

DOCUMENT RESUME

ED 115 759

95

CE 005 579

TITLE Applied Research Projects Supported in FY 1975 Under Section 131 (a) of Part C of the Vocational Education Amendments of 1968.

INSTITUTION Bureau of Occupational and Adult Education (DHEW/OE), Washington, D.C. Div. of Research and Demonstration.

PUB DATE [75]

NOTE 170p.

EDRS PRICE MF-\$0.76 HC-\$8.24 Plus Postage

DESCRIPTORS Demonstration Projects; \*Educational Administration; Educationally Disadvantaged; \*Educational Research; Federal Programs; Financial Support; Handicapped; Minority Groups; Occupational Guidance; \*Program Descriptions; Program Proposals; \*Research Projects; Scheduling; Vocational Counseling; \*Vocational Education

ABSTRACT The report provides an account of how the U.S. Office of Education's discretionary Vocational Education Research Program for 1975 was planned and implemented. It contains information about the legislative and regulatory framework for Section 131 (a) of Part C Research Program, as stated in the Vocational Education Amendments of 1968 Act. Five research priority areas were determined: (1) administration of vocational education at the State level; (2) administration of vocational education at the local level; (3) comprehensive systems of guidance, counseling, placement, and follow-through services; (4) educational personnel serving the educationally disadvantaged, handicapped, and minorities; and (5) curriculum, demonstration, and installation studies. The processes used to implement the award program are outlined, and the award outcomes are discussed in terms of an overview of the purposes and expected results of the funded projects. A total of 361 applications were received for consideration. Synthesis papers are presented for the priority areas with the exception of the fourth. Abstracts are included for all funded projects, arranged by priority area (22 in State level administration, 16 in local level administration, 19 in guidance and counseling, 17 in administration for the handicapped and minorities, and 12 in curriculum) and for eight special projects of national significance. (Author/EC)

\*\*\*\*\*  
 \* Documents acquired by ERIC include many informal unpublished \*  
 \* materials not available from other sources. ERIC makes every effort \*  
 \* to obtain the best copy available. Nevertheless, items of marginal \*  
 \* reproducibility are often encountered and this affects the quality \*  
 \* of the microfiche and hardcopy reproductions ERIC makes available \*  
 \* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
 \* responsible for the quality of the original document. Reproductions \*  
 \* supplied by EDRS are the best that can be made from the original. \*  
 \*\*\*\*\*



ED115759

**APPLIED RESEARCH PROJECTS  
SUPPORTED IN FY 1975  
UNDER SECTION 131(a)  
OF PART C OF THE  
VOCATIONAL EDUCATION  
AMENDMENTS OF 1968**

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY

**U.S. OFFICE OF EDUCATION  
BUREAU OF OCCUPATIONAL AND ADULT EDUCATION  
DIVISION OF RESEARCH AND DEMONSTRATION**

OE005579

\*\*\*\*\*

CIVIL RIGHTS COMPLIANCE

DISCRIMINATION PROHIBITED - TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

STATES:

"NO PERSON IN THE UNITED STATES SHALL, ON THE GROUND OF RACE, COLOR, OR NATIONAL ORIGIN, BE EXCLUDED FROM PARTICIPATION IN, BE DENIED THE BENEFITS OF, OR BE SUBJECTED TO DISCRIMINATION UNDER ANY PROGRAM OR ACTIVITY RECEIVING FEDERAL FINANCIAL ASSISTANCE."

THEREFORE, ANY PROGRAM OR ACTIVITY RECEIVING FINANCIAL ASSISTANCE FROM THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE MUST BE OPERATED IN COMPLIANCE WITH THIS LAW.

\*\*\*\*\*

## TABLE OF CONTENTS

<u>Section</u>	
Preface .....	i
Foreword .....	iii
I. Legislative-Regulatory Provisions .....	1
II. Determining Research Priorities for the Fiscal Year 1975 Program .....	3
III. Implementation of the Fiscal Year 1975 Program .....	8
IV. Numbers of Applications Received and Selected for Funding, by State, by Type of Institutions, in Fiscal Year 1975 .....	18
V. Synthesis Papers and Abstracts of Funded Projects .....	20
A. Administration of Vocational Education at the State Level .....	21
B. Administration of Vocational Education at the Local Level .....	56
C. Comprehensive Systems of Guidance, Counseling, Placement and Follow-Through Services .....	80
D. Administration of Vocational Education Disadvantaged, Handicapped, and Minorities .....	115
E. Curriculum, Demonstration and Installation Studies .....	133
VI. Abstracts of Special Projects of National Significance .....	<u>153</u>

## PREFACE

Vocational education has been of special interest and concern to the Federal Government for over 100 years. The Federal Government has consistently recognized the importance of vocational education in terms of preparing individuals in occupational competency as well as producing skilled persons to meet National and State manpower needs.

The number of persons involved in vocational education has expanded tremendously during the past decade and the trend is continuing. An increasing percentage of youth at the elementary and secondary levels are opting for vocationally oriented curriculums. At the post-secondary level, institutions that provide occupational education are bulging with students who desire occupational training in preparation for employment.

Technological advances, increasing industrialization, expansion of employment in the service industries, and changing manpower requirements across the Nation necessitate up-to-date planning and management information systems for vocational education. Decision oriented studies, development, and demonstration programs are needed to improve and extend existing vocational education programs so that National concerns and individual needs are met. Vocational Education Research and Demonstration Programs are required to produce information and materials for the complex vocational education systems that exist in the 56 States and Territories.

Such information and material must be directly relevant and usable by the planners and practitioners in vocational education.

This report provides an account of how the U.S. Office of Education's discretionary Vocational Education Research Program for fiscal year 1975 was planned and implemented under the administration of the Bureau of Occupational and Adult Education.

Howard F. Hjelm, Director  
Division of Research and Demonstration

## FOREWORD

The Vocational Education Act authorizes the Office of Education to administer vocational education research and demonstration programs. Three parts of the Act are coordinately managed to form the program. Part C authorizes support for research, including nearly all of the functions of the R&D enterprise. Part D authorizes support for exemplary demonstrations, and Part I authorizes support for curriculum development, and related activities.

This is a report of the U.S. Commissioner of Education's discretionary vocational education research program for fiscal 1975 which is authorized by Section 131(a) of Part C of the Vocational Education Amendments of 1968 Act. Half of the funds appropriated for Part C are given directly to the States and Territories on a formulae bases for their discretionary use. The States' half of the appropriated funds may be used to support up to 75 percent of the cost of Research Coordinating Units and up to 90 percent of the cost of the projects. The fiscal year 1975 appropriation for the State grant portion of Part C was \$9,000,000. The portion for the Commissioner of Education's discretionary funding may be used to make grants and contracts for supporting applied and developmental studies, as well as curriculum development, demonstrations,

evaluations, and dissemination. Cost sharing is required for Part C projects.

The Commissioner's fiscal year 1975 appropriation of \$9,000,000 was awarded to 88 projects resulting from a competitive grant announcement made in the Federal Register on October 11, 1974, and to seven special projects.

This announcement identified five priority areas for the receipt of applications. Eligible applicants include all parties except individuals, including all public agencies and institutions and all private organizations and institutions, both non-profit & profit-making.

This report contains information about the legislative and regulatory framework for Section 131(a) of Part C Research Program; the planning and its procedures leading to the determination of the program priority areas for fiscal year 1975; the processes used to implement the award program for this fiscal year; the award outcomes in terms of an overview of the purposes and expected results of the funded projects, and abstracts of the individual projects. In addition, several special projects of National significance are listed.

The effective work of the staff of the Research Branch in accomplishing the tasks described herein, and many related ones, is hereby acknowledged with special thanks. The professional staff are Velma Brawner, Mario F. George, Lawrence Goebel, Judith Jaffe, David H. Pritchard, and Jack A. Wilson.

Glenn C. Boerrigter, Chief  
Research Branch

## I. Legislative-Regulatory Provisions

Regulations pertaining to the administration of the research program under Part C of the Act are contained in the General Provisions for Programs - Administrative and Fiscal Requirements - (45 CFR Part 100a) as published in the Federal Register on November 6, 1973 (38 F.R 30654, 30662). Additional regulations pertaining specifically to the Part C research program are contained in Volume 39, No. 159 of the Federal Register which was published August 15, 1974.

Regulation 100a.26 - Review of Applications set forth basic procedures and criteria to be applied to review of applications received under the vocational education research program, among others. It reads as follows:

(a) The Commissioner, prior to disposition of applications for grants or contracts, shall have discretion to obtain the review of a panel experts (except where review by such a panel is required by statute). Any such review will be in addition to the review of an application by the Commissioner in accordance with such procedures as he may establish.

(b) Review by the Commissioner and by the panel of experts will take into account the following factors (in addition to such other criteria as may be prescribed by statute or regulation):

(1) The need for the proposed activity in the area served or to be served by the applicant;

(2) Relevance to priority areas of concern as reflected in provisions contained in the applicable Federal statutes and regulations;

(3) Adequacy of qualifications and experience of personnel designated to carry out the proposed project;

(4) Adequacy of facilities and other resources;

(5) Reasonableness of estimated cost in relation to anticipated results;

(6) Expected potential for utilizing the results of the proposed project in order projects or programs for similar educational purposes;

(7) Sufficiency of size, scope, and duration of the project so as to secure productive results; and

(8) Soundness of the proposed plan of operation, including consideration of the extent to which:

(i) The objectives of the proposed project are sharply defined, clearly stated, capable of being attained by the proposed procedures, and capable of being measured;

(ii) Provision is made for adequate evaluation of the effectiveness of the project and for determining the extent to which the objectives are accomplished;

(iii) Where appropriate, provision is made for satisfactory inservice training connected with project services; and

(iv) Provision is made for disseminating the results of the project and for making materials, techniques, and other outputs resulting therefrom available to the general public and specifically to those concerned with the area of education with which the project is itself concerned.

The specific criteria which were used to review applications in FY 1975 are as follows:

<u>Criteria</u>	<u>Maximum Score</u>
(1) <u>Priority Area</u> -- Application is focused on an announced priority area(s), and further delineates the priority area.	15
(2) <u>Need and Problem</u> -- Application clearly defines the need for the project and delineates the problem, rather than symptoms of the problem.	15
(3) <u>Objectives</u> -- The objectives of the proposed project are sharply defined, clearly stated, capable of being attained by the proposed procedures, and capable of being measured.	15
(4) <u>Plan</u> -- The application clearly describes the general design for the proposed project. The procedures specify in detail how each objective will be accomplished, and an adequate project management plan is available. If appropriate, inservice training, evaluation procedures, and dissemination plans are included.	20

- (5) Results -- The proposed results of end products are identified and described in terms of transportability to other educational projects or programs. 10
- (6) Personnel -- The qualifications and experience of personnel are appropriate for the proposed project. 10
- (7) Institutional Commitment -- The application shows reasonable evidence of commitment to provide adequate facilities and equipment, and the application provides documented assurance of support from cooperating institutions and agencies when necessary for project success. 5
- (8) Budget -- ~~The estimated cost is reasonable~~ in relation to anticipated results, and the size, scope, and duration of the project are reasonable. 10

II. Determining Research Priorities for the Fiscal Year 1975 Program

Early in 1973, the Deputy Commissioner for Occupational and Adult Education established Bureau-wide planning procedures which included determining the priorities for the vocational education research program of the Bureau for fiscal year 1974.

One major dimension of this planning process for FY 1974 and again in FY 1975 was the establishment of broad goals for the Bureau as a whole, and goal-responsive objectives for main program components of the Bureau. Among the objectives which were established for the Bureau of Occupational and Adult Education were the following ones to which the Vocational Education Research Program is committed.

1. To improve and extend existing programs and develop new approaches for adult, vocational, and manpower education.

2. To improve and expand the training for individuals having special needs, including the educationally disadvantaged, the unemployed and underemployed, the gifted, and the cultural minorities and to bring about the integration of handicapped students into regular training programs.

3. To improve and extend occupational counseling, guidance, job placement, and followup services in elementary, secondary, and postsecondary programs.

4. To improve the State administration of occupational, vocational, adult, and manpower education.

It should be noted that the Vocational Education Research Program, is a mission oriented program that helps the Deputyship to accomplish its overall goals, rather than a program which attempts to accomplish independent goals of its own. With this management orientation, a primary requirement of the research program was that of determining the specific priorities for fiscal year 1975 funding from within the complete list of multi-program objectives established in support of Deputyship goals.

The selected objectives cited above, and the publicly announced funding priorities to be cited below, involved a second major dimension of the planning process - namely, that of obtaining perspective, advice, and recommendations from especially knowledgeable and cognizant groups. The Research Committee of the State Directors of Vocational Education, and The Research and Evaluation Committee of the National Advisory Council on Vocational Education, as well as staffs of the Department of HEW's Regional Offices, and the National

Institute of Education and a wide variety of Special Interest Groups were some of the major contributors to this aspect of the process.

Upon reviewing the advice and recommendations that were obtained about priorities for the fiscal year 1975 Vocational Education Research Program, the Deputy Commissioner for Occupational and Adult Education selected the following priorities to be pursued.

The five research priorities selected for 1975, as subsequently announced in the Federal Register on October 11, 1974, are as follows:

(A) Administration of Vocational Education at the State Level.

(1) The administrative capability of utilizing information to make decisions about educational programs, short- and long-range, needs to be improved in order to maximize the attainment of vocational education goals. The administrative capability to utilize student supply, manpower demand, cost analysis, student placement and follow-up services, and evaluation information needs to be improved. Administrators need better information to facilitate the improved articulation of vocational, occupational, manpower, and adult education programs across and within various educational programs administered or supported at the State level.

(2) The Commissioner is authorized to support applied studies and development projects that build on existing knowledge to design, develop, and field test comprehensive educational management and information systems that are results-oriented for vocational education at the State level. Projects may focus on one or more of the following activities:

(i) The design of a comprehensive educational management and information system for vocational education or one or more components;

(ii) the development of a comprehensive educational management and information system or one or more of the components;

(iii) the field testing of a comprehensive educational management and information system or one or more of the components.

(B) Administration of Vocational Education at the Local Level.

(1) To expand vocational education to ensure articulated programs; to improve coordination and cooperation with business, industry, and community organizations; to initiate new programs in emerging occupational areas; to utilize student needs data; to utilize manpower information; and to utilize cost-benefit and similar data require improved needs assessment, planning, and management techniques and skills at the local educational level.

(2) The Commissioner has authority to support applied studies and development projects that address one or more of the following:

(i) The development of alternative administrative strategies for the maximizing of educational program goals of vocational education while utilizing varying levels of resource allocations;

(ii) the design, development, and field testing of a comprehensive educational management and information system or components of such a system at the local level for vocational education which is based on a needs assessment and existing technology;

(iii) based on a needs assessment, the development and field testing of inservice training materials for vocational education administrators along with user guides in order to ensure the transportability of the materials.

(C) Comprehensive Systems of Guidance, Counseling, Placement, and Follow-Through Services. (1) Comprehensive systems of guidance, counseling, placement and follow-through services for all youth--both in and out of school--and adults have become increasingly important at the elementary, secondary, and post-secondary levels. The need to articulate such systems with business, industry, other service agencies, and manpower information systems is evident as is the need to ensure such services for minorities and for all youth without sex discrimination.

(2) The Commissioner is authorized to support development projects that address all of the following:

(i) Conceptualization, design, and development of comprehensive systems of guidance, counseling, placement, and follow-through services for all youth and adults at the elementary, secondary, and post-secondary levels;

(ii) utilization of existing tested materials and procedures for implementing and field testing a comprehensive system;

(iii) development of materials for training educational personnel to operate a comprehensive system; and

(iv) development of user guides which help to ensure the transportability of the comprehensive system.

(3) The Commissioner is authorized to support applied studies which produce information concerning (i) career planning and assessing student capabilities for selected populations, (ii) evaluation of intended and unanticipated effects of components of existing systems of guidance, counseling, placement and student follow-through systems, and determining cost and cost-benefits of components of a comprehensive system of guidance, counseling, placement and follow-through services.

(D) Educational Personnel Serving the Educationally Disadvantaged, Handicapped, and Minorities. (1) Educational personnel who administer programs, teach, and who serve the educationally disadvantaged, handicapped, and minority populations, need special motivational awareness, and instructional and service-oriented skills in order to assist both young men and women to succeed in vocational awareness, exploration, and preparation programs of their choice, and in their career progression.

(2) The Commissioner is authorized to support applied studies and development projects which produce information, models, and pre- and in-service training materials. These projects should:

(i) Create an awareness on the part of vocational educators and employers of the capabilities of the target populations;

(ii) improve the motivation, instructional, and service skills of vocational educators to improve learning opportunities for the target populations;

(iii) utilize knowledge gained from such groups or organizations such as AMIDS, COP, Teacher Corps, Urban and Rural Programs, and as stipulated in Part F of EPDA; and

(iv) assist in attracting and qualifying persons from all ethnic backgrounds to be involved in vocational education.

(E) Curriculum, Demonstration, and Installation Studies.

(1) More information is needed regarding: (i) the required curriculum and instructional material for vocational education in open entry-exit situations; (ii) the initiating and implementing of demonstration and innovative activities in vocational education at the local level within a framework that allows for the transportability of the activities; and (iii) the methods of installing tested and demonstrated innovations in other educational settings.

(2) The Commissioner is authorized to support applied studies (Curriculum development, demonstrations, or installation projects are not encouraged.) to produce information about one or more of the following concerns:

(i) The required types of curricula and instructional materials that are needed for vocational education in open entry-exit situations;

(ii) the necessary information, organizational requirements, and administrative arrangements to initiate and operate demonstration activities in order that the innovation will remain when outside sources of funds are no longer available; also, what is required to enable other user groups to understand the nature and effectiveness of the demonstration activity; and

(iii) the information needed regarding successful administrative techniques and other information necessary in installing tested demonstrations in other educational settings.

### III. Implementation of the Fiscal Year 1975 Program

The October 11, 1974 announcement in the Federal Register, in addition to setting forth the five priority areas proposed as "additional criteria" applicable to the program for 1975, called for applications to be submitted by November 29, 1974 and listed the approximate amount of funds anticipated for allocation to each State under Section 131(a) of Part C of the Act. This announcement of "additional criteria" was confirmed by republication in the Federal Register on February 28, 1975.

With the publication of the Additional Criteria for Selection of Applicants on October 11, 1974, the following procedures could be initiated. These included the following procedures.

- Identify and select personnel for application review panels.
- Receive and log applications referred by the Office of Education's Application Control Center
- Conduct panel review of applications for technical merit
- Recommend and obtain approval of applications for funding

- Submit approved applications for negotiation of grants
- Award grants
- Notify Applicants not recommended for funding

Review panels composed of Federal and non-Federal technical reviewers were established to evaluate applications that were officially transmitted and received by the announced deadline for receipt of applications which was November 29, 1974.

The following criteria were applied in the selection of panel members and formation of panels for the review of applications for competitive awards in FY 1975. The criteria were applied as general guidelines and not as rigid standards in the formation of individual panels.

#### 1. Criteria for Formation of Each Panel

- a. Panels will consist of at least five voting members with two of the individuals being Federal employees and three being non-federal field readers plus the chairperson and the executive secretary (see B and C below).
- b. The chairperson will be the branch chief, or designated representative, and will be a non-voting member.
- c. The program officer will serve as executive secretary and resource person to the panel and will not be a voting member.
- d. At least two of the voting members will be women.
- e. At least one of the voting members will be a representative of a minority group.
- f. Attention will be given to avoiding potential conflict of interest for the field readers.

#### 2. Criteria for Expertise of Voting Members for Each Panel

- a. Two of the panel members will be content specialists.
- b. One of the panel members will be a research, demonstration, or curriculum development design specialist.

- c. One of the panel members will be an evaluation specialist.
- d. One of the panel members will be a generalist, including users and consumer of the R&D products.

3. Criteria for Selection of Field Readers across all Panels

- a. Attention will be given to geographical spread.
- b. Attention will be given to institutional spread and by type of institution.
- c. Attention will be given to not having two field readers from the same institution.

Administration of Vocational Education at the State Level - Panel

Chairperson: Acting Director  
 Division of Vocational Technical Education  
 Bureau of Occupational and Adult Education  
 U.S. Office of Education  
 Washington, D.C.

Executive Secretary: Program Officer  
 Research Branch, DRD/BOAE  
 U.S. Office of Education  
 Washington, D.C.

Panel Members:

Director  
 Bureau of Special & Compensatory  
 Education  
 Pennsylvania State Department of  
 Education  
 Harrisburg, Pennsylvania

Research Associate  
 Productivity & Technology Group  
 National Institute of Education  
 Washington, D.C.

Director  
 Vocational Education  
 Oklahoma State Department of  
 Education  
 Stillwater, Oklahoma

Director  
 Program Services Branch  
 Division of Vocational  
 Education  
 Alabama State Department of  
 Education  
 Montgomery, Alabama

Senior Program Officer, Region IX  
 Occupational and Adult Education  
 U.S. Office of Education  
 San Francisco, California

Economist  
 Bureau of Labor Statistics  
 U.S. Department of Labor  
 Washington, D.C.

Administration of Vocational Education at the Local Level - Panel

Chairperson: Chief

Bilingual & Indian Education Programs  
Division of Educational Systems Development, BOAE  
U.S. Office of Education  
Washington, D.C.

Executive Secretary: Program Officer

Research Branch, DRD/BOAE  
U.S. Office of Education  
Washington, D.C.

Panel Members:

Director  
Instructional Systems  
The School District of  
Philadelphia  
Philadelphia, Pennsylvania

Chief  
Research, Planning & Evaluation  
Branch  
National Institute of Education  
Washington, D.C.

Program Manager  
Office of Indian Education  
U.S. Office of Education  
Washington, D.C.

Director  
Vocational-Technical Education  
& Industrial Education  
Minneapolis Public Schools  
Minneapolis, Minnesota-

Chief  
Program Support Branch  
Division of Vocational &  
Technical Education  
Bureau of Occupational and  
Adult Education  
U.S. Office of Education  
Washington, D.C.

Comprehensive Systems of Guidance, Counseling, Placement and  
Follow-Through Services - Panel

Chairperson: Specialist  
Division of Adult Education, BOAE  
U.S. Office of Education  
Washington, D.C.

Executive Secretary: Program Officer  
Research Branch, DRD/BOAE  
U.S. Office of Education  
Washington, D.C.

Panel Members:

Manpower Development Specialist  
U.S. Department of Labor  
Washington, D.C.

Education Program Specialist  
Bureau of School Systems  
U.S. Office of Education  
Washington, D.C.

Social Science Instructor  
Foothill Community College  
Los Altos Hills, California

Director  
Research Coordinating Unit  
University of Maine  
Orono, Maine

Director  
Pupil Personnel Services Section  
Minnesota Department of Education  
St. Paul, Minnesota

Educational Personnel Serving the Disadvantaged, Handicapped,  
and Minorities - Panel

Chairperson: Senior Program Specialist  
Division of Adult Education  
Bureau of Occupational & Adult Education  
U.S. Office of Education  
Washington, D.C.

Executive Secretary: Program Officer  
Research Branch, DRD/BOAE  
U.S. Office of Education  
Washington, D.C.

Panel Members:

Director  
Indian Careers on Health  
University of Montana  
Missoula, Montana

Associate Dean  
Graduate Studies & Research  
College of Education  
Florida State University  
Tallahassee, Florida

Instructor  
Mesa Community College  
Mesa, Arizona

Program Specialist  
Division of Vocational &  
Technical Education  
Bureau of Occupational and  
Adult Education  
U.S. Office of Education  
Washington, D.C.

Program Specialist  
Division of Vocational and Technical Education  
Bureau of Occupational and Adult Education  
U.S. Office of Education  
Washington, D.C.

Curriculum, Demonstration, and Installation Studies - Panel

Chairperson: Education Specialist  
Division of Vocational & Technical Education, BOAE  
U.S. Office of Education  
Washington, D.C.

Executive Secretary: Program Officer  
Research Branch, DRD/BOAE

Panel Members:

Vice President  
Prince Georges Community College  
Largo, Maryland

Senior Advisor to the Deputy  
Commissioner  
Division of Occupational Planning  
Bureau of Occupational and Adult  
Education  
U.S. Office of Education  
Washington, D.C.

Program Officer, Region VI  
U.S. Office of Education  
Dallas, Texas

Dean of Instructional  
Development  
El Paso Community College  
El Paso, Texas

Program Specialist  
Division of Vocational and  
Technical Education  
Bureau of Occupational and  
Adult Education  
U.S. Office of Education  
Washington, D.C.

Director  
Human Resources Development  
Program  
Flathead Education Department  
Dixon, Montana

Table I indicates that 361 applications were received for consideration under the fiscal year 1975 Vocational Education Research Program. These applications came from five major types of institutions, and varied in the number relevant to the five priority areas:

Table I

Applications Received by  
Type of Institution  
and  
Priority Areas

TOTALS	Priority Areas					TOTALS
	State Admin.	Local Admin.	Guidance	Disadvan.	Curriculum Deve- lop. & Instal. St.	
Local Educa- tion Agency	0	14	31	19	19	83
State Educa- tional Agency	26	8	17	6	7	64
College or University	16	15	33	29	21	114
Community College or Techn. Inst.	1	8	15	10	13	47
Non-Profit Organization	3	2	7	21	7	40
Profit Organization	3	2	2	5	1	13
<b>TOTALS</b>	<b>49</b>	<b>49</b>	<b>105</b>	<b>90</b>	<b>68</b>	<b>361</b>

Applications referred to the panels were independently read, evaluated and technical review forms written by members of the panel prior to meeting jointly as a panel at the U.S. Office of Education, in mid-January of 1975. Each panelist completed an Application Technical Review Form for each application, and brought his or her copy of the application and the completed Technical Review Form to the panel meeting.

The meetings of the several panels took place concurrently, each with a non-voting Office of Education representative as panel Chairperson, and another as an Executive Secretary. At each panel meeting, the Chairperson:

- described procedures for discussing, recording comments, and rating applications
- stressed the necessity for panel members to withdraw from the meeting and the review and rating of any application in which he or she had a possible conflict of interest
- conducted discussion of applications in numerical order, encouraging discussion on the part of each voting panel member to promote the fullest possible perspective on each application
- called upon the Executive Secretary to read any comments or recommendations on the individual application received from the States and/or the DHEW Regional Offices
- Following the panel discussion of each application, each panelist indicated a final application score for the application under discussion on the Application Technical Review Forms
- Following the panel meeting, the Chairperson and Executive Secretaries tabulated the individual panel members score for each application in order to obtain a panel score and subsequent rank for each application reviewed by the panel.

Subsequent to the panel meetings, a "slate review" procedure was conducted which involved the Chief of the Research Branch, Executive Secretaries of the panels, the Director of the Division of Research and Demonstration, the Associate Commissioner of Adult, Vocational, Technical and Manpower Education, and the Deputy Commissioner of the Bureau of Occupational Education. During this slate review progress, the panel rank of applications, the application requested budgets, and the State allotments were reviewed in order to:

1. Approve the best applications from each of the five priority areas, and
2. Fit approved applications into the available State allotments.

To carry out the results of this slate review process, the project officer (Executive Secretaries) for each priority area prepared recommendations for negotiation for each application approved for funding. Those "request for negotiation" were then submitted to the Division of Contracts and Grants for actual negotiations and awards.

Applicants that were not selected for funding were notified with original letters containing the reason(s) that the application was not selected for funding. These letters were sent out after all awards were made within a State and Congress had been notified of the awards.

IV. Numbers of Applications Received and Selected for Funding, by State, by Type of Institutions, in Fiscal Year 1975. The number of applications received for funding consideration for the FY 1974 Vocational Education Research program by State are listed in Table II. The number of applications funded by type of institutions are indicated in Table III.

Table II

Applications received by State

Alabama	5	Nevada	1
Alaska	1	New Hampshire	1
Arizona	6	New Jersey	7
Arkansas	2	New Mexico	4
California	26	New York	15
Colorado	7	North Carolina	27
Connecticut	13	North Dakota	2
Delaware	3	Ohio	18
Dist. of Col.	4	Oklahoma	5
Florida	2	Oregon	6
Georgia	5	Pennsylvania	27
Hawaii	1	Rhode Island	1
Idaho	7	South Carolina	5
Illinois	15	South Dakota	2
Indiana	3	Tennessee	6
Iowa	5	Texas	8
Kansas	4	Utah	2
Kentucky	9	Vermont	1
Louisiana	2	Virginia	24
Maine	1	Washington	7
Maryland	3	West Virginia	4
Massachusetts	6	Wisconsin	13
Michigan	15	Wyoming	1
Minnesota	3	American Samoa	0
Mississippi	7	Guam	1
Missouri	8	Puerto Rico	2
Montana	3	Trust Territory	1
Nebraska	2	Virgin Islands	0

Table III

Applications Selected for Funding  
by  
Type of Applicant  
and  
Priority Area

Types of Applicants	Priority Areas					Totals
	State Administration	Local Administration	Guidance	Disadvantage	Curriculum, Demonstration and Installation Studies	
Local Educational Agency		1	1	1	3	6
State Educational Agency	15	5	9	2	3	34
College or University	6	6	7	9	5	33
Community College or Technical Institute		1		1		2
Non-Profit Organization	1	2	2	3	2	10
Profit Organization		1		1		2
Totals	22	16	19	17	13	87

V. Synthesis Papers and Abstracts of Funded Projects

ADMINISTRATION OF VOCATIONAL EDUCATION  
AT THE STATE LEVEL

BY  
Jack A. Wilson  
Education Program Specialist  
Research Branch, DRD

CONTENTS

	<u>Page</u>
Background .....	22
Priority Concern .....	23
Applications Supported .....	23
Focus On Priority Activities .....	25
Analysis Of Projects Supported .....	25
Summary .....	29
References .....	31
Project Abstracts .....	33

44

## IMPROVING THE ADMINISTRATION OF VOCATIONAL EDUCATION AT THE STATE LEVEL

### Background

Vocational leadership at the state level is becoming increasingly more complex. Internally, state administration is faced with growing responsibility for the solution of complex problems. Externally, changing social and economic conditions require a responsiveness that may seem at times overwhelming. Morgan et al. (1974) note that

The rapid expansion of programs, the wide diversity of programs, and the flexibility required of State Departments to move in the direction indicated by the need have vastly complicated the responsibility of State leaders in vocational and technical education.

State agencies must continually make a variety of administrative decisions ranging from choices on the type and duration of vocational offerings at the secondary, postsecondary, and adult levels to the type of guidance, counseling, training, and placement services which should be made to special population groups such as the disadvantaged, handicapped, underemployed and unemployed.

These complicating circumstances matched with increased number of students to be trained, increased resources to be allocated, and greatly increased knowledge about the learning process have served to place additional stress and importance on the quality of decisions made regarding programs in vocational education. The vast complexities of administering a vocational education program at the State level suggests the need for a range of information which is current, accurate, immediately available, and in a form that can be understood and used by administrators. Unfortunately, such information or service is not currently available on any meaningful scale for the vast majority of State agencies. State Advisory Councils of Vocational Education continue to report problems with vocational education and related statistics in the area of internal planning, interstate comparisons, and cooperative action with other agencies in the State (National Advisory Council, 1974). Such data are not formatted for use in planning, administering, and evaluating vocational programs. State education agencies must, according to a recent report to the Congress by the Comptroller General of the United States, increase their ". . . efforts in the development of vocational information systems that will provide comparable data, and continuously review utilization of that data to improve vocational programs" (U. S. General Accounting Office, 1974). Until this is done, State education agencies will not have the management capability needed for systematic planning and evaluating of vocational education programs.

### Priority Concern

Given the above concern and need for vocational information by State administrators and those advisory bodies concerned with monitoring their efforts, the U. S. Commissioner of Education concluded that the administrative capability of utilizing information to make decisions about educational programs, short- and long-range, needs to be improved at the State level in order to maximize the attainment of vocational education goals. He likewise concluded that the administrative capability to utilize student supply, manpower demand, cost analysis, student placement and follow-up services, and evaluation information needs to be improved. Vocational administrators need better information to facilitate the improved articulation of vocational, occupational, manpower, and adult education programs across and within various educational programs administered or supported at the State level.

Toward this end, the Commissioner authorized under Section 131(a), Part C, P.L. 90-576 the support of applied studies and development projects that build on existing knowledge to design, develop, and field test comprehensive educational management and information systems that are results-oriented for vocational education at the State level. Support was provided for projects which focused on one or more of the following activities (Federal Register, 1975):

1. The design of a comprehensive educational management and information system for vocational education or one or more components;
2. The development of a comprehensive educational management and information system or one or more of the components; and
3. The field testing of a comprehensive educational management and information system or one or more of the components.

### Applications Supported

Of the 361 applications submitted to the Office of Education for possible support in the Fiscal Year (FY) 1975 vocational education research competition, 49 focused on improving the administration of vocational education at the State level. Of the 49 applications, 22 (45 percent) were selected for grant support. In addition, a proposal for conducting a field trial of a management information system was provided contract support because of its national significance. As can be seen in Table 1 below, 17 of the 23 awards (74 percent) went to State Education Agencies (SEA's) while five (5) awards (22 percent) went to colleges and universities and one (1) award (4 percent) went to a non-profit institution.

Table 1. Grant/Contract Awards by Type of Institution

Type	Number	Percent
State Education Agencies	17	74
Colleges and Universities	5	22
Non-Profit Institutions	1	4
Total	23	100

The supported projects represented a Federal investment of \$1,823,655. This investment--20 percent of the total Federal funds available in FY 1975 for the support of vocational research and development (R&D) projects--was complimented by additional investments on the part of the grant/contract recipients to provide a total investment in this targeted research area in excess of \$2,000,000. In a number of instances, the recipient's contribution far exceeded the award from the Office of Education. Table 2 below indicates that SEA's received two-thirds of the Federal funds invested in this priority area while colleges and universities received slightly less than the remaining one-third. The size of the awards ranged from \$20,000 to \$223,237 with an overall average of \$79,289.

Table 2. Total and Average Size of Federal Investment by Type of Institution

Type	Total	Average Size
State Education Agencies	\$1,205,439	\$ 70,908
Colleges and Universities	587,989	117,598
Non-Profit Institutions	30,227	30,227
Total	1,823,655	

## Focus on Priority Activities

As shown in Table 3, twelve (12) of the 23 projects focused on design, development and field tests; two (2) projects focused on design and development; two (2) focused on development and field test activities; three (3) projects focused on design; and four (4) are concerned exclusively with field testing. System design activities are involved in 17 projects. Sixteen (16) projects deal with developmental activities. Field testing of a total system or components are specified in fifteen (15) of the projects.

Six (6) projects supported in FY 1975 build upon activities begun in FY 1974. These projects seek to further refine and extend the work accomplished in the preceding year. Some of the projects will integrate additional components into an existing MIS. Others will continue the development or field testing of additional subsystems.

Many of the SEA's granted support in this funding cycle have made substantial prior investments in designing and developing components of a management information system. Many of the components are at the field trial/test stage prior to their permanent installation in the system. As a result of the Office of Education investment in these ongoing State efforts to develop comprehensive systems for effective program management, the "state-of-the-art" is extended more rapidly than would otherwise be possible. And more importantly, each of the States is being provided with a MIS unique to the needs of its vocational education program and socio-economic setting.

The applications selected for support in FY 1975 were clearly targeted toward improving the administration of vocational education at the State level by means of a systems approach, i.e., the conceptualization, design, development, and field testing of a comprehensive vocational data system requisite to informed decision-making.

Abstracts of the funded projects are included in the Appendix and contain information on the objectives or purposes of the individual projects, the procedures or approach being used to achieve the objectives, and the expected project contribution.

## Analysis of Projects Supported

Projects funded in FY 1975 are classified in matrix form in Table 4 according to the system components to be developed and/or revised and the developmental tasks to be accomplished in the course of the project. A state name in a specific cell of the matrix indicates that the state

Table 3. Focus on Priority Activities by State of Grant/Contract Recipient

State of Grant/Contract Recipient	Design	Development	Field Test
Alabama	•	•	•
Alabama	•	•	•
Arkansas	•		
Colorado	•	•	•
Connecticut	•		
Illinois	•	•	•
Indiana	•	•	•
Massachusetts			•
Missouri	•	•	•
Montana	•	•	•
Nebraska			•
New Hampshire	•	•	•
New Mexico	•	•	
North Carolina	•		
Ohio			•
Oregon		•	•
Rhode Island	•	•	•
South Dakota			•
Tennessee		•	•
Texas	•	•	
Washington	•	•	•
West Virginia	•	•	•
Puerto Rico	•	•	•

Table 4. A Matrix of Management Information System Components Under Development/  
Revision in State Departments of Education Funded in FY 75 Under Authority  
of Part C, Vocational Education Amendments of 1968

DEVELOPMENTAL TASKS	MANPOWER DEMAND/SUPPLY	STUDENT ACCOUNTING	COST/FISCAL ACCOUNTING	STUDENT FOLLOW-UP AND PLACEMENT	PROGRAM ACCOUNTING	FACILITIES ACCOUNTING	PROGRAM EVALUATION	STAFF ACCOUNTING	MODELING AND SIMULATION	COMMUNITY ACCOUNTING	ROW TOTALS
DESIGN	(10) WA TX RI PR	(7) TX	(10) WV WA TX NC	(8) WV TX	(6)		(6)				63
	NC NH MO IN CO AL	NC NM NH MT IN AL	NH MO IN IL CO AL	NC NM NH MT MO IL	WA NC NM MT MO IN	(5) TX PR NC IN IL	NC MT MO IL AL AL	(4) WA PR NC IN	(3) WA TX MO	(4) NC MO CT AR	
DEVELOPMENT	(12) WA TX TN RI PR OR NH MO IN IL CO AL	(9) TX PR OR NM NH MT IN IL AL	(9) WV WA TX NH MO IN IL CO AL	(8) WV TX OR NM NH MT MO IL	(5) WA NM MT MO IN	(3) TX PR AL IN	(7) WA NH MT MO IL AL AL	(3) WA PR IN	(4) WA TX RI MO	(0)	66
FIELD TEST	(8) TN RI OR OH NH IN IL CO	(8) PR OR OH NH NE IN IL AL	(6) OH NH NE IN IL CO	(7) WV OR OH NH MT IL AL	(3) OH NE IN	(4) PR OH NE IN	(2) NH AL	(3) PR OH IN	(1) WA	(0)	42
IMPLEMENTATION	(6) WA PR NH ME IL CO	(7) SD PR NM NE MT ME IL	(3) WA ME NE	(4) SD NM MT ME	(5) WA NM NE MT CO	(2) PR NE	(0)	(2) WA PR	(2) WA ME	(0)	31
EVALUATION	(3) TN RT IL	(3) NM NE IL	(1) NE	(2) NM IL	(2) NM NE	(1) NE	(0)	(0)	(1) RI	(0)	13
COLUMN TOTALS	39	34	29	29	21	15	15	12	11	4	

proposes to accomplish that development stage for a specific component; e.g., field test a student accounting system. Since a state may propose more than one developmental task each state may have multiple entries. Dispersion of the states over the matrix indicates the scope of funded state activities.

The major stages in the development of a management information system are listed as design, development, field test, implementation and evaluation. Design includes activities such as organization of an MIS task force, identification and assessment of user information needs, preparation of a developmental plan, preparing specifications of a data collection and classification system, preparing specifications of a data processing and management system including specifications for supporting computer software, preparing specifications for an information delivery system. Development includes the activities necessary to produce systematic procedures for the collection, processing and delivery of information. Field test involves limited implementation and formative evaluation of system performance. Implementation refers to the activities necessary for full operationalization of the system. Evaluation denotes a summary evaluation of system effectiveness and efficiency.

Examination of the row totals in Table 4 shows that design is the most frequently funded developmental stage, followed by development, field test implementation and evaluation in that order. Analysis of the histogram of design activities as depicted in Table 4 reveals that design of manpower demand/supply system components and cost/fiscal accounting systems components are receiving the most emphasis with modeling and simulation, community accounting, and staff accounting receiving the least attention. Development effort is primarily focused on manpower demand/supply and cost/fiscal accounting components with student accounting, student follow-up and placement and program evaluation a close second. None of the funded projects propose to develop a community accounting system containing community related information such as community vocational education needs. Field testing is most frequent in manpower demand/supply and student follow-up and placement components and least frequent in modeling and simulation and program evaluation components. Student accounting systems are the most frequently implemented components. No effort is currently being funded in implementing community accounting components or program evaluation components. Summative evaluation efforts are most frequently concentrated in student accounting and manpower demand/supply.

The column totals in Table 4 are arranged in descending frequency and indicate a relative ordering of funded developmental effort across system components. Manpower demand/supply is receiving the most developmental attention with 39 funded developmental tasks--10 states proposed design tasks, 12 states proposed developmental tasks, 8 states proposed field test tasks, 6 states proposed implementation tasks and 3 proposed to accomplish evaluation tasks. Student accounting components and cost/

fiscal components are next in order of emphasis with 34 and 29 proposed tasks, respectively; Community accounting and simulation and modeling components received the least developmental emphasis.

### Summary

Analysis of the projects being supported to improve the administration of vocational education at the State level indicate that a wide range of systematic approaches are being used to improve the administrative process.

A variety of methodologies are being tested to assure that manpower demand/supply, student characteristics, follow-up of former students, State and local staffing, instructional facilities, and related data are continuously generated, currently available and appropriately utilized by different user groups, e.g., curriculum developers, guidance and counseling personnel, and administrative planners. Further, there is indication that the management information systems being developed at the State level are being designed to serve not only the needs of the State but local education agencies in the areas of planning, management, and evaluation. A basic reason for this is that if a statewide management information system is to function properly and serve the State government effectively, it must rely on the local education agencies for cooperation in collecting accurate and timely information. Some of the State systems are being structured to produce planning, management, and evaluation information based on the individual data needs of the participating local school districts. As more States fully implement comprehensive educational management information systems, the significance of the system and its utility for guidance, counseling, placement and follow-up of students will be recognized and, indeed, utilized. Disadvantaged students, for example, can be more effectively served in such instances, as can curriculum developers, facility planners, teachers, administrators and others involved in the teaching-learning process.

In addition, certain of the funded efforts are anticipated to result in tested alternative program planning, management, and evaluation systems with specifications for their appropriate use by State and local personnel. Such tested systems should contribute to improving the accountability of the community at large and various policy-making bodies concerned with the allocation of resources to assure relevant vocational offerings to all clientele groups.

Considerable progress has been made by various States in establishing a comprehensive MIS or major components of such a system. Although there have been some national efforts at exchanging information on the state-of-the-art regarding vocational education information systems, there appears to be a need for even greater exchange of information,

forms, and techniques being used by the various State agencies, as well as the local education agencies. Problems of definition must be resolved if data are to become comparable across States and aggregated at the national level. The quality of the data being used as input into these systems must be improved. Better use must be made of the data that are currently being collected or planned for collection. Care must be taken that State and local education agencies do not collect more data than can be used. In the recent past, most States have focused on developing a system for collecting and storing a variety of fiscal and enrollment information. All too frequently, it is assumed by these system designers that other staff personnel will utilize the data when in actuality, the personnel do not know how to use the management tools which are relevant to analyzing such data. Although some State agencies are building some inservice training into their projects (i.e., training personnel on how to use the facility and analyze the information generated by the system), too little attention is given to this key activity which should be carried on concurrently with the design and development of the system.

Finally, more effort needs to be expended in extending the scope of MIS development. Much of the current effort has been expended in developing accounting systems designed to collect, process, and report information for operational decisions that require well-defined, detailed and highly accurate information about the past. However, planning is future oriented and requires information about the anticipated future effects of current policy alternatives. The nascent State efforts in modeling and simulation reflect an awareness of the need for policy relevant information and should be encouraged and supported to the maximum possible extent.

## REFERENCES

- Coster, John K. and Robert L. Morgan. The Role of Evaluation in the Decision-Making Process. Occasional Paper No. 5. Raleigh: Center for Occupational Education, North Carolina State University, 1969.
- Federal Register, Part I, Vol. 39, No. 199. "Vocational Education Research Projects--HEW/OE Notice for Fiscal Year 1975 Priorities and Criteria." Washington, D. C.: Oct. 11, 1975, pp. 36592-36626.
- Hale, James A. A Review and Synthesis of Research on Management Systems for Vocational and Technical Education. Information Series No. 51. Columbus: The Center for Vocational Education, The Ohio State University, 1971.
- Lucas, H. C. Computer Based Information Systems in Organizations. Chicago: Science Research Associates, 1973.
- Magisos, Joel H. and Paul E. Schroeder, Compilers. State Administration of Vocational Education: Information Sources. Bibliography Series No. 21. Columbus: The Center for Vocational Education, The Ohio State University, 1974.
- Morgan, Robert L., William L. Ballenger, and John E. S. Lawrence, Editors. Management Information Systems for Vocational Education: A National Overview. DASP Technical Report No. 1. Raleigh: Center for Occupational Education, North Carolina State University, 1974.
- National Advisory Council on Vocational Education. The Impact of the Vocational Education Amendments of 1968. Washington, D. C.: National Advisory Council on Vocational Education, 1974.
- National Advisory Council on Vocational Education. Unmet Needs and Unresolved Issues of Vocational-Technical Education in the United States as Reported by the State Advisory Councils on Vocational Education for 1973. Washington, D. C.: National Advisory Council on Vocational Education, 1974.
- O'Brien, J. F. Managerial Reaction to MIS. Raleigh: Center for Occupational Education, North Carolina State University, in press.

U. S. General Accounting Office. Report to the Congress: What is the Role of Federal Assistance for Vocational Education? Washington, D. C.: U. S. General Accounting Office, December 31, 1974.

Young, Robert C. Manpower Demand: Information Guidelines for Educational Vocational Education, and Manpower Planning. Research and Development Series No. 94. Columbus: The Center for Vocational Education, The Ohio State University, 1973.

Project Abstracts ,

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50013

TITLE: Management Information System for Occupational Education (MISOE)

PROJECT DIRECTOR AND ORGANIZATION: Dr. William G. Conroy, Jr.  
Division of Occupational Education  
Massachusetts Department of Education  
182 Tremont Street  
Boston, Massachusetts 02111 (617) 454-0494

GRANT PERIOD: July 1, 1975 - December 31, 1975

### OBJECTIVES OR PURPOSES

1. To implement parts of an occupational education census data system which provides a description of the skills by occupational with which students exit programs and the cost of occupational education programs, by school.
2. To mount data from a Retrospective Impact Study which estimates the differential impact of occupational and academic education on society and students on an interactive computer system and to analyze this data.

### PROCEDURE OR APPROACH

1. Those parts of the census data system which are appropriate for implementation will be put into place during the 1975-76 school year, including terminal performance objectives (TERMOBs) for about 80% of the enrollment in secondary education in Massachusetts. (For a description of TERMOBs see the American Vocational Journal of May 1975, "TERMOBs: Performance Objectives With A Bigger Bite," P. 42, and for a description of the MISOE census data system see the Journal of Research and Development in Education, Winter, 1974, University of Georgia, Athens, Georgia. This census data system is now transportable to other states.)
2. The Retrospective Impact Study is designed to study the relationship between various secondary program mixes in Massachusetts, including specific occupational education programs, and subsequent career and lifestyle development patterns for students who did or should have graduated in 1969 and 1973. This study includes controls for learning ability and SES and certain school characteristics, such that the independent effect of either program or student and school characteristics upon career or lifestyle development can be estimated.

### EXPECTED CONTRIBUTION TO EDUCATION

Each of these activities will provide Massachusetts with an improved basis for planning and managing occupational education and should provide an opportunity for others to capitalize upon this experience.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50017

TITLE: The Design of a Management Information System for Occupational Education in Texas

PROJECT DIRECTOR AND ORGANIZATION: Mr. Ray Barber, Director  
Division of Occupational Research and Development  
Department of Occupational Education and Technology  
Texas Education Agency,  
201 East 11th Street  
Austin, Texas 78701 (512) 457-4641

GRANT PERIOD: July 1, 1975 - December 31, 1975

### OBJECTIVES OR PURPOSES

1. To identify the kinds of information needed by decision makers for allocating resources and planning programs in occupational education.
2. To identify strengths and weaknesses, inefficiencies and information gaps in the educational data gathering and processing systems currently in operation.
3. To design a management information system for occupational education in Texas incorporating all or part of the characteristics of other existing systems.
4. To provide policymakers for occupational education in Texas with knowledge of the requirements, processes, and capabilities of management information systems in shaping management decisions.

### PROCEDURES OR APPROACH

1. Texas Education Agency (TEA) policymakers will meet to identify information needs for the management of occupational education in Texas.
2. TEA staff and staff from the Massachusetts Department of Education's Management Information System for Occupational Education (MISOE) will conduct an in-depth study of existing information systems in Texas, and will develop a data sampling design for the state.
3. TEA staff will study existing information systems in other states, including MISOE. MISOE and TEA staff will participate in simulated decisionmaking experiences, formulating hypothetical policies for occupational education both with and without the use of MISOE.
4. TEA staff will prepare recommendations for a system design. From those alternatives, the state's Commissioner of Education will recommend a system design for acceptance by the State Board of Education.

### EXPECTED CONTRIBUTION TO EDUCATION

The project will identify the characteristics of a management information system for occupational education in Texas and the rationale for selection of a system design, ways in which the system will be integrated with TEA's ongoing programs and procedures, and the procedures, funds, equipment, and personnel required to develop the system. The system design should be useful to other agencies planning to develop management information systems.

## PROJECT ABSTRACT

PROJECT NUMBER:

498AH50021

TITLE:

A Comprehensive System for the Evaluation of Individualized Manpower Training Sites

PROJECT DIRECTOR AND ORGANIZATION:

Mrs. Donna M. Seay  
Southeast Director  
Technical Education Research Centers  
418 South Perry Street  
P.O. Box 4158  
Montgomery, Alabama 36101 (205) 262-7784

GRANT PERIOD:

July 1, 1975 - June 30, 1976

OBJECTIVES OR PURPOSES:

1. Analyze the Individualized Manpower Training System (IMTS) data (collected by the Univ. of West Florida) on which to base management decisions leading to uniform, precise, and effective implementation of the IMTS procedures at six IMTS sites.
2. Analyze the necessary data at IMTS and non-IMTS sites to define relevant, distinguishing factors.
3. Analyze the necessary data leading to a comparative evaluation of student achievement at each IMTS site, among the various sites, and among IMTS and non-IMTS sites.
4. Recommend data collection procedures to serve as inputs to a computerized information system currently being constructed at the Univ. of West Florida.
5. Document all results in a final report.

PROCEDURES OR APPROACH

Using criteria developed for participation in the computerized information system, a survey will be made to select three non-IMTS sites as controls. Data collection forms will be audited and revised where necessary. Six IMTS and three control site manager will be trained in using the revised forms for the system. A computer program will then be written to analyze data from the control sites with the IMTS sites and between IMTS sites.

EXPECTED CONTRIBUTION TO EDUCATION

A major project outcome will be a comparative analysis between IMTS and comparable non-IMTS site on installations, student achievement, attendance and dropouts. The data can be analyzed for both summative and formative assessments useful in planning and operating. The software will be computerized information system can serve as a general, operational model for use by vocational administrators.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50022

TITLE: Development of an Alternative Statewide Management System for Vocational Education Using Regional Planning for System Design, Implementation, and Field Testing

PROJECT DIRECTOR AND ORGANIZATION: Mr. Don K. Gentry  
Executive Office/State Director  
Indiana State Board of Vocational and Technical Education  
120 West Market Street, 16th Floor  
Indianapolis, Indiana 46204 (317) 633-4841

GRANT PERIOD: July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES

1. Identify three regional planning groups responsible for developing a regional plan that interface with a state management information system by July 15, 1975.
2. A State Task Force will develop a management information system for administration and planning of vocational education by November 23, 1976.
3. Analyze the impact regional plans have on the existing data system and existing State Laws by December 15, 1976.
4. Provide a summarization of State Administrative System and State Law changes needed to implement the management information system developed by December 15, 1976.

PROCEDURE OR APPROACH

The State Board of Vocational and Technical Education will award contracts to three regional vocational groups to develop regional plan for vocational education that will interface with a State Management information system using information from the three regional planning groups.

EXPECTED CONTRIBUTION TO EDUCATION

Outcomes anticipated would be a regional planning model or models for Indiana, and a State Management Information System that is efficient. Fragmentation among State Agencies bringing about competition, duplication, and dissipation of resources would be avoided. More efficient use of present resources for vocational education will occur as well as development of plans for increasing resources in the future.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50034

TITLE: Design and Interactive Interface System for a Management Information System in Colorado

PROJECT DIRECTOR AND ORGANIZATION: Dr. Robert F. Barnes  
Director, RCU  
State Board for Community Colleges and Occupational Education  
207 State Services Building  
Denver, Colorado 80203 (303) 892-3011

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES

1. Develop interactive interface system between job demand and job supply components to output training needs by program area.
2. Develop a system for collecting common cost data base from all institutions at all levels--secondary, area vocational schools, state system community colleges and local district community colleges.
3. Expand job supply components to include company-trained personnel and in-migration.
4. Develop interactive interface system among training needs output, program cost factor and training station availability components.
5. Provide output data from Objectives 1 and 3 to planners and decision makers from program decisions based on need and cost.
6. Develop and implement and inservice training program for users.

### PROCEDURE OR APPROACH

The objectives will be achieved by the development of an expanded job supply and common base cost components; refinement of the job demand and training station components; developing and field testing data collection instruments to identify numbers of industry-trained and estimating in-migration employees; updating existing job demand components; updating data collection for the training station system with existing data; collecting, updating and editing job supply data for analysis; and development of inservice training programs for users of the interface system outputs.

### EXPECTED CONTRIBUTION TO EDUCATION

This effort will result in improved job demand and supply data for arriving at a training need index (a measure of surplus or deficit of employable manpower by OE program code); a common cost data base and training station data base for arriving at program need data for use by decision makers at the State and local levels.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50038

TITLE: A Model for Developing Alternative Administrative Strategies for Maximizing Comprehensive Vocational Program Planning and Evaluation

PROJECT DIRECTOR AND ORGANIZATION: Dr. Jack D. Nichols  
Director  
Research Coordinating Unit  
Arkansas Department of Education  
Little Rock, Arkansas 72201 (501) 371-1855

GRANT PERIOD: June 15, 1975 - November 15, 1976

OBJECTIVES OR PURPOSES

The overall purpose of this project is to develop and implement a school-community based model for maximizing the vocational education goals in a local community. The project is designed to explore administrative strategies and alternatives to improve the coordination of all resources for assessment, planning and management techniques. More specifically, the goals are to develop and implement:

1. An inservice program for local staff on strategies for planning and evaluation.
2. A comprehensive data collection system for assessing community needs.
3. A viable school community occupational system.
4. Improved coordination of curriculum with business, industry and community needs.

Objectives are stated in performance terms in the narrative of the project.

PROCEDURE OR APPROACH

The project is designed as a multi-school approach with three model sites in the State. A local project director will be identified in the selected school districts. This team will include at least a school administrator, a potential vocational director, a counselor, and vocational personnel in the district. The project teams will develop in-depth plans of action at a summer workshop. Local project teams will organize advisory councils, conduct brief inservice education for local personnel and establish a calendar of events to accomplish the goals and objectives. Strategies will be identified for forging a closer linkage between the school and the community. Five follow-through seminars will be conducted during the project. A program plan with high priority needs will include strategies for implementation.

EXPECTED CONTRIBUTION TO EDUCATION

A model plan of action for a concerted effort to maximize vocational education at the local level. Improved methods, techniques and strategies for assessing and planning through closer community linkage.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50077

TITLE: Nebraska Vocational Information System

PROJECT DIRECTOR AND ORGANIZATION: Mr. Elton B. Mendenhall  
Director, Research Coordinating Unit for  
Vocational Education  
University of Nebraska  
Box 33, Henslik Hall  
Lincoln, Nebraska 68508 (402) 472-3337

GRANT PERIOD: January 1, 1976 - December 31, 1976

OBJECTIVES OR PURPOSES

The Nebraska State Department of Education has developed a plan for the conceptualization, design, development, and implementation of a vocational information system encompassing six major phases necessary to support administrative decisions. Of the six phases, embracing assessment, priority determination, design, testing, implementation, and evaluation, the first three were completed during the initial period of support. During the second period of support, Phases IV, V, and VI will be pursued with the following objectives:

1. To test the components of the vocational information system through a trial run with a sample of local school districts using instruments, procedures and computer programs developed and adapted during Phases I, II, and III, during 1976.
2. To modify instruments, etc., as prescribed by evaluation during the sample testing.
3. To diffuse the revised instruments, etc., into the administrative activities of the State Department's Division of Vocational Education.
4. To provide for continuous evaluation and adjustment through scheduled system review and modification (Phase VI).

PROCEDURE OR APPROACH

The Test Phase will support validation of instruments and system through a trial run of the entire program with a selected sample of local schools. The Implementation Phase will consist of installation and training for operation of the system by staff of the Division of Vocational Education. Training requirements will be determined by the advisory committee and division staff.

EXPECTED CONTRIBUTION TO EDUCATION

The expected results of this project is the further development and eventual implementation of an information system supportive to the administrative function of the referenced Division. This project should provide the vehicle for adjusting administrative staff to new functions of improved vocational education planning and administration, and provide input to national data gathering efforts. It would also compile data for evaluation decisions regarding costs of manual data handling compared to automated and semiautomated data handling for vocational education program reporting.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50084

TITLE: Development of a State Agency Vocational Education Planning and Decision-Making System

PROJECT DIRECTOR AND ORGANIZATION: Mr. Wilford R. Glasscock  
Acting Project Director  
Research Supervisor  
Finance, Planning and Evaluation Component  
Office of the Superintendent of Public Instruction  
Helena, Montana 59601 (406) 449-3693

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES

Develop and implement a comprehensive planning and decision-making system for the administration of vocational education in Montana.

Namely, these are:

1. To develop a student characteristics subsystem that contains student input data as it relates to enrollment/exit in proprietary, adult and nonpublic schools and public secondary and post-secondary vocational schools, too (data at such levels are now available.)

Follow-up data will be extended to include more details on post-secondary students.

2. To develop and evaluation system that will provide data necessary for post-secondary evaluation and accreditation and the evaluation of curriculum and instruction.

### PROCEDURE OR APPROACH

Communication lines between federal, state and local agencies concerned with vocational education/job market data will be developed. Voc ed decision-makers then will be contacted to determine what data beyond that now supplied, are needed--when and in what priority. Once data and time requirements are known, the source of the data will be made known. New or revised collection instruments will be developed and tested; the data will be converted to meaningful reports on a pilot basis. Evaluation feedback will be used to improve planning and development processes. A procedural manual will be written and maintained for administrative use.

### EXPECTED CONTRIBUTION TO EDUCATION

The effort will result in the development and implementation of a comprehensive evaluation subsystem and the expansion, development and implementation of a student characteristics subsystem to provide for the correlation of information on the accuracy of program offerings (curriculum and instruction) as related to post-graduate vocational student behaviors.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50088  
TITLE: Follow Through - Management Information System

PROJECT DIRECTOR AND ORGANIZATION: Mr. L. E. Bak  
Assistant Director  
Division of Vocational Education  
South Dakota Department of Public Instruction  
222 West Pleasant Drive  
Pierre, South Dakota 57501 (605) 224-3423

GRANT PERIOD: July 1, 1975 - June 30, 1976

OBJECTIVES OR PURPOSES:

The objectives of this project are: To implement a follow through system developed for post-high school students, to develop a procedure or mechanism for the flow of information from vocational programs to industry, to develop a procedure or mechanism for the flow of information from industry to vocational and technical schools and secondary schools which will assist the schools in curriculum change as the industrial job requirements change, to develop and conduct a follow-up system and initiate and test a workable follow-up instrument, to develop a "certification of program completion" which will identify individual student employment capabilities, and to develop a "directory of employers".

PROCEDURE OR APPROACH

Student Entry Information Form will be administered at the post-secondary education level. The various survey forms (Entry, Exit, First-Year Follow-Up, Fifth Year Follow-Up, Employer Follow-Up) will be modified for use at the secondary level. This activity will be followed by conducting 1st year follow-up of students, their employers and a 5th year follow-up. At the conclusion of the survey effort, the subsystem will be evaluated to determine if modification should be made in the instruments.

EXPECTED CONTRIBUTION TO EDUCATION

This effort will result in a Statewide uniform procedure for assessing the training given vocational students once they enter the labor force and feedback information will be used in making curriculum changes; guidance and counseling and administrative decisions.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50109

TITLE: Development of a Management Information System of the Puerto Rico Research Coordinating Unit, Phase II

PROJECT DIRECTOR AND ORGANIZATION: Dr. Vidal Velez Serra  
Director, Research Coordinating Unit  
Department of Education  
Commonwealth of Puerto Rico  
Hato Rey, Puerto Rico 00919 (809) 765-5850

GRANT PERIOD: July 1, 1975 - June 30, 1976

### OBJECTIVES OR PURPOSES

Phase II of the Puerto Rico Management Information System (MIS) is aimed at further development of subsystems for the comprehensive system, namely manpower supply data, teacher information, and program facilities. More specifically, the objectives are to:

1. Obtain relevant data on students by programs, occupations, levels, target groups, economic sectors, and type of institution as well as needed data on teachers.
2. Generate accurate, up-to-date data on the manpower supply and job market demand in Puerto Rico.
3. Develop occupational matrices that will serve for the planning of occupational education in Puerto Rico.
4. Produce required output data need for planning and evaluation.

### PROCEDURE OR APPROACH

Major activities for the accomplishment of these objectives will center around the evaluation and revision of Phase I activities, developing teachers and facilities file forms, up-dating supply-demand components data, collecting data for teachers and facilities subsystems, developing and tabulating occupational matrices for planning purposes, coordinating and disseminating data to local regional and state levels, revising computer programming and interfacing supply-demand data. Output data will then be utilized in establishing priorities for vocational and technical education programs.

### EXPECTED CONTRIBUTION TO EDUCATION

This project will provide for the interfacing of supply and demand data, a requisite for occupational education planning within the Commonwealth of Puerto Rico. Moreover, the expanded MIS will serve to provide local level personnel, especially vocational directors, hard basic data on regional needs for manpower resources, available and projected facilities, output data on follow-up studies and teaching resources which are available. Local personnel, as a result of having factual information, will then be in a position to incorporate local or regional data into their planning and evaluation efforts.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50123

TITLE: Vocational Technical Information System

PROJECT DIRECTOR Mr. Roger A. Labodda  
AND ORGANIZATION: Director, Program Development Unit  
Vocational Education Division  
New Mexico State Department of Education  
Santa Fe, New Mexico 87503 (505) 827-2329

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES

Revise the V-TIS to give the State Department of Education and local school districts adequate information about manpower needs, student placement, follow-up, cost analysis, needs assessment and other information requisite to equitable distribution of monies under a statewide public school funding formula; to analyze equipment requirements and capabilities; to write computer programs in appropriate language; to verify program logic using test data; to test and debug present programs; to evaluate and modify existing programs; to design data based collection forms; to prepare federal reports and printouts; to design machine logic flow charts; to prepare instruction sheets for programmer; to serve as an advisor and coordinator of data collection; to define data needs of the Vocational Unit and the Department of Education.

### PROCEDURE OR APPROACH

Objectives will be reached in three phases: Preparatory phase will make necessary adjustments in Ohio State University's System for Statewide Evaluation of Vocational Information (adopted by New Mexico SDE) to make it compatible with New Mexico's "hardware." Implementation phase will establish procedures for efficient dissemination and retrieval of data from school districts prior to computerization. Revision phase will make adjustments in programming and data collection upon consideration of what is returned from the field. The project will employ a full-time programmer/systems analyst to accomplish the objectives outline above.

### EXPECTED CONTRIBUTION TO EDUCATION

When New Mexico has a vocational information system that will provide accurate information, decisions can be made on a more objective basis at State and local levels. The SDE can supply better direction to local agencies in designing good vocational programs, and the SDE will be in a better position to gain support within and from the State Legislature through improved communication.

## PROJECT ABSTRACT

PROJECT NUMBER:

498AH50127

TITLE:

Alabama Vocational Management  
Information system

PROJECT DIRECTOR  
AND ORGANIZATION:

Dr. Stanley D. Patterson  
Supervisor of Research and Evaluation  
Division of Vocational Education  
and Community Colleges  
Alabama Department of Education  
868 State Office Building  
Montgomery, Alabama 36130 (205) 832-3476

GRANT PERIOD:

July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES

To design and implement a management information system (MIS) that will provide to decision makers accurate, usable and timely data and information concerning input, output, and impact of vocational education. Objectives are:

1. Design a MIS embracing student accounting, fiscal accounting, manpower analysis, and program evaluation.
2. Develop automated data collection and processing for: post-secondary enrollments, adult follow-up, Industrial Development Training, secondary program evaluation, and supply-demand interface.
3. Field test automated data processing of the following components: enrollment reports, secondary and post-secondary enrollment updating, annual teacher reports, technical college follow-up report.

PROCEDURE OR APPROACH

The general approach will be to evaluate and consolidate existing components of data systems and to design and develop additional components to contribute to a comprehensive management information system. In-service training will be conducted to insure that all sub-systems are compatible and subject to being integrated. A detailed overall plan for a comprehensive system will be developed concurrent with the development and field testing of various sub-systems.

EXPECTED CONTRIBUTION TO EDUCATION

The implementation of the total vocational education management information system will result in a larger proportion of the clientele in the State being served more effectively and efficiently with the limited resources available for vocational education. Data will be available on the needs of individuals, society, and industry. Impact information will show cost recovery ratios, placement effectiveness, societal returns, values to industry, and product evaluation.

## PROJECT ABSTRACT

PROJECT NUMBER:

498AH50139

TITLE:

Development of a Comprehensive Management and Information System for the Division of Vocational-Technical Education, New Hampshire State Department of Education

PROJECT DIRECTOR  
AND ORGANIZATION:

Dr. Lila C. Murphy  
Director, Research Coordinating Unit  
Division of Vocational-Technical Education  
New Hampshire State Department of Education  
105 Loudon Road  
Concord, New Hampshire 03301 (603) 271-3276

GRANT PERIOD:

July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES

1. Design a comprehensive management-information system with implementation and evaluation procedures.
2. Establish a reliable, accessible data base required for a comprehensive management-information system.
3. Establish an Occupational Information Center which will provide current information to persons and groups requesting and needing assistance.
4. Develop and test a statewide program evaluation model and design plans for implementation in 1976-77.

PROCEDURES OR APPROACH

After reviewing the literature, instruments will be designed and tested to collect data via face-to-face visits with all agencies providing vocational programs and services. An on-line data base will be accessible through a remote entry device. Reports generated will be evaluated for usefulness to participant agencies. A model for evaluating programs will be designed and field-tested. A resource center to serve the State will be established with dissemination and evaluation procedures specified.

EXPECTED CONTRIBUTION TO EDUCATION

The statewide MIS will provide decision makers at the State and local level with current information for analyzing manpower needs, setting priorities, program planning and evaluation. Better use of limited resources is expected. Students, teachers, administrators and the business and industrial community will be the benefactors of this effort.

## PROJECT ABSTRACTS

PROJECT NUMBER:

498AH50147

TITLE:

A Project to Design, Develop and Test  
a Comprehensive Management Plan for  
Vocational Education in Missouri

PROJECT DIRECTOR  
AND ORGANIZATION:

Dr. W. R. Miller  
Chairman, Department of Practical Arts  
and Vocational Technical Education  
College of Education  
University of Missouri-Columbia  
Columbia, Missouri 65201 (314) 2882-3275

GRANT PERIOD:

July 1, 1975 - December 31, 1975

OBJECTIVES OR PURPOSES

1. Formulate a general systems approach to long-range planning for vocational education in Missouri through 1990.
2. Identify, evaluate and assemble current and/or projected data on manpower, student placement, follow-up, job success, and job satisfaction; cost data, nature and scope of vocational education program.
3. Determine public attitudes toward vocational education and design a public information scheme in response to those findings.
4. Provide criteria and guidelines for Area Vocational Schools.
5. Develop alternative formulae for allocation of vocational resources.
6. Devise a functional plan for meeting the research priorities.
7. Establish criteria and a system for continuous evaluation.

The above and other objectives would provide direction for program development as well as planning for evaluation of vocational education.

PROCEDURE OR APPROACH

At the initiation of the project a Task Force composed of lay persons from state government, private business, industry and education will be established with responsibility for delineating goals and objectives leading to the development of a systems approach for long range planning. Various data base will be developed for synthesis and use in determining alternative allocation formulae, funding sources and schemes, administrative structures and delivery systems. These alternative proposals will then be synthesized for an administrative plan and eventual management plan. This plan will, in turn, provide for the ongoing evaluation and planning cycle.

EXPECTED CONTRIBUTION TO EDUCATION

This effort will result in a management and information system that will improve and extend vocational education in Missouri.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50157

TITLE: Design and Development of Fiscal and Student Follow Up Components of the West Virginia Comprehensive Data System for Vocational Education (CDS-VE)

PROJECT DIRECTOR AND ORGANIZATION:

Mr. Clarence E. Burdette  
Assistant State Superintendent of Schools  
Bureau of Vocational, Technical and Adult Education  
West Virginia Department of Education  
Charleston, West Virginia 25305 (304) 348-2346

GRANT PERIOD: July 1, 1975 to July 31, 1976

### OBJECTIVES OR PURPOSES

1. To establish a data base for determining specific vocational program operating costs of approved vocational curricula.
2. To establish a data base for evaluating selected aspects of vocational education program effectiveness through follow up surveys.
3. To involve state and local level personnel in the cooperative planning and development of financial and follow up systems.
4. To provide information needed by state and local administrators in planning, budgeting, operating and evaluating vocational education programs.

### PROCEDURE OR APPROACH

Finance Component: Contract for services with Cabell County Schools for systems design of finance component requisite to conversion of state charge of accounts to program budgeting format and revision of computer programs for trial run of new system. Concurrent with this activity will be the development of program data forms for incorporation into the local educational agency planning guide and the preparation of procedural manuals and data forms in relation to system. Local administrators and finance officers would then be instructed on the system and expected outcomes. Follow-Up Component: A Flow Chart System will be designed along with survey questionnaires and required materials. Once the system has been pilot tested and revised or redesigned as necessary, the system will be implemented.

### EXPECTED CONTRIBUTION TO EDUCATION

The implementation of the finance component of the data system will allow state and local level administrators to determine average operating costs of different curricular offerings, establish trends in the costs of courses and make related types of comparisons. Similarly, the follow-up survey component will be used in updating the curricula, determining program effectiveness and conducting cost-benefit and related types of analyses.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50165

TITLE: An Assessment of Current Methods of Fulfilling Empirically Determined Educational Information Needs

PROJECT DIRECTORS AND ORGANIZATION: Dr. Douglas S. Katz & Mr. John E. S. Lawrence  
Res. Assoc. & Res. Ass't, Respectively  
Center for Occupational Education  
P.O. Box 5096  
North Carolina State University  
Raleigh, North Carolina 27607 (919) 737-3127

GRANT PERIOD: July 1, 1975 - September 30, 1976

### OBJECTIVES OR PURPOSES

1. Develop a self-assessment procedure for determining the extent that state vocational information systems can meet empirically determined informational requirements identified in a national needs assessment.
2. Implement the self-assessment procedure in selected states, analyze self-assessment.
3. Develop a dictionary of informational requirements.

### PROCEDURE OR APPROACH

A list of standard characteristics descriptive of vocational education data systems will be developed along with instructions for their use by state personnel in describing those systems. After pilot testing, the assessment format will be used to obtain data on various state vocational data systems. A sample of the assessment returns will then be analyzed by site visits to evaluate validity. If acceptable, the completed returns will be analyzed in relation to national needs assessment data. The methods used by each state to satisfy information requirements noted in the needs assessment will be reported and alternative means currently being used to meet specified information requirements will be identified.

### EXPECTED CONTRIBUTION TO EDUCATION

The dictionary of informational requirements, user guidelines, and associated technical reports will have application at national, state and local levels. An empirical determination of the uniformity and comparability of data across state systems can provide a base for establishing a national vocational education data system.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50177

TITLE: Comprehensive Planning and Management  
of Washington State Vocational Education

PROJECT DIRECTOR  
AND ORGANIZATION: Mr. Laurence H. Flinn  
Program Specialist  
State of Washington Coordinating Council  
for Occupational Education  
Olympia, Washington 98504 (206) 753-1300

GRANT PERIOD: June 1, 1975 - November 20, 1976

### OBJECTIVES OR PURPOSES

1. Implement reorganization and reorientation from a traditional educational to a management organization and structure.
2. Improve existing systems to provide information needed by State Vocational Administration for planning and management programs.
3. Improve previous accomplishments in developing a manpower forecast and planning system for vocational education at both the state and local levels.
4. Improve interfaces with both State and National sources and users of information needed to plan and manage vocational education programs.
5. Solicit and support special studies for feasibility and problem solving pursuant to extending, expanding, and implementing improved forecasts, planning and management at the State and local level.
6. Provide the necessary information and training necessary for the public, and state and local administration, to understand and use the management systems and techniques developed, to improve delivery of vocational education services at both state and local levels.

### PROCEDURE OR APPROACH

In achieving the above goals, a vocational education program code/census code matching model will be developed and validated; a five year vocational education forecast for the state will be produced and the process documented. Follow-on assistance and grant supports will be provided to pilot schools currently implementing forecasting techniques, to support local planning and management of vocational education. Local research studies will also be supported to determine the feasibility and practical implementation of planning and management systems at the local level. Vocational administrators and key public opinion leaders will be oriented and trained on the implementation of the planning and management systems.

### EXPECTED CONTRIBUTION TO EDUCATION

This project will develop a forecast capability to support comprehensive planning, as well as the development of a management and organization structure for improved service delivery.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50217

TITLE: Continued Development and Implementation of the Multifarious, Student-Based, Management Information System

PROJECT DIRECTOR AND ORGANIZATION: Dr. Ronald D. McCage  
Coordinator, Research and Development Unit  
Division of Vocational and Technical Education  
Illinois Board of Vocational Education  
1035 Outer Park Drive  
Springfield, Illinois 62706 (217) 782-6420

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES

1. To further refine and integrate the previously developed sub-system components (student supply, manpower demand, supply/demand interface, and follow-up) into the Multifarious, Student-Based, Management Information System (MIS).
2. To develop linkages between the MIS and the components of the program cost, student placement, three-phase evaluation, and an occupational education coordination council (OECC).
3. To expand the MIS from its current four-county area to the ten-county analytic region and explore new approaches to better utilizing available data.
4. To revise and expand, where necessary, reporting procedures and output formats of the MIS.

### PROCEDURE OR APPROACH

The student supply, manpower demand, supply/demand interface, and follow-up components have been developed and initially field-tested within a four-county area. The cost and evaluation components are partially developed, but linkages with the overall MIS are incomplete. The teacher supply/demand, placement, and OECC components are in the design phase. Linkages among the components, such as typing follow-up to the supply/demand comparisons, will be given particular emphasis. Development of the teacher supply/demand component and the feasibility of a placement component will be completed.

### EXPECTED CONTRIBUTION TO EDUCATION

The information generated by the MIS will have a significant impact at the state and local level in all areas of vocational education, including planning, budgeting, decision-making, reporting, and evaluation.

## PROJECT ABSTRACT

PROJECT NUMBER:

498AH50221

TITLE:

A Need Assessment for Career Planning and Preparation in Connecticut

PROJECT DIRECTOR AND ORGANIZATION:

Dr. Philip T. Masley  
Chairman, Vocational and Technical  
Education Department  
School of Education  
Central Connecticut State College  
1615 Stanley Street  
New Britain, Connecticut 06050 (203) 225-7481

GRANT PERIOD:

July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES

1. To collect selected data which concerns itself with the career aspirations, plans and needs of Connecticut state residents.
2. To collect selected data which concerns itself with current guidance practices, career education planning and current labor market needs.
3. To compare these data so that recommendations may be made for career planning and guidance of selected samples of the citizenry of the state.

PROCEDURE OR APPROACH

A comprehensive needs assessment will be designed, including the identification of target populations, developing procedures for selecting sample, designing instruments, field testing instrument, and revising instruments if necessary. Need assessment data will be collected along with data on current guidance practices, career education planning and current labor market needs. Following the analysis of the data, work would be initiated on comprehensive career achievement monitoring and career guidance systems. The results of the comprehensive career achievement monitoring system will be assessed and workshops conducted on the content and uses of needs assessment data. Clients (e.g., colleges, schools, employment agencies) will be provide evaluative data and recommendations for change. Concurrent with this activity, new in-service training materials will be prepared along with user guides for career guidance. Project outcomes will be evaluated.

EXPECTED CONTRIBUTION TO EDUCATION

The administration of career and vocational education will be improved at the local level as administrators, counselors, and teachers will have better information on students and labor market needs.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50245

TITLE: Implementation of a State Wide Computer-Based Occupational Information System with Multi-Facet Delivery Systems

PROJECT DIRECTOR AND ORGANIZATION: Dr. Walter A. Cameron  
Assistant Director  
Research Coordinating Unit  
University of Tennessee  
909 Mountcastle Street  
Knoxville, Tennessee 37916 (615) 974-4466

GRANT PERIOD: July 1, 1975 - June 30, 1976

### OBJECTIVES OR PURPOSES

1. To computerize the present Tennessee occupational information data to provide on-line access as well as computer output microfiche.
2. To develop manual pin-sorts for exploring both the Tennessee junior high and the secondary school level occupational information.
3. To develop delivery systems applicable for presenting occupational information to special user groups, e.g., blind and disadvantaged students.
4. To develop user guides on the various occupational information delivery systems.
5. To provide cost data of and evaluate reactions of students, teachers, counselors, and parents to the various delivery approaches.

### PROCEDURE OR APPROACH

The present Secondary INFOE (Information Needed for Occupational Entry) data base will be computerized to provide on-line teletype terminals to access information. Computer output microfiche (COM) will be obtained from computer tapes to provide students with manual access to the occupational data. The computerized delivery system, designed to provide localized information, will be pilot tested in selected Tennessee secondary schools. A manual pin-sort made up of job title cards with pin-sort holes will be developed for systematically accessing data. Occupational information will be reproduced in braille and on audio tapes for blind students and on filmstrips (with audio tapes) for selected types of disadvantaged students. User guides with media packages will be provided. Inservice training on the various delivery approaches. Users will be queried on the effectiveness of the delivery systems and on improvements needed. Actual cost data will be maintained.

### EXPECTED CONTRIBUTION TO EDUCATION

This effort will result in a model for delivering occupational information through various delivery approaches.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50343

TITLE: An Information Network and Simulation Model for Vocational Education

PROJECT DIRECTOR AND ORGANIZATION: Mr. Reo Beaulieu  
Planning Specialist  
Rhode Island Department of Education  
199 Promenade Street  
Providence, R. I. 02840 (401) 277-3152

GRANT PERIOD: July 1, 1975 - June 30, 1976

### OBJECTIVES OR PURPOSES

1. To establish an Information Exchange Network among the State Departments of Administration, Education, Employment Security, Labor, Social and Rehabilitative Services, Economic Development, and Community Affairs in which manpower supply and demand information can be systematically exchanged, organized, and disseminated to appropriate users.

2. To test the validity of a predictive manpower simulation model as an analytic and planning tool for vocational education and manpower training administrators.

### PROCEDURES OR APPROACH

Objective 1: Identify existing and missing demographic, labor market, vocational education and manpower training data elements; design collection plan for missing data; plot desired information dissemination paths; establish standard operating procedures for the Network; and prepare summary handbook of manpower information.

Objective 2: Incorporate available data in the prototype simulation model; subject the model to expert judgement and opinion; and assess model validity by its ability to reproduce historical data and its usefulness as an analytic and planning tool.

### EXPECTED CONTRIBUTION TO EDUCATION

The project will provide a common manpower supply and demand data base for agencies involved in meeting the occupational and training needs of the citizens of Rhode Island, and a planning tool for the planning and administration of vocational education programs.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50353

TITLE: Models for the Use of a Data Base in Planning State and Local Vocational Programs

PROJECT DIRECTOR AND ORGANIZATION: Mr. Donald M. Gilles  
Coordinator, Career Education Program  
Development and Evaluation  
Oregon Department of Education  
Salem, Oregon 97310 (503) 378-3597

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES

1. To more effectively use state and local data to improve vocational program planning and the curriculum development process at the state, community college, and secondary levels.
2. To design, develop, and test a system to improve the competencies of state and local personnel in the use of data for program planning, curriculum development, and career guidance.

### PROCEDURES OR APPROACH

A set of procedures using state level data (emphasizing manpower supply and demand, enrollments, follow-up information, and task analyses) will be developed and tested to help improve the planning of career and vocational programs at the State Department of Education, Lane Community College, and Portland School District, along with approaches for applying supplemental local data. Procedures will also be developed to use the data in the improvement of the curriculum development process. This effort will be followed by inservice programs for training state staff, regional coordinators, and local program planners in the application of the data.

### EXPECTED CONTRIBUTION TO EDUCATION

The project will produce a minimum of four products. These include guides on how to use the data at (a) state departments of education, (b) community colleges, and (c) local school districts, and a plan for inservice training of personnel involved in career and vocational education decision making at the state, community college, and secondary school levels.

ADMINISTRATION OF VOCATIONAL EDUCATION  
AT THE LOCAL LEVEL

BY

Laurence G. Goebel  
Education Program Specialist  
Research Branch, DRD

CONTENTS

	<u>Page</u>
Background .....	37
Analysis of Supported Applications .....	58
Management Systems .....	59
Vocational Education Administrator Training .....	60
Other Projects .....	61
Summary .....	62
Project Abstracts .....	63

ADMINISTRATION OF VOCATIONAL EDUCATION  
AT THE LOCAL LEVEL

Laurence G. Goebel  
Education Program Specialist

BACKGROUND

The following excerpt from the Federal Register, Vol. 40, No. 41, February 28, 1975, is the priority area description of research on problems associated with the administration of vocational education at the local level which would be supported from Fiscal Year 1975 funds.

"(B) Administration of Vocational Education at the Local Level.

(1) To expand vocational education to ensure articulated programs; to improve coordination and cooperation with business, industry, and community organizations; to initiate new programs in emerging occupational areas; to utilize student needs data; to utilize manpower information; and to utilize cost-benefit and similar data require improved needs assessment, planning, and management techniques and skills at the local educational level.

(2) The Commissioner has authority to support applied studies and development projects that address one or more of the following:

(i) The development of alternative administrative strategies for the maximizing of educational program goals of vocational education while utilizing varying levels of resource allocations;

(ii) the design, development, and field testing of a comprehensive educational management and information system or components of such a system at the local level for vocational education which is based on a needs assessment and existing technology;

(iii) based on a needs assessment, the development and field testing of inservice training materials for vocational education administrators along with user guides in order to ensure the transportability of the materials."

The priority area embraced three major topics of concern to vocational education administration---the use of resources, management systems and administrator training.

Topic (i) was intended to encourage research which would identify the problems which are created when the level of resources authorized for supporting vocational education programs is decreased, increased, or held stable. From this identification it was hoped that empirically validated administration strategies for achieving planned vocational education goals in spite of the varying levels of resource allocation would be developed. The strategies might involve novel staffing plans

or staff realignments, unique program and curriculum modifications, innovative exploitation of community facilities and other resources, and other approaches, singly or in combinations.

The second topic (ii) above, sought to elicit developments to exploit computer technology and modern management practices in designing economically feasible information and management systems which would be of practical assistance in planning, installing and administering local level vocational education programs. A critical task in this development was the initial identification of the specific management and management information needs required for optimum vocational education administration. This needs identification would serve as the basis on which to construct the conceptual framework for the management system.

Administrator training needs was the thrust of the third topic, (iii) above. The goal of this priority topic was to support development of a variety of tested training materials for teaching administrators modern planning, management and supervision principles, techniques and skills. Essential to the development would be analyses of the actual job skills and knowledge required by LEA administrators, and in addition, the inclusion of techniques for assessing the individual capabilities and needs of trainees. The requirement for transportability was intended to encourage more widespread use of the materials, thus excluding reliance on presentation techniques which required expensive hardware, such as computers or other media which might not be available in many situations.

#### ANALYSIS OF SUPPORTED APPLICATIONS

##### Summary of Supported Projects

Proj. No. & St.	(i) Resource Use	(ii) Mgmt. Sys.	(iii) Adm. Tho.	(iv) Other
50028 Alas				X
50092 Wa		X		
50102 D.C.		X		
50126 Miss			X	
50136 Tex			X	
50158 W.Va			X	
50188 N.Y.				X
50193 Ohio			X	
50209 Ohio		X		
50216 Mich		X		
50236 N.C.				X
50281 Va			X	
50286 Tenn			X	
50297 Haw				X
50302 S.C.		X		
50367 T.T.				X

**Resource Utilization:** The chart, which summarizes by priority topics the funded applications, shows that no grants were awarded for Topic (i), which dealt with the use of resources. One applicant cited this topic as the central thrust of the work; however, detailed examination of the proposed work revealed that the applicant had not understood that the operant concern of Topic (i) was the influence that changing levels of financial and other resources had on administrative capability to achieve vocational education program goals.

It is likely that productive work in this problem area may hinge on a number of factors. Among these are: (1) development of more sensitive instructional costing and cost-benefits techniques which have practical utility for LEA administrators. (2) development of systems for assessing and predicting local economic and manpower variables which are feasible for use by LEA planners. (3) creation of practical, tested, alternative strategies involving novel staffing arrangements, unique program and curriculum modifications, assessment and redesign of entry-level skills requirements, articulation and cooperative programs to eliminate unnecessary duplication of programs and facilities, and innovative exploitation of community facilities and other resources.

#### Management System

Five of the projects which were supported involved work on some aspect of vocational education administration. The studies were relevant to the announced priority; however, it is interesting to note that none of the applications attempted to develop a conceptual framework which addressed modern, goal-oriented management practices and their applicability to vocational education administration needs. Two of the projects deal with the information and data requirement components of management and three of the studies are directed to special peripheral vocational education administration concerns.

The Middle Cities Education Association project seeks to identify the specific kinds of data required for vocational education short- and long-range planning, and to develop a practical computer-based system which would provide local vocational education administration ready access to the planning data. The Ohio State project supports collection of data and development of formulas which may be used in determining the relative cost-benefits to Ohio students and to the communities of specific vocational education programs and alternative services.

The study in Florida of a vocational education district coordination council system may produce an alternative management approach that could effect greater economy through cooperative facilities use, reduced program duplication and better employment of available financial and personnel resources. This study is being initiated at a very fortuitous stage, since the district coordinating council system in Florida was installed very recently and the councils have not had time to develop operational modes that would be difficult to modify. If the concept is developed adequately, it may demonstrate a much more viable approach

to vocational education program operation without increasing the non-functional management overburden of an additional administration hierarchy.

Education Turnkey Systems is directing its attention to the special administration concerns in developing and operating effective work-study programs. Work-study programs are exciting an increasing amount of attention since they offer a very flexible and viable means of meeting both secondary and postsecondary student needs for developing solid work experience while acquiring technical skills and education. The Turnkey project will examine the work-study concept and identify the weakness and strengths of existing programs. From these analyses systematic models for installing and administering work-study programs will be designed. These models should reduce the amount of time and effort required to set up new work-study programs since these will provide a type of blue-print or procedural guide for the administrator faced with this program development need. Although categorized in the management systems group, this project shows promise of contributing administrator training benefits also. The final report will serve, in addition, as a procedural manual for training purposes.

The project of Greenville Technical College attacks the problems that are created for students when courses at the post-secondary level require repetition of training already completed at the secondary level. This is uneconomical and wasteful of both the students' time and effort as well as of educational resources. The investigator in this project will seek an approach to articulating the secondary level programs with the postsecondary technical school program through secondary-postsecondary curriculum development teams that will design articulated job entry skills training programs using performance objectives and demonstrated credit-hour or clock-hour requirements.

#### Vocational Education Administrator Training

Of the six training program development projects funded, five deal directly with the competencies of administrators, while one is concerned with the functions of an industry services coordinator who may, or may not be, functioning in an administration role. This group of projects could have significant impact on the improvement of programs for preparing vocational education administrators.

Formal education administrator training programs and curricula have traditionally developed in a very unsystematic manner. Much of the course content consists of "add-ons" which are superimposed on a standard core of study as academic value judgement dictates. Few education administrator preparation curricula are based on systematic field analyses of the job knowledge and skills which are actually needed and employed for effective vocational education administration. In addition, the efficient principles and practices of modern management science have only recently been recognized as adaptable to education administration, and their exploitation is yet to be fully realized.

The six studies of the vocational administrator training priority show promise of contributing some of the fundamental job information data which is needed in order to design more effective formal vocational education administrator preparation programs, as well as in-service, short courses and workshops. The data may provide some in-sights which will be useful in determining the proper mix of theory and practical technical skills. In addition, information should be gained which will assist in identifying both the modern management practices and techniques which have direct applicability in education and those which require modification in order to be utilized effectively in the education administration situation.

An additional benefit to be derived from these efforts will be the variety of alternative techniques and instrumentation produced for needs assessments. The scope of the studies and the limitation on available funds does not permit full empirical validation of these alternatives; however, the work should provide a satisfactory initial step toward achieving some validated needs assessment systems. This is an important element which must be addressed in developing the concepts of competency-based training.

#### Other Projects

Five of the projects which were supported did not directly address any of the three announced topics for the local administration area; however, four of them involve problems which were judged to be of sufficient local concern to justify support, and one deals with a current national socio-economic concern--sex stereotyping in occupations.

A major influence in restricting the roles of women in occupations has been the traditional practice of labeling different kinds of work as either "man's work" or "woman's work." The practice has led counselors, teachers and employers to habitually discourage women from training or seeking employment in fields considered "man's work" and also to discourage men from training or employment in jobs considered "women's work." A scattering of overt approaches and techniques to overcome these traditional sex-stereotyping practices exist throughout the nation; however, without systematic development and evaluation, their impact will not significantly alter the traditional points-of-view and practices. The project being conducted by System Sciences of Chapel Hill, North Carolina, is intended to identify and examine the characteristics of these various intervention strategies. From these analyses the investigators will develop and test model, systematic strategies which combine the most effective features of the interventions studied. The results should provide useful basic information concerning de facto career development discrimination, as well as a guide to practical elimination of it.

The other four projects of this group each touch on vocational education related concerns which reflect more immediate local interests.

The Alaska Department of Education is developing and testing a concept of local job-market information acquisition which employs students to

collect the data. If successful, the approach, in addition to providing an economical method for up-dating local vocational education planning information, may operate as an effective strategy for motivating career development in the participating students and concurrently providing personal occupational planning and guidance information to them.

The project of the New York City Board of Education is experimenting with a more flexible and responsive vocational education program which employs the concept of open entry-open exit training in a centralized skills development center.

The Hawaii State Department of Education has been actively modifying its educational programs to integrate the concepts of Career Education. The activity has approached the stage of implementation and it is necessary to train both counselors and administrators in the concept of Career Education as well as in implementation procedures. The project supported here will develop materials and workshop procedures for providing the necessary training.

The Trust Territory of the Pacific Islands Department of Education project supports the initial step of the Department's attempt to develop a vocational education information dissemination system. The Department is faced with unique problems in the form of thinly dispersed population, widely scattered school sites and difficulties of frequent travel by boat. The project will support an initial conference and workshop at which vocational education program development and information communication strategies will be considered.

### Summary

Sixteen projects were supported in the local administration area. None of these was focused on the priority topic of Resource Utilization. The lack of response may indicate that the fluctuation of resources available for administering vocational education programs was not regarded by people in the field as a critical deterrent to effective administration at this time and that they had a more urgent need for R&D on other problems. Most interest concentrated on in-service training needs of administrators and on the need for current and accurate management information for program planning.

Project Abstracts

## PROJECT ABSTRACT

PROJECT NO: 498AH50028

TITLE: Management Information System

PROJECT DIRECTOR & INSTITUTION: R.L. Spaziani, Director  
Career & Vocational Education  
Alaska Department of Education  
Pouch F  
Juneau, Alaska 99811  
Tel: (907) 465-2900

GRANT PERIOD: July 1, 1975 - March 31, 1976 (9 mos)

---

### PURPOSE OR OBJECTIVES:

1. To determine if students can be trained to conduct successfully local job-market surveys and data analyses.
2. To develop a system for using students to collect and compile local job-market information to be used by SEA's and LEA's for vocational education planning, career counseling and placement activities.

### PROCEDURES:

Student training packages consisting of self-instruction manuals and job survey forms are developed. LEA vocational administrators will be given workshop training in administering the instructional materials. LEA's will train their students and oversee the local surveys and data analyses. The accuracy and completeness of the surveys and analyses will be evaluated by Department of Education staff by resurveying a random selection of businesses and spot-checking job survey reports. If the system proves reliable and valid, the job survey information from all LEA's will be compiled into a statewide job status report for dissemination to local agencies.

### PRODUCTS:

The products should be (a) An evaluation of the feasibility of a statewide job-market information system based on student conducted surveys and data analyses. (b) Self-instruction materials and administration guides for training students to survey and analyze local job-market data.

### SIGNIFICANCE:

The project holds promise for contributing an economical method of statewide job-market data collection which could have concurrently a significant positive affect on student career knowledge, motivation, vocational development and planning. The approach, if it proves feasible, should be adaptable to other states and LEA's.

PROJECT ABSTRACT

PROJECT NO: 498AH50092

TITLE: Strengthening Local Administration of Vocational Education through Design, Implementation and Evaluation of Alternative Delivery Systems for Use by Coordinating Councils

PROJECT DIRECTOR & INSTITUTION: Joe D. Mills, Div. of Voc. Ed.  
Florida Dep't. of Education  
Room 204, Knott Building  
Tallahassee, Florida 32304  
Tel: (904) 488-8961

GRANT PERIOD: June 15, 1975 - December 14, 1976 (18 mos)

-----

PURPOSE OR OBJECTIVES:

The purpose of this effort is to design a vocational education coordinating model that would be adaptable to all 28 Florida Community College Districts. Florida has recently established a vocational education coordinating council in each of the 28 community college districts. In order to achieve maximum benefits to vocational education from these council activities, it is necessary to determine in their early stages what the optimum structure, roles and functions are, and how they can operate most efficiently and effectively.

PROCEDURES:

Surveys will be made of all 28 councils to collect information and data on composition, organization, information requirements and operation. The data will be analyzed to determine council characteristics, strengths, and variables attributable to local special needs. From the analyses alternative model configurations will be developed and, concurrently, six representative sites will be selected from among the districts in which to test the models. Model testing will be preceded by orientation of council members, and district vocational education administrators will be provided leadership training during the field tests. Evaluations will be made by the local councils assisted by project staff members. Models will be revised on the basis of evaluation data, and descriptions of the models will be disseminated to all districts.

PRODUCTS OR RESULTS:

The product will be descriptions of the configurations and functions of alternative, tested models for vocational education district coordinating councils.

SIGNIFICANCE:

The coordinating council model designs may be useful to other states where consideration is being given to problems of intra-district and inter-district coordination and cooperation in vocational education program administration.

## PROJECT ABSTRACT

PROJECT NO: 498AH50102

TITLE: Development of a System for Planning, Managing and Evaluating Cooperative Work-Study Programs

PROJECT DIRECTOR & INSTITUTION: Charles L. Blaschke  
Education Turnkey Systems, Inc.  
1660 L. Street, N.W., Suite 1213  
Washington, D.C. 20036  
Tel: (202) 293-5950

GRANT PERIOD: July 1, 1975 - June 30, 1976 (12 mos)

-----

### PURPOSE OR OBJECTIVES:

The objective of this effort is to design systematic procedures for initiating cooperative education work-study programs. The design will include program planning methods, program management, and techniques for evaluating program effectiveness and efficiency. The approach will seek to incorporate components which contribute the most to program effectiveness and which will permit ready identification of the relationships between expenditures/resources used and program outcomes.

### PROCEDURES:

Relevant existing models for planning, management and evaluation will be reviewed to identify appropriate components and to analyze the strengths of procedures used. SEA's will be asked to identify outstanding work-study program management models and these will be analyzed for additional data. An analysis matrix will be developed which takes into account the functions of planning, management and evaluation; situational conditions of urban, suburban and rural areas; and enterprises in manufacturing, agriculture and services. From these analyses project staff will design the specifications, content, performance standards and other requirements that an optimum model must meet.

### PRODUCTS OR RESULTS:

The results of this effort will be the design specifications of systematic models for installing and administering work-study programs. The models will incorporate planning considerations and techniques, program administration, and program process and outcome evaluation approaches.

### SIGNIFICANCE:

The designs will enable systematic development of demonstration work-study program models which can be empirically validated through field-tests.

## PROJECT ABSTRACT

PROJECT NO: 498AH50126

TITLE: Preparation of Leaders for Industry Services Programs in State, Area, and Local Vocational Education Agencies

PROJECT DIRECTOR & INSTITUTION: James E. Wall  
Res. & Curr. Unit for Vo-Tech Ed.  
College of Ed., Drawer DX  
Mississippi State University  
Mississippi State, MS 39762  
Tel: (601) 325-2510 or 5878

GRANT PERIOD: July 1, 1975 - December 31, 1976 (18 mos)

-----

### PURPOSE OR OBJECTIVES:

The objectives of this work are: (1) To identify the competencies required to administer and coordinate successfully industry services programs; (2) to design and field-test an instructional program the related materials for training personnel to implement and evaluate industry services programs; and (3) to develop a user's guide for the instructional program.

### PROCEDURES:

Training materials will be developed for the apparent role descriptions of the following industry services personnel: Program Planners and Evaluators; Training Materials Developers; and Training Program Coordinators. First, the scope and focus of leadership personnel will be identified to enable initial formulation of an instructional program plan. Second, instructional materials in the form of teaching-learning plans (modules) will be written along with guides for their use. Third, after the instructional plan and materials are reviewed by curriculum experts, they will be field-tested in selected sites in Mississippi, Florida and Oklahoma. Feedback will be used for revisions. Fourth, evaluation will focus on structural validity of revised materials, and the validity of the instructional plan relative to intended aims and scope.

### PRODUCTS OR RESULTS:

The products will be tested modules for training industry services program leaders and a user's guide to the materials.

### SIGNIFICANCE:

The results will be useful in improving leadership competencies of vocational education personnel who work with industries and businesses that are expanding their operations or starting new plants.

PROJECT ABSTRACT

PROJECT NO: 498AH50136

TITLE: Identification of Competencies Needed by School Superintendents  
Serving as Vocational Directors

PROJECT DIRECTOR & INSTITUTION: James F. McNamara  
Educational Administration Dep't.  
Texas A&M University  
College Station, Texas 77843  
Tel: (713) 845-2620

GRANT PERIOD: June 1, 1975 - November 30, 1976 (18 mos)

-----  
PURPOSE OR OBJECTIVES:

The purpose of this effort is to analyze the management skills required by a superintendent acting as a vocational education director, develop descriptions of training needs and specific course objectives, and design and describe alternative pre-service and inservice administrator training models.

PROCEDURES:

Data on the required administration skills will be collected by interview and observation of a random sample of superintendents who also function as vocational administrators. In addition, the S's will be asked to identify those tasks which, in their opinion, are most critical. After analysis of this data, training needs will be identified and specific course objective descriptions will be written. These will be evaluated by the superintendents and by an advisory committee. Alternative administrator preparation program models for pre-service and in-service training will be developed and these will be critiqued by the advisory committee.

PRODUCTS OR RESULTS:

A report will be produced which describes the critical administrative skills required by superintendents acting in the role of vocational administrators. The report will prescribe the specific content of courses for training the administrators in the necessary skills, and will describe a number of alternative pre-service and in-service training program models.

SIGNIFICANCE:

The project should make two important contributions to improved vocational administrator training. The description of critical administrator skills needs should have a high level of validity and practicality since it will be based on actual field observation and interviews. The alternative training models will be useful additions to the existing administrator training curriculum development resources, and will be generalizable to a wide variety of LEA training situations.

## PROJECT ABSTRACT

PROJECT NO: 498AH50158

TITLE: A Proposal for Developing a Performance-Based Professional Development Program for Vocational Administrators in Local Education Agencies

PROJECT DIRECTOR & INSTITUTION: Charles I. Jones  
Dep't. of Occupational, Adult & Safety  
Education  
Marshall University  
Huntington, West Virginia 25701  
Tel: (304) 696-2380

GRANT PERIOD: July 1, 1975 - June 30, 1976 (12 mos)

-----

### PURPOSE OR OBJECTIVES:

To develop individualized instruction units for training local level vocational education administrators in the knowledge and skills required to manage LEA's effectively. The materials development will be based on an assessment of needed competencies which are categorized in terms of their importance in local administration. The instructional materials are intended for use in both preservice and inservice training programs

### PROCEDURES:

In a pre-grant-award phase a working committee has been reviewing literature on competency assessment, identifying and describing needed competencies, and developing a scheme to classify the identified competencies in order of importance. The initial project phase will involve identifying the basic theoretical components of competency assessment, developing techniques and instruments for measuring individual administrator competencies, developing alternative procedures and instruments, and subjecting these to experimental test and evaluation. In the final project phase the working committee will prepare the self-instruction units.

### PRODUCTS:

The products will include (a) A validated list of the competencies required by vocational administrators at the local level. (b) A set of tested instruments and techniques for assessing the individual competencies of administrators. (c) A series of individualized instruction units designed to train administrators in the competencies identified as having high priority for effective administration. (d) User guides for the training materials.

### SIGNIFICANCE:

When empirical validation is accomplished, this development should contribute significantly to the need for tested in-service training materials for teaching modern management practices to vocational education administrators. The assessment instruments and training materials should be useful to administrator training programs nationwide.

## PROJECT ABSTRACT

PROJECT NO: 498AH50193

TITLE: Development of Competency-Based Instructional Materials for Local Vocational Education Administrators

PROJECT DIRECTOR & INSTITUTION: Robert E. Norton  
The Center for Vocational Education  
The Ohio State University  
Columbus, Ohio 43210  
Tel: (614) 486-3655

GRANT PERIOD: July 1, 1975 - December 31, 1976 (18 mos).

### PURPOSE OR OBJECTIVES:

To develop and field-test a set of in-service training materials designed to teach the critical competencies which have been identified by means of a needs assessment as most needed by local vocational education administrators.

### PROCEDURES:

The needs assessment will be carried out by a synthesis of the literature base on role, functions and competencies of LEA's. Competency lists will be critiqued by an advisory committee. Existing in-service training materials will be analyzed to determine competency coverage and further developments needed. The advisory committee will critique this descriptive analysis together with the competency lists. An effort will be made to identify competencies unique to vocational administration, as well as those common competencies which practicing administrators have difficulty performing. A data collection instrument for validating administrator competencies will be critiqued by the committee and tested on a stratified random sample of about 100 administrators. Competency priorities and categories will be established on the basis of the collected data. Prototype training materials will be prepared and subjected to committee critique. The revised materials will be field-tested in four independent and geographically diverse sites. Final revision of the materials and user guides will follow the field-testing.

### PRODUCTS OR RESULTS:

The products should include (a) A validated descriptive list of the competencies needed by administrators. The competencies will be categorized by level of importance and in terms of whether they are unique to vocational administration or are competencies common to all administration but with which administrators tend to have difficulties. (b) A set of field-tested and refined course materials for use in administrator in-service training programs.

### SIGNIFICANCE:

The products should be an important contribution to the developing base of literature and materials resources for practical training programs for vocational administrators. The materials should be generalizable nationwide.

## PROJECT ABSTRACT

PROJECT NO: 498AH50188

TITLE: A Plan for a Comprehensive Occupational Education System in  
New York City - Research and Experimentation in a Skill Center

PROJECT DIRECTOR & INSTITUTION: George R. Quarles  
Office of Career Education  
N.Y. City Board of Education  
110 Livingston Street - Room 837  
Brooklyn, N.Y. 11201  
Tel: (212) 596-8026

GRANT PERIOD: July 1, 1975 - December 31, 1976 (18 mos)

---

### PURPOSE OR OBJECTIVES:

The purpose of this work is to develop a plan and collect data for modifying programs to provide more flexible and responsive vocational education training through a centralized facility.

### PROCEDURES:

The activities include conversion of an existing school to a skills training center, development of improved career guidance, job market data collection, establishment of time frames within which individuals can be trained for specific skills, modification of curricula and instructional materials to permit open entry-open exit flexibility, and development of liaison activities with industries and community organizations.

### PRODUCTS OR RESULTS:

The results will be a strategy for planning and developing vocational education programs that should be more flexible and responsive to the requirements of youth in New York City.

### SIGNIFICANCE:

The work should provide the New York City Board of Education with a plan and data on which to implement an improved vocational education program delivery system.

PROJECT ABSTRACT

PROJECT NO: 498AH50209

TITLE: Improving the Economic Assumption Factors in the Cost-Benefit Study Formulas for Ohio Vocational Education

PROJECT DIRECTOR & INSTITUTION: R. D. Balthaser  
Div. of Voc. Ed., Ohio St. Dep't. of Ed.  
Room 904, Ohio Departments Bldg.  
65 So. Front Street  
Columbus, Ohio 43215  
Tel: (614) 466-2095

GRANT PERIOD: July 1, 1975 - December 31, 1976 (18 mos)

-----

PURPOSE OR OBJECTIVES:

The purpose of this project is to support area vocational education cost-benefit studies by Dr. I.A. Ghazalah, Department of Economics, Ohio University, in which the investigator will extend and supplement prior research for the Ohio Educational Data Systems which are sponsored by the State Department of Education.

PROCEDURES:

The sub-contracting investigator will collect vocational education planning district economic and social data, develop a computerized data base system using Ohio regional economic and personal factors, and develop data print-outs for distribution to LEA's in Ohio.

PRODUCTS OR RESULTS:

The results will be cost-benefit formulas which are more realistic for Ohio vocational education planning districts than the formulas based on national data. Ohio LEA administrators may be able to determine the contribution value of specific vocational education programs and services to their students and communities.

SIGNIFICANCE:

The Ohio State Education Agency will be provided more immediately appropriate planning data for Ohio vocational education program development.

PROJECT ABSTRACT

PROJECT NO: 498AH50216

TITLE: A Proposal to Develop and Implement a Management and Information System for Long-Range Planning of Vocational Education Programs at the Local Level

PROJECT DIRECTOR & INSTITUTION: W. Thuemmel  
Middle Cities Education Association  
420 Erickson Hall  
Michigan State University  
East Lansing, Mich. 48824  
Tel: (517) 355-6580

GRANT PERIOD: July 1, 1975 - September 30, 1976 (15 mos)

-----

PURPOSE OR OBJECTIVES:

The purpose of this project is to develop a system for using computer capabilities to analyze the data on which local vocational education administrators base immediate decisions and long-range plans. The study will investigate both the kinds of management data considered essential and the prediction capabilities which will be most useful in LEA planning activities.

PROCEDURES:

Staff will develop from literature searches a model information system. The model will describe the data and software for such components as demographic data, employment data; regional, state and national data; basic prediction component data such as school system enrollment and program enrollment; and secondary prediction components such as facilities, staff and financial requirements. Pilot tests in three representative districts will be conducted.

PRODUCTS OR RESULTS:

The product of this project will be a field-tested, computer-based vocational education planning information system which will aid local level decision-making. A report will be produced which will describe the conceptualization of an optimum planning information system, the procedures by which the model was developed, the results of testing, the components and characteristics of the model, and how it can be most fully utilized by LEA's.

SIGNIFICANCE:

The work should provide LEA's with a practical tested approach for installing a vocational education planning information facility.

## PROJECT ABSTRACT

PROJECT NO: 498AH50236

TITLE: Testing of Selected Strategies to Eliminate Sex Bias in Vocational Education Programs

PROJECT DIRECTOR & INSTITUTION: Edgar A. Parsons  
System Sciences, Inc.  
121 S. Estes Dr., P.O. Box 2345  
Chapel Hill, No. Car. 27514  
Tel: (919) 929-7116

GRANT PERIOD: July 1, 1975 - September 30, 1976 (15 mos)

-----

### PURPOSE OR OBJECTIVES:

The purpose of this project is to identify and evaluate alternative strategies which vocational education administrators can employ to eliminate the restrictive influences of sex stereotyping on the choice of occupations and training offered to students of both sexes.

### PROCEDURES:

A comprehensive list of possible strategies will be compiled from the literature, case studies, and existing projects or approaches which are being employed throughout the nation. This information will be analyzed and synthesized in the form of a matrix showing the mechanism(s) of change used and the functional relationships within the school environment. This matrix will be used to develop a list of interventions, each of which may be a single strategy or a combination of strategies that can be tested. The interventions will be tested at selected sites. Pre- and post-test data will be collected for evaluation.

### PRODUCTS OR RESULTS:

The product will be an implementation guide for use of administrators. This manual will describe in detail the alternative interventions, their relative effectiveness, any materials to be used, and procedures for their implementation and evaluation. A brief technical report which describes details of the research and development underlying the implementation guide will be included.

### SIGNIFICANCE:

The results should provide vocational education administrators with practical interventions to remove the barriers to full occupational opportunity which have been raised by traditional sex stereotyping and discriminatory counseling and training practices.

## PROJECT ABSTRACT

PROJECT NO: 498AH50284

TITLE: Developing Competency-Based Training Materials to Meet the Inservice Needs of Local Vocational Education Administrators

PROJECT DIRECTOR & INSTITUTION: Curtis R. Finch  
Div. of Voc. & Tec. Ed., Coll. of Ed.  
Virginia Polytechnic Institute and State  
University  
Blacksburg, Va. 24061  
Tel: (703) 951-6385

GRANT PERIOD: July 1, 1975 - December 31, 1976 (18 mos)

-----

### PURPOSE OR OBJECTIVES:

The purpose of this project is to develop teaching materials and user guides for training local level vocational education administrators.

### PROCEDURES:

An instrument to assess the training needs of LVEA's will be developed with the content based on VEA job descriptions, interviews with administrators, teachers, vocational education leaders, and reviews of relevant research. The instrument will be pilot-tested and revised. The revised instrument will be used in a mail survey of approximately 300 LEA's and superintendents. Based on this assessment, prototype instructional packages and user guides covering high priority areas will be prepared. The prototype materials will be field-tested with 15-30 administrators. A "third party" evaluation of the materials will also be made.

### PRODUCTS OR RESULTS:

The products of this project will be four to six instructional packages, together with a user guide, which will approximate four graduate credit hours of instruction. Each package will cover an area of high priority management skills needed by local vocational education administrators.

### SIGNIFICANCE:

The effort should contribute an important addition to the developing body of vocational education administrator professional instructional materials available for inservice training use.

## PROJECT ABSTRACT

PROJECT NO: 498AH50286

TITLE: A State Inservice Training Model for Local Directors of Vocational Education

PROJECT DIRECTOR & INSTITUTION: Melvin D. Miller  
Dep't. of Voc-Tec Ed.  
110 Henson Hall  
The University of Tennessee  
Knoxville, Tenn. 37916  
Tel: (615) 974-2574

GRANT PERIOD: May 1, 1975 - September 30, 1976 (17 mos)

-----

### PURPOSE OR OBJECTIVES:

The purpose of this effort is to replicate experimentation with an inservice professional training concept called "Extern" which was developed for vocational education administrators. Prior experiments with this approach were conducted in Oregon and Arkansas.

### PROCEDURES:

A needs assessment will be made using an instrument called the "Miller-Courtney Vocational Leadership Competency Test" and an unpublished "dogmatism-supportiveness-flexibility scale." Based on this data a training program consisting of a summer workshop followed by a long-term series of developmental activities will be planned. Developmental activities will include both group activities such as site visits, lectures, seminars, etc.; and individual instruction, including the planning and implementation of an improved vocational education program or component by the trainee. A pre-post-test, non-equivalent control group design will be used to evaluate the outcomes. Experimental S's will be administrators with less than 3 years of experience. Controls will be administrators with more than 3 years of experience.

### PRODUCTS OR RESULTS:

The results should be an alternate experimental approach for providing vocational education directors with in-service training to increase or upgrade administration skills.

### SIGNIFICANCE:

The study will provide empirical verification of needs assessment instrumentation and an alternative training program strategy that may have wide generalizability.

**PROJECT ABSTRACT**

**PROJECT NO:** 498AH50291

**TITLE:** Comprehensive Staff Development Model for Delivery of Career Development System for the Public Schools of Hawaii

**PROJECT DIRECTOR & INSTITUTION:** Emiko I. Kudo, Administrator  
Voc-Tec Education  
Hawaii St. Dep't. of Education  
Bachman Hall 101  
2444 Dole Street  
Honolulu, Hawaii 96822  
Tel: (808) 548-6391

**GRANT PERIOD:** July 1, 1975 - June 30, 1976 (12 mos)

-----

**PURPOSE OR OBJECTIVES:**

To train counselors and administrators to implement Career Development programs in the Hawaiian public schools.

**PROCEDURES:**

Materials will be developed by the staff of the Department of Educational Administration, University of Hawaii. The materials will be field-tested with counselors and administrators in selected districts. Based on evaluation of the workshop outcomes, the materials will be revised and then retested if additional testing is needed.

**PRODUCTS OR RESULTS:**

The product of this effort will be course materials and instructional procedures for training inservice counselors and administrators to implement career development programs in Hawaii.

**SIGNIFICANCE:**

The results may serve as a useful reference for other educational systems that need to develop inservice professional training on the implementation of career education programs.

## PROJECT ABSTRACT

PROJECT NO: 498AH50303

TITLE: Occupational Education Program Articulation Between Secondary Vocational Education Centers and Greenville Technical College

PROJECT DIRECTOR & INSTITUTION: J. Ray Mixon  
Greenville Technical College  
Div. of Planning & Research  
P.O. Box 5616, Station B  
Greenville, So. Car. 29606  
Tel: (803) 242-3170, Ext: 241

GRANT PERIOD: July 1, 1975 - June 30, 1976 (12 mos)

-----

### PURPOSE OR OBJECTIVES:

To coordinate secondary level vocational education programs with post-secondary programs in order to eliminate unnecessary duplication of job skills training.

### PROCEDURES:

Convene a conference of secondary and post-secondary institution administrators to develop general policy guidelines on curriculum requirements, advanced placement and degree requirements, and secondary-postsecondary articulation procedures. Select at least three occupational training programs to be used as experimental vehicles. Form working committees of secondary and postsecondary specialists to define completion requirements for job entry skill training in each of the selected occupational training programs. Develop specific performance objectives and redesign the programs for competency-based instruction to replace credit and clock-hour requirements. Conduct a one-week workshop to train secondary and postsecondary faculty in competency-based instruction methods.

### PRODUCTS OR RESULTS:

Results of the effort should be: (1) An alternative approach for developing a cooperative working relationship between secondary and post-secondary institutions to articulate program offerings and avoid duplicative training requirements by substituting competency-based instruction. (2) At least three demonstration training programs which have been redesigned with performance objectives to replace credit and clock-hour requirements, and which can be used as field-test vehicles.

### SIGNIFICANCE:

The effort should demonstrate the feasibility of developing secondary-postsecondary program articulation by substitution competency-based training approaches for the traditional credit and clock-hour requirements.

## PROJECT ABSTRACT

PROJECT NO: 498AH50367

TITLE: Trust Territories Career Education Materials Demonstration and Dissemination Conference for Vocational Education Administrators

GRANT PERIOD: July 1, 1975 - June 30, 1976

PROJECT DIRECTOR & INSTITUTION: David Ramarui  
Trust Territory Department of Education  
Saipan, Marianas Islands  
Trust Territory of the Pacific Islands  
96950

---

### PURPOSE OR OBJECTIVES:

This project involves unifying the dissemination of vocational and career education information and developing administration strategies for an island school system. The system is characterized by a thinly dispersed population and the relative difficulties of frequent travel by water to distant and isolated schools. The focus of this effort is on conduct of a workshop conference on vocational and career education concepts as a first step in developing a unified administrative strategy.

### PROCEDURES:

A five day workshop is planned. Participants from all districts will convene at the Ponape District Center. Conferees will visit and examine programs at several education facilities, such as the Ponape Agricultural and Trade School and elementary schools with prevocational programs. In addition they will visit with teachers who are field testing elementary and secondary level Career Education Curriculum materials. Participants will submit written evaluations of the workshop, the teacher demonstrations and the materials which are reviewed.

### PRODUCTS OR RESULTS:

The product will be a descriptive report of the workshop. Results should be development among the participants of a common understanding of the concepts and goals of vocational and career education, development of practical information techniques for widely dispersed educational facilities, and a unified administration strategy for vocational education programs.

### SIGNIFICANCE:

The project is a logical first step toward developing a unified, goal-oriented administration approach to vocational education information dissemination and program management in an educational system where facilities are widely dispersed, and where distance and transportation factors present major obstacles to efficient administrative communication. Although not strictly an R&D effort, the workshop is an initial step in educational needs assessment and development for the Trust Territory of the Pacific Islands.

COMPREHENSIVE SYSTEMS  
of  
GUIDANCE, COUNSELING, PLACEMENT, AND FOLLOW-THROUGH SERVICES

BY,

David H. Pritchard  
Education Program Specialist  
Research Branch, DRD

CONTENTS

	<u>Page</u>
Educational Need .....	81
Announced FY 1975 Guidance Research Priority .....	82
Overview of Funded Projects in Relation to the Announced Priority .....	83
Overview of Funded Projects in Terms of End Products .....	86
Summary .....	92
Project Abstracts .....	95

COMPREHENSIVE SYSTEMS  
of  
GUIDANCE, COUNSELING, PLACEMENT, AND FOLLOW-THROUGH SERVICES

David H. Pritchard  
Education Program Specialist

I. Educational Need

The recent report to the Congress by the Comptroller General of the United States, What Is the Role of Federal Assistance for Vocational Education? declared:

1. Occupational guidance has not received adequate attention.
2. Schools have not routinely assumed responsibility for job placement assistance.
3. Follow-up of students and employers has been marginal.

Inter-Departmental efforts for the Education and Work initiative sparked by the President's speech on the subject in Ohio last year have recognized the crucial need to strengthen guidance and placement, including improved development and utilization of occupational information. One of several sub-task forces was assigned specifically to review the current status and needs of the interrelated guidance, placement, and information functions and to formulate proposed recommendations for agency action. The guidance, placement, and information sub-task force included specific attention to the ongoing and projected research and development activities in the field of guidance, counseling, placement, and follow-up under the Vocational Education Research Program.

Evidence of guidance, counseling, and placement needs is increasing rapidly from systematically designed surveys of students themselves. Illustrative of such sources are the pioneering and continuing Project TALENT, the Office of Education-National Center for Educational Statistics supported longitudinal study of high school seniors graduating in 1972, and the American College Testing Program's Nationwide Study of Student Career Development.

Legislative bills introduced in the current Congress with developmental assistance from the Administration, the American Vocational Association, the American Personnel and Guidance Association, the American Association of Junior and Community Colleges and other sources, all testify to the key role and critical needs of guidance, counseling, placement, and follow-up programs and services. All advocate forceful measures to develop and implement these programs and services comprehensively and effectively.

The April 1975 National Workshop to Implement Change in Counseling and Career Guidance, which, with U. S. Office of Education support, was sponsored by the Guidance Division of the American Vocational Association in cooperation with the American Personnel and Guidance Association and the National Advisory Council on Vocational Education, brought 200 or so leaders in the guidance and counseling movement together to consider changes in the field during the last five years, to review recommendations for further development produced by a wide array of informed and concerned sources, and to initiate responsive operational and research and development activities throughout the nation.

The basic needs and directions for research, development, and operational implementation of effective, comprehensive, and more widely accessible guidance, counseling, placement, and follow-through programs and services are well established by such sources.

## II. Announced FY 1975 Guidance Research Priority

In response to the foregoing kinds of needs to improve, expand, and extend guidance, counseling, placement, and follow-through functions in elementary, secondary, post-secondary, and adult settings, the following Vocational Education Research Program priority for fiscal year 1975 was announced in the Federal Register on October 11, 1974:

### Comprehensive Systems of Guidance, Counseling, Placement, and Follow-Through Services.

(1) Comprehensive systems of guidance, counseling, placement and follow-through services for all youth--both in and out of school--and adults have become increasingly important at the elementary, secondary, and post-secondary levels. The need to articulate such systems with business, industry, other service agencies, and manpower information systems is evident as is the need to ensure such services for minorities and for all youth without sex discrimination.

(2) The Commissioner is authorized to support development projects that address all of the following:

(i) Conceptualization, design, and development of comprehensive systems of guidance, counseling, placement, and follow-through services for all youth and adults at the elementary, secondary, and post-secondary levels;

(ii) utilization of existing tested materials and procedures for implementing and field testing a comprehensive system;

(iii) development of materials for training educational personnel to operate a comprehensive system;  
and

(iv) development of user guides which help to ensure the transportability of the comprehensive system.

(3) The Commissioner is authorized to support applied studies which produce information concerning (i) career planning and assessing student capabilities for selected populations, (ii) evaluation of intended and unanticipated effects of components of existing systems of guidance, counseling, placement and student follow-through systems, and determining cost and cost-benefits of components of a comprehensive system of guidance, counseling, placement and follow-through services.

### III. Overview of Funded Projects in Relation to the Announced Priority

The announced priority for guidance, it may be seen, premised certain needs for attention within the priority and noted that support was authorized for selected responsive (1) development projects, and (2) applied studies. Significant factors among the premised needs were comprehensive systems; for in- and out-of-school youth and adults; at elementary, secondary, and post-secondary levels; articulated with business, industry, other service agencies, and manpower information systems.

Factors related to developmental projects by the announcement may be abbreviated as (1) conceptualization, design, and development of comprehensive systems, (2) utilization of existing tested materials and procedures, (3) development of relevant training materials, and (4) development of user guides.

Factors related to applied studies were production of information concerning (1) career planning and assessing student capabilities, (2) evaluation of effects of components of existing systems, and (3) determining costs and cost-benefit relationships of components of a comprehensive system.

Table I, Project Characteristics Present in Relation to Announced Guidance Priority; presents information about the correspondence of the 19 funded projects to the priority, as subjectively judged by the author. The columns reflect most of the priority factors just cited. Each row gives the judgment made about an individual project, but only to develop an overall picture of the group of projects as a whole which may possess greater tenability.

Subject to the obvious limitations of the analysis, a few observations seem worth noting. As a group, the selected projects "cover" the overall space of the table (or specified priority factors) rather well. "Developmental project" factors are preponderant compared with "applied studies" factors. About half of the group were judged, in comparison with the others, to be more or less "comprehensive" in conceptualization, design, and developmental thrust. The educational levels addressed range from kindergarten, through elementary, middle, junior high, and

Project Characteristics Present\* in Relation to Announced Guidance Priority

Comprehensive System	Educational Levels	Articulation other Agencies	Use of Existing Materials	Personnel Training	User Guide	Effectiveness Evaluation	Costs Data	Yield Info. on Career Planning, Student Assessment	Population(s)
	h.s.		yes						h.s.
yes	K-A	yes	yes	yes	yes				all
	7-12	yes		yes					sec.
yes	K-PS	yes	yes	yes	yes		yes	yes	all
	middle and H.S.		yes	yes	yes	yes			all, emphasize "special needs"
yes	K-A	yes	yes	yes	yes	yes	yes		all
	h.s.	yes		yes					all 12th; 11th potential dropouts
	9th	yes	yes			yes			9th
	h.s.					yes		yes	"general" students
yes	7-12	yes	yes	yes	yes	yes	yes	yes	sec.
yes	sec.	yes	yes	yes	yes				rural
	elem-PS	yes			yes				rural; emphasize "special needs"
yes	sec.	yes	yes	yes	yes				rural

\*"Present" means relatively so, in the judgment of the classifier, as compared with the other projects in the group

Table I (continued)

Comprehensive System	Educational Levels	Articulation Agencies	Use of Existing Materials	Personnel Training	User Guide	Effectiveness Evaluation	Costs Data	Yield Info. on Career Planning, Student Assessment	Population(s)
yes	comm. coll.	yes					yes		all community college
	h.s.	yes		yes					all, emphasize "special needs"
yes	h.s. coll., out-of-school	yes	yes			yes		yes	neighborhood: mixed ethnic, SES, education
yes	sec.	yes	yes	yes					rural
yes	h.s.	yes		yes		yes			sec.
yes	elem-PS	yes	yes	yes	yes				all, with special emphase

senior high schools, to post-secondary and adult settings. Nearly all projects are concerned with all persons at the educational level or setting of concern, but most of these also make special provision for special sub-populations. A few are devoted exclusively or primarily to the guidance needs of special populations - rural, disadvantaged, handicapped, ethnic minorities, women, and public housing residents. All but two projects give special attention to linkages with non-educational organizations, including business and industry, in the planning and/or operation of the guidance programs and services. Most of the projects will use existing materials and procedures for implementing and/or field testing a more comprehensive system while adding new materials and procedures to their efforts.

The majority of the projects will develop and apply materials for training educational personnel to plan and operate a more comprehensive system. These personnel usually include teachers and counselors, but in some instances they include administrators, paraprofessionals, and representatives of other agencies. One also provides for relevant training of parents. At least half the projects will produce specific user guides to facilitate the transportability of their outcomes to other situations.

Only a half dozen or so of the projects, however, have designed a plan to evaluate the effectiveness of their activities in terms of evidence of student and other outcomes established in their goals and objectives. This general lack is in contrast to the planning in all projects to evaluate whether the management plan and activities were indeed carried out.

Another neglected factor among this group of projects, despite the emphasis of it in the announced priority, is the determination of cost and/or cost-benefit ratios of components of a comprehensive system of guidance, counseling, placement and follow-through programs and services.

#### IV. Overview of Funded Projects in Terms of End Products

Ultimately, there are probably at least as many ways to define the word "comprehensive" as there are would-be definers. This surely holds true when applied to the conceptualization, design, and development of a guidance system. The announced priority provided neither minimal nor maximal limits on the idea of comprehensiveness. Instead, it sought to stimulate applicants' own consideration of the question in the abstract; in the light of available literature, criticism, and recommendations; and in relation to the practical needs, opportunities, and constraints of their own situational conditions and the limitations of time, funds, and other resources which would prevail if an award were received.

As was to be expected, the projects vary widely in their expressed conceptions of comprehensiveness and, consequently, in their formulation of goals and objectives, scope of proposed work, and promised end products. The most salient fact is, however; that every project - whatever its

relative position on a hypothesized scale of comprehensiveness, for whatever reasons - will help to make the guidance programs and services with which it is concerned more comprehensive and effective than they were.

What is most useful is to examine major issues and problems which the projects explicitly address, the ways in which they will move toward greater comprehensiveness and effectiveness in guidance, and the major end products which they will produce.

Several projects directed from a State level are designed to have primary impact on the Statewide system of guidance.

Georgia (072)\* generalizes the most fundamental problem as the fact that students and many adults are currently not exhibiting appropriate career planning behaviors, and also observes that "other school problems are definitely linked...." The project characterizes comprehensiveness in terms of (1) such program aspects as (a) the spanning of grade levels vertically and horizontally, (b) links with community resources, (c) follow-through for extra-school populations, and (d) broader services to adults; (2) the populations served; (3) the operational components of (a) identification of goals, (b) needs assessment, (c) use of specific objectives, (d) the team approach, (e) curriculum based guidance, (f) community involvement, (g) competency-based staff development, (h) linkage with the Statewide Assessment Program; and (4) the following principles (merely captioned here):

1. Career guidance content is more than teaching about the world of work.
2. Career guidance must be sequentially organized from kindergarten through post-secondary institutions.
3. Career guidance must be organized as an integrated structure within the educational program.
4. To meet the needs of all students career guidance must be flexible.....
5. Career guidance is student-centered rather than manpower-centered
6. Career guidance programs must consider the individual's readiness for succeeding stages of career development.
7. Career guidance must not be limited to the traditional concepts of "awareness," "orientation," "exploration," etc. as they relate to work, but must include awareness, orientation, exploration, and progressive practice in developing the career aspects of self.

---

\*Numbers in parentheses refer to the last 3 digits of the number assigned to the project abstracted in another section of this report.

Specific Georgia end products will include a detailed program guide, a comprehensive needs assessment package, a series of staff development modules, and an implementation strategy with a built-in State/local guidance management system. These will have national as well as State and local significance.

California (085) states its main guidance problem to be that Statewide efforts to infuse career guidance into the school system effectively and efficiently are fragmented and incomplete. The most promising of their better efforts need to be identified and made readily available to all schools. In this project the State Department will collect and systematize promising practices already in existence in the field, and insure that they fit into an overall career guidance plan. The components of the "overall plan" will include career planning and decision making; educational, work, and leisure alternatives; life styles; and personal satisfaction. The project will develop piloted inservice training packages and disseminate them through workshops to teachers, counselors, administrators, and community representatives throughout the State. The results are sure to be significant to the nation as well as to California and its local school systems.

Minnesota (095) will attend to the major problem that within the State there is no systematic effort or program for assisting high school youth to make the transition from school to work. The project will help to make the programs more comprehensive by developing this kind of assistance as part of the program at 54 secondary-level vocational centers throughout the State. Tangible end products will include (1) a model and rationale for a comprehensive system of counseling, placement, and follow-up; (2) a handbook or procedures manual; (3) program public relations materials; (4) a student registration and filing system for educational and job placement; (5) instructional materials; (6) materials to assess the quantity of services performed; and (7) an evaluation and/or statistical model designed to use follow-up information. The availability of this range of useful materials will be of benefit not also to the State and its local vocational centers, but also to other places throughout the country.

In Maine (122), attention will be devoted to the "general" curriculum student. As in the nation at large, a large group of such young people in the State have no identification with career development and have no particular plans to continue with any "next step." In this project, a high priority consideration is the judgment that any learning experience initiated for students in this target group will need to be different from the traditional, highly cognitive approaches. Two major outcomes of the project will be an identification of various kinds of barriers in the lives and circumstances of "general" students which have been inhibiting their more effective career development, and the determination of ways to provide an array of more viable experience options for them. The results will be used to extend these options throughout the State, thus making career development programs and services more comprehensive.

The American Institutes of Research (189), in California, highlights this issue: "No one has had the time and financial support to research the most effective strategies for training individuals to design, implement, and evaluate the desired comprehensive guidance, counseling, placement, and follow-through programs." AIR organized and is coordinating a four-State consortium aiming for significant changes in pre- and in-service staff development for personnel establishing comprehensive programs of career guidance, counseling, placement, and follow-through. In California, besides AIR, the Long Beach State University and the California State Department of Education are involved. Also participating are the University of Maryland and the Maryland State Department of Education, the University of Michigan and the Michigan State Department of Education, and the University of Missouri and the Missouri State Department of Education. This consortium combines teams that are unparalleled in their past efforts to develop and implement comprehensive guidance systems. It will validate and expand identified competencies required for comprehensive career guidance, counseling, placement, and follow-through programs and develop transportable training packages keyed to high priority skills. Several key concepts guide the undertaking: competency-based, evaluative research, efficiency, educational and vocational decision making within a context of career-life development, needs of special groups, articulation of pre- and in-service staff development. Among the many other research-development-evaluation work projects by consortium members upon which this new effort builds, are AIR's study for the USOE's Office of Planning, Budgeting, and Evaluation entitled "Practical Career Guidance, Counseling, and Placement for the Non-College Bound Student" and the University of Missouri's long-term "National Career Guidance, Counseling, and Placement Project" performed under grant from the USOE's Bureau of Occupational and Adult Education. Major tangible end products of the consortium project will be (1) a comprehensive catalog listing competency-based staff development materials, (2) a staff development program appropriate for pre- and in-service applications, and (3) a report of the results obtained in the field tests conducted by each consortium center in pre- and/or in-service settings. This report should have extensive and highly significant impact upon staff development for comprehensive guidance systems in educational personnel training program institutions and in on-the-job settings throughout the United States and even some foreign countries.

Another consortium project, involving the Ohio Center for Vocational Education (161), the University of Wisconsin (323), and Northern Michigan University (201), will cooperatively develop a comprehensive career guidance, counseling, placement, and follow-through system for rural (small) schools. The pervasive and persistent problem being faced is the paucity of guidance tools, materials, and methods which have been developed in any significant way to impact specifically on the unique problems rural schools have in preparing their youth and adults for life role transitions. This project is using the combined available resources, materials, and expertise of two R&D agencies, three State departments of education, a university based in rural Michigan, and a number of local rural school districts to study and impact on the problem. Conceptually, the project is guided by the view that career development is not merely occupational development in isolation, but purposeful advancement toward the

total style of life one is striving to achieve. It is anticipated that a major publication or a series of monographs will "package" the following products, among others: (1) statement of the unique problems, (2) graphic and narrative description of a "total" program of career guidance, counseling, placement, and follow-through for rural schools, (3) a suggested set of ideal program specifications along with procedural suggestions on how to validate them locally, (4) a detailed set of Procedural User Guides, (5) a fully developed program of placement and follow-through, (6) a competency-based in-service training program, (7) a rationale and procedures relating to major transportability questions, and (8) a set of recommendations for further development of approaches to comprehensive career guidance, counseling, placement, and follow-through in rural (small) schools. The combination of comprehensive conceptualization, comprehensive programmatic resources, and comprehensive procedures - all as applied specifically to rural situations - will provide a unique stimulus and set of resources for use throughout the nation.

An additional, independent project is also addressed to the guidance problems of schools serving sparsely populated areas. Idaho (179) responds to studies of the quality of guidance, counseling, placement, and follow-through of students and potential students in the State which indicate that these programs and services are infrequent, weak, or non-existent, with a few notable exceptions. The project, recognizing that Idaho's local school districts must be largely self-sufficient in instituting improvements, will produce a "comprehensive and highly transportable model" for career guidance, counseling, placement and follow-through for school district use. This will be supplemented by a comprehensive set of in-service training materials, tested procedures, local adaptation suggestions, and techniques for integrating a comprehensive guidance system with the district schools' other efforts. Aimed specifically to meet the needs within Idaho, much of the output material should also be useful elsewhere.

Project DISCOVER (144), directed from Western Maryland College, is engaged in the research and development of a computer-based career guidance and counselor-administrative support system. This new generation of a computerized guidance system is more than an information storage and retrieval system. It will provide a comprehensive career guidance system enabling students to obtain sequential, individualized career guidance. The guidance system for students is supplemented by support systems to meet needs of administrators and counselors. The current project will bring earlier work through field testing of all guidance modules for grades 7-12 and completion of the programming of the administrative- and counselor-support functions. As field testing indicates, there will be revisions of the system in design, scripting, and/or programming. This marriage of a comprehensively conceived developmental career guidance system with still advancing computer technology is of unique significance to the nation from both the standpoints of delivering effective and more accessible career guidance and of making practical applications of technological developments.

Eastern Illinois University (049) is approaching greater comprehensiveness and effectiveness of guidance in another unique way. It has undertaken to link together systematically, selected products of other previous research,

demonstration, and curriculum development projects funded under the Vocational Education Act, as amended, and some other sources. The linkage will result in an alternatives-based model for a comprehensive guidance system. The model will reflect such conceptual dimensions as self-development, coping behaviors, life-style, decision making, career information, educational awareness, and attitudes and appreciations. Besides the model, user materials will be prepared and tested and leaders will be supplied with materials to train others to update, improve, and expand guidance programs. The whole should be greater than the sum of the parts, and of utility everywhere that strengthened career guidance programs are needed.

The Genesee Regional Approach to Systematic Placement (339), administered by the Genesee Intermediate School District, Flint, Michigan, responds to the need for making guidance systems more comprehensive by meeting the placement needs of students as identified by a variety of national and local sources such as the National Advisory Council on Vocational Education, the National Longitudinal Study of the High School Class of 1972, and the 1973 Michigan Career Development Study. The regional placement system advanced in the project is based upon a set of planning and operational needs that arise when and if local school-based programs are to be implemented. It is characterized by centralized coordination and support and local implementation. It is carefully interrelated with career guidance and counseling on the premise that if a total interface of career guidance and counseling is to be brought about with placement, the objective must be to develop this interface into one systematic approach. Other tangible products related to the model will include regional and local placement implementation handbooks, a manpower survey instrument, a sub-system to provide "employability skills" to students, and a supporting data management system incorporating banks for student, employer, jobs, and manpower, occupational and career data.

Three other projects focus primarily on placement and follow-up to make guidance systems more comprehensive. Nevada (229) is concerned about rapid population growth in the western part of the State and the rapid expansion of enrollment in the servicing community college. The Nevada State Plan for Community Colleges holds, "The major element to a successful occupational program is the counseling and guidance program, including placement and follow-up, plus its faculty advisor programs." The chief project purpose is to develop the placement and follow-up functions and certain guidance and counseling activities, and to integrate the expanded and improved components into an integrated system. Relevant cost data will also be produced. North Dakota (273) is responding to the fact that its schools have to date assigned only "low priority" to employment-related guidance and counseling functions. It is helping the Grand Forks schools to establish a placement service and follow-up record system for high school age youth. The project will also help to improve vocational training course materials for specific work-oriented activities. In Vermont (080), the priority problem is that the majority of students are not being serviced sufficiently with respect to aid in career decision making and "placement information." The project will focus on procedures for utilizing employment information, exploring alternative work experiences, and providing placement services to all students. The major product will be a "model plan of action" and related procedures to guide schools in the State.

The Edenwald-Gun Hill Neighborhood Center (312) in Bronx, New York has set out to test a new conception of an institution to serve as a source of comprehensive guidance, counseling, work experience, placement, and follow-through. Conceived as an "alternative environment" for these functions, it is envisioned that it "could be based in a private agency, a public agency, or even a school." The project will produce a model for guidance, counseling, experience, placement and follow-through for about 300 youths who are residents either of a large low-income housing project or of the surrounding neighborhood. There will be a related model for a cooperative multi-agency approach. An experimental design will test the effects of the program activities in terms of a series of stated hypotheses. This controlled, experimental approach could produce highly significant data about various non-traditional treatments for such persons.

Kentucky (098) provides another controlled experimental project. Western Kentucky University will produce evidence of main and interaction effects of various combinations of work experience and of a curricular Life-Career Development System upon ninth graders in a selected school. Hypotheses to be tested include resultant (a) better attitudes toward school, (b) increased career maturity, and (c) further crystallization of vocational interests.

New Jersey (080) is attending to the need to infuse career awareness and vocational exploration into curricula and guidance and counseling practices, with particular attention to students with "special needs." End products will include revised curricula for 5 academic areas in the middle school and several vocational-technical areas in the high school, plus a survey form to collect data on the local world of work. The significance of this to the State is (1) achievement of another major step toward a county-wide comprehensive career/vocational education and guidance system in southern New Jersey and (2) gaining more know-how and material with which to assist in Statewide adoption.

Guam (003) is making the judged best use of its very limited funding to identify, collect and make available to its high school students career information resources that are more validly applicable to Guam.

#### V. Summary

As expected, the 19 funded applications vary significantly in both the nature of their conception of, and the extent of their direct attention to, study and development of guidance, counseling, placement, and follow-through programs and services as a comprehensive system. The majority, however, do entail a more or less comprehensive purview of a system in that they attend in an interrelated way to a more or less complex set of stated dimensions. Illustrative of such dimensions are theoretical parameters of guidance, content domains, program functional components, delivery strategies, program organizational structures, systems-type planning, designing, implementing, and evaluation-feedback-revision procedures, personnel development, educational level and/or chronological age groups, special populations of concern, geographical boundaries, community involvement, and attention to necessary overall policy-making

and management processes and procedures as applied to a guidance system. All but a few of the projects are essentially of a program "development" nature, as distinguished from an "applied study." All projects do involve improvements and expansion of actual and/or potential program knowledge and operations in the direction of a more comprehensive system.

These particular projects were grouped in a number of sub-classifications in the foregoing discussion to reflect major characterizations. Several of them represent efforts to develop State-wide systems variously to provide new or improved overall guidance program content and structure, encourage wider adoption of most promising practices, create a school-to-work transition sub-system integrated with the on-going guidance and counseling system, and to develop a wider array of career development options for "general" students. A consortium consisting of a major national research institute, several university counselor education programs, and several State departments of education is devoted to development and validation of a series of pre- and in-service competency-based staff development modules related to an explicit integrated model of a comprehensive guidance system. Another consortium consisting of two university-based research and development organizations, a university serving a primarily rural area, and counterpart State departments of education is working to develop a comprehensive guidance system for rural (small) schools. A major, continuing project is completing the development and field-testing of a comprehensive guidance system which combines implementation of a developmental, sequential conceptualization of a career guidance program with advanced computer technology for its delivery to students. One new project will link together in an integrated manner selected guidance products from previous projects supported under the research, demonstration, and curriculum development programs of the Vocational Education Act, as amended. Several projects focus efforts on developing placement, follow-through, and/or follow-up functions and procedures and interrelating them with other guidance and counseling programs and services. Another project will develop and experimentally test an "alternative environment" guidance, counseling, work experience, placement, and follow-up system for residents of a low-income public housing project and the surrounding neighborhood, which mixes ethnic heritage, socioeconomic status, and educational attainment.

No guidance program or project can be isolated from other priority concerns of either education at large or vocational research and development activities. Centered on people, guidance programs and services both depend upon and contribute to the programs and services of other major sectors of involvement with human development and productivity, within "education" and beyond. This group of guidance projects relates in many significant ways to the other formally announced priority areas for fiscal year 1975: administration of vocational education at the State and local levels; educational personnel serving the educationally disadvantaged, handicapped, and minorities; and curriculum demonstration and installation studies. Just a few major examples include one or more guidance projects which (1) base guidance approaches in the curriculum, (2) design and implement a State/local management

system to deliver a comprehensive guidance program, (3) include an administrative support system, (4) develop a broad-gauged data management system, (5) address staff development needs of teachers, counselors, administrators, paraprofessionals, community representatives, and others - which include specific attention to sensitivity and responsiveness to the educationally disadvantaged, handicapped, and minorities, and to improvement of both "academic" and "vocational" course offerings.

Looking to the future, there are two aspects of applied research and development of comprehensive systems and components of guidance, counseling, placement and follow-through which should be emphasized. These are (1) well-designed studies of the outcomes of specified program efforts in terms of changes in student behavior and (2) controlled investigations of the monetary costs of differentiated program efforts. Ultimately, the interrelationships of these two factors as cost-benefit effectiveness ratios obviously would be ideal. These factors were included in the guidance priorities as announced for fiscal years 1974 and 1975; but as they are especially difficult to define and measure, they have had little response among all applications received. Yet interesting, innovative, or acceptable as given program approaches may be to any as "producers" or "consumers," improved, expanded, and extended guidance systems must in the end compete with alternatives for the "investor's" pocketbook on the basis of demonstrable effectiveness, efficiency, and economy.

Project Abstracts

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50003

PROJECT TITLE: Career Resource Center Development

PROJECT DIRECTOR Dr. Michael L. Rask  
AND ORGANIZATION: Board of Control for Vocational Education  
Department of Education  
P.O. Box DE  
Agana, Guam 96910

GRANT PERIOD: July 1, 1975 - June 30, 1976

OBJECTIVES OR PURPOSES:

1. To develop a system for the delivery of career information for secondary school students.

PROCEDURES:

1. Librarians, counselors, and career education staff will review available career information materials in order to develop a list of recommended materials relevant to Guam.
2. The list compiled will be disseminated to all secondary schools on the Island.
3. A Career Resource Center will be developed at each of the two high schools.

PRODUCTS OR RESULTS:

A set of career-oriented material for use in the schools.

EXPECTED CONTRIBUTION TO EDUCATION:

This project will contribute career information appropriate for Guam.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50049

PROJECT TITLE: Personalized Approach to Guidance Excellence

PROJECT DIRECTOR AND ORGANIZATION: Dr. Marla Peterson  
Eastern Illinois University  
Charleston, Illinois 61920

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES:

1. To provide systematic linkage among selected projects that have been funded from Parts C, D, in order that the best guidance components can be extracted from each and be translated into comprehensive system(s) of career guidance.
2. To devise a flexible, comprehensive career guidance model.
3. To prepare and test multi-media packages of user materials which will serve as a resource for effective programs and will give vivid and explicit examples of procedures to be used in administering and organizing a comprehensive K-adult guidance, counseling, placement, and followup program.
4. To disseminate to each State three sets of multi-media packages for use in training.

### PROCEDURES:

The plan of action includes utilization of techniques and procedures that are being developed with Part I and Part C funds into programs that are being funded under Part D. A major portion of the proposed project will deal with the development and testing of a K-adult system which will give proper emphasis to a curricular-based guidance approach.

### PRODUCTS OR RESULTS:

1. Inservice materials which organize, codify, and synthesize many guidance components into an alternatives-based model.
2. User guides which communicate the guidance, counseling, placement, and followup program objectives and operating procedures to all school personnel.

### EXPECTED CONTRIBUTION TO EDUCATION:

Materials for leaders who will train others to update and improve guidance, counseling, placement, and followup practices with a model that combines the best components of selected existing systems.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50058

PROJECT TITLE: A Unified School-Community  
Approach to Remodel Guidance  
Placement and Follow-Up

PROJECT DIRECTOR  
AND ORGANIZATION: George A. Sleeman  
State Department of Education  
120 State Street  
Montpelier, Vermont 05602

GRANT PERIOD: July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES:

1. To develop and implement dynamic group and individual guidance services.
2. To develop and implement a viable placement services.
3. To develop and implement follow-up services for those students who have exited from the school system.
4. To involve the community in the planning and operation of the expanded service.

PROCEDURES:

To develop and implement a school community based guidance, counseling, placement, and follow-up program for the counselor and support personnel in an optimum position to meet the individual career planning needs of every student. As a result of teacher workshops and dissemination of employment information, teachers will be able to make their students aware of the relationship of subject matter to the world of work.

PRODUCTS OR RESULTS:

1. A model plan of action which can be observed and transported.
2. Improved methods and techniques in providing information for students to use in career planning.
3. A viable placement component to assist students in obtaining initial employment and/or further training.
4. A set of follow-up services.
5. A close linkage between the school and the community.

EXPECTED CONTRIBUTION TO EDUCATION:

It is anticipated that the newly structured and oriented services will result in the better ordering of priority needs for students and will focus on procedures for utilizing employment information, exploring alternative work experiences in the community, and providing placement services for all students.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50072

PROJECT TITLE: The Conceptualization, Development and Implementation of a Comprehensive Guidance Model

PROJECT DIRECTOR AND ORGANIZATION: Dr. Paul Vail  
Georgia State Board of Education  
Office of Adult and Vocational Education  
State Office Building, Room 309  
Atlanta, Georgia 30334

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES:

1. To develop a K through post-secondary comprehensive guidance model.
2. Design and implement a state/local level management system to deliver a comprehensive guidance program to all Georgia school systems.
3. Provide for a formative evaluation of the materials currently existing in terms of the goal of this project and of those materials to be developed as a result of this proposed program of work.

### PROCEDURES:

Phase One - Startup activities consist of an initial identification of the model, its elements, and components. This model will be installed for developmental purposes into all 16 participating demonstration schools.

Phase Two - Program planning and staff development activities will be initiated.

Phase Three - Piloting, field testing and redevelopment.

Phase Four - Implementation of all components in participating school systems with formative evaluation to confirm the efficacy of the comprehensive model.

### PRODUCTS OR RESULTS

1. A detailed program guide.
2. A comprehensive needs assessment package.
3. Staff development modules for preparing personnel to provide leadership in developing and utilizing a curriculum-based guidance program.
4. A carefully designed implementation strategy and a state/local level management system that will enable Georgia school systems to implement the entire model without discretionary federal funds beyond the first year of adoption.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50080

PROJECT TITLE: Cooperative Research and Development of Comprehensive Coordinated Curriculum Installation and Guidance, Counseling, Placement, and Follow-Through Services With an Emphasis on Special Needs Students.

PROJECT DIRECTOR AND ORGANIZATION: George Russ  
New Jersey State Department of Education  
Division of Vocational Education  
225 West State Street  
Trenton, New Jersey 08625

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES:

1. To develop and implement curricula and treatments to serve students with special needs with regard to vocational and career decisions and paths.
2. To revise curricula in middle and high school level vocational areas so that career awareness and vocational exploration are integral parts of them.
3. To disseminate, and advise on the use of materials developed in this and previous projects to prevent duplication of efforts.
4. To provide exiting students with realistic information about their options.

### PROCEDURES:

Teachers in the targeted curricula areas, and teachers and counselors working with the special needs students will be matched with Glassboro State College faculty consultants who are specialists in these areas. During intensive workshop sessions, curricula and new diagnosis and treatment schemes will be developed with career awareness and career education infused. During the Fall and Spring semester, the new curricula and activities would be implemented. Teachers, counselors, and consultants collectively will discuss the effects on the students, and will conduct an ongoing evaluation, revision, and updating of the teaching and guidance plans.

### PRODUCTS OR RESULTS:

1. A performed-based, career-oriented, pilot-tested, and revised curricula will be installed in five academic areas at the middle school level, and in several vocational-technical areas at the high school level.
2. A survey form useful for gathering short- and long-term information on the local world of work will be available.

### EXPECTED CONTRIBUTION TO EDUCATION:

A tested county-wide comprehensive career and vocational education guidance system as a showcase model.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50085

PROJECT TITLE: Model for Collection, Synthesis, Dissemination and Infusion of Career Guidance Exemplary Practices.

PROJECT DIRECTOR AND ORGANIZATION: Dr. Anne Upton  
California State Department of Education  
721 Capitol Mall  
Sacramento, California 95814

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES:

1. Report on and validate promising practices from developmental and research projects (1971-1974) with or without special funding.
2. Determine the usefulness and create inservice training packages for each goal within the California Career Development Model.
3. Inservice training packages will be pilot tested, evaluated, and prepared for dissemination.

### PROCEDURES:

The proposed system includes the use of the already existing California Career Development Model that provides an overall set of goals that any exemplary career guidance program should include. The promising practices of the existing model will be classified into this projects' model, and carefully synthesized to eliminate unnecessary overlap or redundancy. Inservice training kits or packages will be developed and piloted in a series of two day workshops.

### PRODUCTS OR RESULTS:

1. The California Career Development Model will be adapted to practical uses.
2. Inservice training packages will be developed.
3. Inservice training workshops will be conducted which will test materials and also train district teams.

### EXPECTED CONTRIBUTIONS TO EDUCATION:

This project is directed at the need to bring the most valid career guidance, counseling, placement, and follow-through techniques developed in the research to all California students, K through adult.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50093

PROJECT TITLE: A Procedure for Planning and Evaluating Senior High School Vocational Education Programs: A Local State System, Phase II.

PROJECT DIRECTOR AND ORGANIZATION: Dr. William E. Stock  
Minnesota Department of Education  
Division of Vocational-Technical Education  
Capitol Square Building  
550 Cedar Street  
St. Paul, Minnesota 55101

GRANT PERIOD: July 1, 1975 - June 30, 1976

OBJECTIVES AND PURPOSES:

The purpose of Phase II of Project S.P.A.C.E. are three fold: (1) to revise and improve the quantity and quality of the counseling and placement materials, procedures, and services in the four participating schools, (2) to expand the scope of the counseling and placement services, and (3) to develop criterion measures and pilot test an evaluation strategy for using follow-up data to facilitate curriculum or program changes within two of the participating schools.

PROCEDURES:

For each project goal, there are several input and process goals all of which are designed to bring about some intermediate or terminal behavior change in some learner group (e.g. students, parents, staff or employees). Many of the activities will be conducted or coordinated by the placement staff in each school; however, the materials, procedures and criterion measures to be used will be developed and validated by members of the staff of the Minnesota RCU.

PRODUCTS AND RESULTS:

1. A description of the rationale and model for a comprehensive system of counseling, placement, and follow-up services.
2. A handbook or procedures manual.
3. Sets of public relations materials.
4. A student registration and filing system for education and job placement.
5. Three sets of instructional materials.
6. Instruments, procedures, and forms to assess the quantity of services performed by career and placement officers.
7. An evaluation and/or statistical model to use follow-up information.

## PROJECT ABSTRACT

PROJECT NUMBER:

498AH50098

PROJECT TITLE:

A Study to Determine the Effects of a Comprehensive and Experiential System of Vocational Guidance and Career Development on Junior High School Pupils

PROJECT DIRECTOR  
AND ORGANIZATION:

Mr. Mark Newton  
Center for Career and Vocational Teacher Education  
Western Kentucky University  
Bowling Green, Kentucky 42101

GRANT PERIOD:

July 1, 1975 - August 31, 1976

OBJECTIVES OR PURPOSES:

1. To further develop a comprehensive, experiential, vocational guidance curricular system at the ninth grade level.
2. To test for main and interaction effects of a comprehensive vocational guidance curricular system on ninth grade pupils.

PROCEDURES:

The guidance oriented work experience component and the Life Career Development System will be used as the experimental variables in the proposed research. Western Kentucky University as an employer can provide the work stations needed in all fifteen USOE Occupational clusters needed for conduct of the proposed research involving work experience.

PRODUCTS OR RESULTS

The net measurable results are expected to be: a) significantly better attitudes toward school; b) increased career maturity; and c) further crystallization of vocational interests. A further empirical benefit will be the program's ease of transportability to thousands of similar sites across the country.

EXPECTED CONTRIBUTION TO EDUCATION:

The proposed experimental research will provide evidence as to the effectiveness of providing pupils with vocational guidance experiences which enable them to identify and actively explore work roles through work experience.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50122

PROJECT TITLE: A Research and Pilot Implementation Proposal to Identify and Provide Experience Options for General Students

PROJECT DIRECTOR AND ORGANIZATION: Ray A. Cook  
Bureau of Vocational Education  
Department of Education and Cultural Services  
Augusta, Maine 04330

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES:

1. To identify and highlight the needs of "general students" in secondary schools.
2. To test and describe some specific means of providing a greater and more pertinent array of experience options in terms of immediate educational experiences and future career development.
3. To describe the approaches used in this study for dissemination and possible implementation in other schools.

### PROCEDURES:

One secondary school in Maine that includes a regional technical/vocational center will be selected as the school in which the project will be developed. In that school, a population of forty (40) "general students" will be identified as the target group; twenty (20) will constitute the experimental group and the other twenty (20) will be the control. The experimental students will be exposed to an orientation program. Control group students will continue in their regular classes. Following the one-year experiences, comparisons will be made between experimental and control groups.

### PRODUCTS OR RESULTS:

1. A descriptive set of methods of identification of the target group.
2. A description of various alternative routes that provide viable experiences for students.

### EXPECTED CONTRIBUTION TO EDUCATION:

This proposed study would identify the barriers to students who needs help in reaching their potentials.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50144

PROJECT TITLE: DISCOVER: A Computer-Based Career Guidance and Counselor-Administrative Support System

PROJECT DIRECTOR AND ORGANIZATION: Dr. JoAnn Harris-Bowlsbey  
Western Maryland College  
Department of Education  
Westminster, Maryland 21157

GRANT PERIOD: September 1, 1975 - February 28, 1977

OBJECTIVES OR PURPOSES:

1. To complete the programming of all remaining modules of the grades 7-12 system, including all administrative- and counselor-support functions.
2. To field test the total grades 7-12 guidance system in two sites in Maryland.
3. To revise the system in design, scripting and/or programming as needed as a result of the findings of the field trial.

PROCEDURES:

Debugging and field testing will be accomplished by technical and guidance staff. Revisions will be made, discussed, and approved by guidance and/or technical teams as appropriate and implemented in computer programs, scripts, or printed materials.

PRODUCTS OR RESULTS:

The end product will be a completed and field-tested systematic career guidance program for students in grades 7-12 for delivery via an IBM 360 or 370 computer, and IBM 3270 cathode ray terminals with light-pen capability.

EXPECTED CONTRIBUTION TO EDUCATION:

The project will disseminate a comprehensive, computer-based, career guidance system that can provide sequential, individualized, career guidance services to students along with support services for administrators and counselors.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50161

PROJECT TITLE: A Comprehensive Career Guidance, Counseling, Placement, and Follow-Through System for Rural (Small) Schools.

PROJECT DIRECTOR AND ORGANIZATION: Harry N. Drier, Jr.  
The Ohio State University  
Center for Vocational Education  
190 North Oval Drive  
Columbus, Ohio 43210

GRANT PERIOD: July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES:

The goal of this project is to improved opportunities for students in small schools, and to help students become aware of their potential, and how this can be applied in their adult years, as well as, expanding opportunities for exploration and life role preparation.

PROCEDURES:

This project will search for materials and processes to be used in the modeling of a comprehensive guidance system for rural areas. Specific procedures include the preparation and conduct of a workshop for key leadership personnel in three States, and a National conference to make others aware of the project's results. This project is part of a consortium arrangement with the University of Wisconsin and Northern Michigan University.

PRODUCTS OR RESULTS:

The project will yield a comprehensive system of Career Guidance, Counseling, Placement and Follow-Through that will be highly transportable within Ohio, as well as nationally. It will provide a comprehensive set of inservice materials for educational personnel, tested procedures, local adaptation suggestions, and techniques for integrating Guidance into the Career Education and curriculum efforts of rural schools.

EXPECTED CONTRIBUTION TO EDUCATION:

The development of guidance tools, materials, and methods will have an impact on the unique problem of rural schools in preparing youth and adults for life role transitions.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50179

PROJECT TITLE: Comprehensive Systems of Guidance, Counseling, Placement and Follow-Through for Persons at All Levels of Education for Idaho

PROJECT DIRECTOR AND ORGANIZATION: Dr. Thomas E. Hipple  
College of Education  
University of Idaho  
Moscow, Idaho 83843

GRANT PERIOD: July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES:

1. To develop a comprehensive system of guidance, counseling, placement and follow-through services for all persons who are, or could be elementary, junior high, high school or post-high school students.
2. To develop a systematic guide, incorporating accepted and tested materials and procedures.
3. To subject the guide to formal review using a jury of experts.
4. To disseminate the developed guide.

PROCEDURES:

Existing guide materials and accepted and proven procedures will be collected. Data will be analyzed, and comprehensive systems prepared. After review, specific materials for a guide will be developed for the elementary, junior high, high school and post-high school levels. These will be reviewed by the experts, edited and prepared in loose-leaf form as a guide.

PRODUCTS OR RESULTS:

The end-product, the guide, should serve as a means for "self-help" in local schools at all levels in sparsely populated Idaho for installing and improving guidance, counseling, placement and follow-through. It will contain proven materials, thus serving as a model "curriculum" for these services, and as an aid to State personnel in encouraging collection of timely information at the local level, thus opening the way for consideration of needed programs.

EXPECTED CONTRIBUTION TO EDUCATION:

The published document will contain materials to assist schools in sparsely populated States to improving aspects of their services for the needs of exceptional individuals, including disadvantaged, handicapped, and minority persons.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50189

PROJECT TITLE: National Consortium for Research on Competency-Based Staff Development in Comprehensive Career Guidance, Counseling, Placement, and Follow-Through

PROJECT DIRECTOR AND ORGANIZATION: Dr. Anita Mitchell  
American Institutes for Research Youth Development Research Program  
P.O. Box 1113  
Palo Alto, California 94302  
(415) 493-3550, Ext. 39.

GRANT PERIOD: July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES:

A four-state consortium coordinated by the American Institute for Research (AIR) will attempt significant changes in pre- and in-service staff development for personnel establishing comprehensive programs of career guidance, counseling, placement, and follow-through services.

PROCEDURES:

Draft modules will be pilot tested on a group of volunteers. Revisions will be made based on performance results of appropriate objectives. Each center will conduct field tests using a time-series design. Performance measures will include results on the module criterion tests, structured and unstructured attitude tests, and post-training knowledge/skill tests. Also, systemic changes and unanticipated effects occurring as a result of this innovative staff development will be assessed and reported.

PRODUCTS OR RESULTS:

1. A staff development program appropriate for pre- and in-service applications.
2. A comprehensive catalogue listing competency-based staff development materials.
3. A report of the results obtained in field tests conducted by each center in pre- and/or in-service settings.

EXPECTED CONTRIBUTION TO EDUCATION:

This project will result in a competency-based learning approach that goes well beyond the conventional cognitive or attitudinal levels of guidance that is emphasized in most instructional programs.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50201

PROJECT TITLE: A Comprehensive Career Guidance, Counseling, Placement, and Follow-Through System for Rural (Small) Schools

PROJECT DIRECTOR AND ORGANIZATION: Dr. Wilbert Arthur Berg  
Northern Michigan University  
School of Education  
Marquette, Michigan 49855

GRANT PERIOD: July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES:

This project intends to use the combined available resources, materials, and expertise of two R&D agencies, three state departments of education, a university based in rural Michigan, and a number of local rural districts to design and develop a rural (small) school comprehensive system of Career Guidance, Counseling, Placement, and Follow-Through.

PROCEDURES:

Three states including the Center for Vocational Education at The Ohio State University, and The University of Wisconsin are working in a consortium. Relevant products and concepts either exist or are currently under development in the R&D centers to provide an advanced platform for launching this development project. There are materials existing within each state that will serve portions of the total system of Career Guidance.

PRODUCTS OR RESULTS:

An inexpensive set of inservice training tools, a set of Career Guidance, Counseling, Placement, and Follow-Through tools and materials will be collected and produced that will allow the small-schools to assist youth and adults in career development.

EXPECTED CONTRIBUTION TO EDUCATION:

A systematic, practical approach of helping students become aware, explore, prepare, decide, and test life expectations under the supervision of trained school and community guidance specialists.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50229

PROJECT TITLE: Assessment of Career Planning,  
Guidance, Counseling, Placement  
and Student Follow-Through Systems

PROJECT DIRECTOR  
AND ORGANIZATION: R. Courtney Riley  
Nevada State Department of  
Education  
400 West King Street  
Carson City, Nevada 89701

GRANT PERIOD: July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES

1. To identify career counseling and guidance requirements for major categories of students.
2. To develop testing and interview techniques and procedures.
3. To Develop placement services.
4. To determine follow-through procedures.
5. To evaluate the effects and determine the cost and benefits.

PROCEDURES:

While counseling and guidance services are well developed and a CO-OP program exists, this project will permit the development of placement and follow-up services that are responsive to student needs. This project is also designed to integrate all these services, thereby strengthening the bridge between on-campus occupational programs and communities while refining and developing improved techniques for reaching the student.

PRODUCTS OR RESULTS:

1. Integrated system involving all campus resources in California and supplemented by the related communities.
2. A documented analyses of traditional as well as innovative approaches to counseling, career guidance, placement and follow through systems.
3. Cost effectiveness data related to the provision of the above services at institutions of 3500-7500 enrollment.

EXPECTED CONTRIBUTION TO EDUCATION:

This project will provide meaningful information concerning the assessment of career planning systems for a wide array of educational institutions regardless of regional location.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50273

PROJECT TITLE: Grand Forks Area Counseling  
and Placement Program  
(CAPP)

PROJECT DIRECTOR  
AND ORGANIZATION: To Be Selected  
North Dakota State Board for  
Vocational Education  
900 East Boulevard  
Bismarck, North Dakota 58502

GRANT PERIOD: July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES:

1. To develop a comprehensive system of employment oriented guidance and counseling services for all senior high school students.
2. To establish a placement service for 1000 high school age youths in Grand Forks, North Dakota.
3. To design new and correlate existing vocational course materials for specific work oriented activities.

PROCEDURES:

Establish a liaison system with the Employment Security Bureau and other job placement services in the Grand Forks area. Build a job bank by surveying the employment community, surveying students and adults in order to establish a work force file system. A job counseling and placement center will be established at Central High School and Red River High School and will be accompanied by student orientation. Testing services will be available under controlled conditions.

PRODUCTS OR RESULTS:

The collected data will be use to improve employment service practices. Longitudinal studies of manpower needs, employment practices, rates of employment and unemployment, as well as other appropriate information will be collected. Reports will be prepared for distribution to school districts as well as to State and federal officials.

EXPECTED CONTRIBUTION TO EDUCATION:

The provision of systematic procedures for providing placement services to students at the pre- and post-high school levels.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50312

PROJECT TITLE: Youth Career Action Center

PROJECT DIRECTOR AND ORGANIZATION: Patricia R. Allen  
Edenwald-Gun Hill Neighborhood Center  
Box 235  
Bronx, New York 10467

GRANT PERIOD: July 1, 1975 - October 30, 1976

OBJECTIVES OR PURPOSES:

1. To increase the vocational direction, employability, and choices available of a selected number of youth (300), more than 50% of whom come from families with incomes of less than \$6,000 and living in publicly aided housing.
  2. To test a new conception of an institution to serve as a comprehensive system of guidance, counseling, placement, and follow-through services which could be anchored in a private agency, public agency, or even a school.
- To assemble an informal group of advisors.

PROCEDURES:

To put under one roof a complex of elements: small task force groups; a year long approach; a socio-economic, racial, and age mix; high school diagnosis information and information on each participant; vocational information at hand; volunteer and paid tasks; community-oriented, student-designed tasks as pre-vocational experience; and components of self-government.

PRODUCTS OR RESULTS:

To design a comprehensive system of guidance, counseling, placement, experience, and follow-through that is developmental rather than one of keeping the youth off the street by any means. The value of an alternative environment like this would lie in its fresh atmosphere and mode of working; no grades or judgements, cooperative rather than a competitive outlook; a place where adult, social, problem-solving, and decision-making skills can be learned and expressed.

EXPECTED CONTRIBUTION TO EDUCATION:

The introduction of an institution concerned about the isolation of the youth in a large low-income housing project and the determination of the impact that this isolation has on their development.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50323

PROJECT TITLE: A Comprehensive Career Guidance, Counseling, Placement, and Follow-Through System for Rural (small) Schools.

PROJECT DIRECTOR AND ORGANIZATION: Dr. Merle Strong  
Center for Studies in Vocational and Technical Education  
University of Wisconsin  
Madison, Wisconsin 53706

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES:

1. To use the combined available resources, materials, and expertise of two R&D agencies, three State Department of Education, a university based in rural Michigan, and a number of local rural districts, to study and impact on their unique problem in preparing rural youth and adults for their life role transitions.
2. To design and develop a rural (small) school comprehensive system of Career Guidance, Counseling, Placement, and Follow-Through (CGP) to make maximum use of existing community, human, and material resources in assisting each student in career development.

### PROCEDURES:

This project proposes to take fully into account the uniqueness of rural schools, both in terms of the advantages and disadvantages of the small community. This development effort will be characterized by building on the many positive elements that are attributed to the rural settings, and attempting to overcome the natural constraints of location, employment potential, citizenry composition, and available resources. This project will be conducted as part of a consortium arrangement with the Center for Vocational Education of the Ohio State University and with Northern Michigan University.

### PRODUCTS OR RESULTS:

This project will provide a comprehensive set of inservice materials for educational personnel, suggestions for local adoption, and techniques for integrating guidance into the schools:

### EXPECTED CONTRIBUTION TO EDUCATION:

This project will improve opportunities for students in our small schools.

## PROJECT ABSTRACT

PROJECT NUMBER: 498AH50339

PROJECT TITLE: Genesee Regional Approach to Systematic Placement (GRASP)

PROJECT DIRECTOR AND ORGANIZATION: Alva E. Mallory  
Genesee Intermediate School District  
Vocational Education and Career  
Development Services  
2413 W. Maple Avenue  
Flint, Michigan 48507

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES:

1. To develop and implement a regional placement system to provide students with a comprehensive placement service to assist them in realizing their career goal.
2. To develop an interface of school placement services with other agencies.
3. To develop a regional model and to transport that model regionally.

### PROCEDURES:

This project will develop a regional placement system characterized by centralized coordination and support, and local implementation. With the existence of a mobile society and close proximity of industrial areas, the regional concept will provide regional information that will result in the broadening of employment possibilities within the region.

### PRODUCTS OR RESULTS:

1. Comprehensive placement services for students.
2. Reduction of duplicity and multiplicity of efforts by coordinating efforts of placement efforts.
3. Better utilization of non-educational resources through increased communication and working relationships.
4. Maximum utilization of resources through cooperative arrangements and pooling resources including expansion of computer technology and utilization.
5. A regional model that is transportable to other regions of a geographically, demographically, socio-economically compatible nature.

### EXPECTED CONTRIBUTION TO EDUCATION:

This project will result in providing assistance to youth who must enter an employment market of a highly competitive nature, and provide them with the kinds of skills that will be necessary to realize the potential benefits of a more favorable employment atmosphere.

ADMINISTRATION OF VOCATIONAL EDUCATION

DISADVANTAGED  
HANDICAPPED  
MINORITIES

By

Mario F. George  
Education Program Specialist

CONTENTS

	<u>Page</u>
Project Abstracts .....	116

## ABSTRACT

PROJECT NUMBER: 498AH50014

PROJECT TITLE: A Research Project for Expanding the Present Vocational Experience Curriculum

PROJECT DIRECTOR AND ORGANIZATION: Dr. Ernest G. Thro  
Hardin County Board of Education  
110 South Main Street  
Elizabethtown, Kentucky 42701

GRANT PERIOD: July 1, 1975 - June 30, 1976

### PURPOSE OR OBJECTIVES

This applied research study expands the present successful vocational experience curriculum at the ninth grade level by integrating three additional components: a basic skill resource room, a technical simulation unit which reflects Hardin County job opportunities, and pertinent guidance and counseling.

### METHODOLOGY

An experimental group of 50 educable handicapped and disadvantaged students in the ninth grade will be tested on attitudes, personality traits, and intellectual functioning before and after eight months of instruction in the expanded vocational educational education program. Concurrently, a control group of 50 educable handicapped and disadvantaged students in the regular (unexpanded) program also will be tested. Standardized tests and survey instruments will be utilized to collect data on the students in the expanded program. Analysis of these data should determine degree of effectiveness of expanded and integrated services for target populations.

### PRODUCTS OR RESULTS

1. A printed curriculum guide which will describe the model of the expanded vocational education program with integration of reading and mathematics skills development.
2. Development of a technical simulation unit in cooperation with community employers; including 15 color video tapes of on-the-job training stations.
3. A final report on the study process and findings pertaining to the use of simulation, guidance and counseling, and basic academic skills development.

### SIGNIFICANCE

The project builds upon an occupational work orientation and exploration program for educable handicapped students which was developed in cooperation with the Kentucky State Department of Vocational Education since 1971. The expected results should provide a sound basis for replicable model programs for such special students in secondary grades.

ABSTRACT

PROJECT NUMBER: 498AH50048

PROJECT TITLE: Competency-Based Inservice Education for Secondary School Personnel Servicing Students with Special Needs in Vocational Education

PROJECT DIRECTOR AND ORGANIZATION: Mr. L. Allen Phelps  
Department of Vocational and Technical Education  
284 Education Building  
University of Illinois  
Urbana, Illinois 61801

GRANT PERIOD: July 1, 1975 - June 30, 1976

PURPOSE OR OBJECTIVES:

1. To pilot and field test a series of six competency-based in-service modules in at least one secondary school program.
2. To evaluate: (1) the performance of each of the course participants relative to attainment of the competencies identified for each module, and (2) each of the six modules in terms of content validity, administrative feasibility, and format improvements needed.
3. To modify the content and format of each of the modules based on the field testing outcomes.

METHODOLOGY:

A series of six teacher education modules will be field tested in least one secondary school district during a sixteen (16) week inservice course in which vocational and special education teachers, and other secondary personnel, cooperatively will design, develop, implement, and evaluate individualized instructional programs for special needs students. At completion of the field test evaluation, data on process, instructional content and services will be analyzed to determine changes needed for revision of the modules to be disseminated.

PRODUCTS OR RESULTS:

A set of six modules useable to vocational and special education staff members are expected to be produced.

SIGNIFICANCE:

Instructional modules will be developed by coordinated efforts which reflect the experience and perspectives of school personnel providing a variety of related services to special needs students.

ABSTRACT

PROJECT NUMBER: 498AH50065

PROJECT TITLE: Research and Development of a System to Provide Itinerant Services to Assist Disadvantaged and Handicapped Vocational Students in the States.

PROJECT DIRECTOR AND ORGANIZATION: John E. Snyder  
Kansas State Department of Education  
Division of Vocational Education  
120 East Tenth Street  
Topeka, Kansas 66612

GRANT PERIOD: July 1, 1975 - December 31, 1976

PURPOSE OR OBJECTIVES:

1. To create knowledge on the part of administrators, teachers and counselors as to the operation and effectiveness of experimental and special needs vocational projects already tested in Kansas which emphasize motivation factors.
2. To develop and field test user guides for practitioner in-service training strategies and techniques.
3. To research and develop a model for expanding learning opportunities.
4. To increase enrollment of disadvantaged and handicapped students in 3 regions by 20%.

METHODOLOGY:

An individualized prescriptive method has been previously researched and developed for disadvantaged and handicapped students. In order to articulate a coordinated activity from the state level to three regions, it will be necessary for instructor training so that each administrator will understand the system of individualized Prescriptive Training Experience and Skills of successful practitioners will be studied and utilized for preparing transportable guidelines.

PRODUCTS OR RESULTS:

1. To develop specific user guides for developing personnel necessary to implement "vocademic" education.
2. To develop a transportable model to improve vocational planning and information services (strategy).

SIGNIFICANCE:

This project is expected to provide for the training of educational personnel serving the disadvantaged, handicapped, and minorities through innovative techniques that allow for open entry - exit situations and assures that curriculum information and materials are correlated with meaningful activities, levels of counselor competencies and flexibility.

ABSTRACT

PROJECT NUMBER:

498AH50069

PROJECT TITLE:

Development and Implementation of Program Models for Assisting Vocational Teachers in Dealing with the Educationally Disadvantaged, Handicapped, and Minorities.

PROJECT OFFICER AND ORGANIZATION:

Dr. Gary D. Meers  
University of Nebraska-Lincoln  
14th and R Streets  
Lincoln, Nebraska 68510

GRANT PERIOD:

July 1, 1975 - December 31, 1976

PURPOSE OR OBJECTIVES:

1. To extend the pre-service and in-service programs for vocational educators in Nebraska.
2. To provide assistance to vocational educators in the improvement of instructional programs for the target populations.
3. To assist in the development and dissemination of materials and resources designed to help vocational educators improve services to disadvantaged, handicapped and minority student populations.

METHODOLOGY:

The initiation phase will be devoted to the detailed planning of in-service activities and an extensive review of literature and resources to provide guidance for the structure of materials, activities, and models which are to be developed as resource information packets. The phase dealing with in-service vocational educators workshops will develop the skills needed to deal with the target populations. The material to be disseminated will be designed to show how vocational education programs can help learners reach at least some of the educational goals they set for themselves.

PRODUCTS OR RESULTS:

1. An in-service program to create an awareness of the capabilities of the educationally disadvantaged, handicapped, and minorities.
2. A parallel model for use in pre-service vocational-technical education programs.

SIGNIFICANCE:

The model for use in pre-service vocational technical education programs will be transportable to other teacher institutions with similar pre-service and in-service needs. It is expected that materials developed to recruit women and ethnic minorities into vocational education programs will stimulate more realistic recruitment activities.

ABSTRACT

PROJECT NUMBER: 498AH50100

PROJECT TITLE: The Development and Validation of an In-Service Program for Vocational Teachers of the Disadvantaged.

PROJECT DIRECTOR AND ORGANIZATION: To Be Named  
Center for Career and Vocational Teachers Education  
Western Kentucky University  
Bowling Green, Kentucky 42101

GRANT PERIOD: - July 1, 1975 -- December 31, 1976

PURPOSE OR OBJECTIVES:

1. To develop and implement an inservice education program for vocational education teachers that is designed to improve teaching effectiveness for disadvantaged students in vocational programs.
2. To make an in-depth assessment of the effects of the inservice program on teachers and students in the cognitive and affective domains.

METHODOLOGY:

A handbook will be developed that includes the specific procedures for the conduct of the inservice program. A rigorous experimental research design is proposed to determine the impact of the program on teachers and students in vocational classes. This research design is geared toward testing hypotheses directly related to the needs of disadvantaged youth as identified by previous research.

PRODUCTS OR RESULTS:

An inservice program handbook will be developed to improve the teaching of disadvantaged students as it will describe the procedures and materials utilized in the program.

SIGNIFICANCE:

The development of an inservice program for vocational teachers designed to improve the teaching of disadvantaged students would have particular applicability in States where vocational teachers are not required to have preparation in this area prior to teaching disadvantaged students.

ABSTRACT

PROJECT NUMBER: 498AH50124

PROJECT TITLE: A System for Interfacing the Administration and Implementation of CETA and Vocational Programs at the Local Level

PROJECT DIRECTOR AND ORGANIZATION: Dr. Harold S. Bonner  
Prairie View A&M University  
Industrial Education and Technology  
Prairie View, Texas 77445

GRANT PERIOD: July 1, 1975 - June 30, 1976

PURPOSE OR OBJECTIVES:

1. To effect an awareness of existing facilities, equipment, and on-going vocational training for the disadvantaged to national, regional, state and local administrators, planners and operators of CETA programs.
2. To establish procedures for the administrative coordination of vocational and CETA programs at all levels in balance with state counties.

METHODOLOGY:

This research study is designed to analyze the effectiveness of the utilization of public schools as a delivery system for Comprehensive Manpower services to disadvantaged persons as depicted under CETA regulations. The study will interpret the success of an experimental program that has been carried out in nine public schools in seven rural counties.

PRODUCTS OR RESULTS:

The results of this study will articulate the feasibility of offering Comprehensive Manpower services at the local level for disadvantaged target populations.

SIGNIFICANCE:

The unusual aspects of this project are that it addresses the problems of cooperation between vocational and manpower administrators, the establishment of comprehensive delivery systems in the target population community, and it addresses the many problems that local officials must face as they attempt to carry out programs as set forth under the CETA legislation.

ABSTRACT

PROJECT NUMBER: 498AH50167

PROJECT TITLE: An Analysis of the Participation of Women of Different Racial Ethnic Groups in Training for Non-Traditional Occupations in Area Vocational Technical Schools, and the Factors which Influenced their Decision to Enter and Remain in such Training

PROJECT DIRECTOR AND ORGANIZATION: Ms. Roslyn D. Kayne  
Rj Associates, Inc.  
1018 Wilson Blvd.  
Arlington, Virginia 22209

CONTRACT PERIOD: June 16, 1975 - May 14, 1976

PURPOSE OR OBJECTIVES:

1. To determine the extent to which young women in general, and young women of each racial/ethnic group, in particular, are participating in training for non-traditional occupations.
2. To expand the opportunities for young women.
3. To increase the capacity of educational personnel working with young women in career decision making situations.

METHODOLOGY:

There are four primary elements in the project's approach to the research:

1. Analysis of data obtained from the office of Civil Rights Survey of Area Vocational Training Schools.
2. A mail survey of women who are presently participating in vocational training for non-traditional occupations.
3. A mail survey of educational personnel who have been identified as influential in the target groups decision to participate in the educational programs for non-traditional occupations.
4. An analysis of each of the above components and a correlation of the data from all three.

PRODUCTS OR RESULTS:

The final report will include a complete description of the research methodology along with the findings of the study. In addition, the primary end product will be a guide for counselors, teachers, and other educational personnel working with young women in their career decision-making.

SIGNIFICANCE:

This study offers the opportunity to learn a great deal more about the characteristics of the women who enter non-traditional jobs and the reasons for their decisions.

ABSTRACT

PROJECT NUMBER: 498AH50168

PROJECT TITLE: Study of the Potential Relationship of Vocational Education Programs to Indian Tribal Self-Determination

PROJECT DIRECTOR AND ORGANIZATION: Wilbur Atcitty  
The Navajo Tribe  
Window Rock, Arizona 86515

GRANT PERIOD: June 30, 1975 - April 29, 1976

PURPOSE OR OBJECTIVES:

1. To develop a model planning process to be utilized by Indian tribes in working with the state and local educational agencies, and the BIA in order to increase the responsiveness of vocational education programs to Indian tribal priorities.
2. To develop a planning model which will enable vocational education programs serving the Navajo Nation avoid duplication and overlap in order to assure maximum utilization and benefit from the monies available for such education and training.
3. To develop a planning design whereby the Navajo Tribe can exercise more influence over vocational education policy and programs serving Navajo students.

METHODOLOGY:

The approach will involve a research design with six basic tasks -

- Task 1: Data gathering and analysis
- Task 2: Field Data Collection and Interviews
- Task 3: Development of a Model System for Vocational Education Planning for the Navajo Nation
- Task 4: Development of Guidelines for Vocational Education Planning for Indian Tribes nationally
- Task 5: Reviews of Tasks 3 and 4 Work Products
- Task 6: Development of the Final Report

PRODUCTS OR RESULTS:

An endeavor by the Navajo Nation to identify new approaches to bringing the resources of vocational education programs into the sphere of self-determination for all Indian tribes.

SIGNIFICANCE:

The articulation of new mechanisms and planning approaches whereby Indian tribes can influence decision-making of the relevant public and private institutions on vocational education.

ABSTRACT

**PROJECT NUMBER:** 498AH50186

**PROJECT TITLE:** An Experimental Program in Vocational Education at the Elementary School Level

**PROJECT DIRECTOR AND ORGANIZATION:** Dr. Robert E. Griffin  
The University of Alabama  
P. O. Box 2846  
University, Alabama 35486

**GRANT PERIOD:** July 1, 1975 - June 30, 1976

**PURPOSE OR OBJECTIVES:**

1. To introduce a combined effective education/vocational development program into two elementary schools.
2. To train the cooperating teachers in development of skills necessary for the program's implementation.
3. To develop new appropriate materials which stress vocational growth and maturity.
4. To develop assessment instruments or use previously developed instruments to evaluate a variety of variables which may be affected by the program.

**METHODOLOGY:**

Project will concern itself with two representative schools within Tuscaloosa with a predominance of Black and/or poor children to determine the extent to which an innovative program assists in the development of positive attitudes toward teachers and learning. Another aspect of the program will be to assess the extent of positive change in teacher attitudes and behavior interacting with students in new ways.

**PRODUCTS OR RESULTS:**

A tested vocational development program within the elementary school programs which combine materials that have proven to be successful with new materials and techniques to develop an appreciation for the uniqueness, dignity and worth of all people.

**SIGNIFICANCE:**

An effort would be directed toward that segment of the school population which has traditionally benefited least from the educational system: The White rural poor and the underprivileged Black. An effort would also have been made to determine the extent to which teachers attitudes are modified as a result of their participation.

ABSTRACT

PROJECT NO.: 498AH50190

PROJECT TITLE: Improving Vocational Education Services  
for Handicapped Students

PROJECT DIRECTOR  
AND ORGANIZATION: Dr. Robert A. Weisgerber  
American Institutes for Research  
Palo Alto, California 94302

GRANT PERIOD: July 1, 1975 - December 31, 1976

PURPOSE OR OBJECTIVES:

1. To identify and document selected (California) vocational educational programs that effectively provide services to blind, orthopedic, and communication impaired students, and those with limited mental ability.
2. To develop and field test prototype individualized instructional materials for vocational educators involved in the career development of handicapped students.
3. To work cooperatively with school, state and university personnel in implementing the instructional modules in their programs, and disseminate information about the modules to the field at large.

METHODOLOGY:

Criteria and course priorities will be set by an advisory panel. Documentation of school programs will be in audiovisual form suitable for inclusion in instructional modules. The draft course will be field tested with vocational educators in representative school districts. Subsequent reproduction and dissemination will be addressed as a final step.

PRODUCTS OR RESULTS:

A seven module course will be prepared for professional inservice training of vocational educators. Three modules will address general concerns (general knowledge, attitudes and practicum) and four will address information and practices specific to particular handicapping conditions.

SIGNIFICANCE:

This project will better enable vocational educators to deal with the challenging and difficult task of providing meaningful educational and vocational experiences for handicapped students. Further, it will provide a means to acquire this professional training in their own school district yet with the possibility of receiving graduate course credit.

ABSTRACT

PROJECT NUMBER: 498AH50224

PROJECT TITLE: Exploratory Programs in Vocational Education

PROJECT DIRECTOR AND ORGANIZATION: To Be Named  
South Carolina Department of Education  
908 Rutledge Building  
Columbia, South Carolina 29201

GRANT PERIOD: July 1, 1975 - December 31, 1976

PURPOSE OR OBJECTIVES:

To develop a comprehensive exploratory program in vocational education for South Carolina to assist students make the transition from vocational courses with predominately male or female enrollment to mixed classes.

METHODOLOGY:

To establish two demonstration centers for innovative exploratory programs in vocational education with an enrollment of 50 students. Next will follow the planning, conducting and evaluating of a comprehensive exploratory program model as designed for all school districts in South Carolina.

PRODUCTS OR RESULTS:

This project will provide needed research for establishing guidelines for exploratory programs throughout South Carolina. Curriculum materials developed by the project will be disseminated to all school districts and the evaluation results will be used to design a comprehensive exploratory program model.

SIGNIFICANCE:

The project as proposed here would assist all school administrators and teachers of exploratory programs in vocational education to plan, implement and maintain effective programs for pupils enrolled in grades 9-10.

ABSTRACT

PROJECT NUMBER:

498AH50226

PROJECT TITLE:

A Proposal for In-Service Teachers for the Disadvantaged and Handicapped Youth

PROJECT DIRECTOR  
AND ORGANIZATION:

Professor Wilhelmina Funchess  
South Carolina State College  
Orangeburg, South Carolina 29117

GRANT PERIOD:

July 1, 1975 - June 30, 1976

PURPOSE OR OBJECTIVES:

The major objective of this project is to raise the level of pedagogical competencies of in-service teachers of the disadvantaged and handicapped youth.

METHODOLOGY:

To provide the participants (60 teachers) the opportunity to alter their concept of teaching—from teaching as telling, to learning as active response, the opportunity to acquire new knowledge through discussions, demonstrations, field trips, interviews, lectures, laboratory experiments and individual and group assignments in a three week intensive graduate study Summer Institute.

PRODUCTS OR RESULTS:

The proposed Summer Institute is to provide training in teaching strategies and interdisciplinary seminars to enhance the success of in-service teachers of disadvantaged and handicapped students.

SIGNIFICANCE:

Each participant will be exposed to the methods of teaching developed in the Felton Laboratory School (on the campus of South Carolina State College), specifically designed for teaching disadvantaged and handicapped youth.

ABSTRACT

PROJECT NUMBER: 498AH50296

PROJECT TITLE: A Cooperative activities Model for University and Vocational/Technical School Collaboration in the Training of Personnel to Work with Handicapped Persons

PROJECT DIRECTOR AND ORGANIZATION: Dr. David C. Gardner  
Boston University  
207 Bay Street Road  
Boston, Massachusetts 02215

GRANT PERIOD: June 30, 1975 - December 29, 1976

PURPOSE OR OBJECTIVES:

To develop and implement an operational training model that will enable Boston University's School of Education and Blue Hills Regional Vocational/Technical School to more effectively train teachers to work with handicapped students in vocational settings and will improve services to the handicapped populations concerned.

METHODOLOGY:

It is expected that, through a formally organized system of university and vocational/technical school collaboration, the opportunities for professional preparation and the quality and quantity of services to the public schools will be enhanced. The proposed program will be developed by using an activities model as the framework for realizing goals of mutual benefit to both organizations involved in the plan. The intent also is to generate procedures, products, and information generalizable to similar programs.

PRODUCTS OR RESULTS:

A collaborative activities model that will improve instruction of prospective teachers of handicapped adolescents and adults. The development of improved and innovative educational materials for vocational preparation of handicapped students and an efficient system for dissemination.

SIGNIFICANCE:

Providing prospective teachers and in-house teachers with improved and innovative techniques for teaching job skills and with techniques for making modification of work tasks for handicapped students.

ABSTRACT

PROJECT NUMBER: 498AH50301

PROJECT TITLE: MIWE: Mobility Through Work  
Experience Education

PROJECT DIRECTOR  
AND ORGANIZATION: Dr. Ernest T. Buchanan  
Tidewater Community College  
Virginia Beach Campus  
1700 Diana Lee Drive  
Virginia Beach, Virginia 23456

GRANT PERIOD: July 1, 1975 - June 30, 1976

PURPOSE OR OBJECTIVES:

To design viable strategies and vocational programs which can increase the participation of female, veteran, handicapped and minority populations in high-skilled occupations and well-paying industries.

METHODOLOGY:

1. Recruit, train and place target populations.
2. Create a MIWE Advisory Council which represents business, industry, organized labor, public and private employment agencies, minority and subgroup advocacy groups.
3. Create a Work Experience Training Bank which will successfully place MIWE students in non-traditional training positions/occupations.

PRODUCTS OR RESULTS:

The identification of positions in the industrial, commercial, and service employment sectors which are not currently held by minority or subgroup individuals. The MIWE Work Experience Bank will be developed by making compilations of available work experience positions in industries and occupational fields in which the rate of minority worker participation is low.

SIGNIFICANCE:

Implementation of this project is expected to affect favorably the attitudes of educators and employers regarding the performance capabilities of subgroup Americans, and enhance future employment opportunities for minority populations in occupations previously inaccessible to them. This project also is expected to produce information and materials to assist employers in identifying and training prospective minority manpower, thus improving employers' prospects of attaining affirmative action goals.

ABSTRACT

PROJECT NUMBER: 498AH50318

PROJECT TITLE: Opportunities Industrialization Centers of America Vocational Education Research Project.

PROJECT DIRECTOR AND ORGANIZATION TO BE NAMED  
Opportunities Industrialization Centers of America  
100 West Coulter Street  
Philadelphia, Pennsylvania 19144

GRANT PERIOD: July 1, 1975 - December 31, 1976

PURPOSE OR OBJECTIVES :

This proposal outlines one educational approach which will be developed and tested to improve the chances of minority youth and adults to become prepared for productive and satisfying work.

METHODOLOGY :

The project will consist of one model with three parallel foci. One focus will be geared toward implementing a modification of the OIC comprehensive systems of guidance, counseling, placement, and follow-through in the vocational school programs. A second focus will be geared toward creating an awareness on the part of vocational educators and employers of the capabilities of minority and disadvantaged students. A third focus will be geared toward assisting in attracting and qualifying individuals from all ethnic backgrounds to be involved in vocational education.

PRODUCTS OR RESULTS :

1. The three models will be conceptualized and operationalized in six vocational education programs.
2. All of the models and materials will be organized into a User's Guide which will be the basis of a training program for local OIC staff and local school systems.

SIGNIFICANCE:

This research project will allow OICs of America to work with local schools, develop comprehensive systems of guidance, counseling, placement, and follow-through services and create an awareness of the capabilities of educationally disadvantaged and minority youth on the part of vocational education personnel.

ABSTRACT

PROJECT NUMBER:

498AH50350

PROJECT TITLE:

Factors of Aptitude and Time Related to the Acquisition of Task Skills by Educationally Disadvantaged Vocational Students

PROJECT DIRECTOR AND ORGANIZATION:

Dr. William D. Frazier  
College of Education  
Oklahoma State University  
Campus Post Office  
Stillwater, Oklahoma 74074

GRANT PERIOD:

July 1, 1975 - December 31, 1976

PURPOSE OR OBJECTIVES:

1. To identify and define educationally disadvantaged students in terms of inability to learn specific tasks within specified time frames.
2. To identify those tasks within the selected vocational programs which can and cannot be learned by educationally disadvantaged students.
3. To make recommendations to curriculum designers and administrators and develop GATB norms for specific tasks.

METHODOLOGY:

Workshops will be conducted for all instructors involved in this project. The next step will be to identify the students in the sample and to obtain the GATB scores for each student enrolled in the ten program areas. This will be followed by the collection of data and the testing of the statistical programs necessary to the analysis of the data which will associate the aptitudes of the students to the time it took to move through the tasks.

PRODUCTS OR RESULTS:

A final report of the project and reporting packages for each of the ten vocational program areas.

SIGNIFICANCE:

This project should provide vocational educators with a tool for identifying the educational disabilities of a student which keeps him/her from learning a vocational skill in a time frame set up by the instructor to learn the skill. Results should allow vocational educators to diagnose the cause for individual failure in a regularly designed program of vocational education.

ABSTRACT

PROJECT NUMBER: 498AH50369

PROJECT TITLE: A Study to Examine and Develop a Comprehensive Model of Identifying and Providing Realistic Vocational Education Experiences for Learning Disabled Students

PROJECT DIRECTOR AND ORGANIZATION: Dr. John T. Cassell  
Saint Joseph College  
1678 Asylum Avenue  
West Hartford, Connecticut 06117

GRANT PERIOD: July 1, 1975 - September 30, 1976

PURPOSE OR OBJECTIVES:

1. To examine existing vocational programs which appears to be meeting the needs of the learning disabled and employer.
2. To provide for the development of strategies which will permit the evaluation of programs which have the capability to meet the needs of the learning disabled.
3. To identify instruments which will measure the comparative effectiveness of occupational interests, counseling, vocational training, and placement of target population.

METHODOLOGY:

A comprehensive search of literature will be conducted, followed by on-site examination of recommended or suggested programs relative to comprehensive systems of guidance, counseling, placement and follow-through services for learning disabled students in Vocational Education programs. The next period will permit an in-depth review and discussion of procedures and practices observed. The final months will be utilized to compile and present a final report of current practices, recommendations of how programs might be revised or modified to more fully meet the objectives as proposed.

PRODUCTS OR RESULTS:

Findings of this project will be disseminated to school systems and personnel responsible for the identification, program planning, and the eventual vocational counseling, guidance, placement and follow-up of learning disabled students.

SIGNIFICANCE:

A current examination and evaluation of practices providing special career and vocational guidance for learning disabled students.

2

CURRICULUM, DEMONSTRATION, AND INSTALLATION STUDIES

BY

Judith M. Jaffe  
Education Program Specialist  
Research Branch, DRD

CONTENTS

	<u>Page</u>
Background of Need for Priority Area .....	134
Open Entry-Exit Systems .....	134
Effectiveness of Demonstration Projects .....	134
Installation of Demonstration Products .....	134
Information Published in the <u>Federal Register</u> .....	135
Analyses of Supported Applications .....	135
Responsiveness to Priority Area .....	135
National, State, and Local Significance .....	136
Conceptual Philosophy .....	137
Summary .....	139
Project Abstracts .....	140

## CURRICULUM, DEMONSTRATION, AND INSTALLATION STUDIES

Judith M. Jaffe  
Education Program Specialist.

### I. Background of Need for Priority Area

The Vocational Education Act of 1963, as amended; authorized the development of "...experimental, developmental, or pilot programs designed to meet the special vocational needs of youths...and...the dissemination of information derived from such programs." In attempting to respond to this mandate and to conduct demonstration programs of high quality, there are three factors which must be considered to be of particular significance at the present time. These are the development of open entry-exit systems, the effectiveness of the demonstration programs being provided and their ability to maintain themselves, and the need to install the products of the demonstration at other sites.

#### Open Entry-Exit Systems

Open entry-exit training is an educational method that provides individualized and flexible instruction. Students begin programs at their current levels, proceed at their own speed through successive levels of the curriculum, and exit the program when they have achieved the required skills. This exit point occurs on an individual basis rather than being tied to specific semesters or time frames. Many educators at the State and local levels have expressed a concern for the development of open entry-exit situations and have suggested the need for further work on such systems in order to maximize their use in the most positive manner for vocational education.

#### Effectiveness of Demonstration Projects

The Office of Education is concerned with enhancing the effectiveness of the demonstration programs it conducts. One of the problems now existing with demonstration programs is that however well a program may demonstrate, little use is made of the R and D efforts after the initial program takes place. Optimum use of tested materials and activities rarely takes place in a local education agency when outside funds are no longer available. A corollary to this is the fact that any use of tested materials is generally limited to the pilot programs where the development occurred. Demonstration materials and activities are not being transported to other school districts and other educational settings. Programs generally lack the structure to build in a transportability framework from the very beginning of the project.

#### Installation of Demonstration Products

In general, most of the reasons for the infrequency of installation of demonstration products in other educational settings can be attributed to factors

extrinsic to the products themselves. They are usually factors related to organizational requirements and administrative techniques. At this time, there is no single accepted model of the way innovations are incorporated into educational practices. Much of what is known about the installation process is either highly conceptual in nature or in the form of lists of generalizations lacking empirical documentation. Neither format does much to influence administrators in a school system to commit themselves to innovations.

## II. Information Published in the Federal Register

After a careful consideration of the current status of demonstration projects from the perspective of especially cognizant groups in relation to the goals of the Bureau of Occupational and Adult Education, the Curriculum, Demonstration, and Installation Studies research priority was announced in the Federal Register on February 28, 1975 as follows:

"The Commissioner is authorized to support applied studies (curriculum development, demonstrations, or installation projects are not encouraged.) to produce information about one or more of the following concerns:

(i) The required types of curricula and instructional materials that are needed for vocational education in open entry-exit situations;

(ii) the necessary information, organizational requirements, and administrative arrangements to initiate and operate demonstration activities in order that the innovation will remain when outside sources of funds are no longer available; also, what is required to enable other user groups to understand the nature and effectiveness of the demonstration activity; and

(iii) the information needed regarding successful administrative techniques and other information necessary in installing tested demonstration in other educational settings."

## III. Analyses of Supported Applications

### A. Responsiveness to Priority Area

The announcement in the Federal Register clearly delineated three specific pieces of information being sought in the Curriculum, Demonstration, and Installation Studies priority area. These can be characterized as studies producing information about instructional materials needed in open entry-exit situations; studies describing the necessary information and organizational arrangements required for maintenance of demonstration activities and for transportability of the activities; and studies producing information necessary for installation of tested demonstration in other educational settings.

The responses as evidenced by Table One below were heavily weighted toward the open entry-exit criteria. Six of the twelve supported applications contain

a major element of open entry-exit philosophy--some in combination with the development of competency based programs.

Although many applications mentioned the possibilities for transportability after the development of their programs, only three of the projects will focus directly on the issues involved in transportability or installation. Two of these applications are concerned with developing a generalizable model for installation of tested program, curricula, and instructional materials into other educational settings, and the third in this category is concerned with developing a program framework that allows for transportability and for maintenance of the program when outside sources of funds are no longer available.

An equal number of projects show up in the "other" category. These applications did not directly address the statement in the Federal Register. Rather, they are more typically program restructuring efforts designed to develop new curriculum or new methods for program development or, in one case, to study the impact of institutional variables on student completion rate. The fact that twenty-five percent of the supported applications could be classified as not directly responsive to the priority area must be a significant consideration in further R and D planning.

TABLE ONE

Responsiveness of Supported Applications To Announced Priority

Project Number	Open Entry-Exit	Maintenance and Transportability Framework	Installation	Other
498AH50075				X
498AH50078	X			
498AH50118			X	
498AH50196		X		
498AH50199	X			
498AH50210				X
498AH50215			X	
498AH50255	X			
498AH50274	X			
498AH50288				X
498AH50297	X			
498AH50356	X			

B. National, State, and Local Significance

In examining Table Two below for this concept, it is important to define the use of the term national significance. Many of the supported applications either deal with problems of national importance or project end products that will probably be generalizable on a national basis. This is not the context in which national significance is being used in this discussion.

Rather, we are defining as nationally significant only those projects which are deliberately designed for national utilization as indicated by the procedures being employed and the individuals involved.

Both of the applications considered to be of national significance proposed as end products types of models which can be replicated for dissemination and/or installation of demonstration efforts.

The majority of the projects will be for State use. Approximately fifty-eight percent of the supported applications will result in an improved system of vocational curriculum in a given State. Twenty-five percent propose to study and impact on a local area.

TABLE TWO

National, State, and Local Significance

Project Number	National	State	Local
498AH50075		X	
498AH50078		X	
498AH50118	X		
498AH50196	X		
498AH50199		X	
498AH50210		X	
498AH50215			X
498AH50255			X
498AH50274		X	
498AH50288		X	
498AH50297			X
498AH50356		X	

C. Conceptual Philosophy

In responding to that part of the priority area which deals with the required types of curricula and instructional materials that are needed for vocational education in open entry-exit situations, three of the six supported applications chose to work toward the development of a total system of self-paced curricula. Each of these represent a piece of what will be required to implement a vocational education curricula within each school system which will allow students of various competency levels to learn occupational skills through an individualized approach.

Two other projects will be using open entry-exit on a more comparative basis. One of these is a specific comparison of an individualized, competency based program with a traditional program. The other project will evaluate an individualized occupational training approach in comparison with different educational methodologies and on different student populations.

The sixth open entry-exit project will seek to develop a strategy for initiating and implementing an open entry-exit approach in an area that has displayed prior administrative barriers. This project will not only make recommendations for implementing the system but also for the use of the strategy in other school systems.

The one project that deals with the twin issues of maintenance of an innovation when outside funds become unavailable and transportability will develop a conceptual framework for the purpose of identifying relationships which are apt to influence continuation of programs and build this into a guide for implementing vocational education demonstration programs. The philosophy here is that the delineation of the important variables to be considered by means of a conceptual framework should enhance understanding of the reasons for continuation or termination of these programs. A research study following the conceptualization will be used as a means of collecting information from historical documents and individuals on exemplary program sites for the purpose of filling in the gaps in the conceptual framework. The Exemplary Program Demonstration Guide which will be developed takes the procedure one step further by suggesting techniques and guidelines for the formulation of implementation strategies. It is hoped that the use of new knowledge and more systematic approaches to vocational education demonstration programs will reduce the time required for utilization of these programs. The techniques suggested in the guide should result in more effective use of resources at the original site as well as in other educational locations.

Both of the projects designed to provide information for installation of tested programs will approach this end by means of a third party change agent concept. Both will develop models whereby an agency outside of the school system will assist the local educational agencies in the installation of the programs.

The models themselves, however, are quite different. One is a systems management approach which is designed to be an operational comprehensive network-based management system in a partnership involving business, industry, labor, government, and education. The model will produce procedures for recruiting and using volunteer staff, guidelines for using on-site facilities, procedures for preparing tested programs for implementation and strategies for collecting and classifying information.

The other model which will be developed will focus less on involving the total community in the management framework and more on finding valid methods and environments for bringing technical education programs to the sites where they are needed. This model will establish criteria for the evaluation of future proposals to determine if the results are complete enough for effective dissemination. It will also develop a cost

accounting scheme on the proposed program so that the costs of dissemination can be estimated for the future.

#### IV. Summary

Of the twelve supported applications in the Curriculum, Demonstration and Installation Studies research priority it is expected that the greatest impact will be made in the area of open entry-exit situations. This assumption is based on the fact that fifty percent of the projects will be in this area, and therefore, the greatest amount of information is likely to be produced here.

This does not negate the importance of the three projects which are expected to yield new information about models for installation and program maintenance. However, if we look at just the question of quantification of response, the overwhelming concern does lie in the area of individualized instruction. Even the three applications which did not directly address the statement in the Federal Register are more closely related to restructuring of instructional programs than to the other two areas. Obviously, then, improvement of instructional procedures and methods is considered to be a critical problem confronting vocational education. Individualized, self-paced programs are seen as a most effective and valid educational approach toward this end. As the vocational education research program continues to provide for the research and development needed to produce information designed to improve vocational education, the consideration of individualization of instructional programs will be highly significant.

Project Abstracts

PROJECT ABSTRACT

PROJECT NO.: 498AH50075

TITLE: Strategies for Revision of Curriculum and Program Restructuring of Vocational Agriculture in Iowa.

PROJECT DIRECTOR AND ORGANIZATION: Alan A. Kahler  
Iowa State University  
Ames, Iowa 50010  
(515) 294-5225

GRANT PERIOD: June 1, 1975 - November 30, 1976

OBJECTIVES OR PURPOSES:

1. Determine the philosophic constructs of agricultural education and purposes for the vocational agriculture program in Iowa.
2. Evaluate current philosophic constructs and program purposes in light of current and projected social, economic, occupational, cultural and educational needs and changes in society.
3. Develop curriculum guidelines based on philosophic constructs, definition, and purposes developed.

PROCEDURE OR APPROACH:

Agricultural educators, state supervisors, community representatives, students and administrators will be surveyed regarding current practices and beliefs. The data will be compiled as a draft philosophic statement and modified for program goals. These goals will be developed into curriculum objectives and Tyler's model will be followed for curriculum development. The curriculum guidelines which are developed will be validated and tested in local junior and senior high school and area school programs in one of the 15 Iowa area and/or community college school districts.

EXPECTED RESULTS OR BENEFITS:

The tested and revised philosophic statement, definition, program goals, objectives, curriculum and guidelines will be published and disseminated throughout the state and nation.

## PROJECT ABSTRACT

PROJECT NO.:

498AH50078

TITLE:

Performance Objective Based Vocational Education,  
Curriculum Project

PROJECT DIRECTOR  
AND ORGANIZATION:

Douglas Tilley  
Newark School District  
Newark, Delaware 19711  
(302) 731-2200

GRANT PERIOD:

July 1, 1975 - June 30, 1976

OBJECTIVES OR PURPOSES:

1. To determine the extent of existing performance based curriculum
2. To extract and synthesize existing curricula with desirable components and develop a common format for the instructional system
3. To develop a performance based vocational education instructional system encompassing four secondary school level instructional areas.
4. To develop an instructional system which permits open entry/exit

PROCEDURE OR APPROACH:

Through the use of ERIC and materials secured from the National Curriculum Coordination Council, State Departments of Education, colleges, universities and local educational agencies, previously completed curricula in four vocational areas will be analyzed. A matrix containing the elements of a proposed instructional system will be superimposed on this analysis to discern where the voids exist. Each element of the instructional system will then be developed in sequential order. These elements are: (1) philosophy (2) objectives (3) instructional aim and scope (4) task identification (5) performance objectives (6) enabling objectives (7) sequencing (8) instructional activities.

EXPECTED RESULTS OR BENEFITS:

The goal of this project is to develop a system of vocational education curricula which through a "self-pacing" performance objective based design will allow students of various competency levels to acquire clearly obtainable and highly tangible occupational skill.

## PROJECT ABSTRACT

PROJECT NO.: 498AH50118

TITLE: A Dissemination Model for New Technical Education Programs

PROJECT DIRECTOR AND ORGANIZATION: Daniel M. Hull  
Technical Education Research Centers  
103 Airline Drive - P.O. Box 4395  
Waco, Texas 76705 (817) 799-0203

GRANT PERIOD: May 1, 1975 - October 31, 1976

### OBJECTIVES OR PURPOSES:

The primary objective is to develop a generalizable dissemination model for modifying, transferring and installing developed programs, curricula and instructional materials into existing and new educational environments wherever they are needed throughout the U.S.

### PROCEDURE OR APPROACH:

The proposed research in support of this objective is to determine effective, economical and valid techniques for using the Laser/Electro-Optics Technology (LEOT) curricula and instructional materials to prepare technicians by a variety of educational modes such as three month up to three year Laser/Electro-Optics programs in technical schools; Laser/Electro-Optics Options to existing programs; short courses; update courses at professional and trade conferences; in-house industrial training/retraining; and as integral parts of technical physics courses. In order for such programs to be adaptable for national dissemination, they must contain at least four essential elements: (1) The instructional materials must be modular, relevant and valid (2) manpower needs must be identifiable and delineated (3) valid educational environments for training/retraining must be identified for a particular technology (4) support for the preparation of individuals to work in the particular technical area must be evident and demonstrated.

### EXPECTED RESULTS OR BENEFITS:

A model will be developed whereby other technical education programs can be disseminated and installed. Evaluation of the research will determine which approaches are effective and which ones are not. In addition, criteria will be established to permit evaluation of future proposals for curriculum development or modification to determine if the end items are complete for satisfactory dissemination.

PROJECT ABSTRACT

PROJECT NO.:

498AH5Q196

TITLE:

Methods of Implementing Vocational Education Exemplary Programs in Local School Districts

PROJECT DIRECTOR  
AND ORGANIZATION:

William L. Hull  
The Center for Vocational Education  
Ohio State University  
1960 Kenny Road  
Columbus, Ohio 43210  
(614) 422-6533

GRANT PERIOD:

July 1, 1975 - September 30, 1976

OBJECTIVES OR PURPOSES:

1. To develop a conceptual framework via a literature review and data collection which identifies methods of continuing exemplary programs after outside funds are no longer available.

2. To develop a guide to implement vocational education exemplary demonstration programs in local school districts or other educational settings:

PROCEDURE OR APPROACH:

The plan is to use the available documentation on exemplary programs that have been federally funded over the past 6 years as a data base for identifying important variables likely to influence the continuation of materials and activities. The variables will be related to a mailed survey that assesses the criterion variable: the degree to which the exemplary program materials have been continued on site and extended to other educational settings.

EXPECTED RESULTS OR BENEFITS:

The results of this research study will be translated into a brief guide for project directors of exemplary program sites. The guide should help project directors be better able to formulate effective demonstration strategies.

## PROJECT ABSTRACT

PROJECT NO.: 498AH50199

TITLE: A Study for the Articulation of Competency-Based Curricula for the Coordination of Vocational-Technical Education Programs in Louisiana

PROJECT DIRECTOR AND ORGANIZATION: Harry J. Boyer  
Louisiana State Department of Education  
Bureau of Vocational Education  
P.O. Box 44064, Capitol Station  
Baton Rouge, LA 70804

GRANT PERIOD: July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES:

1. To make an analysis of incumbent workers within 4 occupational areas including Marine Science and Hotel-Motel.
2. To develop catalogs of performance objectives and criterion referenced measures in the 4 occupational areas.
3. To develop a system to field test the catalogs.
4. To develop an in-service education and dissemination plan for use of the catalogs.
5. To use the performance objectives catalog in designing curricula materials.
6. To disseminate the catalogs to other states.
7. To develop a systematic updating process for each field of development.

PROCEDURE OR APPROACH:

The State of Louisiana is presently developing catalogs of performance objectives in cooperation with the Vocational-Technical Education Consortium of States (V-TECS). This project is to be conducted within the guidelines established by the consortium, thus eliminating duplication of effort and assuring transportability of products and information. The project will use an adaptation of the air force system for task analysis and performance objectives and to translate the catalogs of objectives into curriculum materials that can be utilized by vocational education at the secondary, post-secondary and adult levels.

EXPECTED RESULTS OR BENEFITS:

The project will make available a comprehensive collection of performance objectives and criterion-referenced measures along with equipment listing, reference material and equipment lists in Maritime, Hotel-Motel and two other occupational areas.

PROJECT ABSTRACT

PROJECT NO.: 498AH50210

TITLE: Maintaining an Instructional Systems Design Strategy for Curriculum Development at the Local Education Agency Level for Vocational Education

PROJECT DIRECTOR AND ORGANIZATION: Robert Koon,  
Department of Education  
Division of Vocational Education  
65 S. Front Street  
Columbus, Ohio 43215  
(614) 466-3430

GRANT PERIOD: July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES:

1. To develop a strategy and materials to maintain a systems approach to curriculum development in all the local education agencies in Ohio.
2. To provide directors of vocational education in local education agencies with the materials and procedures needed to initiate and maintain a systems approach to curriculum development and revision.
3. To demonstrate the application of a systems approach to curriculum development at the secondary level.
4. To evaluate the feasibility of utilizing vocational education directors to implement and maintain a systems approach to curriculum development and redesign at the local education agency level.

PROCEDURE OR APPROACH:

Vocational education directors of local education agencies will be introduced to the systems approach to curriculum development during a workshop the last week of July, 1975. Five occupational analyses and accompanying task lists will be provided to the directors along with sample course outlines and courses of study for each. Materials and procedures for aiding vocational directors to get vocational teachers and support staff involved will be developed and updated in October and December. Succeeding workshops will be conducted for in-service training, assessment and revisions.

EXPECTED RESULTS OR BENEFITS:

The project will provide the following:

1. A tested strategy for implementing a systems approach for curriculum development and revision which may be utilized in other educational settings.
2. Data for deciding the validity of using local vocational education directors as a means for implementing the design.
3. A validated in-service package for use with supervisors, directors and curriculum design specialists.

## PROJECT ABSTRACT

PROJECT NO.: 498AH50215

TITLE: A Comprehensive Regional Educational Management System and Evaluation Process for Program Diffusion

PROJECT DIRECTOR AND ORGANIZATION: Kaare T. Jacobsen  
Industry Education Alliance of Los Angeles County  
621 South Virgil Avenue  
Los Angeles, CA 90005  
(213) 386-7271

GRANT PERIOD: July 1, 1975 - December 31, 1975

### OBJECTIVES OR PURPOSES:

The purpose of the project is to develop an operational comprehensive network-based management system and evaluation process for implementing tested programs and monitoring the operation of on-going programs and activities in Los Angeles County.

### PROCEDURE OR APPROACH:

The procedure includes the following steps:

1. Collect baseline data on each affiliate agency and organization to be involved in program implementation.
2. Develop a comprehensive management systems approach for monitoring the operation of the on-going programs.
3. Conduct a needs assessment to determine the needs of the population to be served.
4. Establish policy and develop guidelines for fund solicitation and for gaining membership into the organization.
5. Develop strategies for involving business and industry, organizations and associations, government and labor, and individual persons in the alliance Career Education Programs.
6. Determine means of assessing the alliance delivery capacity and the effectiveness of each program component.

### EXPECTED RESULTS OR BENEFITS:

The project will provide the following products:

1. Procedures for recruiting and utilizing volunteer staff.
2. Guidelines for utilizing on-site facilities.
3. Procedures for preparing tested programs for county-wide implementation.
4. Strategies for collecting and classifying information.

PROJECT ABSTRACT

PROJECT NO.:

498AH50255

TITLE:

A Comparison of an Individualized, Competency-Based Dental Assisting Training Program with a Traditional Program

PROJECT DIRECTOR  
AND ORGANIZATION:

Patricia A. Linde  
Lake Washington School District  
Vocational Technical Career Center  
P. O. Box A  
Kirkland, Washington 98033  
(206) 827-9586

GRANT PERIOD:

July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES:

The purpose of this project is to compare the effectiveness of an individualized, competency-based, open entry-open exit dental assisting program to a traditional program in relation to the needs of both the learner and the dental consumer.

PROCEDURE OR APPROACH:

The ability of two different groups of students to perform tasks to predetermined levels of competency will be compared. One of the groups will receive instruction by the traditional method. The other group will use individualized, competency-based instructional material. Comparisons will be made in three areas: office skills, traditional chairside assisting, and expanded duties.

EXPECTED RESULTS OR BENEFITS:

1. Statistical determination of effectiveness of an individualized, competency-based instructional module in dental assisting as compared to the traditional method of instruction.
2. Development of three instructional modules and the necessary instructional materials for their implementation.
3. Information about the organizational and administrative requirements, which are necessary for implementation of an individualized, competency-based instructional module.

PROJECT ABSTRACT

PROJECT NO.:

498AH50274

TITLE:

Demonstration Model for Implementation of Individualized Learning Units Based on State Developed Curriculum Guides

PROJECT DIRECTOR  
AND ORGANIZATION:

A. Kent Randall  
School of Technology  
Weber State College  
3750 Harrison Blvd.  
Ogden, Utah 84403  
(801) 399-5941

GRANT PERIOD:

July 1, 1975 - June 30, 1976

OBJECTIVES OR PURPOSES:

The objective of the project is to insure that 90 percent of the machine shop, welding and drafting instructors who are selected to participate in the program will be effectively using individualized learning units based on the state articulated curriculum guides and adapted to their specific situations by June 1976.

PROCEDURE OR APPROACH:

Five technical graphics, machine tool, and welding instructors will be selected to serve as regional experts and to assist other instructors in development and modification of the individualized packages. An additional 30 to 40 participating instructors will be selected and will attend a two week workshop in development and use of the learning packages. Their later implementation in their own vocational programs will be evaluated and modified with the assistance of the regional experts.

EXPECTED RESULTS OR BENEFITS:

This project should result in the implementation of a centrally planned and developed curricula for machine shop, welding and technical graphics at the secondary and post-secondary levels. Since the basic materials are intended to be comprehensive, concise, and have provision for internal validation, they should be appropriate for use in any vocational shop situation with prescribed, intended, instructor determined modifications. They are not intended to replace instructor teaching activities but to permit student self-paced learning so that instructors may shift emphasis from repeated demonstrations to motivation and learning management activities.

## PROJECT ABSTRACT

PROJECT NO.: 498AH50288

TITLE: Impact of Administrative Climate Instruction, and Counseling on Control Expectancy, Anxiety, and Completion Rate of Post-Secondary Educationally Disadvantaged and Minority Vocational-Technical Students

PROJECT DIRECTOR AND ORGANIZATION: John E. Roueche  
University of Texas  
Department of Educational Administration  
Austin, Texas 78712  
(512) 471-7213

GRANT PERIOD: July 1, 1975 - December 31, 1976

### OBJECTIVES OR PURPOSES:

1. To determine whether institutional variables descriptive of institution goals and collegiate environment at selected community colleges increase the ability for program administrators to predict success of vocational-technical students over that possible from an analysis of personality and background data alone.

2. To determine whether the use of an institutional, participative, goal-setting intervention within the selected colleges is associated with improved student performance within vocational programs, over that attained by target institutions without that intervention.

### PROCEDURE OR APPROACH:

Project encompasses three different treatment conditions in each of two educational environments and a control group for each environment as follows:

1. Educational Environments
  - a. Vocational-technical
  - b. academic
2. Treatment Conditions
  - a. Administrators only - intervention concerned with goal setting behavior
  - b. Students only - individualized instruction and counseling
  - c. Student and Administrators - Delphi method with administrators and counseling and instruction with students
  - d. Control - no intervention

### EXPECTED RESULTS OR BENEFITS:

From this project it would be possible to determine whether significant improvement in student completion rate can be achieved through the additional interventions. Unlike previous studies, interventions in this study are directed toward significant others outside as well as within the vocational programs.

PROJECT ABSTRACT

PROJECT NO.: 498AH50297

TITLE: The Evaluation of Personalized Individualized Vocational Occupations Training (PIVOT)

PROJECT DIRECTOR AND ORGANIZATION: Joseph I. Rubin  
School District of Philadelphia  
21st Street and the Parkway  
Philadelphia, PA 19103  
(215) 448-3671

GRANT PERIOD: July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES:

1. To determine whether after having completed one school year in one of the following courses:

- a. Nurses aide
- b. Industrial Electricity
- c. Automotive Mechanics
- d. Machine Tool Trades
- e. Drafting

in which the P.I.V.O.T. system was used, students will be able to demonstrate job entry competency.

2. To determine whether students will be able to demonstrate proficiency equal to or greater than comparable students in a variety of educational settings after having completed training in the same skills under different educational methodology.

3. To determine whether the ability of students to develop proficiency in job skills by using the PIVOT system is related to student academic achievement.

4. To determine whether Educationally Mentally Retarded students are able to develop proficiency in job skills using the PIVOT system.

5. To determine whether bi-lingual students are able to develop proficiency in job skills using the PIVOT system.

PROCEDURE OR APPROACH:

Students and schools to be evaluated shall be selected simultaneously. Teachers will be given in-service training dealing with the use of PIVOT and an outline of skills to be covered. The control group will be given an outline of skills to be taught.

EXPECTED RESULTS OR BENEFITS:

The project is expected to show that the PIVOT system is superior to other methods now being used for all student populations and in various educational settings in preparing students for entry level jobs.

PROJECT ABSTRACT

PROJECT NO.: 498AH50356

TITLE: An Exploratory Study of Administrative Barriers to Installation of Open Entry/Exit Work Experiences in Cooperative Clothing Retailing Programs

PROJECT DIRECTOR AND ORGANIZATION: Kathryn Greenwood  
Oklahoma State University  
Stillwater, OK 74074  
(405) 372-6211

GRANT PERIOD: July 1, 1975 - December 31, 1976

OBJECTIVES OR PURPOSES:

1. To determine the opinion of change agents in education and business toward open entry/exit work experience in cooperative retailing programs.
2. To develop a system of individualized instruction to direct students in the achievement of competency-based objectives in retail clothing and textile work situations.
3. To identify and train teacher-coordinators.
4. To make recommendations for implementing the utilization of the system and the use of the strategy of overcoming administrative barriers in other school systems.

PROCEDURE OR APPROACH:

1. Identify attitudes of administrators and retailers toward the open entry/exit approach for cooperative work programs.
2. Establish a project advisory committee
3. Plan and develop learning packages
4. Formulate competency-based objectives.
5. Present the system to approximately 20 teacher coordinators representing secondary and post secondary levels.
6. Evaluate the operation of the system

EXPECTED RESULTS OR BENEFITS:

In exploring reasons why administrators adopt the open entry/exit system and the software (learning packages), this project can demonstrate progress in the development of the idea of preparing individuals for work based on their competency needs rather than on their age or educational level. The strategy for initiating and implementing an innovative approach to cooperative work experience programs should be generalizable to other cooperative educational programs with similar purpose.

VI. Abstracts of Special Projects of National Significance

PROJECT ABSTRACT

PROJECT NUMBER: V0205VZ

PROJECT TITLE: To Review the Research and Development Effort in Vocational Education and Project Future Requirements

PROJECT DIRECTOR AND ORGANIZATION: Dr. Henry David  
The Assembly of Behavioral and Social Sciences  
National Research Council  
National Academy of Sciences

GRANT PERIOD: January 31, 1975 - January 30, 1976

OBJECTIVES OR PURPOSES:

- (1) To review and assess vocational education research and development during the period 1963-74.
- (2) To develop a basis for delineating the strategic directions and emphases in vocational education R&D for the coming decade.
- (3) To identify promising research areas.
- (4) To indicate how improvements could be effected in the organization and management of the R&D effort.
- (5) To determine the requirements for new altered, or additional R&D capabilities and organizations.

PROCEDURES:

The first major task undertaken was to review and assess research and development effort in vocational education for the period 1963-74 in order to allow the Committee to examine R&D policies, projects and programs. The second major task would be to lay the basis for delineating the strategic considerations that would indicate the needed directions of and emphases in R&D in this area for the decade ahead.

EXPECTED CONTRIBUTION TO EDUCATION:

Quarterly progress reports, first year annual report and a final report.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50001-B

PROJECT TITLE: AIM/ARM: Abstracts of Instructional and Research Materials in Vocational and Technical Education

PROJECT DIRECTOR Dr. Joel Magisos  
AND ORGANIZATION: The Center for Vocational Education  
Ohio State University  
Columbus, Ohio 43210

GRANT PERIOD: March 1, 1975 - February 29, 1976

OBJECTIVES OR PURPOSES:

(1) To provide reports on a wide range of topics in vocational and technical education including sub-fields such as agricultural education, distributive education, health occupations education, home economics education, consumer education, trade and industrial education, industrial arts education, and related fields like manpower economics, occupational guidance, and occupational rehabilitation. (2) to provide subject and author indexes to abstracts of instructional materials developed by local school districts, state departments of education, curriculum laboratories and other organizations through the AIM section of AIM/ARM. (3) to provide subject and author indexes to abstracts of research materials developed by research projects supported by the U.S. Office of Education, Department of Education, Department of Labor, Office of Economic Opportunity, private foundations, and other organizations through the ARM section of AIM/ARM.

EXPECTED CONTRIBUTION TO EDUCATION:

This project will report relevant publications and materials in abstract, index form on a bi-monthly basis. It will also provide subject and author indexes which will refer the reader to abstracts which provide a summary of bibliographic, availability, and content information for materials.

PROJECT ABSTRACT

PROJECT NUMBER: 498AH50379

PROJECT TITLE: A Field Trail of the Management Information System for Vocational Education (MISVE)

PROJECT DIRECTOR AND ORGANIZATION: Dr. Harold Starr  
The Center for Vocational Education  
Ohio State University  
Columbus, Ohio 43210

GRANT PERIOD: April 15, 1975 - January 15, 1976

OBJECTIVES OR PURPOSES:

- (1) To assess the comprehensiveness, usefulness, and efficiency of the information subsystem's information flow procedures and data collection instruments.
- (2) To assess the efficiency and usefulness of the computer software subsystem.
- (3) To prepare a system documentation package.
- (4) To produce a plan for field testing and validation of the MISVE.

PROCEDURES:

This basic approach will be the determination of documentation which will provide for a detailed system description of the general MISVE, its two subsystems, and specific subsystem elements, e.g., data base structure, data collection instruments, edit, load, and update programs. This study will also produce the documentation required for transfer planning; that is, documentation needed by potential MISVE users to adapt, install, operate, and maintain MISVE.

EXPECTED CONTRIBUTION TO EDUCATION:

- (1) Documents which describe MISVE and are required by potential system users to adopt, install, operate, and maintain MISVE.
- (2) A plan for field testing and validation of MISVE.
- (3) A project final summary report.

## PROJECT ABSTRACT

PROJECT NO:

498AH50380

TITLE:

Assessment of Black Leadership Attitudes  
Toward The Desirability of Vocational  
Education Programs For Black Students

PROJECT DIRECTOR  
AND ORGANIZATION:

Dr. Harland Randolph  
A.L. Nellum and Associates, Inc.  
1990 M Street, N.W., Suite 450  
Washington, D.C. 20036

GRANT PERIOD:

June 30, 1975 - June 29, 1976

OBJECTIVES OR PURPOSES:

1. To assess attitudes of Black leaders pertaining to the desirability of Black students entering and completing Vocational Education programs.
2. To provide a reliable base of information needed to improve decision-making functions and performance in respect to the administration of Vocational Education programs at the Federal level as related to the subject of this study.

PROCEDURE OR APPROACH:

The major tasks are to:

- a. Search and review the relevant literature
- b. Survey and assess the attitudes of Black leaders.
- c. Hold a conference for OE staff and a representative group of Black leaders.
- d. Hold a conference for OE staff and State Vocational Education officials
- e. Submit a final report that includes the obtained data, and the relevant recommendation.

PRODUCTS:

This project has as its terminal product a final report that will provide a data base that can be used by OE staff. The project does not have responsibility for changing attitudes of Black leaders or for seeking improvement in the performance of Vocational Education programs at the Federal or State levels.

SIGNIFICANCE:

This survey seeks to determine through a reliable research method what the attitude of Black leaders is as regards Black students entering Vocational Education programs. The results will obviously impact on policy at all levels. If the attitude is positive, policy makers have an untapped source of support. If it is negative, the concerns must be surfaced and discussed with the objective being the improvement of the Vocational Education programs in order that they may be more attractive to Black students.

PROJECT ABSTRACT

PROJECT NUMBER:

995AH50106

TITLE:

A State Management Information System Needs Study and a National Needs Assessment of Career Guidance

PROJECT DIRECTOR:

Dr. Donald C. Findlay  
The Center for Vocational Education  
The Ohio State University  
Columbus, Ohio 43210-614 486-3655

GRANT PERIOD:

July 1, 1975 - September 30, 1976

OBJECTIVES OR PURPOSES:

State MIS Needs Study: To (1) assess the extent to which States with Part C funded projects have improved their MIS capabilities; (2) assess the status of MIS developments in Part C funded States in comparison with non-funded States; (3) identify exemplary MIS systems or exemplary features of MIS in the States and constraints inhibiting the implementation or upgrading of MIS by States; and (4) produce a set of recommendations regarding future directions for meeting State management information system needs.

National Needs Assessment of Career Guidance: To conduct a national needs assessment of career guidance, K through adult, with particular emphasis on evaluating national progress in the establishment of comprehensive guidance, counseling, placement, and student follow-through systems.

PROCEDURES OR APPROACH:

State MIS Needs Study: Assessment will be made of changes in MIS capabilities in States funded under Part C for that purpose and differences in MIS comprehensiveness and utility between Part C funded and balance of States. Exemplary vocational education MIS or features of such systems in the States will then be identified as will constraints to implementation or upgrading of MIS by States. Recommendations will be made for upgrading MIS systems in the various States.

National Needs Assessment of Career Guidance: A national survey will be made of State comprehensive career guidance plans along with an identification of career guidance needs as reflected in a review and synthesis of the professional literature. These efforts will be followed by an identification of obstacles and impediments to the implementation of comprehensive career guidance, placement and follow-through services and an assessment of counselor education programs at colleges and universities. Findings will then be analyzed to identify exemplary career guidance methods, practices, comprehensive programs, and dissemination strategies as well as evaluation tools and techniques.

EXPECTED CONTRIBUTION TO EDUCATION:

1. The MIS study will provide a set of recommendations regarding future directions for meeting State management information system needs.
2. The Career Guidance study will identify needed changes in the training and retraining of career guidance professionals and paraprofessionals.

PROJECT ABSTRACT

PROJECT NUMBER: OEC-0-72-0414

PROJECT TITLE: Learning A Living Across the Nation

PROJECT DIRECTOR Dr. Arthur M. Lee  
AND ORGANIZATION: Northern Arizona University  
Flagstaff, Arizona

GRANT PERIOD: October 1, 1974 - March 31, 1976

OBJECTIVES OR PURPOSES:

- (1) To establish and extend a data base.
- (2) To identify and measure changes over the four year period.
- (3) To explore the use of computer technology in processing Vocational Education data on a national basis.

PROCEDURES:

The data to be collected by Project Baseline are data normally collected at the State level by the representative departments of State government. Data will be gathered from not only divisions of Vocational Education but also divisions having responsibilities in general elementary and secondary programs, employment service, finance, chief State school offices, and others.

The fourth year funding will be concerned with two major objectives: (1) to collect 1974 data from SEA's and to analyze and summarize these data for each state; (2) to subcontract for a major analysis of all four years of data.

EXPECTED CONTRIBUTION TO EDUCATION:

State and National yearly reports on Vocational Education. A final summary report presenting the four year accumulation of issues, trends and recommendations as revealed by data from Project Baseline (Learning A Living Across the Nation).

PROJECT ABSTRACT

PROJECT NUMBER: OEC-0-74-7536

PROJECT TITLE: Career Awareness and Training For Youth

PROJECT DIRECTOR Del' Green Associates  
AND ORGANIZATION: Foster, California

GRANT PERIOD: May 14, 1975 - May 13, 1976

OBJECTIVES OR PURPOSES:

- (1) To demonstrate the potential for an increase in the number of young persons motivated to select business ownership as a viable career option.
- (2) To demonstrate the potential for improving the knowledge and understanding of business fundamentals and management as a means of eventually reducing the high incidence of business failure.
- (3) To demonstrate the efficacy of applying the basis career education concept in regular school systems to improve the posture of minority business enterprises.
- (4) To aid in the fulfillment of the career awareness and training objectives included in recommendations in the final report of the Task Force on education and training for Minority Business Enterprise.
- (5) To provide young minority persons and others in the regular school system with exposures to successful minority business persons as a motivational factor.

PROCEDURES:

Qualified personnel will work to develop teams from the business and education communities that will produce instructional materials for school children.

EXPECTED CONTRIBUTION TO EDUCATION:

Curriculum materials, supporting texts and other related materials.

## PROJECT ABSTRACT

PROJECT NO.: IAD-0-74-014

PROJECT TITLE: Public Information Project and Baseline Monitoring

PROJECT DIRECTOR AND ORGANIZATION: Walter J. Woodhull  
National Advisory Council on Vocational Education  
Washington, DC

GRANT PERIOD: July 1, 1975 - June 30, 1976

### PURPOSE AND OBJECTIVES:

The purpose of the project will be to develop awareness of vocational education opportunities among the general public. The objectives are to bring together specialized resources and expertise of state agencies, local communities, business and industry, and to provide focus to their efforts for an effective public information program to meet local needs; to provide technical assistance to State Advisory Councils on Vocational Education, upon request, including planning and writing appropriate television and radio scripts, developing local communication centers, planning billboard campaigns, and assistance in developing and coordinating local funding for public information materials production.

### PROCEDURES:

1. During the period of the contract, beginning July 1, 1975 and ending June 30, 1976, the Contractor shall prepare for the National Advisory Council on Vocational Education as part of its public information program ten (10) films for television public service announcements and ten (10) radio public service spot announcements for the purpose of promoting greater community understanding and interest in vocational and technical education.
2. These films and scripts will be prepared and developed in cooperation with local people from selected cities and/or geographical areas, based on area interest and demand, and will reflect the local image. Production will be accomplished by local companies with costs borne by the local community. One copy of each film and each radio script will be furnished to the National Advisory Council on Vocational Education, attention: Mr. Reginald Petty, Acting Executive Director.
3. The Contractor shall submit monthly written progress reports (2 copies) to the Chairman through the Executive Director of the Council. The first progress report shall be due on July 31, 1975, and succeeding progress reports shall be submitted on or about the last day of each succeeding month. The final report shall be due on June 30, 1976.

### EXPECTED RESULTS OR BENEFITS:

Although the end product of the project will be films and scripts, the project will serve to sharpen the articulation of the vocational education goals within each state. In bringing together such groups as the state education agency, the state department of labor, business and labor interests, and community organizations, the National and State Advisory Councils on Vocational Education will serve as the catalysts to bring about increased cooperation in the field of vocational education.