for your job.

DON'T Isolate yourself from contacts who might help you find a job.

DON'T Feel that the world owes you a living.

DON'T Make claims if you cannot "deliver" on the job.

DON'T Display a feeling of inferiority.

FILMED FROM BEST AVAILABLE COPY

Dear Kid:

Today you asked me for a job. From the look of your shoulders as you walked out, I suspect you've been turned down before, and maybe you believe by now that kids out of high school can't find work.

But, I hired a teenager today. You saw him. He was the one with polished shoes and a necktie. What was so special about him? Not experience; neither of you had any. It was his attitude put him on the payroll instead of you. Attitude, son. A-T-T-I-T-U-D-E. He wanted that job badly enough to shuck the leather jacket, get a haircut, and look in the phone book to find out what this company makes. He did his best to impress me. That's where he edged you out.

You see, Kid, people who hire people aren't "with" a lot of things. We know more about Bing and about Ringo, and we have some Stone-Age ideas about who owes whom a living. Maybe that makes us prehistoric, but there's nothing wrong with the checks we sign, and if you want one you'd better tune to our wave length.

Ever hear of "empathy?" It's the trick of seeing the other fellow's side of things. I couldn't have cared less that you're behind in your car payments. That's your problem..... What I needed was someone who'd go out in the plant, keep his eyes open, and work for me like he'd work for himself. If you have even the vaguest idea of what I'm trying to say, let it show the next time you ask for a job. You'll be head and shoulders over the rest.

Look kid: The only time jobs grew on trees was while most of the manpower was wearing G.I.'s and pulling K.P. For all the rest of history you've had to get a job like you get a girl: "Case" the situation, wear a clean shirt, and try to appear reasonably willing.

Maybe jobs aren't as plentiful right now, but a lot of us can remember when master craftsmen walked the streets. By comparison you don't know the meaning of "scarce."

You may not believe it, but all around you employers are looking for young men smart enough to go after a job in the old-fashioned way. When they find one, they can't wait to unload some of their worries on him.

For both our sakes, <u>get eager</u>, will you?

HOW TO BE LIKED

1. Always recognize and be considerate of the feelings of others. This is the prime attribute of a good leader.

2. Learn to really understand and like people in general. Their attitude toward you is a reflection of the way you feel toward them.

3. Learn to be a good mixer. This means being kind and friendly to all those with whom you come in contact.

4. Become interested in what the other fellow is doing. Incidentally, you might learn something of value.

5. Always respect the other fellow's right to his own opinion. You do not have to agree with him.

6. Never tease or joke about facts to which others might be sensitive. These "twits" are sharp daggers capable of inflecting deep and permanent wounds.

7. Be a builder-upper. When you boost the other fellow [illegible], your own stock goes up.

8. Be cheerful even when you feel "down." There is enough gloom in the world already.

9. Learn to be a good listener. Your mission in life is not broadcasting.

10. Develop a sense of humor. A good laugh is better medicine than the doctor's pills.

11. Cultivate unselfishness. The infant is born selfish--you should have grown since birth.

12. Be fair-minded. What a person is and does determines his worth, not where or how he was born.

APPENDIX

FILMS

Arkansas State Department of Education:

1. Teamwork
2. Getting the News
3. Are You Popular
4. Introducing the New Worker to His Job
5. Importance of Selling
6. World Trade for Better Living
7. Finding the Right Job
8. Belonging to the Group
9. You and Your Work
10. Benefits of Looking Ahead
11. Ben Franklin Sells Today
12. High School: Your Challenge
13. Africans All
14. LSD: Insight or Insanity
15. Marijuana
16. Where the Action Is
17. Portrait of a Disadvantaged Child
18. The Dangerous Years
19. Wanted: Skilled Workers
20. Learning to Study
21. How to Succeed in School
22. The Dropout

FILMS (continued)

Association Sterling Films, 8615 Directors Row, Dallas, Texas, 75247

1. Moments of Decision
2. The Men from the Boys
3. Into the World
4. The Now Colleges
5. Distributive Education: Tell It Like It Is

Bell Telephone System, 915 WEst 23rd Street, North Little Rock, Arkansas

1. Manner of Speaking
2. Tomorrow is Now
3. Engineering--The Challenge of the Future
4. I Rather Like You--Mr. Bell

DOCUMENT RESUME

ED 063 459 08 VT 014 939

AUTHOR	Gorman, Anna M., Ed.; And Others
TITLE	Annual National Vocational and Technical Teacher Education Seminar Proceedings (5th, Atlanta, Ga., Oct. 25-28, 1971): Assessment of Graduate Programs. Final Report.
INSTITUTION	Ohio State Univ., Columbus. Center for Vocational and Technical Education.
SPONS AGENCY	National Center for Educational Research and Development (DHEW/OE), Washington, D.C.
REPORT NO	Leadership-Ser-35
BUREAU NO	BR-7-0158
PUB DATE	Mar 72
GRANT	OEG-3-7-000158-2037
NOTE	181p.
AVAILABLE FROM	The Center for Vocational and Technical Education, The Ohio State University, 1900 Kenny Road, Columbus, Ohio 43210 (limited number, complimentary)
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	Conference Reports; Educational Accountability; *Graduate Study; Leadership Training; *Program Effectiveness; Program Evaluation; *Seminars; *Teacher Education; Technical Education; *Vocational Education; Vocational Education Teachers

ABSTRACT

A total of 126 leaders in vocational and technical education from 44 states and the District of Columbia participated in a 3-day seminar conducted to focus attention on the concepts of evaluation and accountability in graduate programs in vocational education. Reaction panels and discussion groups were stimulated by these major presentations: (1) "Philosophical Design for Graduate Programs in Vocational and Technical Education" by G. Swanson, (2) "Improving Programs to Prepare Leaders in Vocational and Technical Education" by J. A. Culbertson, (3) "The Evaluation of General Staff Officers Programs in the United States Army" by I. Birrer, (4) "The Evaluation of Management Level Training Programs at the A.T. & T. Company" by R. J. Campbell, (5) "Model for Evaluation of Graduate Programs in Vocational Technical Education" by R. Hammond, and (6) "Accountability for Graduate Programs in Vocational and Technical Education" by H. Landrith, C. Schaefer, and J. Struck. Tests of the presentations and summaries of the two group sessions are included in the publication. (SB)

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ED 063459

MISSION OF THE CENTER

The Center for Vocational and Technical Education, an independent unit on The Ohio State University campus, operates under a grant from the National Center for Educational Research and Development, U.S. Office of Education. It serves a catalytic role in establishing consortia to focus on relevant problems in vocational and technical education. The Center is comprehensive in its commitment and responsibility, multidisciplinary in its approach and interinstitutional in its program.

The Center's mission is to strengthen the capacity of state educational systems to provide effective occupational education programs consistent with individual needs and manpower requirements by:

- Conducting research and development to fill voids in existing knowledge and to develop methods for applying knowledge.
- Programmatic focus on state leadership development, vocational teacher education, curriculum, vocational choice and adjustment.
- Stimulating and strengthening the capacity of other agencies and institutions to create durable solutions to significant problems.
- Providing a national information storage, retrieval and dissemination system for vocational and technical education through the affiliated ERIC Clearinghouse.

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LEADERSHIP SERIES NO. 35

FIFTH ANNUAL NATIONAL VOCATIONAL AND TECHNICAL TEACHER EDUCATION SEMINAR PROCEEDINGS

Assessment of Graduate Programs

October 25-28, 1971
Atlanta, Georgia

EDITED BY

ANNA M. GORMAN

JOSEPH F. CLARK

BENTON E. MILES

The Center for Vocational and Technical Education
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210

MARCH, 1972

1B

A FINAL REPORT
ON A PROJECT CONDUCTED UNDER
PROJECT NO. 7-0158
GRANT NO. OEG-3-7-000158-2037

The material in this publication was prepared pursuant to a grant with the Office of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official Office of Education position or policy.

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Dedication to keeping abreast of current developments in vocational-technical teacher education as exhibited by consistent attendance at the annual national vocational-technical teacher education seminars sponsored by The Center for Vocational and Technical Education, The Ohio State University.

President, The Ohio State University

Director, The Center for Vocational and Technical Education

Date

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PREFACE

Two hundred and twenty-six leaders in vocational and technical education from 44 states and the District of Columbia participated in the Fifth Annual National Vocational and Technical Teacher Education Seminar. The purpose of the seminar, conducted October 25-28 in Atlanta, Georgia, was to improve the effectiveness of graduate programs in vocational education. Attention was focused on the concepts of evaluation of and accountability for this area.

Nationally recognized authorities presented models and alternative procedures for assessment of graduate education programs which were discussed and applied. This publication includes the texts of the presentations and summaries of the two group discussion sessions.

Appreciation is expressed to the Honorable Jimmy Carter, Governor of the State of Georgia, and to George W. Mulling, State Director of Vocational Education for the State of Georgia. Recognition is given to the group discussion leaders who conducted and reported the group deliberations. A special thanks is due the program planning consultants and the program planning committee who helped to guide the development of the seminar. Special notice is given to the following Center staff for their contributions in the conduct of the seminar: Anna M. Gorman, project director; Joseph F. Clark, research associate; Darrell Ward, coordinator; Calvin J. Cotrell, Edward Ferguson, Jr., William Hull, and Benton Miles who served as session presiders; and Sidney Borcher who guided the seminar's group discussion activity.

Robert E. Taylor
Director
The Center for Vocational
and Technical Education

INTRODUCTION

The Fifth Annual National Vocational and Technical Teacher Education Seminar was held in Atlanta, Georgia, October 25-28, 1971. The theme of the seminar was Assessment of Graduate Programs in Vocational and Technical Education with focus on (1) the evaluation of a.d (2) the accountability for these programs.

Information on existing models for evaluating leadership programs was presented and served as bases for group discussion. Models related to accountability for graduate programs in vocational-technical education were introduced and critiqued in group discussion sessions.

During the planning sessions for the seminar a determination was made to inaugurate several special program features. A keynote address was also delivered at the closing session; awards were presented to individuals for their devotion to keeping abreast of educational developments as evidenced by attending all of the seminars; and the sessions were recorded so cassette tapes could be made available for purchase by interested educational personnel.

The seminar began Monday evening with a keynote address on the philosophical bases for evaluation of graduate programs. On Tuesday morning, presentations were given describing models for evaluation of leadership programs in institutions other than higher education. Implications from these presentations for graduate programs in vocational-technical education were made by a panel. On Tuesday afternoon, a model for the evaluation of graduate programs in education was given. The components of this evaluation model include curriculum, internships and other types of experience activities, student selection, and faculty performance. Group participation followed with particular attention to pertinent questions.

On Wednesday, the concept of accountability for graduate programs in vocational-technical education was explored through the presentation of "blue sky" position papers. Group participation followed.

On Thursday, recent graduates of vocational graduate programs assessed the impact of these programs on their present position effectiveness. The final presentation and the second keynote address was a paper dealing with "Improving Programs To Prepare Leaders of Vocational and Technical Education."

The following collection of scholarly papers are presented to the reader with the hope that they will contribute to more effective and efficient graduate program development in vocational and technical teacher education.

Anna M. Gorman - Seminar Chairman

Joseph F. Clark - Research Associate

Bud E. Miles - Research Associate

ACKNOWLEDGEMENTS

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CONTENTS

FIFTH ANNUAL NATIONAL VOCATIONAL AND TECHNICAL TEACHER EDUCATION SEMINAR PROCEEDINGS

Assessment of Graduate Programs

CHAPTER I

OPENING SESSION

Welcome

The Honorable Jimmy Carter
Governor, the State of Georgia
Atlanta, Georgia

Good friends of Georgia and distinguished visitors to Georgia, I've always been interested in education. Several years back we set up, at Wesleyan College in Macon, a special program for the brightest 400 high school students in Georgia called the Governor's Honor Program. They had me down to make a speech, and I thought about it on the way out here tonight. I was the main speaker and the title of my speech was "Planning a Life's Career." These young people had been studying philosophy, advanced physics, and mathematics; but at one point in their eight weeks special course, they stopped to spend a whole day interviewing different people who were airline stewardesses, pilots, engineers, school teachers, and others. Now, I was the final speaker of the evening. The young man who introduced me had done a great deal of background work on my career. He got up and said how grateful all of them were to have the then Senator Jimmy Carter to come from Plains to tell them about planning a life's career. He said that I was born in Plains, Georgia, was graduated from Plains High School and then went to Georgia Southwestern College, where he said I studied chemistry. Then he said I went to Georgia Tech and studied engineering, then to the United States Naval Academy and was graduated with a degree in marine engineering science. Then he said I did graduate work in nuclear physics, he said I now grown peanuts for a living and he said I was here to tell them how to plan their life's career. Well, my speech was over before I got the audience back.

I don't know of anything we need more than to establish the closest possible lines of communication between those of you who are responsible for providing us with teachers, instructors, and professors; who prepare our young people for a life of work gratification, usefulness, fulfillment, and dignity: and those of us in public life who are responsible for making decisions about budgets, state governmental structure, ultimate goals, long-range plans, and so forth. Sometimes it's difficult to establish the

proper kinds of communication and it's not just between different kinds of professionals. Mr. J. W. Fanning is a great person. He's been Vice-President of the University of Georgia for quite a while, and is responsible for taking the University of Georgia and letting its influence be felt at every local governmental-community level in Georgia. He likes to tell a story about two young men who had trouble communicating with their daddy. They had a very strict father; he never did permit them to do anything out of the ordinary, and if they did the slightest thing different from what he told them, he would punish them severely. But, when their daddy wasn't around, they were a little more free with their actions. One day their daddy walked into the house and the mother and children were in the living room, and he heard the boys using some pretty foul language and slang in front of their mama. That night when the boys went to bed, their daddy went up to them and said, "Boys, I'm not ever going to warn you again, do not use slang language in this house and particularly in front of your mother." And the boys said, "No, sir, daddy, we won't do it." And, they didn't intend to. But, the next morning they got up pretty early and went down to breakfast and they were sleepy. The first thing the older boy said was, "Pass me some of them durn grits." His daddy didn't say anything; he just reached over and slapped him, alongside the face, not too hard, but the older boy got overbalanced and fell on the floor. He was lying there looking up at his father. The younger boy didn't know what to say; he looked down at his brother lying on the floor, and he looked up at his daddy, and he thought a while, and he looked down at his brother again and looked up again at his daddy. And finally his daddy said, "Boy, what do you want?" He said, "I don't know daddy, but I durn sure don't want any of them grits, I know that." Sometimes we need to have lines of communication established.

Since I've been governor, I've tried to do two or three things of substantial importance to the state, I believe. One is to institute a new system of budgeting, called zero base budgeting, where we just dig up the state government, divide it into about 10,000 small pieces, and take a look, an analytical examination, of each piece. Another thing we're doing is to reorganize the state government of Georgia. We have about 300 boards, bureaus, agencies, commissions and so forth in the state government. We're trying to reduce those to about 20 this year. But the most important thing of all, I think, is to go out to the people all over Georgia and let them tell me as governor, the legislators, educators, and others, that this is what they hope our state will be in the future. We've had 61 of these local conferences. Followed by eight at the state level, and we've had more than 7,000 people attend the local conferences, and about 4,000 or 5,000 people attend the state conferences. This is an analysis of state government but overall we hope to establish goals for out state to achieve. I'm dedicated to carry out these goals during the last three and a half years of my administration.

Every time we have had a discussion about education, the primary suggestion for improvement has related to career planning and vocational education as preeminent. I know what it means historically to benefit from vocational education. Now when I was a farm boy and lived about three miles west of Plains, Georgia, which even now has a population of less than 600, one of the major thrusts in my whole life as a child, until I went off to the Naval Academy when I was about 17 years old, was learning how to be a better farmer, how to make a public speech, how to plan a budget, how to work with others, how to be the president, secretary, or treasurer of that organization. I made my first trip out of my home county to a forestry school when I was 13 years old. I still remember it. I was able to get a good education at public expense. My family has lived in the state for more than 200 years, and I'm the first one to ever finish high school. So I know how much of my life has been shaped by an adequate, forceful, manly, dynamic, practical, inspirational teaching of a vocation to me. And although I've been a teacher myself in the navy, an electronics officer in a submarine, a nuclear physicist, an operator of atomic reactors, coincidentally, I've come back to be a farmer. At the same time, I'm the governor of the state, and I'm charged with the responsibility of assuring that we have the utmost return for the limited investment that we can make in education. Although, as I've said education, at the vocational level, with the career planning emphasis, is a preeminent thought and need in Georgia people's minds, in our high schools, now, we only spend about three percent of our total budget on the vocational program.

It's obvious that we need to reexamine our priorities, correct our faults better. We've had quite an altercation going on in instruction beyond the high school level. In Georgia, it's under the State Board of Education which also has the responsibility for elementary and secondary education. And the Board of Regents in Georgia has the responsibility for the junior colleges, senior colleges, graduate programs, and the training of teachers. We are now, I think, working very closely towards establishing a relationship between vocational-technical instruction and academic instruction so that they are mutually supportive, thus any difference in prestige between the two will be eliminated. We are striving mightily now to see how we can go down into the early years of schooling, just beyond the primary grades and start shaping a young man or a young woman's thoughts toward an ultimate useful life for herself or for himself. In doing this we hope to provide a motivation so that two things might happen. One we won't have the dropout problem so preeminent. We won't have any stigma attached towards a young person who tries from the early stages of his life to shape his efforts toward a useful occupation, short of a professional occupation, and so that we won't have any lack of career planning when a young person actually gets to college. We have a tremendous waste of public funds at the present time because young people go into college not knowing what they want to do, sometimes

even by the conclusion of the junior year. And, a constant shifting in emphasis from engineering to physics, to industrial management, or to liberal arts, or to teaching, wastes time, wastes money and wastes effort; so, career planning crosses many lines.

We are also searching for a way to tie together the many assets that we have in order to contribute a more substantive plan for us to follow. We've got an inadequate use of industry in Georgia; it should be brought in as an integral part of the planning and implementation process for helping young people. We have a very fine opportunity now to utilize new teaching techniques, television, electronic teaching devices, remote control demonstrations, individualized instruction, tailored for each person's needs. To get maximum use from the excellent professor, there will be an increasing use of para-professional personnel and volunteers and aides and superior students. I think often about a quotation from one of the favorite philosophers that I've read, Kierkegaard, who said, "Every man is an exception." Every man is an exception, and this ought to be a preeminent thought for a public official or a teacher--to understand how important it is to be given an opportunity that is shaped as nearly as possible to a student's needs, thus minimizing the number of failures. I'm not sure how far I'd go in saying there ought to be no failures. But, the schools fail more than the children do because we haven't the information nor the capability apparently of analyzing that young malleable person, who is an individual and then shaping a course of instruction or advice and/or counseling to meet that child's needs.

I know how desperately we have a hunger for a modicum of human dignity, among our people, and there ought not to be any lack of opportunity just because a person's parents may have been poor, or rural, or uneducated or black. Quite often we tend to forget in our own apparently affluent nation, we do have this yearning which is not met.

I also spoke the other day to the National Convention of State School Board members, and I told them about an incident that occurred to me about five or six years ago. It made a profound impression on me. At the time I was a chairman of a local school board and I had just been elected to the Georgia Senate. I thought I had really reached a deep understanding of my own people who live in and around the poorest county in Georgia, where my farm's located. I hadn't had a vacation for a long time, and I took one in Mexico. My wife and I and our three sons all speak some Spanish. We lived out in the boondocks in the little towns, and we went out in the wheat fields and the peanut fields, and we watched the people make straw furniture, and we didn't stay in the tourist accommodations because we wanted to try out our Spanish and see how the people lived. One day we were about 200 miles from Mexico City in a desert, and I saw a sign over to the side of the road that said in Spanish "Plains," which is the same name as my own hometown.

Beyond the sign was the most miserable looking little settlement that I have ever seen--about eight adobe huts which looked completely poverty stricken with nothing around them but cactus. Just as a joke, I got out of the car with my camera for I wanted to take a picture of that sign which said "Plains" (with the horrible looking village beyond it) to bring it back and show it to the folks who live in Plains, Georgia. And as we got out of the car, and were adjusting the camera, I saw about eight or 10 little children run out of the hut toward our car. I told my wife, "Rosaline, get out your pocketbook, I know what they want." Sure enough they got around us in a circle and they held out their hands, and they were jumping up and down shouting something over and over in Spanish. It was just a few minutes before I realized that they were <u>not</u> saying "dinero," which means money; but, they were saying two other words, one was "lapiz" and the other one was "papel," which mean pencil and paper. These little children, isolated, poverty stricken, perhaps even hungry, more than anything else in the world wanted to learn how to read and write, so that they could understand themselves and understand the outside world and understand their relationship with their fellow human beings. We got back in our air-conditioned automobile and started driving to Mexico City, and the thought struck me in a most forceful way, that in my own county, in my own state, there are tens of thousands of young people who have the same hunger--to take whatever talent God might have given them, meager or substantial, and develop it to the utmost. The responsibility for that development really to a great degree is not entirely on their own shoulders; it's on the shoulders of people like you and me, whom God has blessed so greatly with material benefits, education, time, positions of responsibility, judgment and influence. I had and still have the greatest determination to do the best I can with my life, as you are doing with your life--constantly to analyze the fruitfulness of our own efforts, and make sure that we never overlook an opportunity to give a child, a hungry child, the education food for which he has a yearning.

There is no other group that I can think of in our nation, who has greater responsibility than you do, nor a greater opportunity than you do because you train the teachers who open that child's eyes and mind and heart, to the outside world. You must do it with a sensitivity and an understanding and a dedication and a commitment that never lowers its search for a standard of excellence. It is always a temptation to accept mediocrity or failure or forget that each child is an individual and has a yearning for knowledge and life.

I talked longer than I had anticipated; but, I just had a few thoughts that struck me while coming to this conference because of knowing about your own inclinations and your own service. I want to add my own heartfelt welcome to you as you come to Georgia for this conference and express to you the thanks of our people for

coming. I hope that you experience a southern hospitality which we still cherish and preserve. I hope that you will have a fruitful conference but also an enjoyable time here, Atlanta has a lot to offer. And I hope you discover it all.

CHAPTER II

KEYNOTE ADDRESSES

Presentation

"Philosophical Design for Graduate Programs in Vocational and Technical Education"

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Introduction

The title of this paper carries the implicit assumption that graduate programs in vocational and technical education have unique conditions or concepts requiring clarification. Such an assumption is only partially valid; graduate programs in this field have arrived on the scene as a result of forces set in motion within many other fields and most of the conditions or concepts are shared or linked with them.

Although it is difficult to identify a philosophical design in graduate programs which is unique to vocational education, a concern for graduate education has grown rapidly over the past two decades. Notable among the contributions to the literature is the work of Carl Schaefer and associates at Rutgers University.[1] In addition, there have been monumental studies by Bernard Berelson,[2] Ann Heiss,[3] and the American Council on Education.[4]

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[1]"The Status of Doctoral Programs in Vocational Education" (paper developed for National Workshop on Fellowship Programs, The Ohio State University, April 12-14, 1971) (To be published).

[2]*Graduate Education in the United States* (McGraw-Hill, 1960).

[3]*Challenges to Graduate Schools*, Center for Research and Development in Higher Education (Jossey-Boss Inc., 1970).

[4]Everett Walters, ed., *Graduate Education Today*, American Council on Education (Washington, D.C., 1965).

It would be most useful if one could describe the development of graduate education in vocational and technical education as a movement couched in an orderly set of values, a system of logic or at least a prevailing rationale. When one examines the literature one soon discovers that such orderliness is not easily found in any field of graduate education and it is even more difficult to find it in vocational fields. The initial approach to be used in this paper, therefore, is to examine the background of graduate education and to raise the question: what does this background have to say to the field of vocational education? The second approach will be to examine the present status of graduate programs, including those in vocational education, and again raise the question: what does this have to say to us?

Background

It should be kept in mind that graduate programs are the offspring, often illegitimate, of universities. Graduate education has become the mechanism for identifying and advancing the most able for an increasing number of academic and professional roles. But universities and their graduate programs have not always accepted this function.

The great advances in science of the 17th and 18th century were led by individuals who were not associated with universities nor the graduates of their advanced programs. John Kepler, Rene Descartes, Isaac Newton, Henry Cavendisk, Joseph Priestly and Antoine Lavasier are among those who made significant contributions to science but whose contributions had neither the organizational support nor the recognition of universities.

A similar situation prevailed within the growing emphasis on technology and engineering in the 19th century. The first engineering degree granted in the United States occurred outside the aegis of universities; the first degree was granted by Reneselaer Institute at Troy, New York. It is not surprising, therefore, that the Land Grant movement itself was rather vigorously opposed by the existing universities of a century ago.

Graduate education had a difficult beginning; it was the focus of a struggle which lasted more than 50 years before the first graduate school was established at Johns Hopkins in 1876. There were many reasons for this difficulty. First, there were institutional tensions which arose from the way in which graduate and undergraduate programs threatened to polarize faculties and to disrupt existing programs. This was compounded by unending arguments about whether graduate degrees should be specialized or whether they should be classical. In due course the specialized degree won out on the grounds that it was more appropriate to the "needs of the times."

Further difficulties surrounded the question of whether graduate programs should culminate in a degree. Many institutions had enrolled "graduate residents" whose purpose was more advanced preparation but who had no possibility of earning an advanced degree. With the growing popularity of graduate programs the argument again was resolved as a response to the "needs of the times" and graduate programs were finally culminated by the awarding of advanced degrees.

Other difficulties centered on the problem of how university faculties should be organized to provide both graduate and undergraduate instruction. There was the question, for example, of whether the faculty should be organized primarily for graduate instruction with undergraduate instruction being considered a subsidiary function or, conversely, whether the faculty should be organized essentially for the undergraduate function with the graduate function being considered its logical extension. A parallel problem involved the issue of whether the graduate and undergraduate faculties should be regarded as separate groups or as an intermingled faculty.

The latter was most easily determined, a natural course of events suggested that the faculties should be integrated wherever both a graduate and an undergraduate faculty was provided for a field. The question of organization was more difficult. Its resolution depended on which faculty was first on the scene and which faculty was most central to institutional purpose. In most institutions the graduate faculty and the graduate school developed as a function above the undergraduate function but subordinate to it.

Concurrent with all of its difficulty and controversy, three forces began to emerge, forces whose combined influence would govern the direction and growth of graduate education. The first was the Land Grant College movement whose most significant contributions to American education included its influences on raising a number of occupations, particularly in agriculture and engineering, to full professional status. Even more important may have been its influence in bringing professional schools into the structure and organization of universities. Neither American nor European universities had accommodated the growth of professional schools until the Land Grant movement began to embrace them.

A second force which combined easily with the first was the establishment and rapid growth of professional societies. Between 1876 and 1905, 15 major scholarly societies were established in the United States. Most of the societies had also established a learned journal and most had begun to look to graduate schools and graduate faculties as a source of leadership.

A third force can be described as the pressure of science. The value of science to the academic community and to the nation was gaining wider currency. Its value was seen as an approach to seeking truth as well as a growing body of knowledge. Its growth was also accompanied by a certain amount of fashion. Such fields as domestic economy and animal husbandry soon changed their designations to domestic science and animal science. Social studies was often referred to as social science and many other fields sought the benefits as well as the prestige of a widespread scientific awakening.

Within institutions and their graduate schools, controversy and argument continued around the following questions: What is the function of graduate education? What do the degrees mean? Why should the graduate school become a professional school? Why should the graduate school be regarded as an access route to jobs?

By the 1930's, graduate education had won its position in universities and graduate schools had been established in major institutions. Growth was very rapid, particularly at the doctoral level. Degrees were being granted in an increasing number of fields. There were no institutional dropouts; once an institution decided to offer graduate degrees, the decision seemed permanent. It may have been at this stage that the American university began to accept the uncomfortably dual role of pursuing the truth and defining what truth is.

During the decade 1960-69, 154,111 earned doctorates were granted by American universities in 176 fields. Of this number only 561, or about 0.3 percent, were granted in vocational-technical education. About 24 percent of the doctorates granted in vocational-technical education were awarded to women. Table I gives the doctorates granted by field and sex from 1960 to 1969.

It is utter nonsense to discuss the present status of graduate education as though it did not grow out of the past or as though its present organization can be taken for granted. Graduate education is a dynamic force responding to educational change and also acting to provoke educational change. What does a knowledge of the background of graduate education have to convey to a new and developing field? What does it have to say to us?

It is clear, first of all, that American educational preferences have moved increasingly toward becoming a credentialing, certificating, accrediting, and degree-oriented society. This movement has been supported by incentive and reward systems which ration status, prestige, and remuneration. Teacher salary scales, for example, are tied to certificates and degrees. Civil service ratings and professorial employment or advancement practices are often tied to the degree consciousness of the academic community. Graduate education has become more than a willing partner in this movement, it has become its chief instrument.

TABLE I

DOCTORATES EARNED BY AREA AND FIELD, 1960-1969

(Data source: U.S. Department of Health, Education and Welfare. *Earned Degrees Conferred: Bachelor's and Higher Degrees.* A publication of the Bureau of Educational Research and Development and the National Center for Educational Statistics. Washington, D.C.: U.S. Government Printing Office. All public and private colleges and universities in the United States known to confer doctoral degrees are included. Professional doctoral degrees such as M.D., however, are not listed.

	Total Number of doctorates earned 1960-1969	Total Number of doctorates earned by women 1960-1969	Percentage of doctorates earned by women 1960-1969
Agriculture, Total	4,462	79	1.77
Agriculture, General	115	1	.87
Agronomy, Field Crops	966	5	.52
Animal Science	872	21	2.41
Dairy Science	262	4	1.53
Farm Management	13	0	.00
Fish, Game or Wildlife Management (1961-1969)[1]	209	2	.96
Food Science	385	16	4.16
Horticulture	539	11	2.40
Ornamental Horticulture	14	0	.00
Poultry Science	211	7	3.32
Soil Science	568	2	.35
Agriculture, All other fields	308	10	3.25
Architecture	50	4	8.00
Biological Sciences, Total	17,708	2,448	13.82
Premedical, Predental and Preveterinary Sciences	25	2	8.00
Biology, General	1,949	395	20.27

(Continued)

	Total Number of doctorates earned 1960-1969	Total Number of doctorates earned by women 1960-1969	Percentage of doctorates earned by women 1960-1969
Botany, General	1,653	186	11.25
Zoology, General	2,262	318	14.06
Anatomy and Histology	633	116	18.33
Bacteriology, etc.[2]	2,096	355	16.94
Biochemistry	2,695	471	17.48
Biophysics	429	32	7.46
Cytology	30	9	30.00
Ecology (1961-1969 only)	37	2	5.41
Embryology	45	11	24.44
Entomology	1,097	46	4.19
Genetics	672	61	9.08
Molecular Biology (1968-1969 only)[3]	32	6	18.75
Nutrition (1961-1969 only)	156	45	28.85
Pathology	271	15	5.54
Pharmacology	783	87	11.11
Physiology	1,145	168	14.67
Plant Pathology	692	19	2.75
Plant Physiology	203	12	5.91
Biological Sciences, All other fields	803	92	11.46
Business and Commerce, Total	3,046	86	2.82
Business and Commerce, General	1,372	33	2.41
Accounting	268	18	6.72
Finance, Banking (1967-1969 only)[4]	53	1	1.89
Marketing (1967-1969 only)[5]	66	1	1.52
Real Estate, Insurance (1967-1969 only)[6]	2	0	.00
Transportation (1967-1969 only)	7	0	.00
Business and Commerce, All other fields	1,278	33	2.58
City Planning (1966-1969 only)[7]	44	2	4.55

(Continued)

	Total Number of doctorates earned 1960-1969	Total Number of doctorates earned by women 1960-1969	Percentage of doctorates earned by women 1960-1969
Computer Science and Systems Analysis, Total (1964-1969 only)[8]	158	4	2.53
Computer Science	99	3	3.03
Systems Analysis	22	1	4.55
Computer Science and Systems Analysis, All other fields	37	0	.00
Education, Total	26,369	5,230	19.83
Physical Education	1,143	313	27.38
Health Education	88	26	29.55
Recreation	30	4	13.33
Education of the Mentally Retarded	118	36	30.51
Education of the Deaf (1964-1969 only)[9]	6	4	66.67
Speech and Hearing Impaired	339	67	19.76
Education of the Visually Handicapped (1964-1969 only)[10]	3	1	33.33
Education of the Emotionally Disturbed (1965-1969 only)[11]	24	6	25.00
Administration of Special Education (1968-1969 only)[12]	14	4	28.57
Education of Other Exceptional Children[13]	391	126	32.23
Agricultural Education	228	2	.88
Art Education	194	52	26.80
Business or Commercial Education	300	89	29.67
Distributive Education, Retail Selling	28	6	21.43
Home Economics Education	124	123	99.19
Industrial Arts Education, Nonvocational	224	1	.45
Music Education	548	75	13.69

(Continued)

	Total Number of doctorates earned 1960-1969	Total Number of doctorates earned by women 1960-1969	Percentage of doctorates earned by women 1960-1969
Trade or Industrial Education, Vocational	181	8	4.42
Specialized Teaching Fields, All other	756	261	34.52
Nursery or Kindergarten Education	14	12	85.71
Early Childhood Education	22	20	90.91
Elementary Education	1,199	459	38.28
Secondary Education	966	154	15.94
Combined Elementary and Secondary Education	21	4	19.05
Adult Education	303	46	15.18
General Teaching Fields, All other	445	97	21.80
Education Administration, Supervision, Finance[14]	7,242	931	12.86
Counseling and Guidance	2,357	488	20.70
Rehabilitation and Counselor Training (1964-1969 only)	80	14	17.50
History of Education, etc. (1964-1969 only)[15]	488	99	20.29
Education, General	6,286	1,183	18.82
Educational Psychology (1964-1969 only)	875	224	25.60
Physical Education, Nonteaching (1964-1969 only)	36	9	25.00
Education, All other fields[16]	1,296	286	22.07
Engineering, Total[17]	18,572	82	.44
English and Journalism, Total	6,471	1,541	23.81
English and Literature	6,322	1,523	24.09
Journalism	149	18	12.08

(Continued)

	Total Number of doctorates earned 1960-1969	Total Number of doctorates earned by women 1960-1969	Percentage of doctorates earned by women 1960-1969
Fine Arts and Applied Arts, Total	4,035	678	16.80
Art General	99	18	18.18
Music, Sacred Music	1,473	199	13.51
Speech and Dramatic Arts	1,978	314	15.87
Fine and Applied Arts, All other fields	485	147	30.31
Folklore (1965-1969 only)	29	8	27.59
Foreign Languages and Literature, Total	4,158	1,186	28.52
Linguistics	551	133	24.14
Latin, Classical Greek	506	128	25.30
French	768	311	40.49
Italian	47	17	36.17
Portuguese	14	3	21.43
Spanish	668	217	32.49
Philology and Literature of Romance Languages	380	93	24.47
German	678	171	25.22
Other German Languages	27	5	18.52
Philology and Literature of Germanic Languages	52	9	17.31
Arabic	5	1	20.00
Chinese	14	2	14.29
Hebrew	23	1	4.35
Hindi, Urdu (1961-1969 only)	2	0	0.00
Japanese	12	2	16.67
Russian	116	28	24.14
Other Slavic Languages	68	20	29.41
Foreign Language and Literature, All other fields	227	45	19.82

(Continued)

	Total Number of doctorates earned 1960-1969	Total Number of doctorates earned by women 1960-1969	Percentage of doctorates earned by women 1960-1969
Forestry	558	1	.18
Geography	663	37	5.58
Health Professions, Total	1,831	168	9.18
Hospital Administration	20	1	.50
Medical Technology	2	0	.00
Nursing, Public Health Nursing	18	17	94.44
Optometry	16	1	6.25
Pharmacy	563	24	4.26
Physical Therapy, Physiotherapy	1	0	.00
Public Health	418	62	14.83
Radiologic Technology	3	0	.00
Clinical Dental Services	24	4	16.77
Clinical Medical Services	302	31	10.26
Clinical Veterinary Services	250	4	1.60
Health Professions, All other fields	214	24	11.21
Home Economics, Total	514	392	76.26
Home Economics, General	104	101	97.12
Child Development, Family Relations	174	87	50.00
Clothing and Textiles	53	52	98.11
Foods and Nutrition	134	108	80.60
Institution Management or Administration	6	6	100.00
Home Economics, All other fields	43	38	88.37
Law	268	12	4.48
Library Science	140	38	27.14
Mathematical Sciences, Total	6,166	401	6.50

(Continued)

	Total Number of doctorates earned 1960-1969	Total Number of doctorates earned by women 1960-1969	Percentage of doctorates earned by women 1960-1969
Mathematics	5,538	348	6.46
Statistics	781	53	6.79
Philosophy, Total	1,701	188	11.05
Philosophy	1,520	155	10.20
Scholastic Philosophy	181	33	18.23
Physical Sciences, Total	25,736	1,179	4.58
Physical Sciences, General	93	3	3.23
Astronomy	421	29	6.69
Chemistry	12,963	884	6.82
Metallurgy	213	0	.00
Meteorology	245	2	.82
Pharmaceutical Chemistry (1961-1969 only)	289	13	.50
Physics	8,415	168	2.00
Geology	2,143	53	2.47
Geophysics	203	3	1.48
Oceanography	222	4	1.80
Earth Sciences, All other fields[18]	170	2	1.18
Physical Science, All other fields	359	18	5.01
Psychology, Total	9,135	1,845	20.20
General Psychology	7,071	1,365	19.30
Clinical Psychology (1961-1969 only)	651	163	25.04
Counseling and Guidance	138	33	23.91
Social Psychology (1961-1969 only)	309	68	22.01
Rehabilitation Counselor Training (1964-1969 only)	36	8	22.22
Educational Psychology (1964-1969 only)	137	37	27.01
Psychology, All other fields (1964-1969 only)	793	171	21.56

(Continued)

	Total Number of doctorates earned 1960-1969	Total Number of doctorates earned by women 1960-1969	Percentage of doctorates earned by women 1960-1969
Religion, Total	2,825	141	4.99
Religious Education, Bible	368	49	13.32
Theology	1,417	49	3.46
Religion, Liberal Arts Curriculum		39	4.54
Religion, All other fields	180	4	2.22
Social Sciences, Total	18,662	2,072	11.10
Social Sciences, General	261	27	10.34
American Studies, Civilization, Culture	257	41	15.95
Anthropology	942	202	21.44
Area or Regional Studies	384	46	11.98
Economics	3,898	219	5.62
History	4,943	579	11.71
International Relations	425	33	7.76
Political Science or Government	2,876	253	8.80
Sociology	2,361	403	17.07
Agricultural Economics	1,165	12	1.03
Foreign Service Programs	11	1	9.09
Industrial Relations	96	4	4.17
Public Administration	283	23	8.13
Social Work, Social Administration	480	174	36.25
Social Science, All other fields	280	55	19.64
Trade or Industrial Training	84	0	.00
Broad General Curriculums and Miscellaneous Total	726	107	14.74
Arts, General Programs	39	9	23.08
Sciences, General Programs	84	9	10.71
Arts and Sciences, General Programs	40	5	12.50
Teaching of English as a Foreign Language	27	10	37.04

(Continued)

	Total Number of doctorates earned 1960-1969	Total Number of doctorates earned by women 1960-1969	Percentage of doctorates earned by women 1960-1969
All Other Fields of Study[19]	536	74	13.81
Total All Fields (areas) Reported:	154,111	17,929	11.63

1. When information was available from 1961-1969 (this field was not given as a separate category in 1960-1961) proportions were computed based on information available. If the field was not listed as a separate category for more years than 1960-1961, the information was included in the residual category. Exceptions are noted.

2. Includes Bacteriology, Verology, Mycology, Parasitology, and Microbiology.

3. The status of this field prior to 1968, when it was considered separately, is not clear.

4., 5., and 6. As in 3, the same observation applies.

7., and 8. These entire areas are new.

9., 10., 11., and 12. Subsumed under other categories in earlier years.

13. Includes: Special Learning Disability, Education of the Crippled, Education of the Multiple Handicapped.

14. Includes Curriculum Instruction as well. These fields were separated for all but year 1963-1964, so it was necessary to combine them.

15. Includes History, Philosophy, and Theory of Education.

16. Includes the recently listed field of Education Specialist.

(Continued)

17. A breakdown on Engineering was omitted from *Earned Degrees Conferred: Bachelor's and Higher Degrees* for the four academic years 1960 through 1964. Other sources investigated provided breakdown by field but not by sex.

18. Includes recent field, "Earth Sciences, General."

19. Includes recent field "Interarea Fields of Study."

Second, graduate schools have become society's central channel for recognizing, selecting, and training talent in all fields. Graduate education has become a part of the career ladder for those regarded as the most able to pursue any fields of intellectual endeavor. Graduate schools have thus accepted many of the functions of professional schools and, accordingly, they have acquired power beyond their role involving attention to knowledge and skill.

A third observation drawn from the background literature on graduate education involves the frequent references to the word "discipline" and the phrase "interdisciplinary study." While the literature is filled with such references there are no definitions to assist in clarifying such words or concepts. Nor is it helpful to refer to the fields in which degrees have been granted; the role disciplines, the mysteries of their creation, and the adequacy of their present supply are issues not treated in the background literature of graduate education nor in the growth patterns of fields in which degrees are awarded. It is merely assumed that, somehow, the attachment to undefined disciplines and interdisciplinary study has some natural value or intrinsic merit associated with the overall mission of graduate education.

A further observation of the background of graduate education shows that doctorates in general or broad fields have not been popular. Doctorates in humanities, American studies, and social studies, for example, have not been numerous compared to the special fields associated with such degrees. A similar observation can be made in more specialized categories as shown in Table II using data from Table I. Efforts to consolidate a field into its more general applications does not appear to win much interest from those choosing a field of study at the doctoral level.

TABLE II

COMPARISON OF NUMBER OF DOCTORATES AWARDED IN THE GENERAL AND SPECIALIZED ASPECTS OF SEVERAL FIELDS 1960-69

Field	Total Degrees	Degrees in Generalized Field
Agriculture	4,462	115 (general agriculture)
Biological Sciences	17,708	1,949 (general biology)
Education	26,369	6,286 (general education)
Physical Sciences	25,736	93 (general physical science)
Social Sciences	18,662	261 (general social science)

The unpopularity of the general or consolidated field may be closely associated with the increasing function of the graduate school as a professional school whose rewards are more available, typically, to those who specialize.

Finally it can be concluded that there have been very few graduate degrees and graduate programs in vocational-technical education. While the professional societies representing the field have been strong and numerous, the reliance on graduate education to supply leadership for the field has been weak particularly at the doctoral level.

The State of the Art--the Current Setting

Undergraduate teacher-education programs in vocational-technical education have been supported by state and federal subventions for more than 50 years. University commitment to vocational-technical education has been limited primarily to the provisions of the subventions which ordinarily did not prescribe graduate-level instruction. Graduate instruction became a function incidental to in-service education and not a primary focus of the field. Almost all of the graduate instruction was concentrated at the master's level.

Graduate instruction in vocational-technical education was stimulated in 1966 by the passage of the Education Professions Development Act. The stimulation did not occur because of the inclusion of provisions for advanced training in vocational education; it was stimulated because of its omission. When the 1968 Amendments to vocational legislation were later proposed, a special effort was mounted to include provisions which were omitted from the Education Professions Development Act. Part F, a section dealing with professional development including graduate instruction, was included. Graduate education in vocational-technical education began to receive systematic attention for the first time. Among other things, it created a flow of doctoral students in a limited number of institutions to supplement the meager flow of doctoral students already being prepared in these institutions.

Another thrust of the 1968 Amendments to vocational legislation, Part D (Exemplary Programs), initiated a transcendent element to the entire field of vocational education. Career education, an emphasis with a focus upon the world of work from kindergarten through adult education, has engulfed entire educational systems and has provided a new context for all of education including vocational education. Career education is too complex to describe within the scope of this paper. Its importance is sufficient, however, to prompt the field of vocational-technical education to raise questions about what its objective should be as well as how they can be accommodated.

The rapidly changing context of vocational-technical education has added fuel to the arguments which have either stimulated or plagued the general field of graduate education for the last century and the special area of vocational-technical education for the

last two decades. The arguments center on how the major or the degree should be defined and how the field should be organized or structured for graduate education.

The degree or the major representing the field can be defined in many ways. It can be defined as a body of knowledge, its conceptual base, and its growth. It may also be defined as a set of propositions or problems whose mastery represents a level of achievement in the field. Some may define it as the acquisition of a set of analytical tools with demonstrated performance in solving the problems in the field. Others would define the major as an effort to acquire competence in a number of practitioner functions such as administration, instruction, management, research, or evaluation. These several ways of viewing or defining the major or the graduate degree are not independent nor exclusive. They do represent, however, a range of emphasis over which there is no unanimity.

The issue of how the field of vocational-technical education should be organized and structured for graduate education leads to even wider divergence of opinion and preference. Some argue that graduate education should be closely linked with the occupational and professional orientation of undergraduate programs; that graduate education should be their logical extension. Others would argue that graduate programs in vocational and technical education should have an emphasis which is distinctly separate from and largely independent of undergraduate programs; and emphasis not linked with occupationally related practitioner skills. A third view suggests that graduate programs in vocational-technical education should be organized to embrace a multi-disciplinary approach albeit within the field of education.

The definition of the graduate major and the question of how the field should be organized for graduate education are not clear and easy options. They depend upon the commitment of the institution to provide in-service instruction to teachers in the field and the relationship of such in-service instruction to graduate education. They also depend upon the extent to which the field of vocational-technical education responds to the credentialing, certificating, and accrediting phenomenon which has greatly influenced all forms of graduate education.

What does an examination of the current status of graduate education in vocational-technical education reveal? What does it have to say to us?

First, graduate education in vocational-technical education has served to identify, select, and prepare a very limited number of persons for leadership roles in the general field of education and a very minimum number for the field of vocational-technical education. There has been a dearth of doctorates and graduate

education at the master's level has been essentially an extension of in-service education.

Second, universities have had a very limited commitment to graduate education in the field. The growth pattern of graduate education has not paralleled the aggregate growth pattern of graduate education in the country. The limited commitment is likewise apparent in undergraduate programs. The occupational emphases have not gone beyond those which have been legislated nor beyond the limits of funding provided by legislation at the federal level. In short, universities have been satisfied to allow external support to circumscribe rather than enhance their commitment to the field.

Thirdly, a large question remains as to how the field of vocational-technical education should attempt an expansion of graduate education. One alternative is to attempt a consolidation of the field and to seek the goal of having a general doctorate in vocational education and a minimum expansion of the fields represented at the master's level. This alternative holds the possibility that graduate education at the doctoral level will share the unpopularity of doctorates in such fields as American studies, general agriculture, and general physical science. This lack of popularity is undoubtedly associated with weakened professional loyalties and discontinuity between undergraduate and graduate programs. The other alternative is a move toward more differentiation with growing occupational and professional relevance as reflected on the overall growth pattern of graduate education in the last decade.

Fourth, the relationship between graduate education to federal and state program planning in vocational education has been very uneven. Federal attention to post-baccalaureate programs in vocational education did not commence until the field was more than 50 years old. State program planning has contributed very little to the direction or growth of graduate education. For the most part, state planning has merely acquiesced to it. The Vocational Amendments of 1968 show promise of a new focus on this problem.

Finally, it should be said that graduate education in the United States has followed a development trajectory that was neither planned nor intended. It wasn't intended, for example, that graduate schools should take on the characteristics of professional schools nor was it planned that graduate education would become vocationally oriented in its functions. It is a major anomaly to observe that the field of vocational-technical education has not had a close association with this development trajectory.

Presentation

"Improving Programs to Prepare Leaders
In Vocational and Technical Education"

Dr. Jack A. Culbertson
Executive Director
Council on Education Administration
The Ohio State University
Columbus, Ohio

When Professor Gorman invited me to speak at this national seminar, she provided several helpful suggestions. She indicated, for example, that you would have a special interest in the preparation of vocational and technical educational leaders in such widely differing arenas as state education agencies, vocational area schools, school districts, and universities; further, that you would be concerned about both resident, and on-campus programs as well as continuing education experience for leaders. My major tasks, she emphasized, were two: first, to stimulate seminar participants to think beyond their present graduate program and, second, to project ideas pertinent to the achievement of new or updated program designs. The paper, she said, should be set within the general theme of program evaluation and accountability.

Perhaps you might wonder why I had the temerity to respond positively to Professor Gorman's request. Some of you might surmise that I did so because of my demonstrated interest in the general improvement of preparation programs for educational leaders and you would be partly correct. However, I was even more intrigued by the fact that certain conditions now affecting American education add special significance to efforts to improve leadership in your field. Brief references to two conditions will help illustrate the point.

The first condition is immediate, visible and current. It can be summarized in two sentences written by Gene Maeroff in the *New York Times* on August 8 of this year: "Vocational education, far more broadly based than at present, figures prominently in the blueprint that the United States Commissioner of Education is drawing up for the future of American education . . . While he does not have the authority to impose his views on local school districts, Dr. Marland can influence local decisions through the power of persuasion and the manner in which the Office of Education allocates approximately $5 billion it has available for primary and secondary schools and for colleges." The move of the federal government into your field is very visible and is clearly represented, for example, in the so-called school-based, home-based, and industry-based models of "career education." This move represents one significant condition bearing upon our discussion. It also

highlights the need for leadership which can give direction, critical assessment meaning, and operation to "career education."

A second condition of note is less visible than the one just noted; however, in the long-range, it may represent a more dynamic and far-reaching lever for change. I refer to the changing relationships between business and education specifically and, more broadly, to the changing relationships between the private and public sectors of our society. President Johnson's tenet of the mid-sixties that the private sector could and should make a greater contribution to the solution of public sector problems, including those associated with education, was a pronounced indicator of the emergent condition. He and other leaders in his administration believed that the troublesome, residual American problems associated with race, education, poverty, cultural deprivation, and related matters could be met more effectively through a greater involvement of private sector leaders in their solution. Those in the private sectors, it was argued, had not only demonstrated the entrepreneural and risk-taking capacity to deal with change; in addition, they had developed the know-how to apply special organization, computer technology, systems analysis techniques, the fruits of research and development and its management, and other private sector tools to public policy problems. Even though the high hopes on the part of those in the public sector for help from the private sector have materialized slowly and inconsistently, and, in some cases, not at all, I am sure you would agree that the relationships between business and education have changed and are changing. Thus, it is not insignificant that we speak of an industry-based model for career education. Nor is it insignificant that performance contracting is making its way into more and more school systems. It is also of interest, to take one other example, that the theme in which you have had great interest at this conference, namely, accountability, is a private sector concept which is being diffused into numerous public sector institutions, including the schools.

Since leaders concerned with vocational and technical education are the ones in education most likely to be affected by the changing relationships between business and education, they are, to put it dramatically, in the "eye of the storm." They have new and unique opportunities, on the one hand, and on the other, are faced by what many see as a threat in such developments as industry-based models for career education. Changing business-education relationships, then, has special significance for the preparation of vocational and technical leaders.

So much for comments on the same illustrative conditions that have special implications for the subject under discussion. I shall return to these conditions later. Now, I would like to highlight some selected trends in the preparation of educational leaders

generally.[1] My assumption is that these trends have direct implications for those concerned with the design of new graduate programs to prepare vocational and technical leaders.

The most visible trend with regard to leadership recruitment and selection practices is found in increasingly aggressive efforts to tap broader and more diverse pools of society's talent. The purposes behind this trend are two: to obtain a greater share of society's leadership talent, and to attract new and different leadership into education. The National Program of Educational Leadership centered at The Ohio State University and involving the University of Texas, Claremont Graduate School, Northwestern, City University of New York, and the State Department of Education in North Carolina, is undoubtedly taking the boldest steps of any group of institutions to find a new breed of leaders. The point can best be illustrated by describing briefly the backgrounds of four of the 22 individuals who have been recruited into the program.[2]

Vivian Larson

Vivian Larson is in her late thirties. She is the daughter of an immigrant carpenter who settled in Cleveland. She attended the public schools of Ohio, eventually earned a baccalaureate degree in education from The Ohio State University. After a very few months of teaching she withdrew in order to earn an advanced degree in social work at Case-Western Reserve. Her career in social work brought her eventually to community mental health. Over the past decade she has worked in the Chicago metropolitan area, including the city of Chicago, as an administrator of public mental health programs. At the time of entry in NPEL, she was regional community health director for a large portion of the city of Chicago. In the late 1960's she worked closely with superintendents on the west side of Chicago in the establishment of state supported mental retardation and special education programs.

Eugene Speller

Eugene Speller is an engineer. He has a master's degree from Michigan State in that field. He is black. He was born in a share cropper's shack on a plantation in southeast Missouri. His life

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[1]See Jack Culbertson, *et al.*, *Preparing Educational Leaders for the Seventies* (Columbus, Ohio, 1969).

[2]The descriptions are taken directly from Luvern Cunningham, "The Search for New and Better Prepared Educational Leadership," September 22, 1971. (Mimeographed.)

story is an incredible adventure leading from the miseries of share cropping through a vertical, social and occupational climb up a brick wall using his fingernails. He is a man of superior intelligence, compassion, and insight.

When he was working on his master's degree he supported himself in part by working in a special program in a high school in Lansing. He was invited to counsel (chiefly with minority group students) about their life, education, and occupational plans. He was "turned on" by that experience and pledged himself to move into education if and when the opportunity presented itself. He began at Ohio State last month. He has been very successful as an engineer in LaSalle, Illinois.

Emelio Gutierrez

Emelio Gutierrez is a lawyer. He came into NPEL four months ago after 14 years of successful law practice in the Rio Grande Valley of Texas. He is located at the center at the University of Texas. He feels deeply the agonies of the Spanish-speaking people everywhere but especially those in his precious and cherished valley. He is a quiet man, marked by compassion. But he is an intense and dedicated man filled with desire to improve opportunity for Spanish-speaking people. He knows that there are very few Mexican-American administrators in the United States. He, his wife and six children have moved to Austin, jettisoned the relative security of the practice of law, and started his new and uncertain career at the University of Texas.

Tom McCollough

Tom McCollough was vice-president of a medical instruments company prior to joining the program in November of 1970. He will soon complete his first full year as an NPEL fellow. In his previous job he was in charge of company planning and studies of the future. He traveled the United States, indeed the world, seeking out new ideas about man's technological and scientific progress. He is essentially a humanist, rather than a hard scientist. He is an artist, a person accomplished in music as well as an able writer. His wife is a junior high school teacher. He respects the incredible seriousness of the problems of education and sees himself as assuming major administrative responsibilities when he completes his program a year from now. Thus far he has participated in a study of the elementary schools in Detroit; audited conventional classes in educational administration; taught sixth grade in an all black ghetto school in Cleveland for 10 weeks; led an in-service education program for the top staff of a state department of education; and will study open classrooms in England and visit schools in Israel this winter.

Are there implications in this trend for those interested in designing new programs for vocational and technical leaders? Would it be possible and desirable, for example, for you to reach for those in significant leadership positions in American industry to undertake new and significant careers in vocational and technical education as a complement to your long tradition of recruiting teachers out of the private sector? Do you not need as much as any group in education to recruit aggressively talented members of minority groups to participate in the evolvement of new programs of career education?

The predominant recent trend in program content has been away from technique-oriented substance and toward theory oriented substance based on disciplines external to education. The disciplines most frequently studied by prospective leaders are sociology, political science, psychology, and economics, in that order. There is some study of, but considerably less emphasis upon, anthropology and social psychology.

Would not social science content be pertinent to the preparation of vocational and technical leaders? If so, which social science discipline(s) would be most central to the preparation of the vocational and technical leaders? For the prospective researcher interested in manpower studies a good grounding in the discipline of economics would be the most appropriate strategy. For the school leader assuming broad responsibilities, a combination of subjects in several disciplines as, for example, the sociology of work, the politics of education, and the social psychology of careers would seem desirable. For the student of educational policy learning theory, the economics of education, manpower studies, law, and other subjects would be relevant. In all cases social science concepts and modes of inquiry would need to be applied within a context of education and be supplemented by work in education.

Another distinct trend in the preparation of educational leaders is toward a greater use of the internship and other field experiences. Internships are being developed and tested in different settings and for different purposes. One type of experience, for example, is called the "rotating internship." In this arrangement the prospective leader spends a portion of his internship year or semester in agencies at different levels of educational government. Within the context of vocational education, for example, the intern might spend time in a federal agency concerned with the improvement of career education, in a state education department where a development project was in progress to improve vocational and technical education statewide, and in a high school where specific efforts to change vocational and technical education were underway.

Another type of internship experience emphasizes broadening experiences at the local school district level. Under this arrangement, the intern might spend time in a model cities program, the mayor's office, a community agency, or a minority group organization. Such experiences are designed to help prospective administrators view a school system as those external to the system see it and to achieve a better understanding of the environment within which school systems operate. The desirability of community experiences is based upon the assumption that future leaders will need to relate to varied organizations and that skills required to engage in the politics of education will continue to be important. Would not the same idea be pertinent to the preparation of vocational and technical leaders; further, would not internships for these leaders in business organizations encourage deeper understandings of the changing business-education interface, provide insights into vocational and technical education in industry; and offer leadership experiences in a substantially different setting.

A major factor affecting changes in preparation programs during the last decade has been the increasing trend toward specialization. Specialization has had two major expressions. One has to do with classes of knowledge, and the other has to do with special ways of using knowledge. New kinds of knowledge that have evolved could be referred to under such terms as the economics of education, the politics of education, the sociology of organizations, administrative behavior, and so forth. Specialized uses of knowledge are associated with the differing functions of research, synthesis, development, and administration. The generalization that researchers, developers, synthesizers, and administrators perform different functions in different settings to achieve different immediate objectives is increasingly accepted. At the same time, the practice of preparing these differing specialists through the same programs without some differentiation in their preparation is being increasingly questioned. It is presumed, for example, that the conclusion-oriented researcher planning to spend much of his career developing valid findings and generalizations to advance scientific understanding through basic inquiry, let us say about the politics of education, needs a somewhat different preparation than does the educational administrator who plans to spend his career making decisions and performing actions designed to bring about improvement in educational policies and programs in local school districts.

Those accepting the generalization in your own field who are engaged in preparing those with doctorates, for example, would strive to see that a substantial amount of preparation was differentiated to help prospective specialists (e.g. researchers, developers, administrators) perform skills inherent in their unique specializations. Differentiations would occur at various points in the program and might include differentiated criteria for

selection as well as differentiated field, internship, classroom, and culminating experiences. For example, prospective basic researchers might intern with basic researchers while prospective administrators interned with practicing administrators. Or, to take another example, the culminating experience for the prospective synthesizer of knowledge might be a dissertation while the implementation of an innovation in a school and the analysis of this experience might be the culminating activity for the prospective administrator.

The trend toward differentiation in preparatory programs is not unrelated to the move toward greater flexibility. Flexibility is usually defined in relationship to students' capacities to make choices. Choices could encompass program objectives as, for example, whether a candidate preferred to pursue a program designed for prospective researchers or one designed for prospective leaders in school districts.

Another aspect of choice has to do with determining the content and methods for achieving objectives. There has been a distinct trend toward greater flexibility with regard to this aspect of choice. In the Department of Educational Administration at New York University, for example, students can choose to pursue regular courses in their program or they can develop their own plan of study. If they elect the latter option, they are assigned to a program advisor who talks with the student as long as is necessary to get a plan of study developed. In developing plans students can pursue independent study, opt for a combination of independent study and regular course work, or ask a faculty member to assist in the design of a special series of small-group seminars. At the University of Massachusetts, to take another example, professors are creating a number of "modules" from which students can select those of interest to them and those related to their objectives. A student does not have to take a total course if he can demonstrate he has already studied or has special competencies in certain modules comprising it. Would not the concept of flexibility either as it relates to the student choice of a specific program to meet career objectives or content and methods for achieving these objectives be pertinent to those interested in improving programs for vocational and technical leaders?

The final trend I will mention has been the growing emphasis upon the development and use of simulated administrative situations and problems in preparatory programs. During the last two years, for example, under the auspices of the University Council for Educational Administration, approximately 100 professors have been involved in "Monroe City," a pseudonym for one of the 20 largest cities in the country, in a major effort to simulate an urban school system, its environment, various administrative positions in it, and problems faced by decision-makers there. The Janus Junior High, the Wilson Senior High, and the Abraham Lincoln

Elementary Principalship simulations are already in use. Eight additional simulations are planned ranging from the Monroe City superintendency to a "school of the future." Each simulation has both audiovisual and written components. The Wilson Senior High, for example, has eight filmed problems ranging from teacher-student conflict to a confrontation of the principal's staff by a rightist organization concerned with law and order. There are 14 audio recorded problems ranging from a bomb scare to a problem learning incident. More than three dozen problems are presented in in-baskets. Trainees making decisions can draw upon handbooks, data banks, and other information. They are also provided background information on films, filmstrips, and 15 booklets on the school systems and community.

A range of support materials are provided professors and graduate students to supplement the simulations. These include specific analyses of decision problems and theories bearing upon urban educational administration. For example, Don Erickson of the University of Chicago and Ted Reller of the University of California are assuming a leadership role in developing a book on the urban principalship. The conception of the book is logically related to the three urban principalship simulations. Finally, a range of instruments are being developed to enable prospective trainees to gain insight into their own decision-making behavior as well as the values and attitudes which shape these behaviors. Four instruments, for example, have been developed to help trainees understand their styles of communication in organizations.

In sum, then, a number of trends in programs for preparing educational leaders are now underway including: (1) more aggressive efforts to recruit from more broadly based talent pools, (2) more theory based content as represented in content from the social science disciplines, (3) an increase in the number and types of internship, (4) a move toward greater differentiation in programs for preparing researchers, administrators, and other specialists, (5) greater flexibility in preparation programs, and (6) the development and use of a wide range of simulations.

Having identified some general trends in administrator preparation let us turn more directly to your theme of "accountability." Webster defines accountability as "capable of giving a reckoning." In education this means that we need to be able to give a reckoning to various publics when their representatives post significant questions. To me there are four questions which are central to accountability and these can be translated into your own context as follows:

1) What are the schools doing with regard to vocational and technical education?

2) Why are the schools doing what they are doing in this area?

3) How well are the schools doing what they are doing?

4) What should the schools be doing in vocational and technical education, and why?

A good accountability system would help leaders to have the necessary data and concepts to respond effectively to these four questions. Therefore, resident, on-campus and continuing education programs can be evaluated for their capacity to assist leaders to deal effectively with the questions as they are posed by various publics. Even though the questions are not sufficient for a total evaluation of programs, they represent important selected criteria. Consequently, they can be used to generate ideas about needed new or updated program designs to meet accountability challenges. What, then, are some of the general implications of these questions for preparatory programs?

A central question today facing all educational leaders and certainly those of special interest to you is the following: What should the schools be doing with regard to vocational and technical education and why? This question bears upon the conditions noted earlier, namely, emergence of the very general and not yet well defined concept of "career education" and the federal effort to facilitate its implementation. Important questions facing leaders today are what is now meant by "career education" and what should be its meaning? Put differently and in more specific terms, what would be the significant outcomes of a desired career education program in a K-12 district, if it were implemented? Why do students and society need the outcomes projected? What programs can achieve the outcomes? I would submit that general administrators and vocational and technical education leaders both need continuing education experiences that would help them answer more clearly and effectively these important and interrelated accountability questions. For if there cannot be a clear vision on the part of leaders of the outcomes desired, how can they be effective either in their actions or in accounting for their actions and the actions of others? State education agencies, universities, local school districts, and other agencies need to design and sponsor seminars and other learning experiences to help leaders in effective purpose definition and value clarification as these bear upon vocational and technical education. There is the related need to be met of helping administrators understand the various models of career education which are now evolving and the concepts and purposes which are inherent in them.

I would also submit that we need greater numbers of well-prepared professors who can address effectively the question of what should the schools be doing in vocational and technical education and why? Leaders in school districts, in other words, should not be required to rely entirely on the political process, on federal guidelines, or on general discussions for definitions of the

purposes of vocational and technical programs. Scholars are needed who can address the question meaningfully and who can generate and order ideas that will inform and elevate political and leadership processes. Scholars need to be prepared with the capability of addressing the question of purpose in various ways. One is through manpower studies to get at the question of different careers and society's changing professional and vocational needs. Another is at the level of the functions to be performed in differing careers and, in turn, the types of training and education needed to enable individuals entering the careers to perform the functions. New thinking is also needed concerning how other purposes traditionally associated with education can be integrated with the emergent concept of career education. Can citizenship education, for example, be subsumed under the concept of career education or is it another category that needs to be logically related in some way to new concepts of career education? Still another major focus for study is the problem of needed curricula and programs to translate purpose into operation.

Clearly, then, we need a new breed of scholar to help articulate and clarify emergent purposes of career education at a time when there is much amibiguity about the directions of American education. Without new scholarship longer-range accountability needs cannot be met effectively. It should be made clear that, given the decreasing demand for newly prepared personnel in higher education, it would not be meeting accountability requirements to develop doctoral programs that offer more of the same. It should also be made clear that there are immediate training needs to be met with regard to professors already involved or needing to be involved in career education. We need, in other words, continuing education programs in career education and the problems to which it is addressed for professors of vocational and technical education, professors of educational administration and professors of curriculum, among others.

Another accountability question is "how well are the schools doing what they are seeking to do in vocational and technical education?" This question implies a capacity for evaluation. The question breaks into additional ones. For example, what measures of effectiveness can be used to determine the extent to which schools are doing what they are purporting to do, what kinds of information systems are needed to gather data on the measures of effectiveness to make necessary evaluations, and what are the implications for changes in preparatory programs? The questions just noted, of course, are central to systems analysis and planning. Practicing educational administrators can gain important insights basic to dealing with the accountability question of how well the schools are doing through a careful understanding of systems analysis and systems planning concepts. Even though a variety of continuing education experiences have been offered on the subject in recent years for leaders of vocational and technical education as

well as for general administrators, it is still a valid observation that school administrators have had difficulty in applying the system concepts and techniques in order to obtain data on how well the schools are doing. Therefore, they are still not well equipped to give a reckoning on this question to interested publics.

This condition poses another important problem concerning the continuing education of school leaders. Most all of the training models on systems analysis have been disseminative and not applicative. The theory of career education itself would lead us to question the heavy emphasis on conferences, meetings and other disseminative devices. Training situations need to be created in which individuals can apply learnings in the performance of functions or in the making of decisions that are central to their career pursuits. One reason why simulation receives support in training is that it does provide prospective administrators opportunities for practicing the application of skills and understandings in problem situations. However, we need to supplement simulation with development teams that will work on defined school system problems. These teams could be composed of scholars, administrators, graduate students, and other personnel who would apply systems concepts in ways that actually generate data about the extent to which schools are achieving stated purposes, including those associated with career education. The results should help some leaders meet accountability needs as well as provide models other leaders could use. The teams could also represent applicative models for the continuing education of professors and school personnel. They might in turn suggest other needed learning models.

The other two accountability questions noted above were: what are the schools doing and why are they doing what they are doing? These questions highlight other continuing education needs shared by almost all school leaders. They need to have a better grasp of emergent practice as it relates to vocational and technical or "career" education. Furthermore, they need to grasp why these practices are in operation and to have careful analysis of their impact and of their implications for use in other school districts. They need alternatives to consider which are related to but go beyond current practice. A model such as the National Academy for Education represents one mechanism for sharing and analyzing practices. State education agencies represent another source for such training as do universities. Clearly, there is much information about innovations in practice related to career education that are not widely known by school leaders. This would include emergent work in education as well as the increasing number of experiments carried on by those in the private sector. The effective ordering and use of this information by leaders is largely dependent upon the continuing education opportunities that are available to them.

Questions of accountability have been discussed to this point more from the perspective of public schools and their leaders. The questions can also be stated within the specific context of training agencies as, for example, institutions of higher education, state education agencies, and school districts. A final recommendation that I would have is that these various agencies responsible for new programs to prepare vocational and technical leaders state explicitly the four accountability questions noted above and that they relate them directly to training functions; further that they devise better ways for answering to their publics the four questions:

1) What are we now doing to prepare leaders of vocational and technical education?

2) Why are we doing what we are doing?

3) How well are we doing what we are doing?

4) What should we be doing to prepare leaders, and why?

I believe that training agencies are going to be pressed to give a reckoning on the questions more in the future than they have in the past. More basically, I believe they are going to have to achieve more carefully conceived and more data-based answers to them if they are to meet important challenges now before us.

CHAPTER III

EVALUATION CONCEPTS FOR GRADUATE PROGRAMS

The program had three presentations, one panel, and a group discussion which focused on the goal of presenting different evaluation models, eliciting implications for vocational and technical education graduate programs, and discussing related ideas.

Presentation

"The Education of General Staff Officers Program in the United States Army"

Dr. Ivan Birrer
Educational Adviser
U.S. Army Command and
General Staff College
Fort Leavenworth, Kansas

I am especially pleased to be here this morning and to tell you something of my institution, the U.S. Army Command and General Staff College at Ft. Leavenworth, Kansas. In talking about the college, or CGSC as I will call it for short, I will portray a military model for assessing, or evaluating graduate programs. At the outset, I should acknowledge that my remarks might sound somewhat prejudiced; indeed, I am enthusiastic about our program--I have been associated with it since January, 1948.

I begin this morning at something of a disadvantage because I represent a rather different kind of graduate professional schooling. Although I believe that much of what we do has application elsewhere, it is true that CGSC is, in many ways, unique. At the start, I'll endeavor to sketch in the necessary features.

Let's commence with a look at the army educational pattern. On this chart, years of commissioned service are shown on the vertical scale. We are concerned with the third, or next to highest, level. Let me make these points: first, while all officers attend the branch basic course and the branch advanced course, only about 50 percent are selected to attend the CGSC; second, the officer comes to the college after eight or more years of successful

competitive service--in mid-career and as majors or lieutenant colonels, with an average age of 34. Third, less than one-fourth of the CGSC graduates will subsequently be chosen for the highest level--senior service colleges. Obviously, each officer's record at CGSC will be a significant consideration for these later selections. In addition to these points, CGSC qualifies as graduate education on two counts. It is post-baccalaureate, and it is available several years after original entry into the military profession.

Having shown you the college's place in the military educational pattern, the next item I call to your attention is the mission. Here is the formal mission statement.

The key phrases are three: peacetime and wartime duty; commanders and general staff officers; divisions, corps, etc. Before attending CGSC, an officer, let's say an infantry major, has had formal military schooling and experience (in Vietnam, most certainly) in infantry. He is, as we say, branch qualified--he has had schooling and on-the-job experience in infantry. Our job is to extend this qualification over the gamut of the team of the combined arms and services. In short, we can say that our goal is to produce graduates who can perform the tasks and solve the problems of commanders and senior staff officers of large army units; that is, 15,000 or more men.

The remainder of my remarks will describe how we endeavor to accomplish this ambitious mission, including the steps we take to appraise our success.

A key variable in any school program is the student body. I have previously indicated that our students have earned attendance by prolonged (at least eight years) service. Perhaps it is self-evident that every officer wants to be selected to attend CGSC. Indeed, for all practical purposes, CGSC graduation is a *sine qua non* for a successful military career. This means that the competition for selection is spirited, and later, that there is substantial motivation to excel as a student.

Fortunately for us, the college is not a part of the selection process. This difficult and important process is accomplished in Washington--in the Office of Personnel Operations. In this office there is a special group specifically concerned with monitoring the careers of the officers of each branch. This office makes school selections as well as other personnel assignments. As for CGSC, each year, the group reviews the record of each officer of the branch with between eight and 15 years of service, who is not a Leavenworth graduate. This record includes efficiency reports made at least annually; reports of previous schooling, both military and civilian; and all other data pertaining to the officer's performance of duty. The point I'm making is that the officer

earns his selection to CGSC by his performance over a period of years. He has clearly demonstrated professional competence. The results of the selection process are published annually, around mid-December. At that time about 1,200 officers learn that they will begin a CGSC 10-month student tour the following August. Moreover, since the entire roster of selectees is published, the whole army knows who is and who is not chosen.

Having been selected, the student officer, complete with family and household effects, travels to mid-America in late summer to commence his schooling. From the college catalog he knows that the curriculum is divided into seven courses of study.

Course 1 covers instruction on the fundamentals of staff organization, including joint and combined staffs, and commander and staff responsibilities, functions, and procedures at command levels ranging from the division to the pentagon.

Course 2 covers the principles of command and management of the army's resources at all levels.

Course 3 presents principles and doctrine pertaining to the organization, mission, capabilities, limitations, and tactical employment of army divisions in various operational environments.

Course 4 presents similar instruction on our larger units, including the army's logistic structure and doctrine pertaining to combat service support for the army in the field.

Course 5 is devoted to strategic subjects that take into consideration the elements of national power and the fundamentals of strategic planning.

Course 6 investigates the concepts and principles concerning the organization and employment of joint and combined forces. Also covered are unconventional warfare, civil disturbance operations, tactical air support, air defense, and employment of other U.S. and Allied Armed Services.

Course 7 examines the history, concepts, organization, and patterns of insurgency. It also covers the effects of internal defense and internal development measures in countering insurgency.

As a matter of historical interest, courses 1, 3, and 4--staff procedures, division operations, and larger unit operations--comprised the pre-World War II CGSC curriculum. The inclusion of Course 2--management--is indicative of the army's concern for resources management. Course 5 reflects the fact that senior tactical commanders function in a broad strategic arena. Course 6--joint and combined operations--recognizes that no one service operates independently. Course 7--internal defense--testifies to

our concern with insurgency. In the military profession as in others it was simpler a few decades ago.

The curriculum is designed or, if you prefer, packaged into three-hour lessons. As a general rule the student attends two lessons per day. Each lesson has been prepared so that approximately one and one-half hours of homework is required. The student academic year, therefore, amounts to nine hours a day, five days a week, for 38 weeks. Of the 30 classroom hours per week (two lessons a day for five days), approximately half are devoted to solving requirements. The rest are spent discussing the requirements that have been solved either as homework or classroom work and in instructor presentations, primarily in the form of introductions, summaries, and conclusions.

Another feature of the college that merits attention is our scheme for curriculum planning--a problem which, in the military school system, is tackled in a quite formalized manner. To understand and appraise the college, one must be cognizant of this rather different approach to curriculum planning.

To establish some parameters for the planning sequence, I should note that the dimension with which we deal is time--classroom time, which is expressed in terms of clock hours instead of semester or quarter hours. Our students are ordered to the CGSC for a 10-month course. We have decided that six classroom hours on a typical day represent a reasonable amount of scheduled instruction. From these two facts, we arrive at a total of available hours for scheduled instruction.

Our mission, as has been pointed out, is a very broad one, which means that the subject matter content we would like to include far exceeds the available time. (An old story to each of you, I'm sure.) The challenge then, is to select from all the material that might be included, the best possible sample and fit it into the course--a task further complicated by rapidly changing world conditions as they pertain to the military. With this as a backdrop, let's see how we go about deciding what should make up the course of instruction--how we go about curriculum planning.

The starting point, of course, is the college mission, which assigns to the college the task to be accomplished. The mission is broad in scope and very general in nature. This means that the college has wide latitude in deciding what should be taught. At the college, the mission statement is under constant analysis to discern what changes in emphasis or direction are desirable. For any one school year the analysis is collected and reviewed. When approved, this collection is called the Commandant's Curriculum Guidance.

Based on this guidance, the academic staff, in coordination with the course directors, develop a document which, when approved, establishes the specific subject matter responsibilities for each course and allocates resources in terms of classroom time. We call this document, Faculty Memorandum Number 1. In military terms it is our operation order.

The content of Faculty Memorandum Number 1 is as shown here:

FACULTY MEMORANDUM NUMBER 1

1. GUIDANCE FOR CURRICULUM DEVELOPMENT.

2. COORDINATION INSTRUCTIONS.

3. ASSIGNMENT OF RESPONSIBILITIES FOR COURSE DEVELOPMENT AND PRESENTATION.

4. ALLOCATION OF HOURS TO COURSES AND SUBJECTS.

5. ASSIGNMENT OF EXAMINATION RESPONSIBILITIES.

As for item 1, two typical examples from the document for academic year 1971-1972 are that--

"Every lesson in the curriculum should be designed to require serious application and work in a manner that is stimulating and thought provoking rather than laborious and time-consuming."

"Instruction, especially the selected operating areas and levels of conflict, is to be guided by the announced U.S. military strategy."

By coordinating instructions we mean the procedures prescribed to control curriculum content, facilitate detailed coordination, and preclude duplication of instruction. These instructions insure that the seven courses of study are a cohesive and integrated whole. We will look at some of these procedures shortly.

The remaining items form the heart of the document. Each course of study is allocated a specific number of contact hours. This bulk allocation is further divided into what we call numbered subjects which consist of one or more three-hour lessons. And, finally, the plan prescribes the number, length, and time of examinations for each course of study.

From here the major focus of curriculum planning activity shifts to the instructional departments. The departmental subject

matter responsibility is analyzed against the background of the number of hours alloted to each course. From this analysis a Course of Study Outline is prepared for each of the seven courses of study.

The Course of Study Outline includes the following: first, a detailed narrative that describes the course of study; second, a listing of student-oriented instructional objectives and the subjects within the course that fulfill each objective; and, third, the proposed presentation sequence for all course lessons.

The crucial features of the outline, quite evidently, are the instructional objectives. In graduate education it is not easy to state specific objectives in precise terms--despite the obvious necessity therefor. We say instructional objectives should have these characteristics:

CHARACTERISTICS OF
INSTRUCTIONAL OBJECTIVES

Stated in terms of the TASK which the student must be capable of performing

Indicate the STANDARD of performance which the student must achieve

Indicate the CONDITION under which the student is expected to perform

Let's look at an actual example that purports to satisfy these characteristics:

EXAMPLE OF INSTRUCTIONAL OBJECTIVE

Course 3, Division Operations

Subject M6001, Organization, Combat, Combat Support and Combat Service Support-Division.

To enable the student, as a general staff officer assigned to
CONDITIONS

a division to allocate forces and assign tasks to subordinate
TASK

units based on unit missions and employment in accordance with

FM 61-100 and TOE's
STANDARD

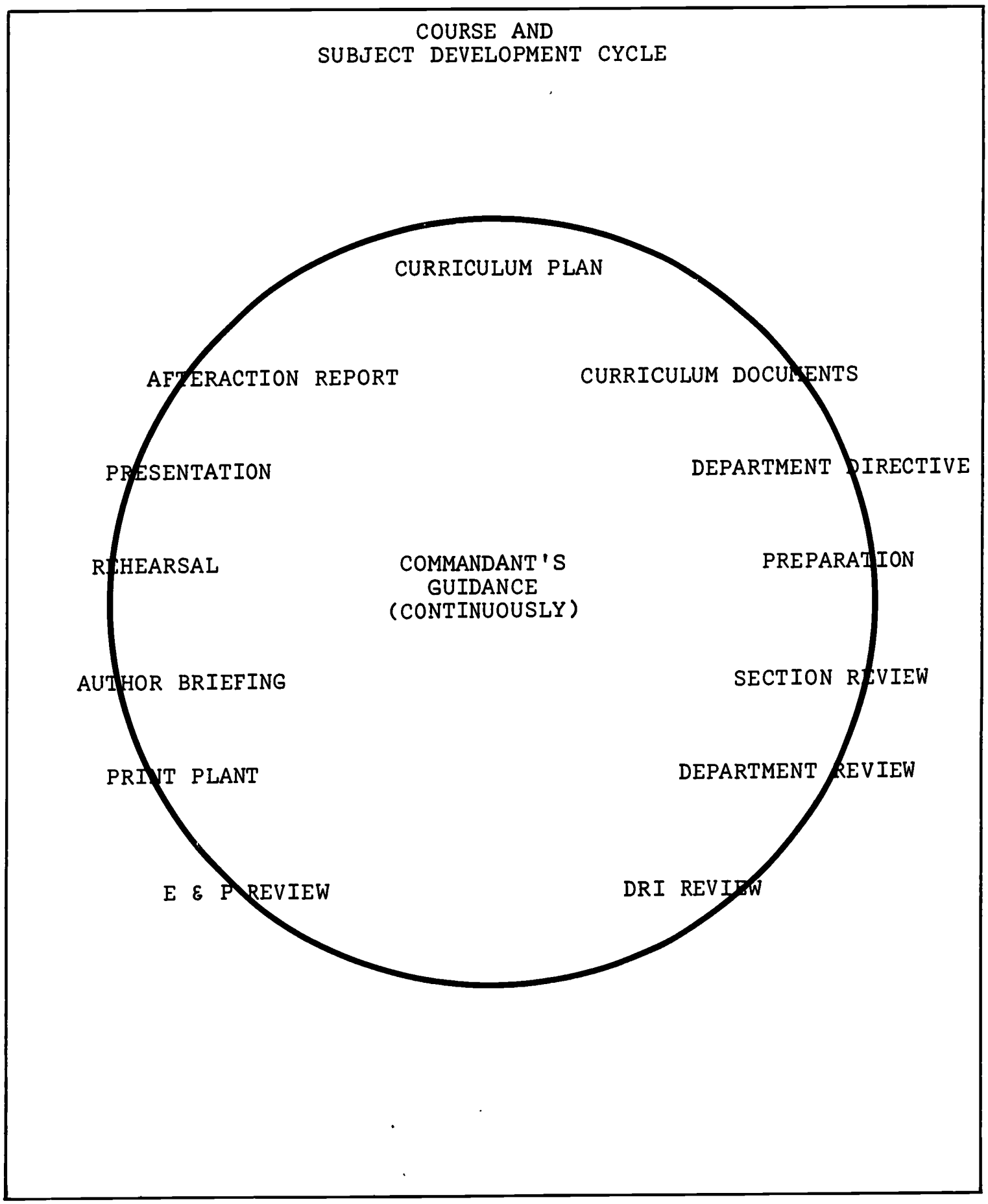
The TASK is allocation of forces and asignment of tasks to subordinate units. This is to be done in accordance with published doctrine--the STANDARD, and as a commander or general staff officer--the CONDITION.

In addition to the Course of Study Outline, the course director prepares and submits to the academic staff a Content Control Data Form for each subject of his course. The Content Control Forms are divided into two parts. Part one contains information that is required to develop the subjects, the training schedule, and the Program of Instruction. Part two consists of subject content control data that is designed along functional and organizational lines to ascertain the instructional emphasis and coverage of the curriculum.

These documents--the Course of Study Outline and its accompanying Content Control Forms--are submitted to the academic staff, which is charged with the important task of insuring that when the seven courses of study are combined, the curriculum will be responsive to the Commandant's Guidance. Based on this staff review, the Course of Study Outlines are modified to the extent required. Unnecessary duplication is eliminated; identified gaps in coverage are provided for; and necessary changes in emphasis, approach, and locale are accomplished. At this point in the sequence, the Course of Study Outlines, as modified, constitute the Curriculum Plan. The plan is submitted to the commandant for approval. When approved, a digest of the plan, giving the scope and other pertinent data for each subject, is published in a document we term the "Program of Instruction."

The next step in the procedure is the preparation and subsequent presentation of each subject listed in the approved Curriculum Plan. The process is explained in the diagram on the following page.

Each subject in the course is assigned to one instructor for preparation. We call him the author-instructor. Starting with the curriculum documents--the pertinent portion of the Course of Study Outline and the various content control forms for his subject, he accomplishes the pertinent research, develops an outline, and drafts the Department Directive. The Department Directive is a document describing the proposed subject in detail. In accordance with the approved Department Directive the author establishes the setting; selects maps if required; and outlines the tasks to be accomplished by the student. He also prepares a comprehensive lesson plan. His subject is then reviewed by his associates and chief within his section and then by his department. Following departmental approval, the subject is submitted to the coordinating staff. At this level the subject is checked for compliance with guidance and overall doctrinal soundness. The material is then reproduced in our own printing plant. After printing is completed,


COURSE AND
SUBJECT DEVELOPMENT CYCLE
CURRICULUM PLAN
CURRICULUM DOCUMENTS
DEPARTMENT DIRECTIVE
PREPARATION
SECTION REVIEW
DEPARTMENT REVIEW
DRI REVIEW
E & P REVIEW
PRINT PLANT
AUTHOR BRIEFING
REHEARSAL
PRESENTATION
AFTERACTION REPORT
COMMANDANT'S
GUIDANCE
(CONTINUOUSLY)

the author-instructor conducts an extensive briefing for his teaching team. The teaching team, consisting of the author-instructor and five members of the same department, is necessary because a subject is taught simultaneously in six classrooms. After a subject is taught, an afteraction report records views, and recommends changes, if any, that should be made in the subject for subsequent presentations. As this circle suggests, the afteraction report is the most important source document for the preparation of the subject for the following year.

So much for a quick resume of curriculum planning. I have endeavored to describe the process in sequential order. In actual fact, several steps are occurring simultaneously. Obviously, the proposed content of an individual subject is reflected in the Course of Study Outline. Certainly, the author-instructor does not wait for a formal printing of the Program of Instruction before beginning the development of his subject. He must act on the assumption that the proposed subject will be approved. On the other hand, the college does proceed through each of the several steps in the sequence each year. These procedures, I submit, have the merit of requiring an annual systematic review of the curriculum. Moreover, they establish an orderly procedure for instituting changes in the curriculum as needed.

The foregoing has been an attempt on my part to give you some general familiarity with my college, with special attention to the characteristics of our student body, the nature of the curriculum, and the manner in which we go about curriculum planning and preparation. With this as a prelude it is appropriate to turn to the theme of this meeting and to describe the procedures we use to determine results. For convenience, I'll divide the description into two parts: the way we evaluate student achievement and the way we evaluate, or assess, our program as a whole, with particular regard to the curriculum.

It should be noted that the college very definitely has a certifying function. Because graduation from CGSC is a prerequisite for a great many assignments (not to mention its effect on promotion) the college is in the position to certify its graduates as qualified for commander and staff positions. Also, from the standpoint of public interest, the fact that the student officer is paid to attend argues for the need to account for his achievement. This accounting is in the form of an Academic Report that is sent to Washington and becomes a permanent record.

Other than the usual identifying data, there are six substantive items. I'll say a word about each in turn.

The first item is the crucial question of graduation/nongraduation. The rules are quite simple: successful completion is