REPORT RESILUES

A PROPOSAL FOR THE ESTABLISHMENT OF A STATE COORDINATING UNIT FOR OCCUPATIONAL RESEARCH AND DEVELOPMENT. FINAL REPORT.

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MAJOR EMPHASIS, DURING THE FIRST YEAR OF OPERATION, WAS ON-- (1) ACTING AS LIAISON WITH STATE AGENCIES, LABOR GROUPS, AND OTHERS INTERESTED IN RESEARCH IN VOCATIONAL EDUCATION, (2) WORKING WITH INSTITUTIONS OF HIGHER EDUCATION IN INITIATING AND CONDUCTING RESEARCH RELATED TO VOCATIONAL EDUCATION, (3) ENCOURAGING SCHOOL DISTRICTS TO DESIGN AND CONDUCT RESEARCH PROJECTS, (4) PROVIDING CONSULTATIVE SERVICES FOR INSTITUTIONS OR GROUPS CONDUCTING RESEARCH IN VOCATIONAL EDUCATION, (5) LOCATING COMPLETED RESEARCH, (6) DISSEMINATING RESEARCH FINDINGS, (7) AIDING SCHOOL DISTRICTS AND INSTITUTIONS IN SECURING FUNDS TO CONDUCT RESEARCH IN VOCATIONAL EDUCATION, AND (8) SPONSORING INSERVICE TRAINING FOR THOSE INTERESTED IN RESEARCH RELATED TO VOCATIONAL EDUCATION. CONSULTING HELP ON RESEARCH DESIGN WAS GIVEN TO 34 LOCAL SCHOOL DISTRICTS, 14 JUNIOR COLLEGES, 14 COLLEGES AND UNIVERSITIES, AND 14 PRIVATE ORGANIZATIONS. THE UNIT ASSISTED WITH 32 RESEARCH PROJECTS IN OPERATION, FUNDED, OR SUBMITTED TO THE U.S. OFFICE OF EDUCATION. IT CONTACTED OR COORDINATED WORK WITH NINE NATIONAL GROUPS, 18 CALIFORNIA GROUPS, 15 INDIVIDUALS CONDUCTING RESEARCH UNDER THE VOCATIONAL EDUCATION ACT OF 1963, SECTION 4(C), AND 30 CONFERENCES IN WHICH STAFF MEMBERS PARTICIPATED ON 11 PROGRAMS. THE DISSEMINATION FUNCTION INCLUDED ESTABLISHING & LIBRARY OF RESEARCH DOCUMENTS AND MICROFICHE FROM THE EDUCATIONAL RESOURCES INFORMATION CENTER AND THE DEFENSE DOCUMENTATION

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FINAL REPORT
Project No. OE 5117
Contract No. OE 5-85-116

A PAGPOSAL FOR THE ESTABLISHMENT OF A STATE COORDINATING UNIT FOR OCCUPATIONAL RESEARCH AND DEVELOPMENT

July 1967

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

> Office of Education Bureau of Research

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

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A PROPOSAL F'R THE ESTABLISHMENT OF A STATE COORDINATING UNIT FOR OCCUPATIONAL RESEARCH AND DEVELOPMENT

> Project No. OE 5117 Contract No. OE 5-85-116

> > Everett D. Edington

July 1967

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

Vocational Education Section
California State Department of Education

Sacramento, California



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INTRODUCTION

This is a final report for the project, "A Proposal for the Establishment of a State Coordinating Unit for Occupational Research and Development", Contract No. OE-5-85-116. The original project was funded under Section 4(c) of the Vocational Education Act of 1963, to be in operation from June 1, 1965, until November 30, 1966. Due to problems encountered in securing staff, the program did not begin operation until June 1, 1966, and the original grant period was extended until June 30, 1967.

The major functions of the Research Coordinating Unit are those of coordination, dissemination, consultation and stimulation of research related to vocational education. The original proposal listed the following specific activities which the Unit would perform to accomplish the general functions:

Location of research and development dealing with or relating to occupational education in all fields of vocational education.

Preparation of synopses of results of occupational research and development and of that which relates to occupational education.

Compilation of annotated bibliographies of occupational research and development and related materials arranged by inherent topics.

Dissemination of prepared materials through cumulative releases as a means of establishing continuous contact with State and local staffs and individuals and agencies.

Dissemination of annotated bibliographies to State and local staffs involved with occupational education, to groups and individuals considering formulation of investigations, to personnel working in related fields.

Dissemination, statewide, to supervisors, classroom teachers, school administrators, school trustees, counselors, teacher educators, or compilations of results of occupational research and development in meaningful and applicable terms.

Compilation of a graphic master chart of information about occupational education that the Unit has drawn together. This master chart will serve for reference, and in addition, as information appears, for the purpose of advising, counseling, stimulating the initiation of investigations and developmental experimentation that will yield information, shown by the master-chart method, to be lacking.



Permissive consultation with those planning submission of research projects under Section 4(c) of P.L. 88-210 to stimulate them to plan their proposals in relation to needed information that will yield results and implications applicable to the statewide program of vocational education.

Liaison relationships and activities with all units and agencies in the State and country dealing with segments of research and development that relate to occupational education.

Development with the Departmental data processing unit of tabulation and storage systems for the coordination of located information, if such a system seems feasible and contributory to facilitating the ease of accessible use of information, or to facilitating the master plan of information available and needed.

Preparation of inter-relationships of available data when such manipulation of data can yield and shed new light and implications for translation into program direction.

Consultation with State and local staffs responsible for the development and operation of vocational education programs about the direction and procedures to use in accomplishing program evaluation.

Consultation with State and local staffs responsible for program development and operation in vocational education to assist them (1) in identification of problem areas in which information is needed to move programs forward; and (2) in preparation of valid designs and procedures for obtaining the information.

Consultation with State staffs responsible for program development and operation in vocational education about accurate interpretation and application of data collected in their operations.

Clearinghouse activities, including consultation when needed, for all activity in the State that relates to occupational research and development.

After the Unit was in operation, the suggested activities were analyzed to determine which of those should be given top priority during the initial year of operation. As a result of the analysis, the major emphasis was placed on the following activities:

- 1. Act as a liaison with State agencies, labor groups and others interested in research in vocational education.
- 2. Work with institutions of higher education in initiating and conducting research related to vocational education.
- 3. Encourage school districts to design and conduct research projects.



- 4. Provide consultative services for institutions or groups conducting research in vocational education.
- 5. Locate completed research which is related to vocational education.
- 6. Disseminate findings of research in vocational education.
- 7. Aid school districts and institutions in securing funds to conduct research in vocational education.
- 8. Sponsor inservice training in research methods and design for those interested in research related to vocational education.

METHOD

The Research Coordinating Unit is located in the State Department of Education and is directly responsible to the State Director of Vocational Education. The Coordinator of Research is a member of the administrative staff of the Vocational Education Section and has direct contact with the subject matter bureau chiefs and regional coordinators of vocational education in California.

The Research Coordinating Unit staff includes the Coordinator of Research, two Research and Evaluation Consultants and an intermediate stenographer. Part time professional and clerical help were employed as needed for special projects. Each of the staff members had responsibilities for effecting the major objectives of the Unit. The Coordinator was primarily concerned with coordination of vocational education research in California, while the consultants spent a majority of their time in consultation, compilation and dissemination of research information.

The professional staff worked directly with colleges and universities, local school districts and private research organizations in developing research projects related to vocational education. Encouragement was given to conduct research having both local and national significance. Emphasis was placed on vocational education research concerning the education and employability of disadvantaged persons. The majority of projects conducted during the past year was financed from local or State funding.

The Research Goordinating Unit also conducted inservice workshops and meetings to upgrade vocational educators and others in the State in research design.

The Advisory Council of the Research Coordinating Unit was organized to holp identify problem areas and establish priorities for occupational research. Individual members of the Advisory Council provided excellent cooperation during the year.



RESILTS

As a continuing unit of the Vocational Education Section of the State Department of Education, the Research Coordinating Unit must be evaluated in terms of both the processes in which the Unit is involved and the products which are results of the activities performed. This portion of the report is devoted to highlighting the accomplishments related to the major objectives of the Unit.

A. To provide consultative services for institutions and organizations planning and conducting research in vocational education.

During the first year of operation of the Research Coordinating Unit, consulting help on research design was given to local school districts, institutions of higher education and private organizations. Some of the institutions to which help was given conducted research on the local level, using existing funds, while others were given assistance in securing outside money to carry out the research. The institutions and organizations assisted were as follows:

Local Districts

Vacaville Union High School District North Bay Title III Center Los Angeles City Schools Office of Sonoma County Superintendent of Schools Office of Napa County Superintendent of Schools Tracy Joint Union High School District Palo Alto City Unified School District Office of Sacramento County Superintendent of Schools Compton Unified School District Emery Unified School District Hughson Union High School District Oakland Unified School District Office of Orange County Superintendent of Schools San Luis Coastal Unified School District Pacific Grove School District Office of Inyo County Superintendent of Schools Torrance Unified School District San Leandro Unified School District La Puente Adult School San Jose City Unified School District Roseville Joint Union High School District Office of Solano County Superintendent of Schools ABC Unified School District Lodi Unified School District Berkeley Unified School District



Local Districts (contd.)

Grossmont Union High School District

La Mirada Unified - Excelsior Adult School

San Bernardino City Unified School District

Office of Monterey County Superintendent of Schools

Office of Contra Costa County Superintendent of Schools

Office of San Mateo County Superintendent of Schools

Office of San Diego County Superintendent of Schools

Office of Santa Cruz County Superintendent of Schools

Office of Marin County Superintendent of Schools

Junior Colleges

Contra Costa Junior College District
West Valley Joint Junior College District
Modesto Junior College
Foothill Junior College District
Southwestern College
College of Marin
Los Angeles Trade & Technical College
Mount San Antonio Junior College
San Francisco City College
Coalinga Junior College
Merritt College
San Joaquin Delta College
Citrus College
Reer'ey College

Colleges & Universities

California State College at Hayward
California State Polytechnic College
University of California at Los Angeles
San Francisco State College
Long Beach State College
Chico State College
Chico State College
Fresno State College
San Fernando Valley State College
University of California at Berkeley
Pacific Oaks College
San Jose State College
Sacramento State College
Stanford University
University of California at Davis

Private Organizations

Foundation for Mexican-American Studies
American Institute of Research
Stanford Research Institute
Systems Development Corporation
California Teachers Association
Social, Educational Research & Development, Inc.
Camp Parks Job Corps (Litton Industries)
California Junior College Association
Management Research Associates
Stanford Research & Development Center on Teaching
Human Resources Research Office
Center for Advanced Study of Behavioral Sciences
North American Aviation
Institute of Local Self Government

Research projects in operation or funded that the Research Coordinating Unit assisted in planning and developing:

Project	Institution
Teaching Agricultural Science to Students of Vocational Agriculture by Feed-Back Approach	Vacaville Unified High School District
Dissemination of Career Information	Office of Sonoma County Superin- tendent of Schools
Pre-High School Vocational Group Guidance for Potential Dropouts and Non-College Bound Students	Tracy Joint Union High School District
Dominant Factors Relating to Successful Employment of a Selected Group of Culturally Disadvantaged Youth	Emery Unified School District
Selection Approaches for Vocational Education Students	Contra Costa Jr. College District
Vocational Education Program of Foothill Jr. College	Foothill Jr. College District
A Developmental Program for Improvement of Teacher Education for Teachers of Persons with Special Needs Directly Applicable to Mexican-American Students	University of California at Los Angeles
A Project Intended to Provide Informa- tion for Improvement of Counselor Education in Vocational Guidance	San Jose State College
Institute on Home Economics Program in Gainful Employment for Disadvantaged	San Francisco State College
Municipalities as a Model for New Careers & Redirection of Vocational-Technical Education Programs	Institute for Local Self Govern- ment, Berkeley

Research projects in which the Research Coordinating Unit assisted, which were submitted to the U.S. Office of Education:

Project

Development and Evaluation of Methods to Facilitate Continuous Enrollment in Adult Job Training Courses

Construction of an Experimental Measure of Motivation

Landscape - Groundsman - Gardener Aide for Special Class Students (Educable Mentally Retarded Youth) Food Service - Food Handling - Services Aide - Work Experience Pilot Training Program for Educable Mentally Retarded Students

Leadership Development for Teachers of Nurse Technicians, Vocational Murses and Hospital or Home Health Aides

A Demonstration Project to Provide Post Secondary Agriculture Instructors with Additional Technical Competency and Business Empathy

Teaching Standard English as a Second Dialect to Speakers of Non-Standard English in High School Business Ed.

Development of a Teacher's Guide for one Year of Useful and Pre-employment Home Economics in Jr. High School

A Proposal to Study the Feasibility of Developing an Information Retrieval System for the California State Department of Education

A Language Arts Curriculum Study for the Two-Year Terminal Junior College Student

Institute: Recommic & Cultural Disadvantage: Its Implications for Vocational Ed. and Teacher Rd. Programs

Institution

Adult Occupational Training Center Los Angeles City Schools

Merritt College Oakland, Calif.

Oakland Unified School District

Chico State College

San Joaquin Delta College

San Bernardino City Unified School District

California State College at Long Beach

State Department of Education

West Valley Joint Junior College District

San Francisco State College

Project

Institute on Home Economics Programs in Gainful Employment for Disadvantaged Youth

Municipalities as a Model for New Careers & Re-direction of Vocational-Technical Education Programs

The Development & Evaluation of a Method on Dissemination of Job Information to Students

An Experimental Evaluation of the Production & Use of Continuous Loop Films to Reinforce the Technical Demonstration in Vocational Education

The Effect of a Special Vocational Work Experience Program on the Rehabilitation of High School Dropouts

A Development Program for the Improvement of Teacher Education for Teachers of Persons with Special Needs Directly Applicable to Mexican-American Students

Leadership Development for Teachers of Nurse Technicians, Vocational Nurses & Hospital or Home Health Aides

A Regional Seminar on Vocational & Technical Teacher Edu. Programs at Small Colleges & Universities

Training Program for Home Economics
Teachers Concerning Consumer Education
& Family Management for Working Women

Research & Development Center for Education of Women for Employment

Development of a Teacher's Guide for Useful & Pre-employment Home Economics Education for Seventh Grade

Institution

San Francisco State College

Institute for Local Self Government Claremont Hotel Building Berkeley, Calif.

Sonome County Superintendent of Schools Office

Marin Junior College District College of Marin Kentfield, Calif.

Solano County Office of Education Fairfield

Division of Vocational Education University of Calif. at Los Angeles

Chico State College

Chico State College

San Fernando Valley State College Northridge, Calif.

California State College at Long Beach Long Beach, Calif.

California State College at Long Beach Long Beach, Calif.



B. To locate and disseminate research findings related to vocational education.

The following action was undertaken in order to facilitate efficient and effective storage and retrieval of research reports:

- 1. A trip was made to Oregon to view the HODEX system developed by the Oregon Research Coordinating Unit. Electronic data storage and retrieval was used in this system.
- 2. The ERIC Junior College Clearing House at UCIA was visited to determine services available, and to discuss possible support the Research Coordinating Unit could provide.
- 3. The ERIC Clearing House for Vocational and Technical Education at Ohio State University was also visited to better coordinate their activities and those of the California Research Coordinating Unit.
- 4. The California State Library and several other State offices were contacted in order to obtain assistance in developing a storage and retrieval system.

It was determined that the Research Coordinating Unit would provide a valuable service in coordination and dissemination if a current and complete file of research reports were available to researchers. Such a compilation was established to assist researchers in avoiding duplication, and to provide background for investigation of their problem. The Research Coordinating Unit newsletter, correspondence and personal contacts were employed to acquire a permanent file of hard copy research materials.

The retrieval system adopted was the key-word card file. Since January 1963, this system has been used by the American Society of Civil Engineers. The announcement and a description of the system were found in the August 1962 Civil Engineering magazine, pages 42-43.

In addition to the key-word (pertaining to the subject of the report) card file, an author file and a location file were set up on the hard copy material.

Copies of the hard copy material are made available to vocational educators and researchers throughout the State on a loan basis. Announcements of available material and abstracts of some studies are reported in the Unit's newsletter (Occupational Research News).

The number of items requested on a loan basis has been growing since the inception of the Research Coordinating Unit. During the first year of operation, the RCU loaned 350 reports upon request. Currently, an average of 50 reports are mailed out on loan each month. The Unit has also mailed out approximately 450 miscellaneous items, such as abstracts of research reports, Xerox copies of resorts.

The "Occupational Research News," a bimonthly newsletter, is also a means by which the Research Coordinating Unit disseminates research information. Five issues, a total of approximately 5000 copies, were distributed during the first year of operation. The current newsletter circulation is 1200 copies to members of the State Board of Education, heads of education departments, county superintendents of schools, county vocational education directors and coordinators, private institutions and State Department Vocational Education personnel.

The Research Coordinating Unit has established a file of microfiche pertaining to vocational education. The semi-monthly issues of TAB (Technical Abstract Bulletin) of the DDC (Defense Documentation Center) and the monthly catalog Research in Education are reviewed as each issue arrives and all microfiche pertaining to vocational education are obtained and added to the Unit's microfiche file. The Unit periodically prepares an index of microfiche on file. This index is a cross referenced subject index derived from the ERIC publication. Two issues of this index were prepared during the report period. Four hundred copies of the index were distributed throughout the State.

A representative review of recent research was conducted and abstracts were prepared for publication in several "Research Summaries." Three "Summaries" were distributed during the period being reported. There were 475 copies disbursed of the Summary "Vocational Education for Persons with Special Needs," 400 copies of "Vocational Choice and Job Satisfaction," and 800 copies of "Trade Industrial and Technical Education." Other "Summaries" prepared during the report period, but not yet distributed, were: "Evaluation in Vocational Education," "Agriculture Education," "Homemaking Education," and "Business Education."

C. To sponsor inservice training in research methods and design.

The inservice training of vocational educators in research was conducted by both formal and informal methods.

The formal program consisted of a week-long research design workshop in October, and a series of seminars throughout the State in January.

Twenty-five persons with responsibilities in vocational education were invited to attend the design workshop, which emphasized survey research techniques and experimental design. Dr. William Nicholls of the Survey Research Center at the University of California, in Berkeley, conducted the sessions on survey research, and Dr. Antionette Ryan of Oregon State University led the meetings concerned with experimental design. Many of the participants are, at present, conducting research projects in their own school districts.

The seminars were held at Los Angeles, Sacramento and Oakland and were for the purpose of acquainting school personnel with educational research programs in the State. The function of the Research Coordinating Unit, the Regional Laboratories (Far West and Southwest Regional Educational



Research Laboratories) and the Division of Adult and Vocational Research of the U.S. Office of Education were discussed. Approximately 150 people attended the seminars.

The Research Coordinating Unit also arranged a demonstration for teacher educators in vocational education at the Stanford Research and Development Center. Teacher educators in Industrial Agriculture, Home Economics and Business Education observed the micro-teaching research project.

Throughout the year, informal inservice training has been conducted on a person-to-person basis with individuals from local districts, institutions of higher education and the State Department of Education. Much of the individual training has been performed in relation to their specific research problems.

D. Act as a liaison between agencies and organizations interested in research in vocational education.

A major aspect of coordination is that of bringing together persons and groups with similar problems so that they can work toward a common solution. The Advisory Council has been a key influence in affecting this coordination. The individual members of the Council have been very helpful as resource persons for the activities of the Unit. The Advisory Council was organized in the fall and has held one meeting during the year. A number of the individual members have been of assistance during the year in areas that they represent.

In the initial meeting of the Council, the following recommendations were made:

- 1) That activity of the RCU be reduced in the seeking-out of vocational research. The major thrust of the Unit should be in stimulation and coordination of research in occupational education.
- 2) That a request to the Bureau of Research, clearly indicating the rationale and need for * list of research projects, which have been proposed, funded and completed, be compiled by the United States Office of Education. The Committee felt that the Bureau of Research should send the RCU a copy of each proposal from California as soon as it is received in Washington.
- 3) That some framework of priority action be taken that will include research pertaining to the methodology teaching-learning process and student acceptance of self, others and vocational education.
- 4) That the Advisory Committee relate to the RCU, areas of vocational research arising in sources other than the usual schools, colleges and universities.



- 5) That the RCU prepare a statement regarding the role and functions of both the RCU and the Advisory Committee.
- 6) That the RCU encourage and compile studies in evaluation, guidance, current occupational needs, placement, and manpower needs. Such studies would serve schools and institutions in undertaking adjustments in curriculum, changes in teacher education, and effect closer ties to labor market demands.
- 7) That the RCU encourage research related to economic and political forces tending to shape a common market in the Western Hemisphere.
- 8) That the RCU continue to keep in close contact with the individual members of the Committee to coordinate research activities with the needs of the groups which they represent.

The recommendations have served as a basis for the activities of the Research Coordinating Unit since the Council meeting. The majority are continuous in nature and will need revision from time-to-time.

Other groups and organizations that the Research Coordinating Unit has worked with, or contacted, this year in coordinating research activities are as follows:

National

Southwest Regional Educational Laboratory
Far West Laboratory for Educational Research and Development
Stanford Research and Development Center on Teaching
ERIC Junior College Clearinghouse at University of California,
Los Angeles
ERIC Vocational-Technical Education Clearinghouse at Ohio State
Region IX U.S. Office of Education
American Institutes of Research
Center for Advanced Study of Behavioral Sciences
Human Resources Research Office (Branch of George Washington
University), Branch Office No. 3, Presidio of Monterey, Calif.

State

Foundation for Mexican-American Studies
University of California, Davis
University of California, Berkeley
University of California, Los Angeles
Survey Research Center, University of California, Berkeley
California Teachers Association
Stanford Research Institute
Center for Inter-disciplinary Studies, San Jose State College
Systems Development Corporation
California Junior College Association
California Association of Secondary School Administrators
California State Employment Service
California State Real Estate Board



Within the California State Department of Education, the Research Coordinating Unit has worked with the following units and bureaus outside of the Vocational Education Section:

Curriculum Laboratory
Systems and Data Processing
Pupil Personnel Services
Intergroup Relations
Title III Elementary & Secondary Act

The Research Coordinating Unit attempted to contact all persons in the State who were conducting research under Section 4(c) of the Vocational Education Act of 1963. An excellent working relationship was established with those persons conducting 4(c) research in California.

The individuals who are conducting research under Section 4(c) projects, whom the Research Coordinating Unit has contacted and/or worked with, are as follows:

J. Chester Swanson, University of California, "Educational Activities Within Business and Industry in Richmond."

Martin Gerstein and Richard Hoover, San Diego Department of Education, "Development of a Regional Center for Collection, Synthesis and Dissemination of Career Information."

Roger S. Cannell, Stanford Research Institute, Menlo Park, "Conference on Planning and Programming of Vocational Education."

William H. Landis, Contra Costa County Department of Education, Pleasant Hill, "Mathematics Competencies of High School Students in Relation to Screening Practices of Major Employers."

R. Garry Shirts, San Diego County Office of Education, "Career Simulation for Sixth Grade Pupils."

John F. Cogswell, System Development Corporation, Santa Monica, "Use of Computer Technology in Vocational Counseling."

Malcom Richland, System Development Corporation, Santa Monica,
"A Study of Potential Utilization of Retiring Military P. rsonnel in
Vegational and Technical Education Programs."

Lawrence Stewart, University of California, Berkeley, "A Study of Characteristics of Vocational Students."

David Allen, University of California, Los Angeles, "A Study of the Aviation Mechanics Occupation."



Paul Lawrence, Auxiliary Enterprises, Anc., California State College, Hayward, "Establishment of Three Centers to Improve the Preparation of Teachers of Culturally Disadvantaged Students, Emphasizing Technical Vocational Education."

Harry V. Kincaid, Stanford Research Institute, Menlo Park, "A Preliminary Evaluation of Pre-Technical Programs in Secondary Education."

Zelpha Bates, California State College, Long Beach, "Development of an Instrument for Evaluating Social Readiness for Employment."

Dwight W. Allen, Stanford University, Stanford, "Flexibility for Vocational Education Through Computer Scheduling - Phase Two."

J. Chester Swanson, University of California, Berkeley, "A Nationwide Study of the Administration of Vocational-Technical Education at the State Level."

Twyman G. Williams, Jr., Vacaville Union High School District, Vacaville, "Comparing the Effectiveness of Two Methods of Teaching Agricultural Science to Students in Vocational Agriculture."

The professional staff members of the Unit attended the following conferences during the year:

National RCU Directors Meeting, Washington, D.C. National Leadership Conference, Tahoe City Operation Fair Chance Planning Meetings, Sacramento and Hayward Data Communications Seminar sponsored by Pacific Telephone Co., Sacramento

San Mateo County Vocational Education Report Meeting, Oakland San Diego County Counselors Seminar

Fall State Conference on Leadership in Vocational Education, * Sacramento

California Teachers Assoc. State Conference on Educational Research, San Francisco

Executive Committee of the Far West Regional Research Laboratory, Reno, Nevada

Western Regional Conference of RCU Directors, Phoenix, Ariz. *San Diego County Schools Guidance Workshop

Performance Criteria in Vocational Education Conference, Stanford University

Educational Conference sponsored by 3-M Company, Sacramento American Educational Research Assoc., New York California Educational Research Assoc., Los Angeles California Jr. College Assoc. Research Committee, Sacramento California Industrial Education Assoc., Sacramento California Guidance and Personnel Assoc., San Diego

ence on Innovative Programs in Vocational Education, San Francisco



PERT Conference, Center for Vocational and Technical Education, Ohio State University

Systems Development Corporation Conference on Occupational Guidance, Los Angeles

*State Meeting of Teacher Educators in Home Economics, Fresno

"Guidance Counselors' Workshop, San Mateo

"Guidance Counselors' Workshop, Oakland

"Statewide Meeting of Asst. County Superintendents, Sacramento Vocational Education Section Administrative Staff Retreat, Monterey "Bureau of Adult and Vocational Education, U.S. Office of Education Region IX Conference, Long Beach

Conference for Home Economics Instruction in Junior Colleges, Fresno National Conference on Facilities for Vocational-Technical Education, Las Vegas, Nev.

Spring Statewide Leadership Conference on Vocational Education, Los Angeles

* Research Coordinating Unit staff members participated in program.

DISCUSSION

The primary objective of the Coordinating Unit for Occupational Research in California was coordination of research activities related to vocational education. During the first year of operation, the activities centered around providing consulting help to persons designing research programs, stimulating capable researchers to work in vocational education and disseminating research findings. The groundwork has been laid for a program which will continue to strengthen vocational education in California through the coordination of research activities. The Unit should now be better able to provide information to those who have decision-making responsibilities in vocational education.

It is not the function of the Research Coordinating Unit to conduct research activities, but to encourage persons with research abilities to concentrate their efforts on the problems related to vocational and technical education. The Unit should also continue to up-grade persons in vocational education to better understand educational research.

It is very important that action research be a continuing part of programs in vocational education. Every available effort should be made to determine the most advantageous and efficient methods of conducting educational programs. The Research Coordinating Unit has encouraged the use of local funds in action research programs, and has emphasized that in every instructional program, action research should be included.



CONCLUSIONS AND IMPLICATIONS

The establishment of a coordinating unit for occupational research has developed an awareness among vocational educators, on both the State and local level, of the role that research can play in helping to provide answers to problems that arise in vocational education. After the first year of operation, the basic groundwork has been set for the intergration of research into the State's program of vocational education.

The personnel of the Vocational Education Section of the State Department of Education have become increasingly interested in using research in their work. However, there needs to be an emphasis on greater cooperation between the vocational educational personnel and the Research Coordinating Unit. The RCU could be of more assistance in helping the bureaus plan and develop their research and demonstration programs. There needs to be an increased awareness that a major responsibility of the Research Unit is that of aiding in the design and planning of research programs conducted under the Director of the Vocational Education Section of the State Department of Education.

There has been an excellent working relationship between the Unit and local educational agencies. Administrators of vocational education are continually contacting the Research Coordinating Unit for assistance in designing their research and innovative type projects.

A good working relationship has been established between the Research Coordinating Unit, institutions of higher education and private research organizations in the State. Improvement of the relationship should be emphasized in order for the Unit to better serve these groups.

Contact has been made and a basis for further cooperation established with the educational research and development centers and the regional research laboratories in California. The Research Coordinating Unit has relied upon these organizations for assistance in the coordination of activities and should continue to have closer cooperation in the future.

The dissemination function has developed at a very rapid rate. A library is being developed from local research materials and national research materials obtained through the Educational Research Information Center and the Defense Documentation Center. A greater effort needs to be made to acquaint persons in California with information that is available. The Research Coordinating Unit should also cooperate with groups in the State Department of Education that have similar storage retrieval problems to develop an information retrieval system.

The first year of operation has been the initiation of the Research Coordinating Unit and the defining of its role. The Unit is now ready to be of greater service to vocational education in the State of California by further stimulation of research and by acting as an agency by means of which research findings can be implemented. Efforts should now be directed toward identifying research priorities and the establishment of a Statewide plan for research in vocational education.



SUMMARY

The California Research Coordinating Unit is a facilitating agent for the Vocational Education Section of the California State Department of Education.

The major activities for the first year of operation have been concerned with stimulating occupational education research projects within local school districts, junior colleges, State colleges, universities and private organizations. Consultative services have been provided to both private research organizations and public educational agencies. The coordination of occupational research was effected through participation in pertinent conferences, seminars involving vocational educators and personal contacts with the existent research leadership.

Dissemination of research and research related information was developed as a process that included compilation, storage and retrieval of data. The purposes of dissemination and the development of a research consciousness among associates in vocational education were furthered by means of seminars, correspondence and a bi-monthly newsletter. A library of research findings in vocational education has been established, which includes both original hard copy materials and microfiche. The microfiche are obtained from the Educational Research Information Center and the Defense Documentation Center. The material from this library is available on a loan basis to interested persons throughout California.

The staff of the RCU participated in a number of State and national conferences during the year in both vocational education and educational research.

The inservice training phases of the program included workshops and seminars conducted by the Unit to upgrade vocational education personnel in educational research. A large amount of inservice education was provided different individuals, as staff members aided them in designing research projects.

The initiatory program of the California Research Coordinating Unit has generated the following projections: selection of priorities to focus both research and demonstration, continuation and expansion of present retrieval system and increased cooperation between the Unit's staff and others in the Vocational Education Section.

At the completion of the first phase of the operation of the California Research Coordinating Unit, it is planned for it to continue as a part of the Vocational Education Section of the State Department of Education. A project has been approved to support fifty percent of its operation from the Bureau of Research of the U. S. Office of Education. The remaining fifty percent will come from federal vocational education and State funds. The present contract extends until December 31, 1968. It is anticipated the Unit will be continued after that time.



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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE OFFICE OF EDUCATION WASHINGTON 25, D.C.

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Research Coordinating Unit were to provide coordination, dissemination, consultation and stimulation of research related to vocational education.

The unit is located in The State Department of Education and is directly responsible to the State Director of Vocational Education. The unit's coordinator is a member of the vocational education administrative staff and has direct contact with the subject matter bureau chiefs and regional coordinators.

Staff members of the unit have worked directly with colleges and universities, local school districts, and private research organizations in developing research projects related to vocational education. Encouragement was given to conduct research having both local and national significance. The majority of projects conducted during the past year were finance from local or state funds.

In-service meetings, seminars and a workshop were held to up-grade vocational educators and others in the State in research design.

An advisory council for the unit was organized to provide assistance in keeping in

An advisory council for the unit was organized to provide assistance in keeping in touch with problem areas and to establish priorities for occupational research.

As a dissemination role, the unit has maintained a hard copy file of available research reports as well as Educational Research Information Center and Defense Documentation Center microfiche and has made them available, on a loan basis, to interested persons in the State. Also as a dissemination function, the unit published a bi-monthly newsletter and several research summaries.

16. RETRIEVAL TERMS (Continue on reverse)							
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17. IDENTIFIERS							