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ABSTRACT

This publication contains abstracts of research projects in vocational education conducted in Pennsylvania. The directory also lists the research, exemplary, and curriculum activities which were conducted during the 1979-80 fiscal year. All projects listed were supported with federal vocational funds under Public Law 94-482. Information contained in each abstract includes name and address of project director, funding amount, purpose, objectives, outcomes, intended audience, and publications and available materials resulting from the project. The following subjects are covered in the abstracts: educational administration, articulation (secondary and postsecondary); vocational attitudes; cooperative education; curriculum; competency-based vocational education; research dissemination; evaluation; guides, models, and resources; inservice education; sex equity; special education; teacher education; and youth unemployment. (KC)

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ED205745

PENNSYLVANIA'S
ABSTRACTS OF
RESearch AND RELATED
MATERIALS IN VOCATIONAL EDUCATION

Prepared by
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Pennsylvania Department of Education
1981

CE 029 737

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PREFACE

Research is valuable only to the extent that it is put to practice. To make the results of completed research activities known, the Pennsylvania Research Coordinating Unit (RCU) for Vocational Education has compiled the following abstracts. This publication also lists the research, exemplary and curriculum activities which were conducted during the 1979-80 fiscal year. All projects were supported with federal vocational funds under Public Law 94-482.

Publications of abstracts is one way the RCU disseminates research and related results to vocational educators in the Commonwealth. This edition has been improved to include specific information in each abstract for the intended audience and a listing of available materials. Educators are encouraged to request more information and materials for any of the abstracts listed and to make full use of any findings which may be adaptable to their situation.

The best source of information, in most cases, is the project director listed with each abstract. Microfiche copies of final reports are available from the Vocational Education Information Network (VEIN), Millersville State College, Stayer Research and Learning Center, Millersville, Pennsylvania 17551, Telephone: (717) 872-3477. When requesting a copy, give the number listed in the upper left-hand corner of the abstract.

We solicit the suggestions and comments on this publication and offer any help we can give to those initiating or implementing any worthwhile research and related activity.

Carroll A. Curtis

Carroll A. Curtis, Director
Research Coordinating Unit
for Vocational Education

PA052057: Competency-Based Vocational Educational Development Program

William R. Silkman
Erie County Technical School
8500 Oliver Road
Erie, PA 16509

\$45,561.00 Federal
0.00 Non-Federal
9/1/79 to 6/30/80
Project #84-9817

The purpose of this project was to plan and develop competency-based programs and materials to be used for secondary level students at the Erie County Technical School.

Objectives

1. Establish a more comprehensive program designed to foster individual student attainment with an emphasis on validated occupational tasks.
2. Update curriculum materials and course outlines to reflect current technology and state-of-the-art advancements.
3. Involve Craft Committees in assessing curriculum materials, facilities and equipment.
4. To develop a performance oriented student profile capable of providing prospective employers, higher learning institutes, and parents with an accurate description of competencies developed.

Outcomes

1. A coding system was developed based on the VEMIS numbering system. Major trade divisions were also incorporated.
2. A system of rough draft sheets was devised.
3. Teachers began to generate competency-based materials.
4. Year-end school closing activities temporarily halted teacher input portion of program.

Audience

This report is of particular value to secondary and postsecondary schools implementing competency based vocational education.

Publications and Available Materials

- Final Report.

PA052164: Staff In-Service Competency-Based Vocational Education Development

Earl L. Horst
Lebanon County AVTS
833 Metro Drive
Lebanon, PA 17042

\$5,215.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9812

The purpose of this project was to expose all of the Lebanon County AVTS instructional staff and support personnel to Competency-Based Vocational Education methodology.

Objectives

By the end of the in-service program each instructional participant will be able to:

1. Use employment data to determine or revalidate the scope of each program.
2. Select and use a craft advisory committee to validate the program.
3. Create a list of tasks for each occupation.
4. Identify and/or write performance objectives.
5. Design learning activities that utilize a variety of instructional methods.
6. Maintain a means of providing continuous information to the student, parents and teacher regarding the progress of the student.

Outcomes

1. A graduate follow up on employment is made for all students.
2. A craft advisory committee has been selected to validate program contents.
3. Forty percent of the craft advisory committees have evaluated the task lists.
4. Performance based objectives are at all stages of development.
5. A variety of learning activities have been designed and put in use.
6. An information system is in place to continually inform the student, parent, and employer or prospective employer of an assessment of the student capabilities.

Audience

The resultant CBVE curriculum materials are at a partial state of completion. The completed parts are evaluated by the craft advisory committee and put into use.

Publications and Available Materials

Publications of our CBVE materials will not be available until completed and funding becomes available for reproduction.

PA051925: Workshops--Preparation of Transition Plans in Area Vocational-Technical Schools

Curvin C. Smith, AEC, Inc.
North Allegheny Office and Research Park
McKnight and Pine Creek Roads P.O. Box 15073
Pittsburgh, PA 15237

\$3,780.00 Federal
0.00 Non Federal
9/1/79 to 12/31/79
Project #84-9810

The purpose of this project was to assist area vocational-technical schools in the preparation of transition plans for making structural modifications in order that their buildings be accessible to handicapped persons.

Objectives

1. Prepare a model format for transition plans and have the format approved by the Section 504 Office of Technical Assistance, HEW.
2. Develop Transition Plans for the Centre County, Lebanon County and Central Westmoreland County Area Vocational-Technical Schools who in turn would serve as host schools for workshops.
3. Conduct one day workshops at the above schools for the purpose of assisting school administrators in the preparation of transition plans.

Outcomes

Information was shared and materials were distributed to attendees at the workshop which will enable administrators to prepare transition plans with minimal difficulty.

Audience

Administrators representing 48 educational institutions participated in the workshops. Materials were sent to seven other persons who expressed interest in the program but could not attend.

Publications and Available Materials

- The Final Report.
- Model Transition Plan (Format).
- American National Standards Institute (ANSI) Guidelines.
- Other materials concerned with structural modifications for making buildings accessible to handicapped persons.

PA052160: The Development of Instructional Materials in Anatomy and Physiology
for Vocational Health Occupations

William P. Gorth
National Evaluation Systems, Inc.
30 Gatehouse Road
Amherst, MA 01002

\$25,898.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9821

The purpose of this study was to design and develop competency-based instructional modules in anatomy and physiology for use in vocational education instructional programs for practical nurses, nursing assistants, medical assistants, dental assistants, and emergency medical technicians.

Objectives

The major objective of the project was to design and develop competency based instructional modules in anatomy and physiology for use in vocational education instructional programs for practical nurses, nursing assistants, medical assistants, dental assistants, and emergency medical technicians.

Outcomes

1. Modular units and instructor's guides for the following four anatomical systems were developed: nervous, endocrine, genitourinary, and reproductive.
2. An advisory committee reviewed the modules.
3. All of the modules were field tested.

Audience

The modules are especially useful for the following instructional areas: practical nursing, nursing assistant, medical assistant, dental assistant, and emergency medical technician.

Publications and Available Materials

- Final Report.
- Modules.

PA052168: In-Service Training To Implement CBVE

Robert D. Muzzi
Lacawanna County AVTS
120 Monahan Avenue
Dunmore, PA 18512

\$6,494.00 Federal
\$ 480.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9808

The purpose of this project was to provide time for staff development by bringing in substitutes on a scheduled basis. The program will provide instruction to the instructional staff related to the skills necessary to implement a CBVE system.

Objectives

1. Establish a program coordinating committee composed of faculty members from both the secondary and postsecondary health occupation programs.
2. Develop a correlated practical nursing curriculum based on a hierarchy of objectives.
3. Offer a health assistant curriculum which will provide the graduate with marketable skills as well as postsecondary options.
4. Plan a program to provide educational articulation for the health assistant student and advanced standing placement for career mobility from other health occupations.

Outcomes

1. Develop entry/related occupation list using the D.O.T.
2. Identify tasks using V-TECS and other sources.
3. Utilizing craft advisory committees.
4. Writing performance objectives.

Audience

The results are useful to vocational curriculum planners and instructors.

Publications and Available Materials

- Final Report.

PA052155: In-Service Training for Competency-Based Vocational Education

William C. Downs
Central Westmoreland AVTS
R.D. #1, Arona Road
New Stanton, PA 15672

\$ 5,125.00 Federal
\$15,577.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9818

The purpose of this project was to continue the development and establishment of competency-based instruction in all of the educational programs at the Central Westmoreland AVTS.

Objectives

1. To validate a competency list for each vocational course.
2. To write performance objectives for all competencies on the validated list.
3. To design and write learning activities utilizing a variety of methods that are self-paced, contain appropriate evaluations of achievement and that are adaptable to the entire range of student abilities.
4. To provide facilitator help to begin to implement learning activities into instruction.
5. To develop and maintain a record of continuing progress of individual students.

Outcomes

1. A sequenced list of competencies were prepared and validated by the various craft committees.
2. A total of 1432 competency-based task packages were written.
3. Various shops are now implementing competency-based instruction.
4. Five resource centers are set up and operating.
5. Handicapped and disadvantaged students are benefiting from the development of the system for individualized instruction.
6. Sex bias has been eliminated in all task packages.

Audience

The resulting reports and curriculum materials are useful to the Bureau of Vocational Education, Vocational Educators and Curriculum Developers.

Publications and Available Materials

- Final Report.
- Copies of Various Task Packages.

PA052166: To Develop and Implement Competency-Based Instruction

William C. Downs
Central Westmoreland AVTS
15 West Third Street
Greensburg, PA 15601

\$21,757.00 Federal
\$23,863.00 Non-Federal
7/1/79 to 6/30/80
Project #84-9818

The purpose of this project was to continue the development and establishment of competency-based instruction in all of the educational programs at the Central Westmoreland AVTS.

Objectives

1. To validate a competency list for each vocational course.
2. To write performance objectives for all competencies on the validated list.
3. To design and write learning activities utilizing a variety of methods that are self-paced, contain appropriate evaluations of achievement and that are adaptable to the entire range of student abilities.
4. To provide facilitator help to begin to implement learning activities into instruction.
5. To develop and maintain a record of continuing progress of individual students.

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2. A total of 1432 competency-based task packages were written.
3. Various shops are now implementing competency-based instruction.
4. Five resource centers are set up and operating.
5. Handicapped and disadvantaged students are benefiting from the development of the system for individualized instruction.
6. Sex bias has been eliminated in all task packages.

Audience

The resulting reports and curriculum materials are useful to the Bureau of Vocational Education, Vocational Educators and Curriculum Developers.

Publications and Available Materials

- Final Report.
- Copies of Various Task Packages.

PA052167: Pennsylvania Interstate Distributive Education Consortium (IDEC)
Membership

James R. Gleason
The Ohio State University
Columbus, OH 43210

\$1,750.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9826 (Cont.
of 85-8806)

The purpose of the project was to maintain membership in the Interstate Distributive Education Consortium (IDEC).

Objectives

1. To maintain Pennsylvania's membership in IDEC in lieu of a comparable in-kind development project.
2. To provide Pennsylvania distributive education teacher-coordinators with the opportunity to assess the IDEC materials.

Outcomes

1. A subscription service provided teacher-coordinators with updated materials at minimum expense and assurance that the IDEC system is current and contains all newly developed items.
2. Membership provided classroom management ideas, newly developed implementation materials, a quarterly newsletter and general classroom supporting materials.
3. Specific items included were: competency master list, IDEC competencies for new DECA competitive events, curriculum index card file, revised bibliography, career related bulletin boards, transparency masters, IDEC operational guide, case studies and revised learning activity packages.

Audience

The results of the project and curriculum materials are very useful to vocational educators and students.

Publications and Available Materials

- IDEC Materials.

PA052126: Teacher In-Service Metrics

Edmund R. Retort
Mohawk Area School District
Bessemer, PA 16112

\$1,817.00 Federal
\$1,050.00 Non-Federal
9/1/79 to 6/30/80
Project #84-9801

The purpose of the project was to provide the teaching staff with a working knowledge of the metric system as it applies to their individual laboratory through the use of a metric instructional package developed by the National Center for Research in Vocational Education, Ohio State University.

Objectives

1. Provide a two-day in-service workshop for vocational teachers to orient them to metrics, acquaint them with Ohio State metric materials and provide training on using metrics in the classroom.
2. Teachers will facilitate student instruction through the use of developed instructional packages peculiar to their program area.
3. Students will be able to obtain an acceptable level of performance in the use of metric-measuring devices and conversion methods.

Outcomes

1. Thirty-five vocational teachers and administrators participated in two-day metric measurement workshops.
2. Over 500 vocational students received at least 10 hours of instruction in metric measurement.
3. Over 200 vocational students were able to master the metric measurement material to a level of 80 percent or better.
4. Nonpublic vocational schools were invited to participate in the metric measurement activities.

Audience

The project results are useful for vocational education teachers and administrators involved in integrating metric measurement into the vocational curriculum.

Publications and Available Materials

- Final Report.

PA052154: In-Service Competency-Based Vocational Education

Everett E. Nicklow
Somerset County AVTS
R.D. #5, Vo-Tech Road
Somerset, PA 15501

\$3,250.00 Federal
\$2,100.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9814

The purpose of the project was to implement initial writing of CBVE materials by teachers, specifically defining the scope of their course in the form of tasks.

Objectives

1. To in-service teachers in adapting "V-TECS" competency-based materials into curriculum.
2. To develop task definition of curriculum for validation by local craft committees.
3. To coordinate library and audiovisuals into the CB plan.
4. To lead into performance objective learning package, development and implementation.

Outcomes

1. Conducted in-service workshop for the staff and administrators on CBVE.
2. Developed task listing for validation.
3. Developed insights into current curriculum articulation with CBVE.

Audience

The results are especially useful to vocational staff planning and implementing CBVE.

Publications and Available Materials

- Final Report.

PA052053: Mini-Computers and the Building Trades: A Guide for Teachers of Vocational Education

Ernest L. Peters
West Chester State College
West Chester, PA 19380

\$37,566.00 Federal
0.00 Non-Federal
3/24/80 to 6/30/80
Project #85-9828

The purpose of this project was to develop curriculum materials that may be utilized in the building trades explaining means by which mini- and micro-computers may be utilized in homebuilding and construction of small business.

Objectives

The objective was to develop resource materials for vocational educators in the building trades which will assist in teaching students:

1. How to choose the type of mini-computer suitable for particular building and functions to be performed.
2. How to install computer systems to operate effectively over a range of demands.
3. To identify potential difficulties in computers, both in hardware and software, so that computers will operate as trouble free as possible.
4. To identify potential uses of the computer and to promote awareness of the computer's potential.

Outcomes

Materials were developed to provide vocational education teachers with a means of introducing students to the utilization and installation of mini- and micro-computers in residential and small business buildings. Material developed included:

1. General materials designed to promote awareness of the utilization of mini- and micro-computers in the building trades.
2. Specific materials designed for teachers of electricity, heating and air conditioning.
3. Examples of worksheets to be used with students in class.

Audience

The materials should be useful for teachers of electricity, heating and air conditioning.

Publications and Available Materials

- Final Report.

PA052152: A Catalog of Performance Objectives and Performance Guides for Records Management

Patricia E. Wallace
108 Signal Hill Road
Holland, PA 18966

\$10,000.00 Federal
0.00 Non-Federal
2/1/80 to 6/30/80
Project #93-0010

The purpose of this study was to develop a catalog of performance objectives and performance guides for records management tasks.

Objectives

1. To establish performance objectives for records management tasks that could be included in a records management course on the high school, community/junior college, and/or four-year college level.
2. To establish performance guides for records management tasks that could be included in a records management course on the high school, community/junior college, and/or four-year college level.

Outcomes

1. A writing team composed of records management incumbents and consultants was utilized to provide initial input into the draft stage of the project.
2. A literature search was undertaken to establish standards for the 101 tasks.
3. In addition to the performance objectives and guides, the completed catalog consisted of the following parts: table of contents, definition of terms, equipment lists, bibliography, and cross-reference table.

Audience

The results of the project are very useful to vocational educators and students.

Publications and Available Materials

- Final Report.
- Catalog of Performance Objectives and Performance Guides.

PA052153: Fulton County Coordinated Cooperative Education Concept

Charles R. Leader
Central Fulton School District
McConnellsburg, PA 17233

\$33,950.00 Federal
\$21,973.00 Non-Federal
7/1/79 to 6/30/80
Project #84-9806

The purpose of this project was to design and implement a coordinated cooperative educational program to meet the needs of Fulton County. The program would help to reduce or eliminate overlapping of coordination visitations, student placements and misconceptions of contractual agreements between local schools and business/industry.

Objectives

1. Design a cooperative educational management system which will coordinate the efforts of all existing work-release programs in Fulton County.
2. Conduct a countywide needs assessment for cooperative programs.
3. Implement a coordinated cooperative educational program for Fulton County.
4. Evaluate the effectiveness of the coordinated cooperative program.

Outcomes

1. A needs assessment for cooperative education was completed.
2. A cooperative educational management system was designed to coordinate the efforts of all existing work-release programs in the county.
3. The coordinated educational program for the three school districts in the county was implemented.
4. The third-party evaluation was completed.

Audience

The resulting reports, forms and guidelines would be especially useful to supervisors and coordinators of cooperative education.

Publications and Available Materials

- Final Report.

PA052123: To Extend the Automotive Course of Study and To Finalize the Course of Study Project

Frederick G. Welch
Division of Occupational
and Vocational Studies
The Pennsylvania State University
University Park, PA 16802

\$5,862.00- Federal
\$2,023.00 Non-Federal
7/1/79 to 6/30/80
Project #93-0008 (Cont.
of 85-8001)

The Automotive Course of Study required revisions to be made to include emission control and the Pennsylvania inspectional materials to make this document useful and practical for automotive teachers in the Commonwealth of Pennsylvania. The course of study project, finalized in 1979, had several activities remaining to be accomplished. The various courses of study were never finalized or printed. This project undertook the responsibility to finalize these courses and to print and disseminate the Appliance Repair Course of Study.

Objectives

1. To convene a writing team of automotive mechanics to revise the Automotive Course of Study.
2. To finalize the art work on the Graphic Arts Course of Study and the Welding Course of Study.
3. To submit graphic arts and welding materials to the Pennsylvania Department of Education for review and recommendations.
4. To revise, as necessary, the above materials, in addition to the areas of commercial art, building trades, diesel mechanics, and appliance repair, which have already been submitted for review.
5. To prepare and deliver one camera-ready copy to the Pennsylvania Department of Education on the various curriculums reviewed.

Outcomes

1. The Automotive Course of Study was revised.
2. The courses of study for Commercial Art, Building Trades, Appliance Repair, and Welding were revised.
3. The Appliance Repair Course of Study was printed and disseminated at the Shippensburg Curriculum Conference in July 1980.

Audience

The final report and instructional materials would be especially useful to administrators and teachers of the various courses developed.

Publications and Available Materials

- Final Report.
- Automotive Course of Study.
- Appliance Repair Course.

PA052124: In-Service Training for Competency-Based Vocational Education

Eugene J. Pandolph
A. W. Beattie AVTS
9600 Babcock Boulevard
McCandless Township
Alison Park, PA 15101

\$4,000.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9806

There was a need to provide teachers at the A. W. Beattie AVTS an opportunity to develop the skills needed to develop and implement a competency-based vocational education instructional program.

Objectives

1. Utilize employment data to determine the scope of the program.
2. Select or identify a list of tasks for the occupation within the scope of the program.
3. Use craft advisory committees to validate the content of the program.
4. Prepare/select performance objectives.
5. Develop instructional components and learning activities that utilize a variety of instructional strategies that will provide for individual differences and needs.
6. Maintain a system of providing continuous feedback to the student, parents, and teacher regarding progress and development.

Outcomes

1. The vocational staff received in-service training on competency-based vocational education.
2. Advisory committees assisted instructors in reviewing and validating course content.
3. Teachers were able to begin revising and updating their courses of study to reflect the skills and competencies of incumbent workers.
4. Teachers were able to provide their students with a list of competencies needed to compete in the labor market.

Audience

The report is especially useful to vocational staff implementing competency-based vocational education.

Publications and Available Materials

- Final Report.

PA052126: Implementation of Competency-Based Vocational Education In-Service

Marion B. W. Holmes
The School District of Philadelphia
Division of Career Education
John F. Kennedy Center for Vocational Education
734 Schuylkill Avenue
Philadelphia, PA 19146

\$25,626.00 Federal
5,253.00 Non-Federal
1/1/80 to 6/30/80
Project #93-0009

The purpose of this project was to have the central administrative office develop, design and conduct in-service staff sessions for vocational instructional staff and administrators in competency-based vocational education.

Objectives

1. Enable the instructional staff to demonstrate their understanding of the concept, theories and processes for implementing within their classroom a competency-based vocational education delivery system.
2. Enable the instructors to become eligible as part of a cadre who can assist with conducting future staff development sessions.

Outcomes

1. The vocational staff designed, implemented and provided in-service sessions for more than 130 district personnel.
2. Participants are able to demonstrate their understanding of the concepts and use of competency-based delivery system.

Audience

The resulting reports and curriculum materials are useful to teachers and curriculum planners of vocational-technical schools or programs.

Publications and Available Materials

- Final Report.

PA052125: In-Service Training for Competency-Based Vocational Education

Joseph J. Risbon
Bethlehem AVTS
3300 Chester Avenue
Bethlehem, PA 18017

\$4,000.00 Federal
\$1,550.00 Non-Federal
7/1/79 to 6/30/80
Project #35-9819

The teacher in-service program was designed to equip teachers with the skills needed to implement a competency-based instructional program.

Objectives

1. Use employment data to determine the scope of the program.
2. Select and use a craft advisory committee to effectively validate the content of the instructional program.
3. Identify or create a list of tasks for each occupation within the scope of the program.
4. Identify and/or write performance objectives.
5. Design learning activities that utilize a variety of instructional methods.
6. Maintain a means of providing continuous information to the student, parents and teacher regarding the progress of the student.

Outcomes

1. Twenty-eight vocational teachers received in-service on CBVE.
2. All of the teachers were able to accomplish the specific skills detailed in the objectives.
3. Additional vocational staff have been recruited for a similar curriculum development project for the 1980-81 school year.

Audience

The resulting reports and curriculum materials are useful to teachers and curriculum planners of vocational-technical schools or programs.

Publications and Available Materials

- Final Report.

PA052121: Task Level Articulation Between Secondary and Post-Secondary Vocational Programs in Electronics Technology

Ronald J. Glass
Lehigh County Community College
Schnecksville, PA 18078

\$23,720.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #84-9804

This project was a continuation of a previous project established to improve and refine existing procedures for awarding advanced standing to students entering the college Electronic Technology program.

Objectives

1. To refine the existing articulation process between Lehigh County Community College and the Lehigh County Vocational-Technical School as it is applied to Electronics Technology using an objective recording system of competencies.
2. To complete a software package of implementing the Electronic articulation process.
3. To apply the developed articulation process to applicants from sources other than area vocational-technical schools.

Outcomes

1. A system has been designed that combines the CBE approach in occupational training with the existing time-based credit-earned instructional structure of our college.
2. Agreement was made with the directors of the various offices who process student records to institute the system on a trial basis until the internal mechanics of implementation are resolved.
3. Materials for implementation are completed to be used for initial testing of the system.

Audience

The materials developed will be of interest to vocational educators (electronics particularly) planning to apply a CBE approach to an existing or proposed technology program.

Publications and Available Materials

- Final Report.

PA052128: Proposal To Design a Statewide System for Establishing Regional Pools of Qualified Teachers for Potential Staffing of Local Vocational Training Programs

Charles Hoffman
Management Advisory Service
Laventhol and Horwath
2101 North Front Street
Harrisburg, PA 17110

\$9,022.00 Federal
0.00 Non-Federal
4/1/80 to 6/30/80
Project #83-9822

The purpose of this study was to design an information system which will identify persons who are qualified by trade competency and/or teaching skills to be certified as vocational education teachers. This study is part one of a two-year contract.

Objectives

1. Define the desired competency levels to be achieved by students through vocational technical training.
2. Determine the level of trade competency and teaching skills required of teachers so that students may have reasonable opportunities and expectations to achieve the desired competency levels.
3. Establish a curricula of mandatory and elective courses which, in addition to trade competency, will meet requirements for various levels of certification.

Outcomes

The following outcomes were achieved over the first three-month period.

1. A plan for data collection was completed.
2. Data collection instruments were completed.
3. A project advisory committee was organized.

Audience

The report is especially useful to vocational education administrators.

Publications and Available Materials

- Final Report.

PA052120: Vocational Education Information Network (VEIN) Resource Dissemination for Pennsylvania

Erma D. Keyes
Millersville State College
Millersville, PA 17551

\$203,999.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #83-9804 (Cont. of
83-8805)

Services were to be responsive to national, state and local initiatives for disseminating resources to vocational educators in Pennsylvania.

Objectives

1. Plan, organize, control and update the system to optimize dissemination services to vocational educators for the maintenance and improvement of instructional programs.
2. Acquire appropriate documents for the information and resource collections on vocational education.
3. Disseminate information and resources relevant to user needs on management, design, development and improvement of vocational education research, programs, curriculum and instruction.
4. Evaluate the system for dissemination effectiveness and user satisfaction with services.

Outcomes

1. Organization of the system enabled staff to effect scheduled dissemination services and to conduct related but unscheduled services in cooperation with RCU and BVE.
2. Resource purchases were based on relevance to vocational education practices within the state. Unsolicited materials were identified with state programs and activities.
3. More than 25,000 resource items were delivered to over 5,000 clients via client responsive and selective dissemination practices. Staff had approximately 15,000 contacts with vocational educators statewide.
4. Service records indicate diversified client groups served to their satisfaction.

Audience

Educators responsible for developing and implementing vocational education programs and organizers of dissemination services.

Publications and Available Materials

- Final Report.

PA052051: In-service Training To Plan, Develop and Implement Competency-Based Vocational Education

H. William Fisk, Jr.
Berks AVTS
2900 St. Lawrence Avenue
Reading, PA 19606

\$8,625.00 Federal
2,707.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9807

The purpose of the project was to assist teachers in building the necessary skills in order to plan, develop and implement competency-based curriculum within all programs offered at the vocational-technical school. The program provided for five (5) days of release time for sixty-five (65) teachers. This consisted of one (1) day for a general awareness in-service program and four (4) days of one-on-one, or small group, skill building work sessions with staff members of the curriculum department.

Objectives

1. To conduct in-service training to help teachers develop the competencies necessary to plan, develop, integrate and implement competency-based vocational education.
2. To provide substitute teachers in order to give the regular teachers the necessary release time to participate in the skill building sessions.
3. To develop competency-based curriculum for implementation in all instructional areas at Berks Vocational-Technical School.
4. To build the necessary foundation for the implementation of an on-going curriculum development and evaluation plan.
5. To build a data base from which other vocational schools can draw upon for implementing a competency-based vocational education program.

Outcomes

1. Teachers participated in a one (1) day general CBVE awareness in-service program.
2. Provided 180 days of release time for teachers to participate in skill building sessions.
3. Competency lists were developed for all instructional areas.
4. Some modules were developed to be pilot tested in 1980-81.
5. Developed materials to be used in teacher skill building work sessions.

Audience

The resulting reports and curriculum materials are useful to teachers and curriculum planners of vocational-technical schools or programs.

Publications and Available Materials

- Final Report.
- Materials for Teacher Skill Building.
- Sample Competency Lists.
- Sample Pilot CBVE Modules.

PA052054: Competency/Field Based Vocational Curriculum Specialist Development
Program: Phase II

Calvin J. Cotrell
Temple University
Broad and Montgomery Avenues
Philadelphia, PA 19122

\$32,073.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9824 (Cont.
of 94-9005)

The purpose of the project was to implement a pilot competency/field based vocational curriculum specialist development program.

Objectives

1. Review program delivery system, content and materials based upon evaluation of the first year of operation.
2. Recruit 10-15 interns.
3. Organize an individualized advanced degree program for each intern.
4. Place the interns.
5. Conduct seminars of correlated leadership theory and provide field supervision for interns.
6. Evaluate the revised pilot program and recommend improvements.

Outcomes

1. A revised curriculum and delivery system was implemented during the academic year in the competency/field based mode which had been proposed.
2. The curriculum was modified to bring it directly in accord with the V-TECS diffusion and adoption plan of the RCU.
3. Fourteen internships were arranged within the cooperating schools. Each intern helped a minimum of two teachers develop curricula during a semester.

Audience

The report of this pilot project should be of interest to graduate programs in vocational education throughout the nation where there is a need for a viable program for curriculum specialist development.

Publications and Available Materials

- Final Report.

PA052047: Revision of Distributive Education Teacher-Coordinator's Handbook

Marvin Hirshfeld
Temple University
Distributive Education Program
287 Ritter Addition
Philadelphia, PA 19122

\$14,524.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9804 (Cont.
of 93-9024)

The purpose of this project was to revise the Handbook for Distributive Education Teacher-Coordinators published in 1969. This would enable pre-service Teacher-Training Institutions in Pennsylvania to have current material for use in their college courses. In-service teachers would also have current information available. Pennsylvania Vocational Directors would have these handbooks for their use in administering Distributive Education Programs.

Objectives

1. To review and revise the Handbook for Distributive Education Teacher-Coordinators published in 1969.
2. To validate draft content on handbook by Distributive Education Program Specialist in the Pennsylvania Department of Education, team of teacher-coordinators and a teacher educator of distributive education.
3. To provide 20-25 reproducible photographs for the handbook.
4. To design a cover for the handbook.

Outcomes

1. A select group of ten Distributive Education educators reviewed and revised the Handbook for Distributive Education Teacher-Coordinators.
2. A panel of experts from the Pennsylvania Department of Education and teacher educators validated the handbook.
3. Over 25 reproducible photographs were provided for the handbook.
4. A new cover was designed for the handbook.

Audience

The handbook would be especially useful to Distributive Education educators.

Publications and Available Materials

- Final Report.
- Distributive Education Teacher-Coordinator's Handbook.

PA052037: Identification of Middle Management Technical Job Training Program Needs

Joseph Scottino
Perry Square
Erie, PA 16541

\$4,260.00 Federal
0.00 Non-Federal
5/1/80 to 6/30/80
Project #83-9819

The purpose of the project was to determine if there were middle management level technical job descriptions in northwestern Pennsylvania manufacturing industries for which external training programs are not available and if there is a need for developing these training programs.

Objectives

1. To determine if there are technical middle management level job categories for which there is a training need.
2. To determine what kind of training programs are needed to improve the representation of women and minorities in the middle management level of industry.

Outcomes

1. A questionnaire format for determining industry training needs.
2. A list of training needs for northwestern Pennsylvania industries that, if met, would mitigate procurement problems and would provide trained personnel for which hiring needs exist.

Audience

The resulting reports are useful to college program planners interested in developing certificate level vocational post-secondary programs.

Publications and Available Materials

- Final Report.

PA052041: Implications of Selected Supervisory Techniques to the Success of Beginning Teachers of Agriculture

Robert A. Martin
Department of Agricultural Education
The Pennsylvania State University
University Park, PA 16802

\$2,000.00 Federal
240.00 Non-Federal
1/1/80 to 6/30/80
Project #83-9817

The purpose of this study was to determine if using selected supervisory techniques would contribute to the success of beginning teachers of vocational agriculture.

Objectives

1. To determine the effectiveness of beginning teachers of agriculture when supervised in a system of performance and product specification.
2. To determine the effect on student achievement when beginning teachers and their supervisors evaluate teacher performance on the basis of objectives and goals.
3. To determine the need for school administrators to supervise beginning teachers on the basis of the objectives and goals that are set and achieved.

Outcomes

1. The principals and teachers randomly selected for participation in this experimental study used supervisory techniques and strategies based upon two systems of supervision -- product specification and process specification. The results suggest that there are significant differences in the ratings of the two systems of supervision as perceived by principals, beginning teachers of vocational agriculture, and vocational agriculture students in Pennsylvania high schools and area vocational-technical schools.
2. Principals using product specification supervision (supervision-by-objectives) followed these five steps:
 - Pre-observational conference
 - Observation
 - Analysis
 - Post-observational conference
 - Critique
3. Instructional materials concerning conservation of energy in agriculture were field tested.

Audience

The resulting reports are useful to administrators of vocational education programs and teacher educators in agricultural and vocational education.

Publications and Available Materials

- Final Report.

PA052058: Vocational Education Resource Diffusion

Erma D. Keyes
Vocational Education Information Network
Millersville State College
Millersville, PA 17551

\$82,347.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #93-0001 (Cont.
of 85-8802)

Diffusion was structured to facilitate use of selected vocational education resources by local school personnel for competency-based instruction.

Objectives

1. Facilitate use of V-TECS materials by vocational educators.
2. Facilitate use of other recommended vocational education resources.
3. Demonstrate that structured diffusion of vocational education resources reduces product development costs and increases usage.

Outcomes

1. Diffusion workshops and related training or information sessions were attended by 1,082 instructional planners.
2. More than 5,000 copies of 197 titled resources were distributed to LEA personnel in conjunction with, or as a result of, diffusion workshops.
3. The number of educational agencies with approved plans, submitted by program trained curriculum coordinators, for CBI implementation to 93 since July, 1979.
4. Resource materials for three vocational programs were analyzed by selected review teams.
5. Project activities gave LEAs access to curriculum and instructional resources (for more than 100 occupational programs) with no expenditure for curriculum development.

Audience

Reported information is useful to state and local personnel responsible for vocational education delivery system.

Publications and Available Materials

- Final Report.

PA052038: Competency Levels in Agricultural Mechanics Needed and Possessed by Teachers of Vocational Agriculture in Pennsylvania

Philip Buriak
Armsby Building
Dept. of Agricultural Education
The Pennsylvania State University
University Park, PA 16802

\$1,430.00 Federal
0.00 Non-Federal
10/22/79 to 4/30/80
Project #83-9806

The purpose of this project was to determine if the need for increased instructor training in Agricultural Mechanics skills, abilities and understandings is necessary for effective programs in Vocational Agriculture in Pennsylvania.

Objectives

1. To determine the degree of competence needed by instructors of Agriculture in Agricultural Mechanics.
2. To determine where instructors of Agriculture received their training for competence in Agricultural Mechanics.
3. To determine the effect of instructors' age, college training, years taught and years in an occupation other than teachers of Agriculture.

Outcomes

1. The mean needed competence was found significantly higher than the mean possessed competence for 115 of the 148 Agricultural Mechanics skills.
2. The mean possessed competence classified according to biographical data yielded significant differences for four of seven grand means, i.e. semesters of high school Vocational Agriculture completed as a student, college credits completed in Agricultural Mechanics, years teaching experience in high school Vocational Agriculture, percent of the total program reported as Agricultural Mechanics.
3. The majority of instructors developed competence through self-teaching, colleges and high school. The least competence was developed through in-service.

Audience

The findings and conclusions of this study are useful to Vocational Agriculture instructors and teacher educators of Vocational Agriculture.

Publications and Available Materials

- Final Report.

PA052176: Vocational-Technical Education Consortium of States (V-TECS) Membership

K. M. Eaddy	\$20,000.00	Federal
Southern Association of Colleges and Schools	0.00	Non-Federal
795 Peachtree Street, N.E.	7/1/79 to 6/30/80	
Atlanta, GA 30365	Project #85-9802	

The purpose of this project was to pay the 1977 membership for Pennsylvania in V-TECS and to carry out the specific conditions of the contract.

Objectives

1. To develop agreed upon catalogs of performance objectives and criterion-referenced measures. The cost of these projects will be borne by the member state.
2. To conduct validation, dissemination and implementation activities concerning the products of V-TECS.
3. To employ a person to serve as full-time technical coordinator.
4. To provide one voting representative from the state to serve as a member of the Board of Directors of V-TECS.
5. To develop and implement a comprehensive plan for the dissemination of materials developed by the V-TECS effort.
6. To develop and implement preservice and in-service teacher education programs concerning the proper utilization of V-TECS materials.

Outcomes

1. A heavy equipment mechanic and solar heating mechanic catalogs have been developed with baker and medical secretary catalogs currently under development.
2. Performance objectives were made available to other states.
3. An RCU staff member served as full-time technical coordinator.
4. The State Director for Vocational Education is the voting representative from Pennsylvania.
5. A plan was developed and implemented to infuse V-TECS products into the local vocational schools of Pennsylvania.
6. A preservice and in-service teacher education plan on utilization of V-TECS was accomplished.

Audience

The results of the project and curriculum materials are very useful to vocational educators and students.

Publications and Available Materials

- Seventy different V-TECS catalogs are available to member states.

PA052022: Emission Mechanic Training Program Implementation

Erma D. Keyes
Vocational Education Information Network
Millersville State College
Millersville, PA 17551

\$21,000.00 Federal
0.00 Non-Federal
4/1/80 to 6/30/80
Project #83-9823

The purpose of the project was to obtain Emission Mechanic Training Program materials for placement in selected locations for initial groups of trainees.

Objectives

1. Implementation on classroom level of selected training material units designed to prepare emission control mechanics for automobile inspection stations.
2. Structuring of system to collect and record trainee fees as means of replacing disposable materials.

Outcomes

1. Thirty-seven (37) combination training packages of audio-visual and printed instructional materials were purchased from the developer, Creative Selling, Inc., and the Pennsylvania Department of Transportation. One unit will be kept in VEIN curriculum collection. Other units are placed with agencies under an agreement of performance with Pennsylvania Department of Transportation.
2. A recordkeeping system for collection of trainee fees will be maintained to restock training supplies at sites as needed.

Audience

This report and the training materials are useful to administrators and auto mechanics instructors of training programs for emission control system mechanics in Pennsylvania.

Publications and Available Materials

- Final Report.
- Audio-Visual Materials.
- Instructor Guide and Trainee Materials.

PA052035: Development of Directed Self-Instructional Modules To Be Used in Preparing Resource Persons

Richard A. Adamsky
Temple University
Room 455
Ritter Hall Addition
Philadelphia, PA 19122

\$50,167.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9825 (Cont.
of 85-8809)

The purpose of this project was to complete the development of directed self-instructional modules that was started during the 1978-79 fiscal year.

Objectives

1. Develop the following named modules:
 - Instruct others to set up and operate a video system
 - Register learners for CBTE programs
 - Provide administrative services
 - Conduct a CBTE orientation program
 - Assist learners in obtaining the various vocational instructional certificates issued in Pennsylvania
 - Conduct an observation session
2. Test each module with no less than five local teachers, and retest after revision (if needed).
3. Test the following modules, developed during the 1978-79 fiscal year, with the program staff:
 - Establish and maintain records in the VITAL-mis
 - Evaluate a product or process type teaching performance
 - Select appropriate modules
 - Conduct a small group meeting
 - Monitor the progress of a resident resource person
 - Facilitate a Council of Educator's Review
 - Conduct a helping conference
4. Test the modules developed during this fiscal year (1979-80) with the program staff during the 1980-81 fiscal year.

Outcomes

1. The six resource person preparation modules were developed and tested.
2. Summative testing of several modules previously developed was completed.
3. It was recommended that the materials be introduced to vocational teacher educators and that they use them with both pre and inservice teachers and curriculum development specialist interns.

Audience

The modules are especially useful for pre and inservice vocational teachers.

Publications and Available Materials

- Final Report.
- Six Modules As Listed in Objective 1.

35

PA052040: In-Service Training for Competency Based Vocational Education

Ralph M. Laymar
Lancaster County AVTS
Willow Street, PA 17584

\$ 6,750.00 Federal
\$26,550.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9811

The purpose of the project was to provide the supervised time necessary to expand previously attained progress in competency based vocational education and insure more complete and thorough utilization of procedures, techniques and materials.

Objectives

1. Develop, revise or update curriculum and instructional materials for a competency-based program.
2. Develop instructor competencies essential to the implementation of competency based education.
3. Identify instructor evaluation instruments indicators that verify the absence or presence of the essential elements of competency based education.

Outcomes

1. Revised Competency Based Education Implementation Plan.
2. Adopted School Board Policy that commits Lancaster County AVTS to competency based education.
3. Competency based education policy statement included in instructors' Policy Handbook.
4. Formation of Instructor Curriculum Committee.
5. D.O. Training Plans based on V-TECS Task Analysis.
6. Course Outlines in task format based on valid task analysis.
7. Selected task outlines verified by the local craft committee.
8. Performance Objectives identified for tasks and included in plans or instructional materials.
9. Appropriate strategies and/or materials selected or developed to implement learning objectives.

Audience

The resulting reports and curriculum materials are useful to Trades and Industrial, D.O., Agriculture, D.E., Health and Special Needs educators, administrators and curriculum planners.

Publications and Available Materials

- Final Report.

PA052034: The Establishment of a Coordinated Cooperative Educational Concept in Clearfield County

Charles Eisentrout
Clearfield County AVTS
R.R.#1, P.O. Box 5
Clearfield, PA 16830

\$29,753.00 Federal
\$50,802.35 Non-Federal
7/1/79 to 6/30/80
Project #84-9802 (Cont.
of 84-8825)

The purpose of this project was to continue the development of a coordinated cooperative program based on the county concept. The main component of the program was a centralized management and data collection system.

Objectives

1. To establish a coordinated cooperative education program to meet the needs of students and industry as determined by results of the needs assessment conducted in five participating school districts.
2. To continue the development and operation of a coordinated cooperative education program and to provide vocational opportunities to all students.
3. Maintain the centralized management record system and coordinate all activities of the cooperative education program from a central office.
4. To evaluate the effectiveness of the cooperative education program and make improvements where necessary.

Outcomes

1. Results of the needs assessment that was conducted in the five participating school districts was reviewed to determine availability of training stations and interest of students.
2. Coordinators were assigned specific geographic areas within the participating school districts. Students were placed according to their occupational objectives.
3. A central office for cooperative education was maintained for record keeping and data collection.
4. Data was collected continuously to evaluate the effectiveness of the cooperative program.

Audience

Results of this project may be useful to administrators and cooperative education program directors desiring to provide a variety of vocational offerings to students living in sparsely populated areas.

Publications and Available Materials

- Final Report.

PA052039: Competency-Based Teacher Improvement Program

Norman W. Waldman
Director of Vocational Education
Greene County AVTS
RD #2, P.O. Box 40
Waynesburg, PA 15370

\$2,075.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9817

The purpose of the project was to present to the faculty of the Greene County Area Vocational-Technical School a planned program of instruction over an extended time period. This program enlightened them regarding V-TECS and enabled them to tailor their instruction and to pattern it after this approved and acceptable method of competency-based vocational education.

Objectives

1. Establish a program of teacher education to produce those modules needed in a competency-based program.
2. Develop the need in the mind of these teachers involved to embrace competency-based instruction.
3. Show instructors how instruction can be enhanced by use of V-TECS.

Outcomes

1. Teachers will start to modify shop curriculum to enhance individual tasks.
2. Instructors will discard the obsolete tasks and add new tasks as reflected in needs of industry.
3. Lesson plans will be revised.
4. Evaluative criteria will be converted to a more meaningful measurement of performance.
5. Performance objectives will be developed to bring about better understanding of cognitive and psychomotor performances.

Audience

The results are useful to area vocational-technical school administrators planning in-service programs in competency-based vocational education.

Publications and Available Materials

- Final Report.

PA052036: Feasibility Study for Paravetic Competency Development of Vocational Agriculture Teachers

Donald E. Evans
The Pennsylvania State University
207 Old Main Building
University Park, PA 16802

\$4,970.00 Federal
0.00 Non-Federal
1/1/80 to 6/30/80
Project #83-9815

The purpose of the project was to conduct a feasibility study of the vocational agriculture teachers' need for animal health (paravetical) competencies.

Objectives

1. To identify the paravetic competencies needed by vocational agriculture teachers to teach high school students and adults via laboratory demonstrations or S.O.E. projects.
2. To identify methods for teaching the paravetic competencies.
3. To develop an awareness of the legalities pertaining to performance of paravetic competencies and develop a knowledge of the legalities affecting performance of these competencies.

Outcomes

1. Identification of animal health (paravetical) competencies to be taught to vocational agriculture teachers and the need for a comprehensive statewide in-service.
2. Development of the objectives for the statewide in-service and the selection of the methods for instruction.
3. Developed an awareness of the legalities that pertain to the performance of such animal health (paravetical) competencies.

Audience

The resulting reports and materials are useful to teacher educators and vocational teachers in agriculture education.

Publications and Available Materials

- Final Report.
- Animal Health Handbook for Vocational Agriculture Teachers - Curriculum Resource Library, Department of Agricultural Education, The Pennsylvania State University.
- "Paravetics," Pennsylvania Agricultural Education, January, 1980.
- "Assuring Competency in Paravetic Procedures," VocEd Journal, Agriculture Insider, Journal of American Vocational Association, May, 1980.
- "Paravetic Competency Feasibility Study for Vocational Agriculture," Center Update, Professional Personnel Development Center for Vocational Teacher Education, The Pennsylvania State University, Spring, 1980.

PA052049: Status of Gifted Students in Vocational Agriculture Classes in the United States

Himanshu S. Pandya
The Pennsylvania State University
207 Old Main Building
University Park, PA 16802

\$2,000.00 Federal
0.00 Non-Federal
11/30/79 to 5/30/80
Project #83-9811

The purpose of the project was to study the present status of gifted students in vocational agriculture classes.

Objectives

1. To explore the current enrollment status of gifted students in vocational agriculture classes in Pennsylvania and the United States.
2. To identify the different methods used by schools for identification of gifted students.
3. To explore the availability of career awareness education and the availability of curricular and co-curricular activities for gifted students who have enrolled in vocational agriculture.
4. To explore the opinions and knowledge of vocational agriculture teachers and their administrations toward gifted students and their programs.
5. To explore the present status of gifted students who graduated from high school vocational agriculture classes from 1974 to 1979.

Outcomes

1. In the last five years, the enrollment of gifted students in vocational agriculture classes has increased four-fold. At present there are 317 identified gifted students enrolled in vocational agriculture in Pennsylvania and approximately 22,000 are enrolled at the national level.
2. IQ tests and/or nomination by teachers are the most widely used by schools for the identification of the gifted.
3. Very few vocational agriculture teachers conducted career awareness programs for gifted students before they enrolled in vocational agriculture.
4. The need for information on how to teach the gifted in vocational agriculture classes was indicated by the teachers and their administrators.

Audience

The findings of this research are useful to teachers, administrators and researchers that are preparing gifted students in vocational agriculture.

Publications and Available Materials

- Final Report.

PA052046: Field Testing of the Greenhouse Production Section of a Horticulture Laboratory Record Book for Pennsylvania

Gene M. Love
The Pennsylvania State University
Department of Agricultural Education
102 Armsby Building
University Park, PA 16802

\$4,840.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #93-0003 (Cont.
of 93-9008)

The primary purpose of this study is to field test a greenhouse production crop record book.

Objectives

1. To determine if a relationship exists between the use of the greenhouse crop record book and student performance.
2. To determine if a relationship exists between the use of the unit of instruction and student performance.

Outcomes

1. A unit of instruction on potted-chrysanthemum was effective in promoting cognitive learning about potted-chrysanthemum production.
2. The potted-chrysanthemum unit and the greenhouse record book when used independently were effective in helping students grow better quality potted-chrysanthemums.

Audience

The results are most useful to greenhouse production and horticulture instructors.

Publications and Available Materials

- Final Report.

PA052016: An Evaluation of the SUN Area Vocational-Technical School's (AVTS) Twelfth-Year Program

Patrick F. Toole
Central Susquehanna Intermediate Unit
P.O. Box 213
Lewisburg, PA 17837

\$26,500.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #83-9802 (Cont. of
83-8806)

The purpose of the project was to evaluate a new delivery system instituted during the 1978-79 school year at the SUN AVTS which would permit students to enroll in a one-year, full-time program of instruction at the AVTS as seniors. This twelfth-year program would replace the about three-year, two-week system previously in use at the school.

Objectives

1. Collect and analyze data on the primary evaluation questions: Do students who are enrolled in the twelfth-year program at the SUN AVTS have changed attitudes and social adjustment when compared to students who are not enrolled in the program? and, Do students enrolled in the twelfth-year program have better skills and trade knowledge than students who are not enrolled in the program?
2. Collect and analyze information on the secondary evaluation concerns: twelfth-year AVTS attendance, withdrawals, employer satisfaction, placement, enrollment, teacher attitudes, and benefit to handicapped students; costs, scheduling, withdrawals, and staff opinion.

Outcomes

A battery of standardized tests, personal interviews and questionnaires was used to collect data on the primary evaluation questions. Examination of various unobtrusive indicators provided data on the secondary questions. Results of the study indicate:

1. That no significant differences were found between twelfth-year students and vocational students not enrolled in the program in: skills and trade knowledge, attitudes and social adjustment, attendance and employer satisfaction.
2. That home school costs and withdrawal rates have not risen; scheduling is easier, and home school personnel view the program positively.
3. That the program has had a high rate of early drops and "no-shows;" the number of drops during the school year has not increased.
4. That enrollment to capacity or near capacity is critical to the program's success; the SUN AVTS has not yet achieved a high enrollment.

Audience

The evaluation's findings are of interest to school administrators and vocational educators.

Publications and Available Materials

- Final Report.

PA052122: School Improvement in Vocational Education in Pennsylvania (SIPVE)

Thomas E. Long
Consultant Researcher
1926 Crawford Avenue
Altoona, PA 16602

\$4,781.00 Federal
0.00 Non-Federal
5/1/80 to 6/30/80
Project #83-0001

The purpose of the project was to relate Pennsylvania's School Improvement Program to school improvement efforts in education.

Objectives

1. Study the School Improvement model in-depth.
2. Study the Research Coordinating Unit model in-depth.
3. Cite their relative strengths and limitations for promoting school activities in area vocational-technical schools.
4. Study the special problems of area schools in involving sending schools in activities aimed at improving: communication, articulation, problem identification, planning activities and evaluation.
5. Recommend a plan for future school improvement activities in area schools.
6. For school improvement activities cite the potential roles of: Pennsylvania Department of Education - Research Coordinating Unit, Intermediate Units and Higher Education.
7. Study the elements of school districts' long range plans and their relationships to vocational education delivery systems.

Outcomes

1. The study of the School Improvement model and Research Coordinating Unit model was completed. The strengths and limitations for promoting school improvement in the vocational schools were identified.
2. Special problems with involving sending schools were discussed.
3. A plan for school improvement was identified and cited the potential roles of the Pennsylvania Department of Education, Research Coordinating Unit, Intermediate Units and Higher Education.

Audience

This report is especially useful to Pennsylvania Department of Education staff working on a model for involving vocational schools in the school improvement program.

Publications and Available Materials

- Final Report.

PA052011: Characteristics of Unemployed Youth

David Lynn Passmore
Division of Occupational and
Vocational Studies
The Pennsylvania State University
University Park, PA 16802

\$4,941.00 Federal
\$1,624.00 Non-Federal
5/1/80 to 6/30/80
Project #83-9820

The purpose of this study was to prepare a descriptive profile of unemployed youth, 16 through 19 years, in the civilian, noninstitutionalized population of the United States and to provide a discussion of the implications of this profile for federally reimbursed vocational education programs.

Objectives

1. Provide a comprehensive review of the characteristics of unemployed youth.
2. Classify the characteristics of unemployed youth according to demographic, educational and social variables.
3. Construct a descriptive profile of unemployed youth.
4. Determine the distinguishing characteristics of unemployed youth.
5. Derive implications for planning vocational programs.

Outcomes

1. The report described the definition and scope of youth joblessness for policy analysis and consideration in vocational education.
2. The report pointed out the following necessary steps for vocational education:
 - Clarification of whether vocational education sees the reduction of youth joblessness as a goal
 - Determination of the barriers to youth employment, beyond youth skill deficits, that could constrain what vocational education could do to reduce youth joblessness
 - Consideration of the consequences of youth joblessness so that whether vocational education should attempt to design policies and actions to reduce youth joblessness can be determined

Audience

The report produced should be useful to planners and policy-makers in vocational education as well as to students of the youth labor market.

Publications and Available Materials

- Final Report.

PA052014: Development of Guidelines for Provisions for Serving Nonpublic School Students in Public Vocational Education Programs in Pennsylvania

Raymond G. Wasdyke
Educational Testing Service
Princeton, NJ 08541

\$9,498.00 Federal
0.00 Non-Federal
3/1/80 to 6/30/80
Project #93-0011

The purposes of the Guide are to identify for state and local educators the statutory requirements regarding nonprofit, private school student access to publicly funded vocational education programs, to provide a ready reference to these statutes and to discuss implementation issues which occur.

Objectives

1. Review and analyze precedent and current federal and state legislation, rules and regulations, codes and guidelines that relate to nonpublic students' participation in public educational offerings.
2. Conduct on-site visits to selected vocational programs in Pennsylvania to identify exemplary cooperative arrangements between nonpublic and public educators.
3. Develop a publication to guide state and local vocational educators in increasing nonpublic students' access to vocational programs.

Outcomes

1. The review and analysis of federal and state legislation relating to nonpublic student participation in public education was completed.
2. Exemplary cooperative arrangements between nonpublic and public education were identified.
3. A procedural guide for promoting more participation of nonpublic students in publicly funded vocational education was developed.

Audience

This report is especially useful to vocational administrators that are planning programs for nonpublic students.

Publications and Available Materials

- Final Report--"A Procedural Guide for Providing Access for Nonprofit, Private School Students to Publicly Funded Vocational Education Programs."

PA052010: Professional Horticulture Competencies for Entry Level and Experienced Vocational Horticulture Teachers in Pennsylvania

A. Ronald Attarian
Department of Agricultural Education
The Pennsylvania State University
University Park, PA 16802

\$1,845.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #83-9805

The purpose of this study was to identify the professional horticulture competencies that a vocational horticulture teacher must perform successfully, and to distinguish between those competencies needed by an entry level teacher and those competencies needed by an experienced teacher.

Objectives

1. To determine professional horticulture competencies needed by entry level and experienced vocational teachers as identified by:
 - Undergraduate students in agricultural education and horticulture
 - Beginning vocational horticulture teachers
 - Experienced vocational horticulture teachers
 - Administrators and craft committee members
2. To determine differences between teacher respondents on the ratings of professional horticulture competencies with regard to: sex, age, educational level, major in college, years of teaching experience, teacher department size, main area of horticulture taught, and years of horticulture work experience.

Outcomes

1. One-hundred eighty competencies were considered necessary for an entry level vocational horticulture teacher.
2. Two-hundred forty-four competencies were considered necessary for an experienced vocational horticulture teacher.
3. Significant differences in the ratings of the horticulture competencies were observed based on teachers' level of education, undergraduate major in college, size of the vocational agriculture department, and horticulture subject area taught.

Audience

The results are especially useful to vocational horticulture teachers, administrators, and craft committee members in vocational horticulture schools in Pennsylvania.

Publications and Available Materials

- Final Report.

PA052062: Development of V-TECS Catalog of Performance Objectives and Performance Guides for Solar Heating Mechanic

Dan K. Jacobs
Associated Educational Consultants, Inc.
North Allegheny Office and Research Park
McKnight and Pine Creek Roads
P.O. Box 15073
Pittsburgh, PA 15237

\$2,152.00 Federal
0.00 Non-Federal
7/1/79 to 12/31/79
Project #85-9822 (Cont.
of 85-8803)

The purpose of the study was to assess work done in the domain of Solar Heating Mechanic (no Dictionary of Occupational Titles code) and to draw implications from the findings relative to products to be developed for V-TECS which would culminate in a catalog of performance objectives and guides for the domain.

Objectives

1. To gather information relevant to the domain and to assess the work done.
 - To operationally delimit the tasks of Solar Heating Mechanic.
 - To identify available lists of duties and/or tasks performed by incumbent workers.
 - To identify and categorize, by content, available curriculum resource materials.
 - To identify job-relevant standards associated with job performance.
 - To identify lists of tools and equipment used on the job task.
2. To identify incumbent workers.
3. To identify and validate lists of tools/equipment and tasks performed.
4. To utilize teams of teachers and incumbent workers/supervisors from the domain to produce and verify a catalog of performance guides and objectives for validated tasks of the domain.

Outcomes

1. The activities of the project were accomplished by: literature searches; mailed and personal inquiries; interviews; mailed, self-administered survey; and utilization of writing and field review teams.
2. The following products were submitted to V-TECS: State-of-the-Art Report, Domain Report, Population Report, Occupational Inventory, data decks, Writing Team Report, Field Review Catalog, Final Catalog of Performance Objectives and Performance Guides.

Audience

The final catalog was distributed by V-TECS to member states and U.S. Military associate members to use as a basis for competency-based vocational curriculum in solar programs.

Publications and Available Materials

- Copyrighted materials (Domain Report, Occupational Inventory, Final Catalog) are available to non-members of the V-TECS Consortium on a fee basis.

PA052061: Development of V-TECS Catalog of Performance Objectives and Performance Guides for Heavy Equipment Mechanic

Dan K. Jacobs
North Allegheny Office and Research Park
McKnight and Pine Creek Roads
P.O. Box 15073
Pittsburgh, PA 15237

\$2,998.00 Federal
0.00 Non-Federal
7/1/79 to 12/31/79
Project #85-9823 (Cont.
of 85-8804)

The purpose of the study was to assess work done in the domain of Heavy Equipment Mechanic (D.O.T. Code 620.261-022) and to draw implications from the findings relative to products to be developed for V-TECS which would culminate in a catalog of performance objectives and guides for the domain.

Objectives

1. To gather information relevant to the domain and to assess the work done.
 - To identify and categorize, by content, available curriculum guides.
 - To identify and categorize, by content, available instructional materials.
 - To identify available lists of duties and/or tasks performed by incumbent workers.
 - To identify job-relevant standards associated with job performance.
 - To identify lists of tools and equipment used on the job task.
2. To identify incumbent workers.
3. To identify and validate lists of tools/equipment and tasks performed.
4. To utilize teams of teachers and incumbent workers/supervisors from the domain to produce and verify a catalog of performance guides and performance objectives for validated tasks of the domain.

Outcomes

1. The activities of the project were accomplished by: literature searches; mailed and personal inquiries; interviews; mailed, self-administered survey; and utilization of writing and field review teams.
2. The following products were submitted to V-TECS: State-of-the-Art Report, Domain Report, Population Report, Occupational Inventory, data decks, Writing Team Report, Field Review Catalog, Final Catalog of Performance Objectives and Performance Guides.

Audience

The final catalog was distributed by V-TECS to member states and U.S. Military associate members to use as a basis for competency-based vocational curriculum in heavy equipment programs.

Publications and Available Materials

- Copyrighted Materials (Domain Report, Occupational Inventory, Final Catalog) are available to non-members of the V-TECS Consortium on a fee basis.

PA052017: Development of a Model for Integrating Industrial Arts into a Planned Program of Vocational Education at the Senior High School Level

Ralph M. Layman
Lancaster County AVTS
1730 Hans Herr Drive
Willow Street, PA 17584

\$44,476.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #84-9805 (Cont.
of 93-9007)

The purpose of this project was to develop a model for integrating Industrial Arts into a planned program of Vocational Education. When students cannot attend an AVTS full-time, they will not be afforded the opportunity through this program to learn a wide variety of fundamental competency based occupational skills to prepare them for entry level employment.

Objectives

1. Integrate the three Industrial Arts clusters with five related vocational Trade and Industrial clusters.
2. Identify fundamental skills contained in the validated V-TECS task lists for selected occupations that can be taught in the several industrial Arts shops.
3. Coordinate articulation with the local AVTS for those tasks that cannot be taught in the I/A shop.
4. Design a model to enable common competency based occupational skills to be taught as an option to the regular Industrial Arts program, titling this new program "Occupational Skills Development" (OSD).

Outcomes

1. Non-AVTS students will have an opportunity to acquire competency based common core vocational skills in several occupational areas while still pursuing a full academic program in their home high school.
2. The flexibility of an OSD program enables it to be implemented into virtually any existing I/A program.
3. This cluster-type vocational program fills the void between I/A and V/E by providing fundamental "need-to know" skill training for students unable to enroll in an AVTS.

Audience

The material contained in this project report will be useful to Academic and Vocational Administrators, Industrial Arts and Vocational Education teachers, guidance counselors, curriculum personnel and others interested in or involved with teaching Trade and Industrial subjects.

Publications and Available Materials

- Final Report.

PA052009: Competency-Based Vocational Education Orientation and Implementation for Professional Staff

Merrill I. Hughes
Delaware County Intermediate Unit
Sixth and Olive Streets
Media, PA 19063

\$4,465.00 Federal
0.00 Non-Federal
1/1/80 to 6/30/80
Project #84-9814

The purpose of this project was to prepare the professional staff at the three Delaware County Area Vocational-Technical Schools with the skills necessary to implement competency-based instruction.

Objectives

1. It was proposed that 25 staff members from eight clusters would be coached through the development of a criterion referenced measure.
2. Ten new staff members will be introduced to and provided opportunities to develop skills in CBVE.

Outcomes

1. One hundred thirty-six CRM were completed for the following areas: masonry, health assistant, horticulture, commercial art, cosmetology, drafting, food service, appliance repair, data processing, automotive mechanics, warehousing, and building trade maintenance.
2. Ten new staff members were successfully introduced to CBVE.

Audience

The results of this project are especially useful to vocational teachers preparing criterion reference measures for CBVE.

Publications and Available Materials

- Final Report.

PA052008: Task Level Articulation: Secondary and Postsecondary Vocational Education Programs

Luene Corwin
Williamsport Area Community College
Williamsport, PA 17701

\$24,910.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #84-9809 (Cont.
of 84-8823)

The purpose of this project was to continue operationalization and pilot testing of a task level articulation model which incorporates competency based education as a basic premise. Masonry, horticulture, and drafting occupational areas were added while implementation continued in electrical, carpentry, and welding.

Objectives

1. To continue implementation and evaluation of the initial steps of the articulation model (development of common secondary/postsecondary task lists, competence standards, and student record sheets) for the occupational program clusters on which work was begun in 1978-79 and add three occupational areas.
2. To pilot and evaluate the actual articulation process with students entering postsecondary programs for which initial steps of the articulation model have been completed.
3. To develop and disseminate a report on the task level articulation model, its implementation at WACC, and its adaptability to other institution.

Outcomes

Secondary and postsecondary instructors from masonry, horticulture, and drafting worked in groups to develop the following:

1. A complete task list encompassing all competencies taught based upon occupational task analysis.
2. A competency statement sheet for each task based on industry expectations, which includes performance objective, product standards, and process guide.
3. Student competency record sheets and strategies for actual articulation between secondary and postsecondary educational levels.

Electrical, carpentry, and welding instructors implemented usage of competency record sheets, revalidated task lists, and advanced placed students into postsecondary programs based on their mastery of competencies.

Audience

The resulting reports will be of interest to persons developing articulation projects and to instructors in the given occupational areas.

Publications and Available Materials

- Final Report.
- Task List and Competency Statements. (Available directly from Williamsport Area Community College for the cost of duplication and postage)

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PA052013: The Expansion and Implementation of a Coordinated Cooperative Educational Concept in Schuylkill County

Ray L. Taylor
Schuylkill County AVTS
420 N. Centre St.
Pottsville, PA 17901

\$37,600.00 Federal
\$36,425.00 Non-Federal
7/1/79 to 6/30/80
Project #84-9803

The third year of the coordinated county cooperative concept was designed to provide assistance and supervision to all the home school (public and non-public) districts in a joint effort to avoid duplication of effort in: supervision, business and industry contact, public relations, travel, written materials and communication; improve and expand existing cooperative education programs; develop additional programs, and minimize operating costs; overcome and/or avoid problems found in the field of cooperative education; and standardize procedures.

Objectives

1. Expand the now coordinated cooperative education program for the vocational school and the twelve public school districts and the three non-public schools, including the programs for the handicapped and disadvantaged in Schuylkill County. Stress the availability of the coordinated cooperative program personnel to serve the needs of all students and serve the needs of all potential cooperative situations on an individual or group basis.
2. Update a county-wide industrial survey data collection system in order to identify Schuylkill County employment needs.
3. Placement and coordination of 100 Diversified Occupations students, male and female, in traditional and non-traditional areas.
4. Placement and coordination of 240 Capstone students, male and female, in traditional and non-traditional areas.

Outcomes

1. The new management system provided a clearinghouse at the AVTS for all job leads and related curriculum for Capstone students with general and specific theory for Diversified Occupations students.
2. Schuylkill County AVTS has maintained a follow-up Graduate Survey and an Industrial Survey which has been utilized every two years in an attempt to record the success of our graduates and the present and future needs of all employers in our county.

Audience

The resulting reports, forms, procedures, and guidelines would be useful to I.U. #12, Supervisors of Cooperative Education, Guidance Personnel and CETA personnel.

Publications and Available Materials

- Final Report.
- All Forms and Procedures.
- Revised Curriculum Materials.

PA052012: A Survey on Vocational Services Available for Hearing Impaired Students

Donna LeFevre
Bloomsburg State College
Bloomsburg, PA 17815

\$1,564.00 Federal
0.00 Non-Federal
11/19/79 to 6/30/80
Project #83-9812

The purpose of this study was to determine whether the vocational schools in Pennsylvania were adequately providing supportive services to hearing impaired students.

Objectives

1. To determine what services were being made available to the hearing impaired student.
2. To determine what training was given to vocational staff on the topic of deafness.
3. To determine what counseling and follow-up was being conducted with the hearing impaired vocational graduate.

Outcomes

1. A very small percent of hearing-impaired students are enrolled in the vocational schools.
2. Important services such as interpreters, special curriculums and teacher assistance were infrequently offered.
3. Little or no follow-up was offered to graduates.
4. In-service in the area of deafness is uncommon, and few personnel who have contact with the hearing-impaired students were trained in the problem of deafness.

Audience

The results are useful to vocational educators that are planning programs and services for the hearing impaired student.

Publications and Available Materials

- Final Report.

PA052024: Determining the Transferability of the 916 Materials to Pennsylvania Vocational Education - A Pilot Study

Richard A. Adamsky
Temple University
Ritter Hall Addition
Philadelphia, PA 19122

\$9,000.00 Federal
0.00 Non-Federal
4/1/80 to 6/30/80
Project #93-0012

The purpose of the project was to develop and test a model program specifically designed to help local vocational teachers try CBE. The purpose was fulfilled through focusing on the following objectives.

Objectives

1. Identify local level institutions interested in trying CBE.
2. Identify vocational teachers from these school (#1) interested in trying CBE.
3. Purchase and/or develop materials that will facilitate individualized instruction.
4. Design a system which can promote individualized instruction.
5. Design a staff development program for preparing local level personnel to operate an individualized program.
6. Prepare local level staff (#4).
7. Install and evaluate program.

Outcomes

Objectives 1-5 (above) were met within the duration of this project. Such was accomplished through cooperation with the RCU staff, meetings with vocational personnel, and visitations at 916 AVTS in White Bear Lake, Minnesota.

Audience

The report (final) would have interest to RCU staff alone, but the materials purchased from 916 AVTI have broad applicability to Pennsylvania vocational education. In addition, the persons involved in this project have developed skills, knowledge, and attitudes which ideally suit them to serve as resource persons to others wishing to utilize 916 AVTI materials to install individualized instructional programs (CBE).

Publications and Available Materials

- Final Report.

PA052026: Providing Support Services to Vocational Education Task Articulation Sites

Richard A. Adamsky
Department of Vocational Education
Temple University
Philadelphia, PA 19122

\$2,410.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #84-9811

The purpose of the project was to insure that four task-level articulation sites would be provided with needed help and consistent information during the 1979-80 fiscal year.

Objectives

1. Articulation sites will have made progress toward establishing fully articulated curriculum.
2. Articulation sites will have more fully opened communication channels among themselves and between themselves and the project consultant.
3. Articulation site leaders will have developed more positive feelings toward establishing "open-entry open exit" curricula.

Outcomes

Through general meetings of all site leaders, site visitations, and materials review and feedback sites made progress toward their stated objectives, communications improved, and site leaders internalized the need for "open-entry open exit" curricula.

Audience

This report should be of value to those agencies seeking to promote task-level articulation in Vocational Education.

Publications and Available Materials

- Final Report.

PA052050: DECA Leadership Training and Post-High School Leadership Roles

Ona Kay Lee Kinter
4443 Greengrove Drive
Allison Park, PA 15101

\$1,634.00 Federal
0.00 Non-Federal
9/1/79 to 6/30/80
Project #83-9807

The purpose of this study was to determine how former state officers of the Pennsylvania Association of Distributive Education Clubs of America continued beyond high school to demonstrate leadership in work, postsecondary institutions and/or communities.

Objectives

1. To determine whether former state officers of DECA continue beyond high school to demonstrate leadership as they assume their roles in business, postsecondary education and/or in their community.
2. To determine the extent to which these former state officers attribute development of leadership characteristics and skills to training experienced during their membership in the Pennsylvania DECA association.
3. To determine the effects of DECA and the distributive education program in relation to occupational understanding, civil consciousness, social intelligence, and leadership skills.

Outcomes

1. More than half of the eighteen officers of academic years 1970-71 through 1977-78 responded to a mailed self-administered questionnaire.
2. More than two-thirds of those who work are in jobs related to marketing and distribution. About two-thirds held management positions.
3. Over half participated in work related activities, and elective or appointive positions and awards for excellence attested to leadership.
4. Over half of respondents attending postsecondary institutions were in extracurricular activities, and elected or appointed to leadership positions.
5. Nearly three-fourths of the respondents took part in community activities.

Audience

The results are useful to educators working with vocational youth clubs.

Publications and Available Materials

- Final Report.

PA052027: Development of Competency-Based Instruction Modules for Finding Simple Interest, Bank Discounts, and Bank Reconciliations in Business Mathematics

Charles F. Dye
Coordinator of Business Education
York College of Pennsylvania
Country Club Road
York, PA 17405

\$3,688.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9803

The purpose of the project was to provide an opportunity for college students to acquire certain established competencies in business math.

Objectives

To develop modules in the following skill areas: simple interest, bank discounts and bank reconciliations.

Outcomes

1. Advice was obtained from the Business Teacher Education Advisory Committee on the design and contents of the modules.
2. Competencies for each module were established.
3. The following modules were completed: Simple Interest, Bank Discounts, and Bank Reconciliations.

Audience

The modules are especially useful to postsecondary business teachers.

Publications and Available Materials

- Final Report.
- Modules on Simple Interest, Bank Discounts, and Bank Reconciliations.

PA052021: A Study of Instructional Innovators in Home Economics Units in Higher Education Institutions

Ruth Marshall
Home Economics Education Program
The Pennsylvania State University
212 Rackley Building
University Park, PA 16802

\$1,945.00 Federal
365.00 Non-Federal
10/1/79 to 6/30/80
Project #83-9810

The purpose of this study was to learn about instructional innovators in home economics units of higher education.

Objectives

The objective of this study was to test home economics educators in higher education who identify themselves as more innovative and how they differ significantly from those who identify themselves as less innovative when their:

1. Scores for factors which influence being innovators are compared.
2. The two groups are compared on selected personal and instructional variables.
3. The two groups are compared on instructional innovativeness variables.

Outcomes

1. Each of the three hypotheses was partially accepted.
2. The more innovative and less innovative differed significantly on the number of meetings attended and on scores for three of the factors: innovative instructional strategies, determinants of instructional strategies and innovatively related perceptions.
3. In terms of the availability and use of resources for instructional improvement, the groups differed in their use of instructional grants, in their total use of available resources and on percentage score which resulted from dividing the number of resources used/awarded by the number of resources available.

Audience

The results of this study should facilitate the planning for such things as faculty development programs and instructional support systems by home economics administrators and professional organizations.

Publications and Available Materials

- Final Report.

PA052174 Phase II Evaluation of Certain Aspects of Vocational Education Personnel
Development Centers

Thomas P. Ryan
Appalachia Educational Laboratory Inc.
Post Office Box 1348
Charleston, WV 25325

\$18,737.00 Federal
0.00 Non-Federal
12/3/79 to 6/30/80
Project #83-9813 (Cont.
of #83-8807)

The purpose of the project was to supplement the process and product evaluation of the four VEPDC Centers (at Indiana University of Pennsylvania, The University of Pittsburgh, The Pennsylvania State University, and Temple University) through mail surveys of a representative sample of the clients of the Centers.

Objectives

1. Provide, through mail surveys to clients, information to the Pennsylvania Department of Education for better direction of use of funding resources in VEPDCs, establishment of an improved rationale for administering basic funding, and improvement of accountability for the use of the funds.
2. Provide a final report, including individual reports on each Center and a summary for all four Centers.

Outcomes

The activities of the project were accomplished through a series of twelve tasks related to planning, instrument development, pilot testing, revision, administration to 1,931 participants, data collection, analysis and reporting. The product of the project is the final report detailing the responses of 855 respondents with statewide and single-Center summaries.

Audience

The Pennsylvania Bureau of Vocational Education, the Centers, and those interested in the Center's approach to Vocational Education personnel development.

Publications and Available Materials

- Final Report.

PA052002: Guidelines for Establishing Programs and Services for Displaced Homemakers

Kathryn Towns
The Pennsylvania State University
Capitol Campus
Middletown, PA 17057

\$20,082.00 Federal
8,865.00 Non-Federal
9/15/79 to 6/30/80
Project# 84-9812

The goal of this project is to prepare a publication which will assist vocational education staff and community groups in providing services and programs for the displaced homemaker.

Objectives

1. Develop the rationale for programs and services to displaced homemakers.
2. Develop methods for doing a needs assessment.
3. Research special needs of particular populations of displaced homemakers; e.g., rural, rich, etc.
4. Develop methods for planning and implementing a displaced homemaker program.
5. Develop evaluation guidelines for services and programs.
6. Survey vocational-technical schools, community colleges, CETA prime sponsors, The Pennsylvania State University's Continuing Education sites and known community organizations to determine services provided or planned for displaced homemakers.
7. Develop a list of funding sources.

Outcomes

1. A publication of 117 pages entitled "Guidelines for Establishing Programs and Services for Displaced Homemakers;" 300 copies delivered to sponsor in May 1980.
2. Results of survey from 146 respondents; see Appendix B of Final Report.
3. A dissemination workshop presented at Pennsylvania's 1980 Vocational Education Conference.

Audience

The publication is particularly useful for Pennsylvania's Area Vocational-Technical Schools but can be of assistance to all who work with the displaced homemaker.

Publications and Available Materials

- Final Report.
- Guidelines for Establishing Programs and Services for Displaced Homemakers, Available from RCU in Harrisburg, Pennsylvania

PA052007: Auctioneering Training Certificate Program

William R. Ferencz
Harrisburg Area Community College
3300 Cameron Street Road
Harrisburg, PA 17110

\$11,538.00 Federal
0.00 Non-Federal
1/14/80 to 6/30/80
Project #93-0007

The purpose of this project was to prepare the documents necessary for a task analysis of the career field of auctioneering. Using these materials it will be possible later to develop a catalog of duties and tasks, performance objectives and guides, and instructional materials which will be designed to enable persons to enter the auctioneering career field successfully.

Objectives

1. Investigate the sources which contain information about the duties and tasks of auctioneering.
2. Investigate the sources which contain information about the materials used by auctioneers.
3. Investigate the sources which contain information relative to instructional programs in auctioneering.
4. Delineate the population of auctioneers to be surveyed.
5. Prepare an Occupational Survey.

Outcomes

1. A State of the Art Report was completed.
2. An Occupational Survey Form was completed.
3. Preparations were made to write a catalog of tasks and performance objectives for auctioneering.

Audience

The results are especially useful to curriculum planners preparing competency-based instructional material for auctioneers.

Publications and Available Materials

- State of the Art Report.
- Occupational Inventory.
- Final Report.

PA052028: A Multi-Media Package To Promote Positive Parental Attitudes Toward
Non-Traditional Vocational Education

Richard L. Wiles
Nova Productions, Inc.
Post Office Box 870
Butler, PA 16001

\$34,241.00 Federal
0.00 Non-Federal
7/1/79 to 4/30/80
Project #85-9805 (Cont.
of 93-9023)

The purpose of this project was to encourage the achievement of true sex barriers in vocational education and decrease the tendency to make occupational choices based upon sex-role stereotyping among students and their parents.

Objectives

1. To produce a 15 minute color/sound film to increase awareness of and change attitudes about occupational sex-role stereotyping.
2. To prepare an associated trainer's guide book.
3. To prepare a parent handbook.
4. To prepare promotional materials.

Outcomes

1. A 15 minute sound/color 16 mm film was developed. The film covered successes of employees in non-traditional occupations, legal rights to opportunities in all occupations, changes in composition of the work force, changes in role of the family, and opportunities for vocational training.
2. A teacher guide was developed that covered each aspect of the film.
3. A parent handbook was developed that covered information on key issues of the film.

Audience

The materials are especially useful for parents of middle school students.

Publications and Available Materials

- Final Report.
- Fifteen-Minute Sound/Color Film, "Vocational Education in a Changing World"
- Teacher Guide.
- Parent Handbook.
- Promotional Materials.

PA052020: A Survey of Vocational School Teachers' Knowledge of Hearing Loss and Their Attitudes Toward Hearing-Impaired Students

Bette L. Hoover
Bloomsburg State College
Bloomsburg, PA 17815

\$1,565.00 Federal
0.00 Non-Federal
11/19/79 to 6/30/80
Project #83-9808

The purpose of this study was to gain information on the types of in-service programs that are needed to prepare vocational educators to serve the needs of hearing-impaired students in their classes.

Objectives

1. To determine the vocational school teachers' attitudes toward hearing-impaired students mainstreamed in their classes.
2. To determine the vocational school teachers' knowledge of the special educational needs of the mainstreamed students in their classes.

Outcomes

1. The data indicated that vocational teachers had a fair amount of knowledge about hearing-impaired students in their classes.
2. The attitudes toward the mainstreamed students were neutral.
3. Vocational teachers' knowledge about hearing loss was highly correlated to their attitudes toward their mainstreamed hearing impaired students.

Audience

The resulting information is useful to educators preparing vocational teachers to teach the hearing impaired student.

Publications and Available Materials

- Final Report.

PA052015: Continuation of Task Level Articulation Project Between CCAC, CCN and Parkway West Area Technical School

Larry L. Whitworth
1130 Perry Hwy.
Pittsburgh, PA 15237

\$24,980.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #84-9807

This project was designed to achieve task level articulation between a postsecondary institution's welding program and a secondary school's metal fabrication program. It also intended to begin articulation of heating and air-conditioning programs at the respective schools.

Objectives

1. To pursue task level articulation in welding/metal fabrication and heating/air-conditioning.
2. To conduct a task analysis among metal fabrication and heating/air-conditioning employers to determine tasks required in performance of job duties.
3. To form Craft Advisory Committee for heating/air-conditioning and welding.
4. To articulate welding and heating/air-conditioning programs at Allegheny Community College North and Parkway West AVTS using the performance-based lab projects as a guide to coordination.

Outcomes

1. Articulation agreements were made between CCN and nine secondary schools in Allegheny County in the following programs: secretarial science, applied electronics, heating/air-conditioning and auto mechanics.
2. Craft Advisory Committees were actively assisting in determining tasks for heating/air-conditioning and welding.
3. Plans were made to coordinate audio-visuals and resource materials with competency based curriculum with all the educational institutions in the articulation project.
4. Plans were made to provide staff development in competency based instruction for all faculty in the articulation project.

Audience

The curriculum materials and final report would be useful to curriculum planners and instructors in welding/metal fabrication and heating/air-conditioning.

Publications and Available Materials

- Final Report.

PA052018: School Improvement Plan Competency-Based Instruction

Joseph J. Vallone
Upper Bucks County AVTS
Perkasie, PA 18944

\$17,329.00 Federal
\$31,304.00 Non-Federal
1/1/80 to 6/30/80
Project #84-9819

The purpose of this project was to develop a long range plan that will allow teachers, administrators and board members to maintain and improve programs and services contributing to the goals of the school. It will also permit the identification and mastery of new skills needed by the staff to manage programs and services.

Objectives

1. To develop an individualized instructional program based on each student's choice.
2. To develop an open entry/open exit for students.
3. To develop an opportunity to move from secondary to postsecondary without penalty or repetition of skills already learned.
4. To develop documentation to prospective employers of skills actually possessed by each prospective student.
5. To develop a system to update course content.
6. To develop a basis for equipment purchase and facility modification.
7. To develop an equal opportunity regardless of special needs of the student.

Outcomes

1. The teachers were instructed in the use of the D.O.T., and through the project activities were able to more adequately define the scope of their program.
2. Instructors identified members of a craft committee related to their occupation and determined ways in which the committee could contribute to the development of competency based programs.
3. Secured a task analysis of their occupation and validated the tasks that apply to each occupation identified and defined by the instructor according to the D.O.T.

Audience

The resulting report is useful to teachers, curriculum specialist, supervisor of vocational education and vocational directors.

Publications and Available Materials

- Final Report.

PA052033 Competency-Based Vocational Education - Staff Development

Robert H. Kifer
Greater Johnstown Area Vocational Technical School
445 Schoolhouse Road
Johnstown, PA 15904

\$3,148.00 Federal
1,208.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9815

The purpose of the project was to engage in curriculum improvement activities as identified by individual teachers through a self-evaluation process with the end result being the development of competency based materials and the skills necessary to implement the materials.

Objectives

1. Fourteen teachers will develop a working understanding of CBVE.
2. Fourteen teachers will engage in self-evaluation of curriculum materials developed prior to the project to determine activities in most need of work.
3. Each teacher will develop products or plan a course of action to deal with the weaknesses identified through the self-evaluation process.

Outcomes

1. A better understanding of CBVE as interpreted by the Administrative Staff.
2. Self-evaluation of curriculum developed to date.
3. Setting of objectives to accomplish and develop products centered around activities designed to integrate CBVE/ideas into existing programs.
4. Work on the development of an instructional improvement plan.

Audience

All materials developed can be used by individual teachers and shared with the entire staff where they will serve as models for curriculum improvement.

Publications and Available Materials

- Competency Lists, as Automechanics
- Competency Learning Guides.
- Self-Evaluation Forms.
- Final Report.

PA052031: The Relationship Among Vocational Educators' Open-Mindedness, Knowledge of Adolescent Childbearing Attitudes Toward Pregnant Adolescents and Adolescent Expectant Fathers

Tena St. Pierre
The Pennsylvania State University
University Park, PA 16802

\$1,827.00 Federal
\$ 317.00 Non-Federal
7/1/79 to 11/30/79
Project #83-9803

The purpose of this project was to investigate the relationship among vocational educators' attitudes toward adolescent parents, their degree of open-mindedness, and their knowledge of the problems of adolescent parenthood. In addition, these variables were examined by sex of vocational educators as well as by sex of adolescent parents.

Objectives

1. There will be no statistically significant relationship between male and female vocational educators' degree of open-mindedness, knowledge of adolescent parenthood and their attitudes toward adolescent parents.
2. There will be no statistically significant difference in male and female vocational educators' attitudes toward male and female adolescent parents.
3. Regardless of degree of open-mindedness and knowledge, there will be no statistically significant difference in male and female vocational educators' attitudes toward adolescent parents and male and female adolescent parents.

Outcomes

1. There was a significant relationship between both male and female vocational educators' degree of open-mindedness and attitudes toward male and female adolescent parents. The same was found for the relationship between their knowledge and attitudes. The higher their degree of open-mindedness, the more positive were their attitudes toward both adolescent parents. Those with a higher knowledge of the problem of adolescent parenthood had a more positive attitude toward both male and female adolescent parents.
2. Male vocational educators had equal attitudes toward male and female adolescent parents. The same was found true for female vocational educators. Attitudes were generally positive toward both sexes of adolescent parents.
3. Male and female educators who were more open-minded had more positive attitudes; those who had greater knowledge of the problem had more positive attitudes. Female vocational educators had significantly greater knowledge of the problem and more positive attitudes than their male cohorts.

Audience

The resulting information would be useful to vocational educators.

Publications and Available Materials

- Final Report.

PA052045: The Relationship of Nutrition Knowledge, Attitudes, and Dietary Behavior to Commitment Toward Teaching Nutrition

Carol Byrd-Bredbenner
The Pennsylvania State University
University Park, PA 16802

\$1,970.00 Federal
365.00 Non-Federal
11/1/79 to 6/30/80
Project #83-9809

The purpose of this study was to investigate the relationships of nutrition knowledge, attitudes and commitment for teaching nutrition. Comparisons were made with six different samples of graduates from The Pennsylvania State University (1968-1978) in nutrition, home economics, nursing, elementary education, health and physical education and other related fields.

Objectives

1. To assess knowledge of certain nutrition concepts, attitudes and dietary adequacy of each of the six groups.
2. To determine the commitment to teaching nutrition.
3. To determine if differences and relationships exist in nutrition, knowledge, attitudes, commitments and dietary behavior among each of the six groups.

Outcomes

1. Nutritionists and home economics scored significantly higher on nutrition and attitude scales than the other four groups.
2. Nutritionists and home economics scored higher on the commitment scale than the other groups except the health and physical educators.
3. Females achieved significantly higher scores on measures of nutrition knowledge, attitudes and commitment, but males scored significantly higher than females on dietary behavior.
4. No significant differences on any measures were associated with enrollment in post-baccalaureate education.

Audience

The results of this study are especially useful to educators and researchers in the field of nutrition and dietary behavior.

Publications and Available Materials

- Final Report.

PA052043: Articulation Between Secondary and Postsecondary Vocational Programs

Theresa Marciniak
Reading Area Community College
Reading, PA 19603

\$24,999.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #84-9808 (Cont.
of 84-8818)

The purpose of the project was to establish a competency-based vocational business program with the Berks County High School business departments. This project involves task-level articulation in the secretarial skills area and provides students with a training continuum from the secondary to postsecondary level.

Objectives

1. To identify performance standards for the secretarial tasks and design evaluative criteria.
2. To identify or develop performance guides and resource needs for each task.
3. To identify alternative learning activities and delineate strategy for initiating the program.
4. To develop articulation agreements.

Outcomes

1. Performance standards have been established for the first year courses offered in the Executive, Medical and Legal Secretarial Science options.
2. The performance objectives and performance guides were validated by the advisory committees.
3. A medical V-TECS catalog was developed by the Medical Advisory Committee.
4. Competency-based credit-by-exam tests for typing and shorthand were developed to award credit for competencies.
5. The articulation project is being expanded to include Child Development and Data Processing for the next funding year.

Audience

The reports, survey materials and results, and curriculum materials are useful to secretarial skills instructors at the secondary and postsecondary levels.

Publications and Available Materials

- Final Report.
- Medical V-TECS Catalog.
- Competency-Based Syllabi for Typing 1, 2 and 3; Shorthand 1, 2 and 3; and Business Communications.

PA052025: An Adaptive Vocational Program for Trainable Retarded Youngsters

Henry Pilker
School District of the City of Erie
1511 Peach Street
Erie, PA 16501

\$23,980.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #93-0002 (Cont.
of 93-9006)

The purpose of the project was to research the educational value of placing trainable retarded students in regular vocational shops.

Objectives

1. To formulate IEPs based on parental, professional and student attitudes toward the area that could best benefit the student.
2. To place studnets in various vocational shops that will benefit them in everyday self-help skills.
3. To acquaint the TMRs regular students and regular teachers with each other's characteristics.

Outcomes

1. IEPs will continue to be done with parents, special education teachers and vocational teachers involved.
2. The TMR student did not meet with successful experiences in shops selected to develop vocational skills. The student found no benefit in shops such as carpentry, masonry, electricity, etc.
3. The self-help skills portion was successful. Students take pride in going to shops such as Health, Cosmotology, etc., and are learning skills such as basic cooking, hair and nail care, teeth care, etc.
4. The interaction with students and teachers should be encouraged.

Audience

The resulting report is most useful to special education administrators, teachers and aides.

Publications and Available Materials

- Final Report.

PA052171: Brochure for Preserving and Expanding Pennsylvania Industry -
"Pennsylvania New Industry Training Service"

Daniel A. Clark
Altoona Area Vocational-Technical School
1500 Fourth Avenue
Altoona, PA 16603

\$5,500.00 Federal
\$ 750.00 Non-Federal
4/1/80 to 6/30/80
Project #84-9822

The purpose of this project was to publish a brochure explaining why new industry should locate in Pennsylvania.

Objectives

1. To identify Pennsylvania's many available resources so that industry will be attracted to locate in this state.
2. To disseminate information identifying the cooperative arrangements between vocational education and industries locating in Pennsylvania.
3. To explain how new industry training service (Occupational Training) can save companies money through tailor-made training.
4. To explain that training begins before industry starts construction and continues until they are fully staffed.

Outcomes

1. A brochure was published and distributed showing the desirable capability and environment for growing and developing business/industry in Pennsylvania.
2. The brochure contains information concerning the arrangements between Pennsylvania Education institutions and industry; explanation of a specialized industrial training service for new and expanding industry, and a list of all the area vocational schools and community colleges offering vocational-technical programs.

Audience

This brochure is especially useful for Pennsylvania's Vocational Education institutions and business/industry.

Publications and Available Materials

- Final Report.

PA052032: Curriculum Development Competency-Based Instruction

James E. Bell
Eastern Northampton AVTS
R.D. 1, Kesslerstown Road
Easton, PA 18042

1,250.00 Federal
550.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9810

The purpose of this project was to implement Competency-Based Vocational Education at Eastern Northampton AVTS.

Objectives

1. Each instructor will have a list of at least thirty competencies written in a performance module for his/her area.
2. Each instructor will have written five modules of instruction based on the completed competencies. Each module will contain an information sheet, task sheet and a stated method of evaluation.
3. Each instructor will validate the scope of the program by using graduate follow-up studies and the D.O.T. This information, along with the curriculum materials developed, will be validated by a craft committee.

Outcomes

1. Eight instructors were trained at a Summer Workshop on Competency-Based Instruction.
2. Each instructor was able to complete from two to five training modules written around validated tasks.
3. In general, the instructors felt the training they received was very helpful and all indicated that they would implement CBI in their program.

Audience

The results of this project are especially useful to vocational school staff involved with the implementation of CBI.

Publications and Available Materials

- Final Report.
- Two Sample Modules.

PA052019: Vocational Education Needs of Handicapped Youth Project

Patrick F. Toole
Central Susquehanna Intermediate Unit
P.O. Box 213
Lewisburg, PA 17837

\$40,893.00 Federal
0.00 Non-Federal
3/1/80 to 6/30/80
Project #83-9818

The purpose of this project is to identify vocational preparation programming factors that may affect the performance and successful outcomes of handicapped students. Activities during the planning phase from March 1, 1980 to June 30, 1980 included the development and administration of an inventory of services and programs in the vocational education schools in Intermediate Units 11, 15, 16 and 17, the development of evaluation criteria, research methodology, follow-up data collection procedures and the initiation of literature searches and other research information collection activities.

Objectives

1. To determine the current state of vocational education programs offered to handicapped students by vocational education schools, home schools, and various local community programs through the development and administration of an inventory.
2. To identify and develop evaluation criteria to be employed in the research project.
3. To develop research methodology.
4. To expand the information based on program options.
5. To establish an advisory committee.

Outcomes

A major conclusion of this project was that the number of handicapped students admitted and the quality of the services given to handicapped students by the vocational education schools depend on several factors. These factors are: communications, the relationship between the intermediate unit, vocational education schools and home schools, and a non-discriminatory attitude toward handicapped students.

Audience

This report would be of interest to school administrators and vocational educators.

Publications and Available Materials

- Preliminary Report.
- Project Inventory.
- Final Report.

PA0521/2: In-Service Training for Competency-Based Vocational Education

William H. Clark, Jr.
Venango County AVTS
1 Vo-Tech Drive
Oil City, PA 16301

\$1,425.00 Federal
\$1,272.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9820

The purpose of this in-service was to implement V-TECS as a support to the existing curriculum at Venango AVTS.

Objectives

1. Instructors will use V-TECS materials as a support to their existing curriculum.
2. Instructors will develop competency-based instructional materials.
3. Evaluators will define the scope of their progress by listing the competencies to be achieved by their students.

Outcomes

1. Seven instructors have been involved in developing CBVE materials.
2. V-TECS materials as well as other CBVE materials were used in this development.
3. An evaluation of the results was planned for 80-81.

Audience

This report may be useful to vocational school staff planning and conducting CBVE in-service training.

Publications and Available Materials

- Final Report.

PA052161: Emerging Careers in Energy - The Northeast Vocational Energy Education Consortium

Kenneth Ertel
Center for Occupational Continuing
Education
University of Massachusetts
Amherst, MA 01003

\$1,600.00 Federal
0.00 Non-Federal
2/1/80 to 6/30/80
Project #83-9821

The purpose of the project was to bring together the state directors of vocational education from Regions I and II for the purpose of forming an energy education consortium.

Objectives

1. To form a consortium of state agencies responsible for vocational energy education.
2. To agree on the purpose, form, governance, management structure, and financing of the consortium.
3. To share information on the form and types of energy-related education occurring in the states.
4. To provide each state with information which will assist state departments of education in creating a coordinated state plan for vocational energy education and to provide input for a long range plan for vocational energy education in the Northeast.

Outcomes

1. Nine states from Regions I and II form the Northeast Energy Education Consortium.
2. It was agreed that each state would provide some interim funding for the initial operation of the consortium.
3. A report on the energy education activities of each state was prepared.
4. A draft of "Emerging Careers in Energy" was completed.

Audience

This report would be of value to state directors of vocational education and other school administrators interested in organizing an energy education program.

Publications and Available Materials

- Interim Final Report.

PA052059: Development of V-TECS Catalog of Performance Objectives and Performance Guides for Medical Secretary/Medical Record Clerk (V-TECS Project 4223)

Curvin C. Smith
Associated Educational Consultants, Inc.
North Allegheny Office and Research Park
McKnight and Pine Creek Roads, P.C. Box 15073
Pittsburgh, PA 15237

\$27,330.00 Federal
0.00 Non-Federal
7/1/79 to 5/31/80
Project #85-9801

The purpose of the study was to assess work done in the domain of Medical Secretary (D.O.T. Code 201.362-014) and Medical Record Clerk (D.O.T. Code 245.362-010) and to draw implications from the findings relative to products for V-TECS catalog development.

Objectives

1. To gather information relevant to the domain and to assess work done in the domain area.
2. To operationally delimit the tasks of Medical Secretary and Medical Record Clerk.
3. To identify sources of determining delimiting criteria for the population of incumbent workers.
4. To identify incumbent workers.
5. To identify and validate lists of tools/equipment and tasks performed.

Outcomes

1. The activities of the project were accomplished by: literature searches; mailed and personal inquiries; interviews; mailed, self-administered survey; and utilization of writing and field review teams.
2. The following products were submitted through the State V-TECS Technical Coordinator to V-TECS according to a prescribed, sequential schedule: State-of-the-Art Report; Population Report; Occupational Inventory; Writing Team Report; Field Review Catalog; Final Catalog of Performance Objectives and Performance Guides.

Audience

The final catalog was distributed by V-TECS to member states and U.S. Military associate members to use as a basis for competency-based vocational curriculum in medical secretary and medical record clerk programs.

Publications and Available Materials

Copyrighted materials (Occupational Inventory, Final Catalog) are available to non-members of the V-TECS Consortium on a fee basis. Lists of materials and data available to member states are available from V-TECS or the State Technical Coordinator.

PA052127: Teacher In-Service, Competency-Based Instruction

John M. Kaufmann
Carbon County AVTS
13th Street
Jim Thorpe, PA 18229

\$1,375.00 Federal
\$ 675.00 Non-Federal
7/1/79 to 6/30/80
Project #84-0001

The purpose of this project was to introduce CBI to the instructors using the V-TECS format.

Objectives

1. Write occupational descriptions and assign D.O.T. code(s) to define the scope of the course.
2. Perform an occupational analysis.
3. Begin duty/task analysis.
4. Analyze a test (CRM) according to the criteria in the instructional planning guide.
5. Explain trainer/facilitators intended supportive role to all instructors.

Outcomes

1. Scope of course was completed for three programs.
2. Duty/task analysis was completed for three programs.
3. C.R.M. instruments were completed for some instructional materials.
4. A select number of teachers and administrators were given in-service training on CBVE.

Audience

The results of this project are especially useful to vocational schools that are in the process of implementing CBVE.

Publications and Available Materials

- Final Report.

PA052156: Evaluation of Coordinated Cooperative Education Programs, in Clearfield, Fulton, and Schuylkill Counties

Frederick G. Welch
Division of Occupational
and Vocational Studies
The Pennsylvania State University
University Park, PA 16802

\$4,976.00 Federal
\$1,856.00 Non-Federal
7/1/79 to 6/30/80
Project #84-9813

The purpose of the project was to evaluate the second year of the county-wide coordinated cooperative education programs funded by the Research Coordinating Unit in Clearfield, Fulton, and Schuylkill counties.

Objectives

1. To determine the effect the coordinated cooperative education project had upon high youth unemployment and school dropout rates.
2. Sample students' attitudes toward the second year of the cooperative education program concerning placement, on-the-job supervision, theory class, extra-curricular activities, etc.
3. Sample employers' reactions toward the consolidated efforts to determine its effectiveness in alleviating duplication and encouraging participation by employers in the cooperative education program.
4. To determine how well the individually funded projects are meeting their stated objectives.

Outcomes

1. The projects were meeting the stated objectives.
2. The employers indicated a willingness to continue training the students and felt that coordinated efforts of the program had made their job easier. They appreciated having to contact only one individual instead of several from each school district and program areas.
3. The guidance counselors felt the co-op program had improved over the past year and they were enthusiastic toward the consolidated co-op approach. Students felt their program to be valuable and stated that the employers were visiting them approximately twice each month.

Audience

The results would be especially useful to co-op coordinators implementing a consolidated co-op approach.

Publications and Available Materials

- Final Report.

PA052162: An Appraisal of the Temple University Undergraduate Distributive Education Program Based on a Ten-Year Follow-Up Study of the Graduates

Eileen R. Shorr
Temple University
13th and Columbia Avenue
Philadelphia, PA 19122

\$2,000.00 Federal
0.00 Non-Federal
2/1/80 to 6/30/80
Project #83-9816

The purpose of this follow-up study of Temple University distributive education graduates of the undergraduate program was to determine if they developed the skills needed to function in distributive education positions.

Objectives

1. Appraise and evaluate the distributive education program at Temple University.
2. To determine post-college activities of the graduates.
3. To increase D.E. teacher education curriculum relevancy.
4. To increase competency proficiency levels for future Pennsylvania D.E. teachers.
5. Model survey instrument for evaluation of teacher education programs in distributive education.
6. Suggestions for improving program management in D.E. teacher education.

Outcomes

1. Computer programs for evaluation of D.E. teacher education programs.
2. Valuable information for starting new collegiate distributive education programs and for improving presently existing programs.
3. Survey instrument easily adaptable for use in evaluating all collegiate vocational education programs.

Audience

This report is especially useful to distributive education educators.

Publications and Available Materials

- Final Report.

PA052169: In-Service Training or Instructors Designed To Build the Necessary Skills Needed To Plan, Develop and Implement Competency-Based Vocational Education

H. William Fisk, Jr.
Berks Vocational -Technical School
2900 St. Lawrence Ave.
Reading, PA 19706

\$22,321.00 Federal
\$17,656.00 Non-Federal
1/1/80 to 6/30/80
Project #84-9815

The purpose of this project was to assist teachers in building the necessary skills in order to plan, develop and implement competency-based vocational education.

Objectives

1. To conduct in-service training to help instructors develop the competencies necessary to plan, develop and integrate competency-based materials into their present programs.
2. To conduct in-service training to help instructors develop the necessary skills to prepare for pilot testing of competency-based materials and approaches for managing such a system.
3. To provide for substitute teachers in order to give regular instructors the necessary release time. Permanent full-time teachers will be hired so that all classrooms are properly supervised and meaningful instruction is occurring during the regular teacher's absence.
4. To prepare modules for specific units of instruction in order to prepare for the pilot testing stage of the implementation of CBVE.
5. To pilot test developed materials to build a data base from which decisions can be made to determine whether the necessary skills have been developed by the teachers.

Outcomes

1. Teachers participated in 455 days of release time from the classroom during which time they developed various CBVE skills.
2. Consumerism curriculum was developed and implemented by the full-time substitutes; therefore, the students were exposed to learning activities which will support their vocational-education programs.
3. Sample modules were developed for pilot testing.
4. Some basic modules were pilot tested.
5. Developed materials to be used by the teachers in building CBVE skills.

Audience

The resulting reports and curriculum materials are useful to teachers and curriculum planners of vocational-technical schools or programs.

Publications and Available Materials

- Final Report.

PA052129: Development of V-TECS Catalog of Performance Objectives and Performance Guides for Baker (V-TECS Project 4224)

Dan K. Jacobs	\$23,067.00 Federal
Associated Educational Consultants, Inc.	0.00 Non-Federal
North Allegheny Office and Research Park	10/15/79 to 6/30/80
McKnight and Pine Creek Roads, P.O. Box 15073	Project #93-0005
Pittsburgh, PA 15237	

The purpose of the study was to assess work done in the domain of Baker (Hotel and Restaurant) - D.O.T. Code 313.381-010, Pastry Cook (Hotel and Restaurant - D.O.T. Code 313.381-026, and Baker (Bakery Products) - D.O.T. Code 526.381-010 and to draw implications from the findings to develop V-TECS catalogs.

Objectives

1. To gather information relevant to the domain and to assess work done in the domain area.
2. To identify available lists of duties and/or tasks performed by incumbent workers.
3. To identify job relevant standards associated with job performance.
4. To identify incumbent workers.
5. To identify and validate lists of tools/equipment and tasks performed.
6. To utilize teams of teachers and incumbent workers/supervisors from the domain to produce and verify a catalog of performance guides and performance objectives for validated tasks of the domain.

Outcomes

The activities of the project were accomplished by: literature searches; mailed and personal inquiries; interviews; mailed, self-administered survey; and utilization of writing and field review teams.

Audience

The final catalog was distributed by V-TECS to member states and U.S. Military associate members to use as a basis for competency-based vocational curriculum in baker programs.

Publications and Available Materials

Copyrighted materials (Occupational Inventory and Final Catalog) are available to non-members of the V-TECS Consortium on a fee basis. Lists of materials and data available to member states are available from V-TECS or the State Technical Coordinator.

PA052170: Curriculum Coordinator Program

Glenn E. Motter
Harrisburg Steelton-Highspire Technical School
Harrisburg, PA 17110

\$9,353.00 Federal
0.00 Non-Federal
2/1/80 to 6/30/80
Project #84-9816

The purpose of the project was to implement a program of competency-based vocational education in all trade areas.

Objectives

The First - 2/1/80 to 6/30/80

1. Review of all courses of study by curriculum coordinator.
2. Introduce V-TECS and other available competency-based curriculum materials to instructors.
3. Review craft committee membership and assist instructors in updating where needed.
4. Plan in-service training for new and existing staff to update curriculum for meeting guidelines of competency-based vocational education.

Outcomes

First Year - 2/1/80 to 6/30/80

1. A rationale for change and updating of curriculum was completed.
2. Occupations that determine the scope of the programs were completed.
3. Craft committees were identified for some programs.
4. In-service training on various aspects of CBVE was conducted.

Audience

The resulting reports and curriculum materials are useful to vocational educators and curriculum planners in the field of vocational education.

Publications and Available Materials

- Final Report.

PA052175: Competency-Based Curriculum Teacher In-Service Education Program

Donald F. Drake
Monroe County AVTS
P.O. Box 66
Bartonsville, PA 18321

\$2,225.00 Federal
4,140.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9809

The purpose of this project was to update the curriculum at the Monroe County AVTS.

Objectives

1. The objective of the Summer in-service competency-based curriculum is to work with each instructor on an individual basis to institute and develop a competency-based curriculum and instructional program.
2. Every instructor at the Monroe County AVTS will be working on various stages of development of their individual competency-based curriculum.
3. The direct result of this in-service time will be that each instructor will be able to institute competency-based programs for the 1979-80 school year.

Outcomes

1. All 18 of the instructors received training on CBVE.
2. Six of the instructors are progressing very rapidly into the implementation stage of CBVE.
3. Plans were made to provide additional training on CBVE.

Audience

The results of this project are very useful to persons training vocational teachers to implement CBVE.

Publications and Available Materials

- Final Report.

PA052157: Development of a V-TECS Catalog for the Occupational Title: Audio-Visual Repair

Gale L. Dargitz
Local Government Research Corporation
1315 South Allen Street
State College, PA 16801

\$19,525.00 Federal
0.00 Non-Federal
10/15/79 to 6/30/80
Project #93-0006

This project is directed toward the development of a V-TECS Catalog for the occupational title of audio-visual repair, intended to provide improved curriculum resource materials. The catalog will contain validated duties, tasks, performance objectives and guides including a tools and equipment list. During this reporting period research and preliminary reports were completed, employees and incumbents identified, and the occupational inventory booklet prepared. The catalog will be completed during the next fiscal year.

Objectives

1. Research the current status of performance-based instructional materials in the area of audio-visual repair.
2. Assemble information on worker's performance of identified tasks.
3. Identify employers and incumbents in the occupation of audio-visual repair.
4. Prepare a comprehensive list of tools and equipment, and duties and tasks in the occupational area.
5. Utilize the above data and materials to develop a V-TECS catalog of performance objectives based on validated task analysis during the next project year.

Outcomes

1. The literature search resulted in over eighty useful references which yielded a definition of the D.O.T. title, competency-based resources materials, curriculum guides, instructional materials and sources of standards associated with the tasks performed.
2. The population in the domain area was identified and delimited, and occupational demand and needs were analyzed.
3. Approximately 86 public sector and private sector employers of some 238 audio-visual repairers were identified and they agreed to participate in the occupational inventory survey.
4. The occupational inventory booklet and the methodology for conducting the survey were developed.

Publications and Available Materials

- Final Report (First Project Year)
- State-of-the-Art Study, Audio-Visual Repairer, February 1980
- Population Report, Audio-Visual Repairer, April 1980
- Occupational Inventory, Audio-Visual Repairer, June 1980

PA051911: The Effects of Parental Sex-Role Attitudes on the Self-Concept and Sex-Role Identity of Preschool Children

Penny L. Kuchta
The Pennsylvania State University
212 Rackley Bldg.
University Park, PA 16802

\$1,354.00 Federal
\$ 182.00 Non-Federal
7/1/79 to 6/30/80
Project #83-9801

The purpose of this research was to provide for a better understanding of human development and family relationships.

Objectives

1. To determine the difference in self-concept and sex-role identity between children of traditional and emerging sex role attitude parents.
2. To examine the relationship among sex-role identity, sex of the child, and self-concept of the preschool children of traditional and emerging parents.

Outcomes

Sixty pairs of parents, thirty that held emerging sex-role attitudes and thirty that held traditional sex-role attitudes, were selected in terms of their responses to a sex-role attitude measure. After the two groups of parents were identified, their preschool children's self-concept and sex-role identity was assessed by a self-report and a projective technique, respectively. Statistical analyses compared the two groups of children's sex, self-concept and sex-role identity. Also, the relationship among sex, self-concept, and sex-role identity was explored.

Audience

Results will contribute to existing information concerning sex-roles and self-concept to help educators make better decisions. Knowledge of the effects of parental attitudes will also aid parents in decision-making and provide information for parenthood curriculums.

Publications and Available Materials

- Final Report.

PA052173: Identifying Competencies for the Certification of Supervisors of Vocational Education in Pennsylvania

Donald F. Drake
Dept. of Vocational Education
255 Ritter Annex
Philadelphia, PA 19122

\$1,984.00 Federal
\$ 0.00 Non-Federal
10/1/79 to 6/30/80
Project #83-9814

The purpose of the study was to develop a valid set of competencies considered to be essential to the success of supervisors of vocational education in Pennsylvania.

Objectives

1. What is the role of the vocational supervisor in Pennsylvania?
2. What competencies are considered to be essential to the success of vocational education supervisors in Pennsylvania?

Outcomes

1. The role of the vocational education supervisors was identified.
2. A test of competencies essential to be a successful vocational education supervisor in Pennsylvania was identified.

Audience

The results are very useful for teacher training institutions involved with vocational education supervisor training.

Publications and Available Materials

- Final Report.

PA052158: Dissemination of Technological Updating Materials for Instructors of Electronic Programs

Frederick G. Welch
207 Old Main
University Park, PA 16802

\$5,676.00 Federal
\$ 487.00 Non-Federal
4/1/80 to 6/30/80
Project #84-9820

The purpose of the project was to edit 22 hours of videotape to produce approximately 12 hours of tape dealing with technological updating for electronic instructors.

Objectives

1. Edit 22 hours of technological updating video recording that can be useful at the local school level by those persons who attend the workshop.
2. Package the edited videotapes.
3. Encourage school to duplicate the tapes.
4. Disseminate the edited materials to vocational schools.

Outcomes

1. Eighteen hours of electronic technology videotapes were produced.
2. Workshops were held for electronic technology updating.

Audience

The tapes are useful to electronic instructors and students in vocational, electronic training programs.

Publications and Available Materials

- Final Report.

PA052159: Dissemination of Technological Updating Materials for Instructors
of Automotive Programs

Frederick G. Welch
207 Old Main
University Park, PA 16802

\$5,676.00 Federal
\$ 487.00 Non-Federal
4/1/80 to 6/30/80
Project #84-9821

The purpose of the project was to edit 23 hours of videotape to produce approximately 15 hours of tape dealing with automotive technology.

Objectives

1. Edit 23 hours of technological updating video recordings that can be useful at the local school.
2. Package the edited videotapes.
3. Encourage schools to duplicate the tapes.
4. Disseminate the edited materials to vocational schools.

Outcomes

1. Twenty hours of automotive technology videotapes were produced.
2. Workshops were held for automotive technology updating.

Audience

The tapes are useful to automotive instructors and students in secondary and postsecondary vocational programs.

Publications and Available Materials

- Final Report.
- Twenty Hours of Videotapes.
- Abstracts for Each Tape.

PA052178: Solar Energy Curriculum Materials for Building Trades Instructors

Dalton Paul
Route 6
Chambersburg, PA 17201

\$5,394.00 Federal
0.00 Non-Federal
4/1/80 to 9/30/80
Project #84-0002

The purpose of this project was to update vocational education building trades instructors' knowledge and information in the field of solar energy.

Objectives

The participants will be able to:

1. Identify the tasks performed by a solar energy mechanic.
2. Identify the tools and equipment necessary to perform the tasks identified in competency #1.
3. Become aware of state national resources available for developing solar energy skills.
4. Utilize practical techniques to demonstrate solar energy applications in the building trades.
5. Become aware of theoretical concepts related to solar energy applications.

Outcomes

1. Eighteen building trades instructors were given informational and "hands-on" activities on solar energy during a three-day summer conference at Shippensburg State College.
2. During the conference, six domestic solar hot water systems were constructed by the participants. These included two passive systems and four active systems. Schools with multiple attendance were given the constructed systems to take with them and use as instructional aids in their home district.
3. Provisions were made for the collection of technical data from participants who received the systems and installed them in their local school. The data is used to compare the efficiency of systems and provide information to instructors and students.

Audience

The resulting materials and information are designed primarily for building trades vocational programs.

Publications and Available Materials

- Sets of Plans for Domestic Hot Water Systems That Were Constructed During the Workshop (Plans Are Available on a Cost-Efficiency Basis.)
- Final Report--Contact RCU in Harrisburg, Pennsylvania

PA052177: In-Service Training for Competency-Based Vocational Education

George L. Lange
Beatty and Cooper Rds.
Monroeville, PA 15146

\$5,625.00 Federal
\$ 500.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9816

The purpose of this project was to team the teachers of Forbes Road East AVTS with the skills needed to implement CBVE.

Objectives

1. Ability to identify and create tasks for each occupation in teachers' fields.
2. Ability to identify and write better performance objectives.
3. Additional knowledge in the ways of providing continuous information to the students and parents.
4. Ability to design learning activities.
5. Ability to select and better use craft advisory committees.
6. Additional knowledge in the processes of follow-up studies.

Outcomes

1. Teachers were able to identify and create tasks for their program areas.
2. In-service program implemented for the school year 1979-1980.
 - Each program area met with the Advisory Committee to gain input about curriculum.
 - Resources materials purchased for each area to aid in the writing of the above.
 - Operation and job sheets written for the tasks in each area.
 - Written pretests and posttests for each module.

Audience

The resulting reports and curriculum materials are useful to teachers and curriculum planners of vocational-technical schools or programs.

Publications and Available Materials

- Final Report.

PA052163: Consortium for the Development of Professional Materials for Vocational Education

Kenneth W. Sloan
1960 Kenny Road
Columbus, Ohio 43210

\$19,950.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80
Project #85-9827

The purpose of this consortium was to provide an organizational structure to facilitate the continuing development and field testing of professional development materials for vocational education.

Objectives

1. To develop and field test six competency-based modules for use in the preparation of local administrators of secondary and postsecondary vocational education programs.
2. To assume responsibility for completing the field testing and revision of seven modules begun during the first year of the consortium.

Outcomes

The following seven modules were field tested:

1. Direct Curriculum Development
2. Guide the Development and Improvement of Instruction
3. Direct Program Evaluation
4. Promote the Vocational Education Program
5. Provide a Staff Development Program
6. Manage Student Recruitment and Admissions
7. Involve the Community in Vocational Education

The following modules were developed:

8. Prepare Vocational Education Budgets
9. Manage the Purchase of Equipment, Supplies, and Insurance
10. Manage Vocational Buildings and Equipment
11. Evaluate Staff Performance
12. Select School Personnel

All of the member states have joined the consortium for the third year.

Audience

The report and modules are very useful for the member states in the consortium.

Publications and Available Materials: Final Report.

PA052165: V-TECS Catalog Development: Dairy Farmer

Gene M. Love
Agricultural Education Dept.
The Pennsylvania State University
University Park, PA 16802

\$20,511.00 Federal
\$ 0.00 Non-Federal
10/15/79 to 6/30/80
Project #93-0004

The purpose of the project is to plan and develop an occupational catalog for the Vocational-Technical Consortium of States (V-TECS) in the occupation Dairy Farmer. With curriculum development for the occupation, dairy farmer, teachers will be able to rely on recent empirical data concerning the duties and tasks performed by persons in that occupation. The resultant curriculum materials should provide up-to-date performance oriented curriculum materials for production agriculture classes.

Objectives

1. To identify and list the essential duties and tasks needed for successful performance as a dairy farm worker.
2. To develop performance objectives for each task identified as essential for successful performance as a dairy farm worker.
3. To develop performance guides for each task identified as essential for successful performance as a dairy farm worker.
4. To develop a list of essential tools and equipment needed for successful performance as a dairy farm worker.

Outcomes

1. The State of the Art Report.
2. The delineation of the survey population.
3. Submitted the Occupational Inventory.

Audience

The resultant catalog will be made available to teachers of agricultural production. Initial impact should accrue to the consortium states but the curriculum materials will eventually spread nationwide.

Publications and Available Materials

- State of the Art Report.
- The Incumbent Survey.
- Occupational Inventory for the Dairy Farmer.