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ABSTRACT

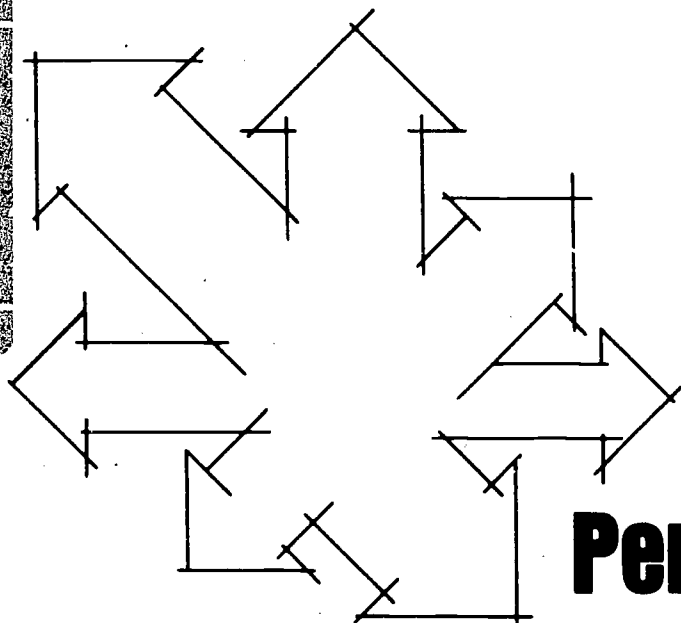
The proceedings of the conference on outstanding research and curriculum activities conducted by the various State research coordinating units opens with William W. Stevenson's brief examination of alternative research efforts. The remainder of the first half of the document consists of abstracts of the 15 presentations at the conference sessions (which dealt with curriculum diffusion, national curriculum coordination, State diffusion models, copyright policy, and the USOE's national diffusion model); minutes of the annual business meeting; operational guidelines for the conference; a list of conference participants; and the keynote address of the 1974 National Research Coordinating Unit Conference by Gordon Swanson. The remainder of the document consists of approximately 60 project resumes describing research coordinating unit management techniques and significant research projects in vocational education in various States. Each resume lists: project title, sponsoring agency, project director or contact person, duration, funding, purpose of project, and description of project.

(JR)

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proceedings

ED118840



National RCU Personnel Conference

THE SCORE AFTER...

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1965-1974

Presiding - Charles H. Rogers, Director
North Carolina Occupational Research Unit

March 18-21, 1974 Doubletree Inn Scottsdale, Arizona

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

This Proceedings document was prepared as a follow-up to the Ninth Annual National RCU Personnel Conference entitled, "The Score After Nine -- 1965-1974" held at the Doubletree Inn, Scottsdale, Arizona on March 18-21, 1974. The theme of the Conference centered around outstanding research and curriculum activities that had been conducted by State Research Coordinating Units prior to the Conference. Each state was asked to prepare three Project Resumes which were published in an earlier document and distributed at the Conference.

This publication is an expanded overview of the Conference program. Many people have contributed to its production. The publication was edited by Dr. Ronald D. McCage, Coordinator of the Research and Development Unit, and was printed by the Illinois Curriculum Management Center, both a part of the Division of Vocational and Technical Education, Board of Vocational Education and Rehabilitation, State of Illinois.

A special thanks is extended to Mr. Charles Schickner, Illinois RCU, for his management of the design and assembly of the document for printing, to Mrs. Barbara Rocco (Ron McCage's secretary) for her able assistance in the preparation of this document, and to Mrs. Bonnie Clarke who assisted her by typing the Presentation Summaries.

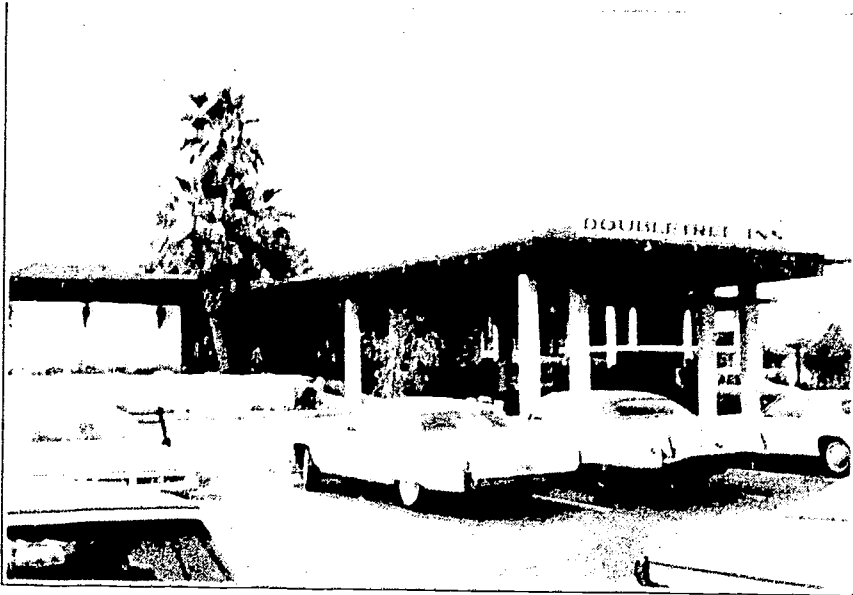
Dr. Charles H. Rogers
President
1974 National RCU Personnel Conference

"THE SCORE AFTER NINE"

(1965 - 1974)

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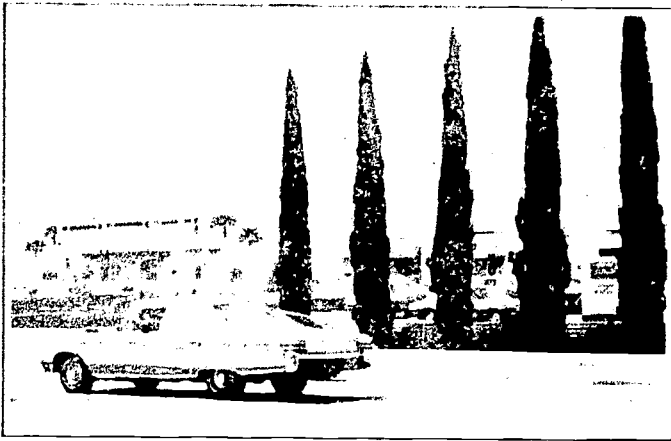
"THE SCORE AFTER NINE"
(1965 - 1974)

MONDAY, March 18, 1974

10:00 am - 1:00 pm

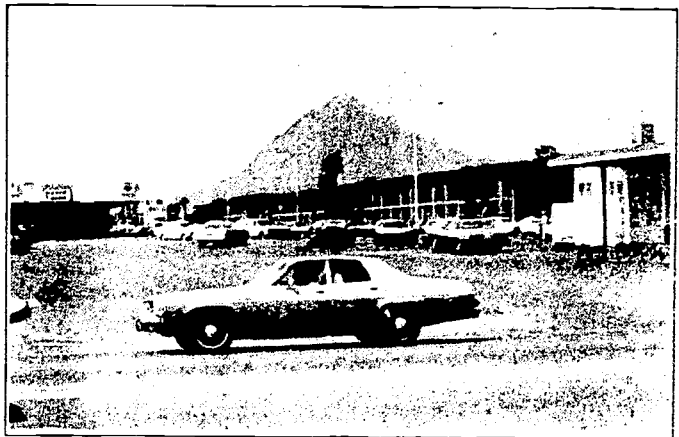
Registration Doubletree Inn, Lobby



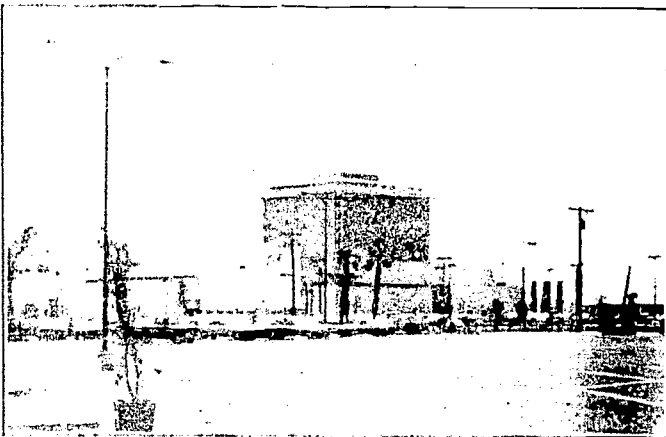


Santa Fe Springs,
and...

Magnificent
shopping at...



the
Doubletree Inn...



"THE SCORE AFTER NINE"

(1965 - 1974)

MONDAY, March 18, 1974

1:00 pm - 5:00 pm

Opening Session Chairman Charles H. Rogers

1:00 pm - 1:30 pm

"Starting Lineups"

Welcome. Eugene Dorr

Conference Orientation Charles H. Rogers

1:30 pm - 3:30 pm

"Warm-up Years"

*"Panel of Hall of Famers". Vernon Burgener
Jack Davis
Arthur M. Lee
William Stevenson*

3:30 pm - 4:00 pm

Coke/Coffee Break

4:00 pm - 5:00 pm

"Hits, Runs, and Errors"

"A Big Hitter" Gordon Swanson

ALTERNATIVE RESEARCH EFFORTS

Dr. William W. Stevenson
Assistant State Director
Head, Division of Research, Planning and Evaluation
Oklahoma State Department of Vocational
and Technical Education

Introduction

It may be that in all too many cases our research effort has been too singular in its approach, in that we have overemphasized the search for how to improve instruction in the classroom or what might commonly be termed the learning environment. There may also exist a concomitant feeling of guilt or failure in those of us who have turned away from this search to more promising areas of investigation. While it is important that this search for ways to improve the learning environment be continued, it may be that the efforts of others are more appropriate in this endeavor and that our own, that is Vocational Education's research, might be better aimed in another direction. I would like to state some reasons why I have reached this conclusion, and to propose some promising alternative directions toward the improvement of Vocational Education which we might explore.

The Search for Better Teaching Methods

The results obtained in our search for ways to improve student learning have pretty generally been fruitful. There have been some outstanding exceptions which may or may not be practical for classroom implementation. We, as the total research community, have learned that students appear to learn more if given immediate and continuous feedback on how well they are doing. It also would appear that a system of measured rewards which are attractive to the learner does in most instances appear to stimulate learning. We know that if a student is motivated, more learning occurs-- but this may be of little consolation to a teacher under adverse teaching conditions. There are undoubtedly other approaches which appear to be promising at least under simulated experimental conditions. But I think it would not be overly critical to say that what we have learned through a massive research effort has told us very little about how to increase learning under normal classroom conditions. Conversely, many of our investigations which compared one approach to another or which considered one method against another or which looked at the influence of increased resource allocations have ended with the conclusion of "no measurable difference in resultant learning." The Rand Corporation study which summarizes the findings of some 200 research projects concluded that there was very little relationship between what goes on in the classroom and the amount of learning which takes place. Most other studies that I have reviewed reached the same conclusion. Our own investigations in Oklahoma over the past three years which have attempted to identify something in the process which appears to affect future employment success of students have been equally nonsatisfying. We have not been able to demonstrate that

increased funds, used either for equipment or materials or facilities or that any of the other accepted improved projects such as advisory committees, youth clubs, or organized lesson plans or any of the other measurable process elements, were related to any appreciable extent to student success upon program completion.

Perhaps some of the more basic research efforts in some of the other disciplines will find the key which unlocks this puzzle. It appears to me at this point in time that Vocational Education research's most promising areas of investigation lie in other directions.

Alternative Research Approach

Let us then consider more promising and more personal arenas of investigation which will contribute more to the improvement of Vocational Education. I would like to discuss two alternatives and I am sure that many more will come to your mind as these are being discussed. The first of these alternatives is the identification, collection, compilation, analysis and presentation of data and information which will improve the decisions which are made relative to Vocational and Technical Education. The second of these alternatives deals with an effort to instill in every teacher enough research expertise, and an inquiring research attitude, which will assist them to determine for themselves what works best for them with certain types of students under certain classroom or laboratory conditions.

Data Collection and Analysis for Management Decisions

In suggesting that we as Vocational Education researchers turn the major emphasis of our work toward the collection and analysis of information and data, I am including the entire spectrum of information for administrative decisions. This consideration includes all of the many phases of an effective information system: decision on the types of information needed, gathering and packaging this information, and studying the way administrators use information in making decisions.

I admit to a certain pragmatism in that I feel that this may be the area in which we as researchers can have the greatest impact on the improvement of the delivery system for occupational education. I include in what I perceive the target audience to be the whole body of the population which affects Vocational Education. The general public, the legislature, state level managers including education and vocational education administrators, and local decision makers in both the public and the educational area should all be considered as potential users of information.

Thus we are saying that we not only should provide information which administrators are aware of needing, but we should also attempt to expand that awareness to include a whole new approach to enlightened decision making. This would involve the encouragement of the administrator in the use of data and information as well as creating within him an awareness of the present inadequate basis of many decisions. Also included in this approach is a close and systematic and organized observation of how

decisions are influenced and construction of a feedback mechanism which provides for an improvement in the process. I would throw in this one caution which says: we as researchers must be involved in decision making but not involved in making decisions. After the researcher has done the most complete job possible of obtaining and presenting objective data and information, it is the administrators prerogative to select which data or information he will consider, and to what extent this will influence the final judgment. We do need to constantly keep before those in administrative positions the critical need to expand their base for making decisions. This is and should be an ever changing, flexible search for the correct balance between the cold hard facts presented by the information system and the intuitive judgment of the administrator and his other more subjective advisors. Our search should be to find a way in which we can foresee the needs and provide the information; we should not be, nor should we want to be, the sole source of input to the decision maker.

Every Teacher and Investigator

The second alternative takes a much more limited but no less challenging approach to our role in improving the educational process. If my thesis is correct--that we are limited in the amount of generalizable information we can uncover on how to increase learning--then let us take the micro approach and assist the individual teacher in discovering what works best for him with a particular student in a particular classroom. I think this involves more of an attitude than a method; more of a concept than a competency; more of thought than theory. This means helping teachers to question all that they do, and assisting them in evaluating the results of the day to day routine in which they are engaged. If teachers can be trained to analyze the learning environment, to experiment with varied approaches, and to evaluate the results empirically, we may create thousands of learning laboratories for both students and teachers--learning laboratories in which yesterday's methods are viewed in the light of today's programs, in which new approaches are encouraged and new solutions sought, not in some massive federally supported project, but in the hearts and minds and consciousness of every dedicated teacher.

I am sure that you recall as I do at the end of a teaching day saying to yourself, "Things went well today. I think my students really learned." Or, "This was a lousy day. I don't think anybody learned anything." But I was not equipped to go beyond that observation. If I had had the analytical tools, and I am talking not about statistics and research methodology, but about an inquiring stance and an intellectual inquisitiveness, accepting the need for different approaches for different situations, a broader view of my role as an educator and a greater awareness of all of the influences which infringe upon the student/teacher learning phenomena, I could have become a more effective teacher.

Conclusion

I have presented two alternatives for our research thrust. I encourage you to broaden this search so that we may make research an essential ingredient in the system for providing an improved education for those who need and can benefit from it.

Excerpts of the KEYNOTE ADDRESS
1974 National RCU Conference

Professor Gordon Swanson
University of Minnesota

To the reader:

Last year our Conference entitled, "The Score After Nine -- 1965-1974" attempted to look at the successes that the RCU's have enjoyed since their inception in 1965, and also the errors we made along with possible changes we could make to alleviate future errors.

Dr. Gordon Swanson from the University of Minnesota provided us with an exceptional Keynote Address that attempted to delve more fully into our needs as RCU personnel. In his presentation Dr. Swanson made it clear that we as RCU personnel needed to take our own careful look at the RCU's-- their operations and practices. He provided participants with a challenge to move ahead and select and attack real issues that face the vocational and technical educators.

I have taken the prerogative of excerpting what I feel are key excerpts from Dr. Swanson's speech so that we won't forget where we have been and where we need to go.

Ronald D. McCage, Ed.D.
President
1975 National RCU Conference

-...The task that has been assigned to me by the Planning Committee is a task that I regard as being so important that you should not rely upon one person's impression. It is so large that it cannot be done, as a matter of fact, in the context of the Conference. I sincerely hope that you will take this kind of assignment, your record after a decade, and perhaps create a committee, perhaps give some thought as to how you can report what you have done over the decade, because if you do this, you will be doing precisely what other kinds of organizations have done in the past.....

-...I am going to try to describe some of the successes. Some of the unique ones that the RCU's have had. I am not going to talk about the errors. I don't think there have been many errors. The reason I am going to talk about your successes is that I think you need to build on your successes.....

-...In 1965, there was a specific focus upon redressing the imbalances in Civil Rights, particularly the Title I of ESEA and that is where Civil Rights questions entered MDTA at the same time and skilled training was attempted. This was the year that RCU's were born, parturition occurred in a room in Washington, and they had a very short gestation period.....

-...I would like to know where we can find another federal program for research or any other type of federal program where you have the same kind of mid-wifery occurring on the same continuing basis.....

-...1967--widespread demands for welfare reform--the words were, "off the welfare rolls and on the payroll." It was also the year of a major review of the National Center for Educational Research and Development. The Edith Green review occurred about which I spoke in 1970 to this group, and you will recall that her review and her evaluation were devastating on both counts--with one exception--the RCU's.....

-...but it is one of the reasons that I started out by suggesting that you should on your own take a look during the next year--at your record during the past decade.....

-...The Research Coordinating Units are unusual as a system--they had an initial rise--a slight fall--and then another rise. This is true in terms of members of RCU's and true also in the amount of money expended and received. They've gone through that cycle; that is unusual in itself. Most agencies or systems of research that start to fall continue it while RCU's got back in business--many times with state support and it's an indication of durability of the system.....

-...The RCU's have done an excellent job of measuring up to almost any kinds of standards that one wants to identify for research but particularly for research utilization.....

-...Dissemination of vocational education research often occurs before the project is completed--it is so fast and so complete partly because of the system of RCU's that we need not, anymore, concern ourselves about the absence of utilization and dissemination--it is extremely rapid. The tragedy is not that the gap is so wide; the tragedy is that the gap is so narrow. The question no longer is whether or not the research is being disseminated but a more important question is whether or not that we are researching the right things; and, I hope that many of you appear before hearings--the oversight hearings on vocational education that you'll emphasize this point--you can find illustration after illustration to demonstrate this. You can find more illustrations of good dissemination than bad dissemination and the ratio is about thirty to one. Dissemination is well handled and it's because of the system that was created nine years ago.....

-...I think you should look at the allocation of funds to RCU's. Now admittedly, the allocations in the Project Baseline study do not indicate how much state money--it only indicates the amount of federal money, but take a look at the amounts--maybe I should do it this way. Take a look at this data and see how much money is allocated to RCU's. My guess is that if you take a look at its Tables and you take the RCU's that have between fifty and one hundred and twenty five thousand dollars or more federal money going to the RCU you will have 75 percent of the total. There is a high correlation between one and two. All I'm suggesting here is that there is some need for money. There is a need for more funds. A number of good RCU's rely almost entirely or largely on state resources but there is a need to feel that money can be called the RCU system.

-...I think that most of the research that has been done during the past decade has been focused on practice--curriculum studies--teacher education and a variety of practice oriented studies. I believe that RCU's can and should involve themselves in policy and indeed it seems that it seems to be the thing that grows out of RCU--the creation of policy. Many of them have their focus on policy change.....

-...Research Coordinating Units as well as all vocational educators have tried to cast themselves in the role of an underdog--they're always fighting their way somewhere. It's kind of a complex that we've had. It seems to me that we now need to rid ourselves of that. RCU's are one of the most durable and one of the most acceptable systems of research in the country and the standard bearers should not be the people with an inferiority feeling. You're not an underdog; you're leading the way for a lot of other people and, if one year from now you have gone through a very thorough review and analysis of where you are and where the National Academy of Science begins to ask many of you...How well have you done? Where are you? What have you accomplished? (and) Where are you going?--Then you will stack as high on the list as you did on Edith Greene's list when she evaluated you in 1967.....

NOTE: A typed record of the full Keynote Address was taken from a tape of the Conference. It was typed verbatim and has been placed at the back of this document for reference.

"THE SCORE AFTER NINE"

(1965 - 1974)



THURSDAY, March 19, 1974

8:30 am - 12:00 Noon

Morning Session Chairman Ray Barber

8:30 am - 10:00 am

"Play Ball"

Reports on RCU Curriculum and Diffusion Projects and Products

"Eastern Division Reports" James Hill
Theresa Mack
Lewis Abernathy
Garry Bice
Edward Lareau

10:00 am - 10:30 am

Coke/Coffee Break

10:30 am - 12:00 Noon

"Play Ball"

Reports of RCU Curriculum and Diffusion and Products -
(Continued)

"Western Division Reports" George Pilant
Tom Parr
David Fretwell
Donald Eshelby
Carol Ann Hodgson
Stanley Rumbaugh
Roland Krogstad

12:00 Noon - 1:00 pm

Lunch

PRESENTATION SUMMARY

PRESENTATION TITLE

Assessment of Vocational Teacher Education in Mississippi

PRESENTER (Name, Title, Organization):

James F. Shill, Associate Director
Research and Curriculum Unit
Mississippi State University

ABSTRACT OF PRESENTATION:

The Research project was conducted in three phases. The first was a comparison of perceptions of vocational educators in 13 service and/or specialty areas concerning preservice education. Vocational educators assessed abilities to execute specific performance tasks related to vocational instruction after completing preservice programs and has obtained some experience on the job.

The second phase of the project focused upon the assessment of inservice teacher education activities (both those conducted by the State Division of Vocational-Technical Education and by institutions of higher learning). This phase summarized vocational educators' perceptions of how well they were able to execute specific performance task areas after completion of inservice programs.

In the last phase, the project focused upon attitudes and values held by vocational teachers working in the different service and/or specialty areas. The project provided baseline data to be used in curriculum planning for improving teacher education programs as well as developing insights into establishing competency based teacher education programs.

PRESENTATION SUMMARY

PRESENTATION TITLE:

Vocational Education Deployment/Enrollment
Forecast and Decision Model

PRESENTER (Name, Title, Organization):

Frank H. Wimer
Washington State Coordinating Council for Occupational
Education, Olympia, Washington

ABSTRACT OF PRESENTATION:

To determine how that employment would probably be distributed within the various occupations and within the various industries, we used the 1970 Census of Employment.

The U. S. Department of Labor has produced a computer tape for each state called Industry/Occupation Employment Matrix (see sample on page 5). This data from the 1970 census is in a matrix form with 440 occupations and 227 industries. Each cell contains the number employed in that occupation in that industry at the time the census was taken. There is a relationship between each cell and the total of all cells for a particular occupation or a particular industry.

These relationships are used to produce a new matrix in which the cells reflect the new projected level of employment based on the Economic Forecast.

A new matrix is then produced to indicate the projected level of employment for each year of the forecast period. By summing the growth in each of the cells related to the vocational program plus the replacements for that year, a demand for new hires for a particular occupation for a particular year is produced.

In order to display data which corresponds to the vocational education programs, a vocational education code to census code relating table was produced (see relating table sample on page 6).

By using this coding and the previous mentioned process and through computer programs, we can compute a projected demand for new hires by vocational education program (see job opportunities sample on page 6).

Analysis

In order to make recommendations regarding program growth, we next analyze and compare what is happening in each occupational program in terms of enrollments, completions and placements compared with the projected demand. This is accomplished via analysis form (see sample on page 6).

ADDITIONAL INFORMATION:

In column #3 record the past year's total preparatory enrollment in the occupational program; and in column #4 record the past year's placements into jobs in the occupation or a directly related occupation as reported in October. Then calculate the ratio of enrollments to placement by dividing enrollments by placement and record it in column #5.

In column #7 record the projected demand for the same year, and calculate the percent of demand being met by the placements by dividing the placements by the demand and record the percent in column #8.

In recent years there has been a great deal of pressure on vocational educators to assure that the programs are consistent with the expected job opportunities. Under federal vocational laws, the responsibility for providing employment forecasts was assigned to the U.S. Department of Labor and to the State Department of Employment Security. However, in most states the forecasts were in formats which were not usable by vocational education planners.

This research project which I will briefly describe has resulted in both a forecasting system and a decision model for the allocation of resources for vocational education preparatory programs and facilities. Further, this methodology has been agreed upon by our state budget agency as the basis for presenting state appropriation requests.

My discussion here today will briefly cover four phases:

1. The process of projecting demand for new hires by vocational occupations.
2. An analysis of actual enrollments, completions and placements compared with the demand, for the purpose of making recommendations regarding program growth or reduction.
3. A method of charting trend lines to give a visual display of relationships.
4. Decision process for making allocations of funds to schools.

Forecasts (1)

If employers are questioned regarding their future plans for new hires, their response is usually very optimistic, or the response is conditioned by today's new contract or by today's loss of a big order. Employers usually over-estimate the need, and labor leaders usually under-estimate the need. The best estimate is somewhere between.

In this project, rather than to survey a sample of employers as to their expected demand and to construct totals based on the samples, it was decided to base the projections on more gross projections of the future. For control totals of future employment levels, the official Washington State Long-Range Economic Forecast of employment by major industries was used.

(1) See flow diagram of vocational education forecast process and related items, page 9.

Recommendations

Recommendations for growth or reduction in various occupations are based on this analysis.

We feel that in order to recommend that a program should grow, the enrollment to placement ratio should be low; that is, there is good placement (see analysis form on page 6, column #5). And there must be significant demand for new hires (see analysis form on page 6, column #7). And there is a significant unmet demand (see analysis form on page 6, column #8).

Let's look at the analysis on the bottom of page 6 (diesel mechanic and customer service representative) and ask the three basic questions. If the enrollment to placement ratio is high - that is, very poor placement, our recommendation would be to review the program to determine why there is poor placement and then to correct any problems or to reduce the enrollments or perhaps even close the program.

Trend Display

Another tool used to aid in the decision process is a chart for each occupation showing trend lines, both historical and projections of the future (see chart F/C 2-72 on page 8).

This chart shows trend lines of actual total enrollments, actual first year enrollments in a two-year program, actual completions, and actual placements. The projections of the future (see chart F/C 2-72 on page 8).

This chart shows trend lines of actual total enrollments, actual first year enrollments in a two-year program, actual completions, and actual placements. The projections or the objectives expected to be accomplished in the future for each of these items can also be plotted on the chart.

In this display we have added one more item - a "potential" enrollment line. This line is calculated to indicate what the level of enrollment would be if there were a direct relationship between the work force mix and the school enrollment mix. It is based on the assumption that the skills being developed by students in a comprehensive school system should reflect the skills of the world of which the student will live and work.

The previous described analyses and the trend line charts can each be used at both the state level and within a particular school as an aid in making program decisions.

Allocations

There are only a few important points I would like to make on the allocations. In this process, allocations are made to schools for enrollments in each occupation based on a share of the state totals. Each district, with the aid of its advisory committees, etc., determines if the allocation is reasonable based on the specific local conditions. If not, the school can request modifications with evidence to support the changes.

Following are the four factors used to make the preliminary enrollment allocations to districts:

1. The first factor relates to the state population. All things being equal, the larger the district's population, the larger its share of enrollment in a particular program. This population variable tends to promote a comprehensive

program in each district.

2. The second factor is family income - used as an indicator of personal need. The greater a district's share of below average incomes, the larger its allocated share of enrollment slots. The rationale for using income is that the lower the income level, the higher the need for programs.
3. The third variable is a measure of alternative training opportunities in a particular program available to residents of a particular district. All things being equal, fewer enrollments would be allocated to districts which already enjoy the greater share of alternative training opportunities in that particular occupational training program.
4. The fourth variable is the historical enrollment record in a particular program, based on the district's share of the system's enrollments in a particular program the previous year. This variable in effect tempers the changes in enrollment allocations of the other three variables by tying the current allocation in the historical pattern.

PRESENTATION SUMMARY

PRESENTATION TITLE:

New York State RCU Activities 1965-74

PRESENTER (Name, Title, Organization):

Dr. Theresa M. Mack, Associate
Bureau of Occupational Education Research
State Education Department, Albany, New York 12224

ABSTRACT OF PRESENTATION:

During the past nine years the nature of the activities of the RCU has changed. Originally research projects which had been identified in the New York State Plan for Vocational Education were conducted by outside agencies and RCU personnel served as coordinators and monitors. Presently most of the research studies are done in-house and are specifically related to the research needs of the bureaus of vocational education. During the past nine years seventy-one publications which are reports of RCU funded studies have been distributed. Titles are listed on the following pages. Most of the studies are found in ERIC.

In fiscal year 1971, two Research and Development Institutes for Occupational Education were formed, one at the City University of New York, and the other at Cornell University, for the purpose of conducting studies and providing other services related to needed change in the field of occupational education. The City University center primarily focuses on urban and suburban needs; the Cornell center on rural and suburban needs. A listing of their publications follows.

Document dissemination is no longer an integral part of the RCU. EPSIS (Educational Programs and Studies Information Service) is a newly formed unit of the New York State Education Department that coordinates three areas of interest to educators. The coordinated areas are the New York State Curriculum Laboratory, ERIC microfiche reproduction service, and an ERIC computer search service.

PRESENTATION SUMMARY

PRESENTATION TITLE:

Cost Analysis of Secondary School Vocational-
Technical Education Programs

PRESENTER (Name, Title, Organization):

Dr. Garry R. Bice, Director, Tennessee Research
Coordinating Unit for Vocational-Education
909 Mountcastle Street, Knoxville, Tennessee 37916

ABSTRACT OF PRESENTATION:

To determine the cost of educating a student in a specified vocational program, the calculation of current unit cost per student contact hour for each program was accomplished through the following steps: 1) A representative sample was selected from the population. 2) The selected sample of schools with vocational-technical education programs in Tennessee was contacted and permission granted to collect the data necessary for completion of the study. 3) Each selected school was visited to gather the following data: a) Name, position and salary of each professional staff member associated with the vocational-technical program. b) A class schedule for the current school year amended to provide the name and numbers of each section taught, credit and contact hour for each course, enrollment, and name of instructor. c) A copy of the master schedule describing each course and curriculum offered. d) A copy of the financial report for the fiscal period covered with all expenditures for current operations allocated to academic departments in so far as the records were available. e) The number of full-time equivalent students enrolled in each curriculum for the period covered. 4) Analysis of the data was made to determine: a) Direct costs per student contact hour for each course; b) Indirect costs per student contact hour for each course without consideration of the value of site or location; c) Indirect costs per student contact hour for each course with consideration of the value of the site and location; d) Total cost per student contact hour for each course; e) Total cost of educating a student in each course offered; f) Projections of course and program costs in terms of existing and maximum enrollments for a five year period based on an inflationary change factor of five percent.

Findings:

High costs per student contact hour were found to be associated with both course and school. There was no evidence that size of school or geographical location were important in determining the cost level. There was an observed tendency for course costs in all schools to cluster towards the low.

Direct costs, primarily teachers' salaries, were found to be the largest factor in the cost breakdown. Other direct costs (those for space, equipment and materials) were generally low because space and equipment costs were inclusive

ADDITIONAL INFORMATION:

only of a share of these costs depending upon the years of life of each.

Mean costs, except in cases where a course was taught in only one school, tempered both the highs and the lows and were probably more representative because they were the result of all costs and all student hours. The influence of single course costs was partially reduced by developing means by program category, i.e., Agriculture.

Projected costs were based on the means which were available for courses, program categories and programs by school. It was apparent that these projected costs could be used by planners and budget makers.

PRESENTATION SUMMARY

PRESENTATION TITLE:

Preparation and Dissemination of Teacher Prepared Instructional Material

PRESENTER (Name, Title, Organization):

Dr. Edward H. Lareau, Associate Director for Research
Admiral Peary Area Vocational Technical School
Ebensburg, Pa. 15931

ABSTRACT OF PRESENTATION:

The Admiral Peary Research Project in Career Education referred to by the acronym TIMES (Temporally Individualized Modular Education Scheduling) has developed and implemented a delivery system for career preparation that educates students to individual occupational goals while accommodating different abilities and competencies of the individual students. The model was designed to be as general as possible so that it could fit into any educational system. The focal point of the TIMES concept is the teacher prepared Task Instruction Sheet (TIS), which are prepared at the local level to suit local needs and for the instruction of local students. The majority of the teacher prepared TIS do not measure up to the minimum standards for publication or dissemination. Isolated examples of instructional sheets in various areas are by themselves at a level of sophistication to be considered publishable, but no one curriculum is complete in terms of publishable materials. During the first year of operation each student at the AVTS completed 53 instructional sheets, on the average, across all 20 program areas. During the first year of operation, each instructor completed 78 task instructional sheets, on the average, across all 20 program areas. As the school approaches the end of its second year of operation, it appears that the above average figures will be approximately doubled for the second year. The most obvious solution to the above problem would be to hire professional writers and illustrators to work in conjunction with each classroom instructor to prepare task instruction sheets that are suitable for widespread dissemination. Industry or private enterprise could become involved by releasing a full time employee on a one or two year sabbatical to work with practicing teachers in the classroom at the secondary and post secondary level. Teacher contracts could be extended to 11 months so that the teachers could be employed full time for two months of curriculum development.

PRESENTATION SUMMARY

PRESENTATION TITLE:

Manpower Supply - Demand - "Career Program Planning System"

PRESENTER (Name, Title, Organization):

Dr. David H. Fretwell, Coordinator, Applied Research & Exemplary Programs, State Department of Education, 942 Lancaster Drive NE, Salem, Oregon 97310

ABSTRACT OF PRESENTATION:

PURPOSE - The major purpose of the Career Program Planning System (CPPS) is to provide data for the decision making process in implementation of new and extension or curtailment of existing career education programs at the exploratory, preparation (high school) and specialization (post high school) levels. Allied benefits of the program include the identification of priority occupational areas for task analysis and curriculum development activities as well as the provision of data for student career counseling activities.

DATA AVAILABLE - Two types of data are available. 1) Manpower demand data indicating how many people are employed in specific occupations throughout the state and how many will be needed in the coming years. 2) Manpower supply data indicating how many people are being trained for specific occupations in various training institutions throughout the state.

ORGANIZATIONS OF OCCUPATIONS IN SYSTEM - Some 3,500 occupations will be contained in the system. These occupations are identified by several methods in order that they can be retrieved, along with desired manpower demand and supply data, by several methods depending on the user's needs. The occupational identifications used systems include, from general to specific: Oregon career cluster code, worker trait group classification, United States Office of Education, Dictionary of Occupation number and Job title.

WHERE IS THE DATA - The data collected are being placed in a computer based retrieval system utilizing the data processing facilities at Oregon State University. The user can request the occupations, or group of occupations, state local manpower demand information and manpower supply data from a terminal at the State Department of Education and receive an information summary within 24 hours. Allowances have been made, and appropriate facilities are available at Oregon State University, to provide similar user access via remote terminals at any location in the state.

PRESENTATION SUMMARY

PRESENTATION TITLE:

Overview of the North Dakota Research Coordinating Unit

PRESENTER (Name, Title, Organization):

Dr. Donald Eshelby, Director
North Dakota RCU
State Board for Vocational Education

ABSTRACT OF PRESENTATION:

The philosophy of the NDRCU has been one of practicality. There have been few "pure" research studies conducted because most of our efforts have been directed to developmental projects designed to provide the basis for curriculum and program improvement.

Some of the projects recently completed will be briefly discussed in this presentation. There are as follows:

- a) A Ladder-Lattice curriculum for Nursing to provide an opportunity for Nurse Aides, L. P. N., and other health personnel to move directly to more advanced training without loss of prior experience and/or training.
- b) Power Plant operators curriculum designed to provide a basis of upgrading the skills of employees of electrical power generating plants. The curriculum was developed by a joint committee of labor, union, Rural Electric Cooperatives, and private industry.
- c) Farm Management program for adult education programs modified from Minnesota's model. This program began operation prior to the completion date due to the great demand from the field. Currently there are more than 395 farmers enrolled in 14 programs statewide.
- d) An occupational modules project has been completed in office education which is a model office activity for secondary programs. There are 24 modules which include a teacher packet and student materials.

North Dakota has initiated a follow-up study of vocational graduates to be completed in five phases. The first phase is underway currently and involves Office Education and Distributive Education graduates from Post Secondary programs.

The accountability cloud is still hanging over educator's heads. To attempt to handle the situation in North Dakota, we have a project underway to develop a P. P. B. E. S. system for education programs. The system is designed to be an

ADDITIONAL INFORMATION:

evaluation tool, not just a cost accounting system. A slide-tape series will be presented at the RCU conference.

An interesting note regarding implementation of R & D monies under Parts G and D of the Vocational Act in North Dakota centers around the Bismarck Public School District. This district was the site of the first discretionary part C project in North Dakota. After completion of funded activities, the School District has continued and expanded the program as a regular offering to their students.

Without exception, each school funded under vocational education exemplary money has followed suit. I feel this speaks well for the programs and the exemplary staff. Not all programs were funded for large sums of money or for multi-year terms but the programs were continued in all cases to some degree at the local level after initial funding period expired.

The area which has caused North Dakota greatest concern is the area of determining manpower needs by occupation. Little assistance has been given by the Employment Security Bureau and most of the information provided is of little use due to classification difficulties.

PRESENTATION SUMMARY

PRESENTATION TITLE: A Project to Research the Coordination Possibilities Between State Agencies Involved with Vocational Education & Promotional Activities to Implement Concluded Programs

PRESENTER (Name, Title, Organization):
Carol Ann Hodgson
Coordinator of Research, Division of Vocational Education, State Department of Public Instruction

ABSTRACT OF PRESENTATION:

Through a concerted effort by project staff, contacts were initiated with agencies involved with or who should be knowledgeable about vocational education. Through a series of dinners, legislators and key individuals were informed on the status and needs of vocational education in Indiana. Sixty-two legislators and one U.S. Congressman, as well as other decision-makers at the local level were reached through these meetings.

A bill requesting state funds for vocational education based upon a per student distribution formula was introduced into the Indiana House. The bill passed both the House and Senate with only one dissenting vote. It is anticipated that in the coming budget year, funds will be allocated in excess of 300 percent of what has been through the State for secondary vocational programs.

This project has had an impact upon the coordination and communication possibilities between state agencies and in informing key decision-makers and public of the needs of vocational education in Indiana.

PRESENTATION SUMMARY

PRESENTATION TITLE:

Investigating Interaction of Learning Styles and Types of Learning Experiences in Vocational-Technical Education

PRESENTER (Name, Title, Organization):

Roland J. Krogstad, State Consultant
Vocational Education Research, Exemplary and EPDA
Wisconsin Board of Voc.-Tech. and Adult Education
Madison, Wisconsin 53702

ABSTRACT OF PRESENTATION:

In addition to allowing students to progress through a course at his or her pace, truly individualized instruction should provide alternative environments, audio-visual media, sequencing, branching, presentation modes, response modes, instructional content, types of learning, learning modes, etc. These alternatives should be based on learning theory and designed and managed to accommodate individual preferred learning styles in order to optimize an individual's learning in his selected educational program. The computer could assist in prescribing and managing these learning experiences.

The purpose of this project, currently in its second year, is to investigate types of learning styles relevant to vocational education and to develop and field test alternative learning experiences to optimize individualized instruction. The preliminary phase conducted at UW-Stout (J. Banks) involved identification of four learning styles, e.g., concrete/symbolic, structured/un-structured. An instrument was developed to assist in identifying the learning styles of students on two continuums. The placement somewhere along the continuums indicates the preference for a learning style. The placement of a person's score near the continuum mid-point may indicate the person desires a mix or composite of both learning styles on the continuum.

The major emphasis of the project at F x Valley Technical Institute is to identify and field test additional learning styles, instruments and alternative learning experiences relevant to vocational-technical education. Mean scores scattergrams, and bar graphs were developed for 15 classes indicating placement of students on the continuums. The Oakland Community College of Michigan cognitive mapping programs are being field tested.

Initial scores of matching learning styles with teaching styles in one class of 20 accounting students indicate higher achievement where they are matched than in cases where they are not matched. Evaluations of attitudes toward the diagnostic testing indicate that 23% of the students resented the testing and 67% did not; and 81% felt the map was accurate or fairly accurate. About 96% (26) of the participating faculty felt the mapping program should continue. Further field testing as to whether achievement gains are enhanced by matching learning

ADDITIONAL INFORMATION:

experiences and teaching styles with learning styles is needed.

"THE SCORE AFTER NINE"

(1965 - 1974)

TUESDAY, March 19, 1974

1:00 pm - 5:00 pm

Afternoon Session Chairman Virginia Bert

1:00 pm - 3:00 pm

"League Franchise Expansion"

*-A National Network for Curriculum Coordination in
Vocational-Technical Education-*

Panel Moderator. Kenneth Eaddy

*Panel Members. James L. Blue
Herbert Bruce
Joseph Kelly
Ronald Meek*

3:00 pm - 3:15 pm

Coke/Coffee Break

3:15 pm - 5:00 pm

"Seventh Inning Stretch"

Special Interests Research Groups. . . . Beverly Wheeler

7:30 pm - 9:00 pm

"Twilight Exhibition Game"

*Special Session to Show Films and
Related Material Ronald McCage*



The Directors of the National Curriculum Management Network
share ideas on areas of Articulation and Cooperation...



"THE SCORE AFTER NINE"

(1965 - 1974)

WEDNESDAY, March 20, 1974

8:30 am - 12:00 Noon

Morning Session Chairman Jake Huber

8:30 am - 10:00 am

"Play Offs"

-State Diffusion Models-

Panel Members Garry Bice, Tennessee
Joe Mills, Florida
Ronald McCage, Illinois
Irma Keyes, Pennsylvania
Joe Kelly, New Jersey

10:00 am - 10:30 am

Coke/Coffee Break

10:30 am - 11:30 am

"Play Offs"

-State Diffusion Models- (Continued)

PRESENTATION SUMMARY

PRESENTATION TITLE:

A Diffusion Model for Vocational-Technical Education in the State of Tennessee

PRESENTER (Name, Title, Organization):

Garry R. Bice, Director, Research Coordinating Unit
University of Tennessee, 909 Mountcastle Street
Knoxville, Tennessee 37916

ABSTRACT OF PRESENTATION:

The original objectives of the Tennessee Research Coordinating Unit, as established in 1966, focused upon dissemination activities, research and development activities related to disadvantaged persons, and the development of programs to improve the research literacy of vocational-technical clientele within the State. Then, as now, the State Division of Vocational-Technical Education and The University of Tennessee College of Education cooperate to jointly sponsor the efforts of the RCU.

As changing needs of personnel within the State were recognized, the goals and objectives of the RCU were redefined in 1970. Resulting efforts developed into a systematic research and development program for vocational-technical education, aimed at implementing changes in local school programs with the changes based upon sound research findings. These efforts and the resulting program, then, constitute the Tennessee Operational Model for Dissemination.

In concert with the objectives developed by the National Center for Vocational Education at Ohio State University and the Center for Occupational Education at North Carolina State University, the Tennessee RCU strategy for effecting change included four programmatic efforts, labeled here in the Operational Model as "Subsystems."

The information retrieval and dissemination system is essentially a document-based system. The prime source of input to the system is the nationwide ERIC system. Components of that system include complete microfiche collections, computer search capabilities (using the "Query" program), and supporting publications such as "Research in Education" (RIE), "Abstracts of Research and Related Materials in Vocational Education" (ARM), "Abstracts of Instructional Materials in Vocational Education" (AIM) "Current Indexes to Journals in Education" (CIJE), and related indexes.

Thirteen strategically located institutions serve as Regional Resource Centers (RRC's) where individuals have access to necessary indexes, view microfiche on a reader or reader-printer, and print out pages as necessary. Two RRC's are located

ADDITIONAL INFORMATION:

in secondary schools, three in State Technical Institutes, seven in Area Vocational Schools, and one in a Community College. Workshops for Regional Resource Center personnel are held regularly in November and May as a means of keeping the individuals up-to-date on both RCU activities and current trends in information needs throughout the State. RRC personnel serve voluntarily as a liaison between their institution and local schools, and are initially supplied with 1,500 free microfiche and a reader-printer. Additional microfiche may be requested from the Center RCU.

To facilitate retrieval, dissemination, and consumption of research and research-related information at the local level, three Regional Research and Development Offices were established. These offices, staffed with professional and clerical personnel are located in East, Middle, and West Tennessee. In addition to operating as strategic contact points for referrals and requests, the Regional Research and Development Coordinators provide valuable technical assistance in the writing of research proposals, conducting small research projects, and analyzing and utilizing packaged information such as manual and computer searches.

With the central data base located in the College of Education at the University of Tennessee in Knoxville, retrieval and dissemination of library materials is supported and facilitated by both Regional Resource Center Representatives, where files are individually organized and maintained, and Regional Research and Development Offices in Jackson and Murfreesboro, Tennessee.

The "Query" computerized retrieval system is used to access ERIC files at the University of Tennessee Computing Center. Increased emphasis has been on maximum utilization of already completed computer searches by the printing and dissemination of an "Index to Query Computer Searches," with updates added to it every three months.

A monthly awareness paper is published by the RCU to focus attention on key research and development results. The "RCU Circulator" has proven to be a valuable feedback mechanism from readers and is mailed to approximately 4,500 persons bimonthly from September through May, the mailing list has expanded from the original total of 2,600 in 1970 to the above mentioned total by individual and group requests.

The Tennessee Selective Dissemination of Information (SDI) Sub-System for Area Vocational Schools, State Technical Institutes, Community Colleges, and Secondary Schools was initiated in September of 1972. Using the "Directory of Personnel in Vocational Education in Tennessee," a faculty profile was constructed for each school, listing the total number of teachers in each vocational instructional area. The profile serves as a key for assembling the SDI package for each school. The package provides individual teachers with listings of available materials in specific instructional areas on a regular basis.

In many cases, documents from the AIM and ARM indexes on topics such as cosmetology and cooperative education were limited. The Tennessee RCU SDI sub-system has, therefore, proven to be a valuable checkpoint for the types of documents that are scarce in the Vocational-Technical ERIC Clearinghouse files and has put the RCU in a position to be able to make recommendations to ERIC Clearinghouse to place greater emphasis on information retrieval in the instructional areas for which there is

both a demand and little supply. The Management Information System is a data-based information system consisting of files of student enrollment, instructional personnel, census data, program cost, and student placement. Data are retrieved using a form such as this.

The total system is a computerized data bank with the primary goal of providing comprehensive, current and accurate data to educators and administrators at all levels. Approximately twenty items of information are collected on each secondary and contract adult vocational-technical student and teacher in the State. From the initial input, basic demographic, attitudinal and enrollment accounting data are generated on units varying in size from the entire State to a single class. After initial data collection in the fall, output is sent to contributors in January and April for updating. The following fall, follow-up information is collected on each student in the previous year's records.

Profiles and analyses are regularly disseminated to teachers, superintendents, and regional and state offices of the State Division of Vocational-Technical Education. Appropriate data is generated for required state reports to the U.S. Office of Education. Additionally, all data are stored for specialized analysis in the future by these groups and other individuals or organizations involved in educational or economic research. The single most important use for evaluating the adequacy and effectiveness of existing programs so that better planning of future educational programs can be achieved.

Project INFOE (Information Needed for Occupational Entry) was developed and implemented to provide career information to students in grades 7 through 14.

The key to INFOE and INFOEscript which provides for general career information on three pages and for specific information, pertinent to local communities, on the fourth page. In localizing information for the fourth page, data were obtained from local offices of the Tennessee State Employment Service, regional vocational education supervisors, state area vocational-technical schools, state technical institutes, state community colleges, and businesses and industries. Much of the content for the first three pages of general information was adapted from existing guidance materials. After being validated for use in Tennessee, the four pages were photographed and reproduced on aperture cards.

In cooperation with the Tennessee Valley Authority, the RCU developed a career information component for students in grades 4, 5, and 6. This component called Elementary INFOE (Information Needed for Occupational Exploration) is designed to provide students with basic information on career clusters as well as general information on specific job titles. Twenty INFOEscripts have been developed for each of the fifteen career clusters identified by U.S. Office of Education.

One INFOEscript for each cluster consists of an introduction and an overview of the careers contained in the cluster. In addition, nineteen scripts for each cluster contain general information on specific job titles.

As the three primary programmatic areas and enabling systems developed, it became evident that not enough change and progress was occurring at the local classroom level. Since all systems had been carefully designed and tested (empirical evidence was gathered on each system and sub-system), it was decided that the weak point was still the linking agent between researcher and practitioner. Analysis of change strategies and models as developed by Rogers (1962), and Havelock (1970) led to the development of a product utilization system that include five different components, each with a somewhat similar function, but each playing a different role in the system. In addition, some of the components have functions to be completed in other programmatic areas within the RCU.

The first component of the system is an obvious but most often overlooked one. The central administration of the RCU is the point at which the whole product utilization system begins. The very fact that educational research and development activities are often viewed from a jaundiced perspective by local administrators and instructional staff, necessitates the development of a system that will meet the needs of local clientele. The administrator of the unit that is change-oriented must make possible all the activities, in appropriate sequential order, at strategic points. These activities must be made available to all clientele -- from the innovator to the late adopter. The unit must commit time, personnel, and other resources needed to accomplish the task of change; and the administrator must provide appropriate publicity to the program in order that it might diffuse via the social inter-action process.

The second component is the resource base. The resource base consists of: (1) hard copy and microfiche from Central ERIC and selected clearinghouse; (2) selected curriculum materials and publication produced by local educational agencies from within a limited geographical area (in this case the State of Tennessee); (3) a data bank of census statistics, economic information, educational statistics and education program enrollments, program cost information and program evaluation (accountability) information; (4) resource persons representing various disciplines that are skilled in problem solving processes and able to interpret research reports, statistics, legislation and the writings of theoreticians and research writers; and (5) a source of funds (known as the mini-grant program in Tennessee) that can be used to assist local educational agencies experiment with or simply try something new or different from what they had been doing.

The third component of the system is an Extension/Change agent, strategically located and capable of effectively communicating with research-oriented clientele, state and local supervisors and administrators, and classroom instructional personnel. The role of the extension/change agent in Tennessee has been developing over the last three years. The extension/change agent, with clerical support, is located in the regional office of vocational-technical education. That arrangement permits immediate contact with up to 12 supervisors, each of whom has many contacts and daily working relationships with local instructional personnel. With a regional office centrally located in each of the East, Middle and West Tennessee areas, the agent actually serves as an extension of the main RCU office, which houses most of the data, information, and resource bases. In addition to having direct access to the total resource system at the main office, the agent has mini-collections of materials and resources in his own office. The nature and extent of these collections is determined by the nature of the problems confronting the educators in that particular region.

The agent serves both as a solution giver and a process helper so actually is a change agent according to Havelock (1970).

The fourth component of the system is a coordinator of product utilization, located at the central office. That coordinator has the prime responsibility of packaging the results of research and development activities. Various types of packages are developed, dependent on the product, but are aimed at serving two primary groups, namely, the extension/change agent or the regional resource center person.

The resultant system has, then, developed into a paired change process and can best be summarized as illustrated here.

The system was designed to try to focus the efforts of national research centers and laboratories, the State Department of Education, and the University upon the problems of the local school system and its instructional personnel. With the information explosion resulting from technological developments and massive numbers of researchers

and agencies exploring alternative systems, methods, techniques, etc., it has become necessary to establish a series of screens through which information and related products flow, with key results being sifted out and packaged for the various users of those efforts.

The objective of the organizational structure as described, is to provide something for everyone. As illustrated here, via the linkage agent, the user has access to rather complete document and data-based information from the information sub-systems housed at the central RCU.

The teacher educators and inservice education coordinator has access to package of information, designed to acquaint teachers, administrators, and supervisors with new concepts and current developments, from the system's coordinator of product utilization; the local administrator or supervisor has access to information related to practical applications of research and development results from the extension/change agent; and the local teacher has access to similar information from the regional resource center.

In addition, since any educator can assess the system at any point, all types of people from the innovator to the laggard can be accommodated. For example, an innovative teacher in a local education agency may access information about a new instructional technique from one of the regional resource centers located near him geographically to see who is using the technique or how it is being used, or the teacher may access more detailed information and results of research on the instructional technique directly from the central RCU. Further, a less-innovative teacher may be less interested in technically written research reports and go to the extension/change agent who provides interpretation of research results to the teacher.

At this point, the information dissemination system must be re-emphasized. In order for clientele to make changes, they must be aware of and have knowledge about improved concepts, techniques, methods and processes. The information dissemination system is designed to assist with this critical area.

In the adoption (of change) process, individuals usually progress through the awareness, interest, evaluation, trial and adoption or rejection phases. Various products and activities of the RCU are targeted to most of these phases. Specifically, the "RCU Circulator" contains short notes related to research and development results -- and is disseminated bimonthly to clientele throughout the State. The objective of the "Circulator" is to assist with making clientele aware of various developments. Selective Dissemination of Information (SDI) sheets are disseminated on alternative months to specific audiences and contain information related to how the previous development or concept is applied to their specific instructional area. The SDI sheet may include abstracts of projects utilizing the concept, lists of selected curriculum guides or sources of additional information. This technique helps to develop the interest of various clientele. To assist clientele with the evaluation phase, the information dissemination system has the responsibility of developing and disseminating such products as annotated bibliographies, popularized (condensed) versions of technically written research and development reports and indexes to additional sources of information.

Assuming that, after sufficient evaluation, the individual wants to move to the trial phase, he may contact the Regional Research and Development Coordinator or the central RCU and apply for financial resources through the RCU's Mini-Grant program (usually \$1,000 limit). Depending upon results of the mini-grant project, the individual may decide to adopt or reject all or part of his product. Results of mini-grant projects are also incorporated into the information dissemination system and utilized at the awareness, interest and evaluation phases for other clientele.

One way of judging the value or effectiveness of the total system is to examine how many people are making use of the system and how much and what kind of information is being requested. A study by Kelly (1973) revealed that after 2 years, approximately 30% of the vocational-technical teachers in local schools throughout Tennessee had some knowledge of the role and function of the RCU. That study also revealed that all segments of the system were being utilized to some degree.

Analysis of requests for information have been most encouraging. In 1970, an average of twenty-one people per month made on-site use of the document and data-based systems at the central RCU. In 1973, that number had increased to 100 on-site users per month. In 1974, monthly requests for 520 titles were received (over 1,000 pieces of microfiche). And in 1971, requests for complete (computer and manual) searches of the ERIC system for specific information averaged five per month. In 1974, 40 requests for new manual searches and 25 requests for new computer searches were received each month. An analysis of RCU funded mini-grant projects in Tennessee by Sutton (1973) revealed that 98% of the mini-grant project directors felt that local school students had benefited as a direct result of mini-grant projects. Project directors listed 23 different ways in which students had benefited from the mini-grant program. In addition to yielding benefits to students, there is evidence (Sutton, 1973) that other teachers, administrators, parents and community leaders derived benefits from the mini-grant program. Examples of changes, based upon the results of research, directly affecting students include individualizing selected units of some courses in a school, revising the content of selected courses, updating the total curriculum of a school and the implementation of pupil placement programs. In addition, approximately 200 schools are making more and better occupational information available to their students through the use of the INFOE (Information Needed for Occupational Entry) system.

In summary, the primary purpose of the Research Coordinating Unit in the State of Tennessee is to bring about change in the vocational-technical education system in the State. Utilizing strategies suggested by Rogers and Havelock, a system consisting of data and information bases, human resources, product utilization coordinators, extension/change agents, and regional resource centers was developed. Pairing various components of the system, it has become possible to work with all levels of clientele and all types of individuals. In this way, it is possible to move nearly anyone from the awareness stage through the adoption stage in the long process of change.

PRESENTATION SUMMARY

PRESENTATION TITLE:

The System for Dissemination

PRESENTER (Name, Title, Organization):

Robert L. Schmalfass, Consultant, Program Planning,
Department of Education-DVTAE, 228 Knott Building
Tallahassee, Florida 32303

ABSTRACT OF PRESENTATION:

Most every "lesson" or "sermon" is prefaced by some text, and so, also, is mine today.

Florida is one of the very few, if not the only state in the union that has a legislative mandate dealing with the dissemination of educational materials.

My text quickly reads as follows:

A definition for dissemination may be inferred from this statute, but the DOE has defined it as a system for achieving implementation of improved practices and programs in schools. This system includes provisions for the acquisition, distribution, follow-up and evaluation of alternative educational practices and programs.

Within the scope of this definition, the Division of Vocational, Technical and Adult Education's "system" is unique and effective. The uniqueness and effectiveness of the system, as well as the system itself, is couched in the organizational structure of the Division and the philosophical commitment of all staff to the implementation of improved vocational education programs and practices.

By Florida statutes, the State Board of Education is the chief policy-making and coordinating body of public education in Florida and authorizes the State Board of Education to constitute the State Board for Vocational Education with responsibility for administering all state and federal laws for the promotion of vocational education and articulating it with other state education programs. Section 1.14-2, the Florida State Plan for the Administration of Vocational Education annually approved by the Florida State Board for Vocational Education establishes the Division as the State Board staff responsible for the provision of "leadership in the planning, coordination and general administration of the statewide program of vocational education with the local education agency being responsible for local program operation".

As the result of the breadth of responsibilities assigned to it, the Division of Vocational, Technical and Adult Education in its role as the State Board Staff is "program oriented" because it is concerned with the promotion, development,

ADDITIONAL INFORMATION:

implementation and evaluation of high quality vocational, technical and adult education rather than the institutional arrangement which provides the services at the district level.

Six major functions have been identified as essential for the Division to carry out its leadership role. To perform these, the Division has been organized as follows:

- A. Division Administration
- B. Bureau of Vocational Planning
- C. Bureau of Vocational and Adult Programs (Consultative Services and Technical Assistance)
- D. Bureau of Vocational Research and Evaluation
- E. Bureau of Vocational Program Services
- F. State Advisory Council for Vocational and Technical Education

Further Divisional organization provides for five regional offices from which each program operating section of the Division has area supervisors under the direction of an area program coordinator. By living in the region and working out of the area office, a program supervisor can provide more effective, efficient and rapid dissemination through consultative services either as an individual or member of a team to the educational leaders and managers in local districts.

These five geographical regions approximate major labor market areas with the area offices located in Tallahassee (Area I), Gainesville (Area II), Orlando (Area III), Tampa (Area IV), and Boca Raton (Area V). These area offices are maintained and supervised through the Bureau of Vocational and Adult Programs.

One more transparency to show you the organization of the UOE. Implementation of improved vocational education programs and practices is not solely effected by the acquisition and distribution of written materials and publications, but, also, by the total commitment of all Division staff to disseminate learned practices and innovative ideas through individual and/or team member consultative services and technical assistance to educational managers, practitioners, representatives of cooperating businesses and industries and representatives of other local, state and national governmental agencies.

This commitment is reflected in various Division Staff Memoranda issued by the Director as policy, Staff Memorandum No. 3.01-1 identifies the Division Philosophy and Objectives from which come these statements:

"....it is the function of the Division of Vocational, Technical and Adult Education to:

1. Provide continued leadership and services in the development and implementation of programs having the greatest occupational, social, civic, economic, and cultural value for youth and adults as long as benefit can be derived.
2. Initiate, encourage, and support continuing efforts in programs of research, experimentation, innovation, and dissemination.
3. Work cooperatively and maintain effective communications with other Divisions of the State Department of Education, Governmental agencies, institutions, professional and civic organizations, business, industry, and all other agencies.
4. Provide resources for the development, appraisal, and dissemination of curriculum and instructional materials.

5. Provide resources for an increased recognition and utilization of a planned program of information services to the lay and educational public.
6. Develop guidelines and procedures to assess the effectiveness and provide for the improvement and expansion of vocational, technical and adult education.

Staff memorandum No. 3-17-3 lists the operational guidelines for innovative and exemplary programs and projects, one of which reads:

"A plan for disseminating the structure and findings of an exemplary program and and innovative project must be developed jointly by the local project director and staff of the research and evaluation bureau."

Dissemination is the "name of the game", and is central to daily standard operational procedures for each Division staff member (including support personnel); and it remains a continuing objective in high priority with united divisional effort for its continuous improvement.

INPUT:

Product needs are identified by any one or a combination of several different processes:

1. Needs assessments at local and/or state levels;
2. Program priorities established at the Division level,
3. Comprehensive plans developed by local school districts, community college districts, and universities.
4. Researchable ideas garnered by individuals or organizational units through conferences, seminars, professional journals and papers.

Bureau of Research and Evaluation:

The Bureau of Research and Evaluation will determine what products will, in fact, be developed. This is accomplished through a project funding system -- which includes the following activities:

1. The product needs are written up as project proposals for funding and submitted by local school districts, community college districts and universities to the Bureau of Research and Evaluation in a document entitled, "Funding Guide for Implementation, Improvement and Evaluation of Vocational, Technical and Adult General Education Programs", for the given fiscal year. The university document is entitled, "University Funding Guide for Vocational, Technical and Adult Teacher Education", for the given fiscal year.
2. The proposal are initially pored through by Bureau of R & E staff, and those acceptable are submitted to the Research Coordinating Council for further review and approval according to identified research priorities established by the Research Bureau and the Division Director.
3. The approved proposal are then recommended by the Chief of Bureau of R & E to the Division Director for his letter inviting the proposal as a project to be funded through the DVTAE.
4. From this point forward to completion, all phases of product development are monitored and technically assisted by the staff of the Bureau of R & E and the Rescoord Council.

DVTAE Administrative Leadership:

The completed product is transmitted to a meeting of Division Administrative Leadership for approval. This decision-making body is comprised of the Division Director, Assistant Director, Bureau Chiefs and other appropriate program administrators as appertain.

If the word is "GO", further decision is made relative to the publication of the product. It will be published commercially for general sale to the public or by the DOE for gratis distribution or for distribution at a minimal cost.

If the decision is "NO", the product is returned to the Bureau of R & E where it will either die or remain in "Limbo" to possibly be incorporated in whole or in part in some future project.

Area Office Coordinators:

The "GO" product is now ready for dissemination and diffusion. A product package is given to each of the five Area Coordinators in which are included some basic information and data appertaining to the benefits of the product, costs of implementing the product in schools, organizational arrangements necessary for implementation, and other findings, analyses, and recommendations.

The area coordinators and their staff then work with district school personnel to diffuse to product -- "Make it widely perceptible, known, and familiar".

Through a funding request for demonstration, the product is implemented in one school in each of the five areas after a series of in-service workshops with the necessary school personnel responsible for the product's full implementation.'

It is during the time of demonstration that the area staff will continue to work with other local district people making team aware so that they may Explore the product through a coordinated on-site visit to the demonstration school. After the visit and a complete Evaluation of the product by the visiting team, the team then decides to Accept or Reject.

This, I submit, is one way that we in Florida try to effect a positive educational change.

PRESENTATION SUMMARY

PRESENTATION TITLE:

State Diffusion Models - An Illinois Alternative

PRESENTER (Name, Title, Organization): Ronald D. McCage,
Coordinator, Research and Development Unit
Division of Vocational & Technical Education
Ill. Board of Vocational Education and Rehabilitation

ABSTRACT OF PRESENTATION:

The Vocational Education Act of 1963 and its successor, the 1968 Amendments, provided several line item funds designed for developmental and innovative activities. The two Acts marked the first time in the history of vocational education legislation that both emphasis and funds were placed on innovative developments in the field.

The utilization of certain line item funds by Illinois, as well as several other states, has produced a number of products that have become well-known at both the state and national levels. Demands for these materials have caused both state and federal officials to search for new methods of making highly desirable materials available on a massive scale.

As this situation began to emerge in Illinois, DVTE staff began to look for alternatives that suited the operational philosophy of the agency and that adhered in Illinois law. Since the USOE Copyright Guidelines now provided for a much improved situation for the involvement of commercial disseminators, this appeared to be a feasible approach. USOE Copyright Guidelines were reviewed to determine the legal ramifications for state-supported activities. The search proved futile until the receipt of the Copyright Program Information Bulletin released in late 1970. This document provided the key for solution of the problem at hand.

The Copyright Program Bulletin provided additional information and clarified interpretations of USOE Copyright Guidelines as they applied to state grants. Through analysis of this document, it was determined that USOE Guidelines do not apply to federal money granted to states under a state-administered formula grant program. The document defined formula grant money to be monies received by the states under the 1968 Amendments. Several other categories received in a similar manner and administered by other agencies in Illinois also fall under this definition. The final point made was that a state was responsible and had the legal right to establish its own system of providing a release for commercial dissemination of materials produced through these funds. This key point made it possible for a State Board to set its own policies. Under this interpretation, the Division prepared a policy statement based on USOE provisions. It was approved by the State Board of Vocational Education and Rehabilitation on

ADDITIONAL INFORMATION:

February 15, 1972.

After formal acceptance of the Division Copyright Policy by the Board, state staff began to develop guidelines for implementation of the policy. After three months of extensive investigation, Bulletin No. 37-972 entitled Administrative Guidelines for Securing Assistance in the Dissemination of Project Materials Arising from Contractual Agreements was published. This publication culminated almost three years of effort on the part of Division staff.

The Guidelines are designed to provide the local project director with a systematic approach to dissemination of project materials. The Guidelines provided for two major dissemination routes. One route provides for the dissemination of "Thin Market Material" which can be defined as those materials directed at a limited market. This material would be printed through the Regional Curriculum Laboratory or subcontracted through local printers. The second route made provisions for "Mass Market Material" or those material for which large market potentials exist and material feasible for commercial dissemination are available.

The project director seeking assistance in dissemination must follow a four-step process to reach his goal. The four steps are identified as follows:

- Step I: Request for Product Dissemination
- Step II: Publisher Search and Alert Stage
- Step III: Evaluation and Reappraised Stage
- Step IV: Contractual Agreement Stage

To handle this backlog of materials, the Division decided to host a Publishers Alert Conference. The Conference was held on March 29 and 30 at the Sheraton-Oakbrook Motor Inn in Oakbrook, Illinois. Ninety-two publishing houses were sent invitations to attend. Twenty-one publishers came representing sixteen major houses.

Three of four projects offered for publication have been released to publishers and are or will be available by October, 1974.

PRESENTATION SUMMARY

PRESENTATION TITLE:

VEIN - A People Oriented Information System

PRESENTER (Name, Title, Organization):

Erma D. Keyes, Associate Director of VEIN
Millersville State College

ABSTRACT OF PRESENTATION:

VEIN - the Vocational Education Information Network for Pennsylvania - is fulfilling the RCU mission to disseminate research and related materials for vocational education. The overlap of career, vocational, and adult education broadens the target audience for services provided. All services are designed to establish people-to-people interaction for satisfactory results of information seeking.

VEIN recommends that potential users of information and curriculum materials personally contact information workers. Telephone lines are open each day from 8:00 AM to 4:30 PM. VEIN initiates calls to individuals who submit written requests. This procedure allows information workers to negotiate conditions of searches and to provide low volume, highly refined responses. Manual and computer searches of ERIC documents, the AIM/ARM collection, the PA project and curriculum files, periodicals and other related publications are carefully reviewed by experienced information workers. Support staff reproduce selected documents as microfiche or hard copy. On-time delivery of requested information -- a critical factor for knowledge utilization - is a positive feature of VEIN's search service.

State, regional and local vocational, adult and career educators are heavy users of VEIN's services. VEIN personnel work with administrators, teachers, counselors, researchers, librarians and college/university staffs through workshops, conference presentations and exhibits, and on a one-to-one basis to encourage expanded use of documented information and topical experts in problem-solving and decision-making.

Other VEIN services include printed bulletins announcing special emphasis materials, unsolicited distribution of current interest items to individuals, microfiche reader loans on short and long-term bases, updated equipment information packets for reviewers, small group sessions and surveys to study information needs and product format, and consultant services for developing and implementing curriculum or information delivery systems at state and local levels.

Cost for these services is covered by federal funds granted by the Bureau of

ADDITIONAL INFORMATION:

Vocational Education and the RCU. Millersville State College contributes space, use of college facilities, and certain administrative services. VEIN users do not pay for services or materials.

Effectiveness of VEIN's efforts to be a reliable source of information among its target audience is evidenced by the number of repeat users as the volume of requests annually increases. Mid-year summaries for FY 75 indicate that volume will be more than double that of FY 74.

Success of this information dissemination system is attributed to the VEIN focus on talking with people and concentrating on their needs; the cooperation of the Bureau of Vocational Education, the RCU and Millersville State College staffs; and interaction with other state and national information centers.



11:30 am - 1:30 pm

"Player Draft"

Business Luncheon



. . . . Charles H. Rogers, Presiding

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MINUTES OF THE ANNUAL BUSINESS MEETING

National RCU Personnel Conference
Scottsdale, Arizona
Wednesday, March 20, 1974

The annual business meeting of the National RCU Personnel Conference was called to order at 12:30 p.m., Wednesday, March 20, 1974, at the Doubletree Inn, Scottsdale, Arizona, President Charles H. Rogers presiding.

Minutes of the 1973 business meeting were APPROVED as PRESENTED.

The financial statement was PRESENTED and ACCEPTED.

President Rogers expressed his appreciation to John Coster (AVA - announcements), the National RCU Planning Staff, Ron McCage (Brochure of Project Report Abstracts), the USOE Representatives, and Presenters of the Project Reports for their efforts and participation in this Conference.

Jake Huber, Nevada RCU, reported that "The Position Paper of RCU with NIE was forwarded to NIE, but no further word had been received on NIE Action."

President Rogers led a discussion of the draft of the proposed "Operational Guidelines for the National RCU Personnel Conference." Amendments were received and recorded.

It was MOVED, SECONDED, PASSED that the "Operational Guidelines for the National RCU Personnel Conference" be accepted as amended.

Brandon Smith, chairman-audit committee, reported that the financial records were in order and no further action is necessary.

Bob Schneider, chairman-nominating committee, announced that the following persons were recommended for 1974-75 RCU Officers:

President:	Glenn Smith, West Virginia Ron McCage, Illinois
Vice-President:	Brandon Smith, Minnesota Jake Huber, Nevada
Secretary-Treasurer:	Ray Barber, Texas Don Eshelby, North Dakota

Nominations were open from the floor.

It was MOVED, SECONDED, PASSED that nominations for President be closed.

It was MOVED, SECONDED, PASSED that nominations for Vice-President be closed.

It was MOVED, SECONDED, PASSED that nominations for Secretary-Treasurer be closed.

Nominations for 1974-75 RCU Officers were closed.

George Pilant and Douglas Patterson were appointed by President Rogers to count the ballots and report the results of the election.

Election for the office of President ended in a tie.

It was MOVED, SECONDED, PASSED that the outcome be decided by "flipping a coin." Glenn Smith "called the toss" and lost.

Ron McCage, Illinois RCU, is the 1974-75 RCU President.

Election for the office of Vice-President ended in a tie.

It was MOVED, SECONDED, PASSED that the outcome be decided by "flipping a coin." Jake Huber "called the toss" and won.

Jake Huber, Nevada RCU, is the 1974-75 RCU Vice-President.

Election for the office of Secretary-Treasurer. Ray Barber, Texas RCU, was elected.

The newly elected RCU officers were introduced.

President Rogers asked for invitations from states wishing to host the 1975 RCU National Conference. Invitations were extended from California (San Francisco) and Colorado (Denver).

The membership selected Colorado (Denver) as host state of the 1975 RCU National Personnel Conference.

National RCU Conference dates were set for March 17-20, 1975.

It was MOVED, SECONDED, PASSED that a vote of thanks be expressed to Sid Borchert and Beverly Wheeler, both of Arizona RCU, for the fine job in making Conference arrangements and hosting the annual meeting in Phoenix.

It was MOVED, SECONDED, PASSED that a vote of thanks and appreciation be extended to retiring President Charles Rogers and his officers for the outstanding leadership during the past year.

President Rogers adjourned the meeting at 3:00 p.m.

Respectfully submitted,

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Ray Barber, Secretary-Treasurer
1973-1974

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Operational Guidelines for the National RCU Personnel Conference

Purpose

The National Research Coordinating Unit (RCU) Personnel Conference shall meet annually for the following purposes: to improve communication among state vocational research personnel in the United States and its territories, to coordinate research efforts, to provide inservice education opportunities, and to disseminate research findings. This informal organization shall not be affiliated with a professional educational research association.

Officers, Duties, and Term of Office

The officers of the Conference shall include: president, vice-president, secretary-treasurer, and four regional representatives (Northeastern, Southern, Midwestern, and Western). The three officers, the past president, the four regional representatives, a USOE representative, and a representative of the state hosting the Conference shall form the executive committee. A representative of each of the National R & D Centers for Vocational Education will be invited to serve in an advisory capacity to the executive committee.

Duties and Responsibilities: The primary responsibility of the executive committee shall be to plan and conduct the annual national conference.

President: The president shall serve as the chairman of the executive committee and general chairman of the national conference. He shall be responsible for calling interim meetings of the executive committee for the purpose of planning the national conference and attending to other business related thereto.

Vice-President: The vice-president shall serve in the absence of the president in planning and conducting the national conference.

Secretary-Treasurer: The secretary-treasurer shall record the minutes of all executive committee meetings and be responsible for overseeing the recording of the proceedings of the national conference. He shall also be responsible for conducting all financial transactions associated with the conference.

Regional Representatives: The regional representatives shall serve on the executive committee and shall represent the special interests of their geographic regions in the planning of the national conference.

Term of Office: The term of office for all officers shall be for a period of one year.

Election of Officers

A nominating committee consisting of a representative of each of the four regions will be appointed by the president to nominate a slate of officers which shall be presented to the business session of the national conference. A member of the existing executive committee shall not be a member of the nominating committee. Nominations from the floor will be accepted during the business session.

Voting will be conducted by secret ballot. Each state or territorial RCU shall have one vote in the election of each officer. A majority vote of the RCU's represented at the business session of the national conference is required for the election of each officer. New officers shall assume their duties at the last session of the national conference at which they were elected.

The regional representatives shall be selected by the RCU personnel from each of the four regions. Each region will choose its own method for selecting its representative.

Financing

The national conference shall be financed through a registration fee which shall be collected at the time of registration at each conference. The amount of the fee will be determined by the executive committee prior to the national conference and shall be based on the estimated expenses for the conference. At the close of each national conference, all unexpended funds shall be turned over to the incoming secretary-treasurer to be used for expenses incurred in planning and conducting the next annual conference.

It shall be the responsibility of the RCU in each state and territory to provide financial support for travel and subsistence for each of its representatives attending the annual conference.

The secretary-treasurer shall present a treasurer's report to the executive committee annually. An audit committee appointed by the president shall review the treasurer's records annually and shall report its findings to the business session of the national conference.



"THE SCORE AFTER NINE"

WEDNESDAY, March 20, 1974 (1965 - 1974)

1:30 pm - 5:00 pm

Afternoon Session Chairman Glenn Smith

1:30 pm - 3:00 pm

"Player Contract Negotiations"

-Copyright Policy-

Publisher's Viewpoint. William McKnight

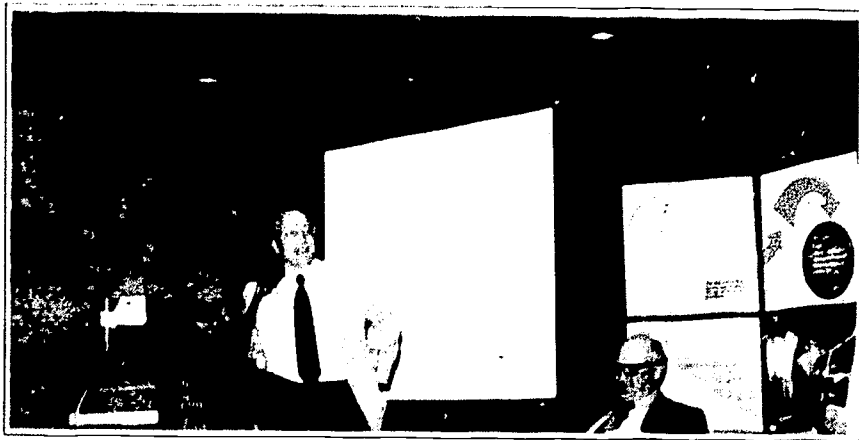
Developer's Viewpoint. Donald Lux

ILLW's Viewpoint. Larry Braaten

3:00 pm - 3:30 pm

Coke/Coffee Break





Don Lux and Larry Braaten discuss early Copyright Problems . . .





3:30 pm - 5:00 pm

"Ground Rules"

-USOI Dissemination Policy
National Center Diffusion
Model-

. John K. Coster
The North Carolina Center

. Robert Taylor
The Ohio State Center



. Sidney High
U.S. Office of Education



PRESENTATION SUMMARY

PRESENTATION TITLE:

The Center for Vocational and Technical Education's Role in Developing Information System Capacity for Research Coordinating Units

Place Photo Here

PRESENTER (Name, Title, Organization):

Dr. Robert E. Taylor, Director
The Center for Vocational and Technical Education
The Ohio State University

ABSTRACT OF PRESENTATION:

One of The Center's primary roles since 1967 has been the improvement of research coordinating units capacity to deliver information services to vocational, technical and career education personnel in the states. Specific undertakings have included: 1) a conference of RCU directors in October, 1967 during which the RCU's delineated their role as disseminators of research and related materials to state and local level educational personnel; 2) CVTE formed an ad hoc committee of RCU personnel from California, Kansas, Oklahoma, North Carolina, Wisconsin, and New Jersey. These RCU personnel helped CVTE develop the Guide for State Vocational-Technical Education Information Dissemination Systems; 3) On the recommendations of the ad hoc committee, a pilot program was undertaken involving the states of California, Nevada, Oklahoma, Pennsylvania, Wisconsin, Tennessee, New York, and New Jersey. Activities of this group included assistance with a target audience study and training workshops for information specialists; 4) A target audience study of 3,200 administrators, teachers, supervisors, counselors, researchers, teacher educators in seven states was conducted. This study resulted in a report, Interpretation of Target Audience Needs in the Design of Information Dissemination Systems for Vocational and Technical Education; 5) Workshops were held for information specialists from 26 states at two sessions (Columbus and Denver). These week-long workshops helped information specialists from research coordination units in the design and operation of information dissemination systems; 6) A Guide to State Information Resources was developed to assist RCU's in informing users about the location of microfiche collections, computer facilities and to announce their own specific information services; 7) An ERIC Instructional Package for Vocational Educators was developed (pilot tested, revised, field tested, revised) for use in training users with ERIC and CVTE information products.

The Center has executed considerable effort in optimizing diffusion of research, development and training products. One of the major Center R&D programs has dealt specifically with this empirical question. Numerous activities and products have been initiated to facilitate the diffusion process: 1) national leadership seminars; 2) 304 publications; 3) 27 persons on sabbaticals; and 4) extensive collaborative developments.



A Time to Listen

"THE SCORE AFTER NINE"
(1965 - 1974)

THURSDAY, March 21, 1974

8:30 am - 12:00 Noon

Closing Session Chairman Larry Braaten

8:30 am - 10:00 am

"Commissioner's Forecast"
- *National Advisory Council and U.S.O.E.*
Reports - Calvin Dellefield
Howard Hjelm
Sidney High
Mary Marks
Kent Bennion

A Time to Report



PRESENTATION SUMMARY

PRESENTATION TITLE:

The Latest Word From BOAE/OE

PRESENTER (Name, Title, Organization):

Larry Braaten, Coordinator
State Vocational Research Program, DRD/BOAE/OE
Washington, D.C. 20202

ABSTRACT OF PRESENTATION:

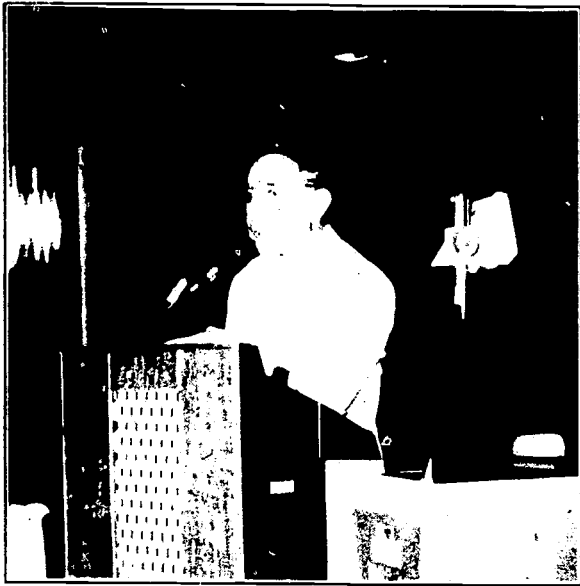
Larry Braaten, in addition to chairing the final session involving the USOE participants, reviewed and discussed a number of current items of interest to RCU Directors as follows:

The need for RCU Directors to become familiar with the Federal Register and the Commerce Business Daily, including procedures for requesting subscriptions

Provided current status on OE/NIE "copyright" review

Provided an analysis and summary of BOAE proposal review procedures and recommendations for FY 1974 Part C, Section 131(a) applications. Notifications to applicants will be made upon completion of contract negotiations and notification to congress.

Recently appointed RCU Directors were reminded to review the HEW/OE MEMORANDUM from Sidney C. High, Jr., dated 12/15/72 for a recapitulation of RCU operating procedures.



General Comments on Vocational Education
with Emphasis on the role of Research

. . . . Dr. Calvin Dellefield
Executive Director
National Advisory Council

Proposed Legislation for
Vocational Education

. . . . Otto Legg
U.S.O.E., B.O.A.E.



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"THE SCORE AFTER NINE"

(1965 - 1974)

"PLAYERS AND UMPIRES"



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NATIONAL RCU CONFERENCE

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KEYNOTE ADDRESS
1974 National RCU Conference

Professor Gordon Swanson
University of Minnesota

I hope the general nature of this Conference will change tomorrow morning. I rather enjoy the baseball metaphor and I don't mind being called the big hitter. I accept the adjective but not the noun. Many of you here are more competent to do this than I am. I should explain what I have just said. When I was a little boy and my mother told me to grow up and be somebody, I didn't know what to be so I just kept on growing. The task that has been assigned to me by the Planning Committee is a task that I regard as being so important that you should not rely upon one person's impression. It is so large that it cannot be done, as a matter of fact, in the context of the Conference. I sincerely hope that you will take this kind of assignment, your record after a decade, and perhaps create a committee, perhaps give some thought as to how you can report what you have done over the decade, because if you do this, you will be doing precisely what other kinds of organizations have done in the past. I'll get into this more deeply later. It seems to me that this is a formable task and worthy of some focus at this time as you did in 1969 or 70 when you had Dr. Goldmanner to do an evaluation of RCU work. My most important observation at the beginning is that you should do this again next year, that you should do it after you have had time to take a more careful look, a more thorough research oriented look into the score after ten. We must decide first of all what are the questions.

I will describe first of all what I will attempt to do during my presentation. I would like to start by describing the nature of the ballpark for the nine year record. I would like to do this because I think it tells where we are going and where we will play. In preparing for this I did the following things. I read all of the reports of the National Advisory Council and I suggest that you do the same. Don't read each one as they come to you, but read it and put it on the shelf, but some time take them all off the shelf and read them again, all at the same time. See what they have to say to you. The ideas that transcend. I got all these reports of the National Manpower Advisory Committee's Reports of Eli Gensburg. The difference between these committees is that the Vocational Advisory Committee has rotating Chairmanship, whereas Eli Gensburg is Chairman of the Manpower Advisory Committee on a continuing basis. I suggest that the current Manpower Legislation stands out in the series of reports that they gave. It will tell you things when reading all the reports that you cannot get by trying to remember what the previous one tells or says, then try to draw conclusions from them. I also talked with Brandon Smith, Director of our own RCU, with whom I have a relationship-- a friendly animosity. I must point out that in our institution everybody gets dipped; no one comes out clean. I'd like to try to. Oh, I should say that I read the federal reports of RCU's, which is only a fragmentary slice about RCU's and I also read the parts on RCU's in Research on the report of the baseline which is becoming known as the Lee Study. It's like two telephone books and it is a monumental study and it will tell you more about vocational education, and I brought this along so I could read it in my room. There is a list of accomplishments which follows at this point in the regional

report but which has been omitted in this publication because of its length. It is long. The rest of that report would stack that high on your desk. It is available at no cost and will be sent to anyone requesting a copy from Project Baseline. The address of the project headquarters is here, and I suggest that you write for it. It contains a great deal of information about individual projects by RCU's and individual vocational education projects. Art, I don't want to get you into trouble by suggesting that they write--but, as the RCU Directors, they should have it. You should get it. I have a big shelf filled with Baseline information and data that will not be put into mimeograph form and that is why I call it a monumental study. This is what I tried to do, to prepare for this assignment. I am going to try to describe some of the successes. Some of the unique ones that the RCU's have had. I am not going to talk about the errors. I don't think there have been many errors. The reason I am going to talk about your successes is that I think you need to build on your successes. Let me start talking about the nine-year record. I guess I will extend it into a twelve-year record because I would like to begin in 1961. I am going to trace what has happened each year since 1961 by mentioning my view points. In 1961, there was a federalization and focus on skill training, for two reasons, that there was an intent to develop depressed areas. That was the area redevelopment bill which preceded all Manpower Development and Training Bills. It was the father of legislation. In order to train the technologically displaced, the casualties of automation, if you please. The only reason the initial MDTA bill passed was the automation displacement problem--that was 1961. In 1962, we saw the first national focus on skilled training to solve unemployment and to keep a careful note of that because we haven't gotten off of skill training to solve everything. In 1963, there was an emphasis on youth employment problems. This was the birth of the Peace Corp. This was the shift of the focus of vocational education programs that Duane knows so much about because he worked with staff personally. Specific skill needs of the market were what they tried to shift away from as they tried to shift to the general employment needs of all people. This, incidentally, was the beginning of the planning emphasis. If anything characterized the 1963 legislation, it was a planning document. In 1964, it was a declaration of a war on poverty. 1965 was a memorable year for you. That was the year of the Walter Heller Tax cuts and the Viet Nam escalation--the two of which lowered unemployment and made it easier to live without the problems of unemployment that had gone up and then down. In 1965, there was a specific focus upon redressing the imbalances in Civil Rights, particularly the Title I of ESEA and that is where Civil Rights questions entered MDTA at the same time and skilled training was attempted. This was the year that RCU's were born, parturition occurred in a room in Washington, and there was a very short gestation period.

I came from Agriculture, too. I want to tell you, Brandon, this doesn't get any better either. I should tell you that there are two people in this room who were there when conception and parturition occurred. These were Duane Nielson and Larry Braaten, and I think you should take note of the fact that these two individuals continued to come and meet with RCU Directors. I would like to know where you can find another federal program for research or any other type of federal program where you have the same kind of midwifery occurring on the same continuing basis. You should applaud them. 1966 was when you began hearing the word "delivery system." It was also the

year in which emphasis began to be focused upon evaluation, program planning and budgeting systems--all three in 1966.

1967--widespread demands for welfare reform--the words were, "off the welfare rolls and on the payroll." It was also the year of a major review of the National Center for Educational Research and Development. The Edith Green review occurred about which I spoke in 1970 to this group, and you will recall that her review and her evaluation were devastating on both counts--with one exception--the RCU's. This was the bright and shining polished gem in the whole bag and it still is. 1968 was when there was a beginning of private employer involvement in Manpower Training and Development. It was from this private employer emphasis that Model II of Career Education had its seed and began growing. It was the first family assistance plan failed to get by Congress, the Manpower Bill failed to get by the President--both reappeared and were passed in the Comprehensive Manpower Bill of 1974. Provisions of both were found throughout.

In 1969, was the emergence of career education; in 1970 was the enormous expansion of career education. Nothing has swept the educational establishment as fast or met with such acceptance as career education. It was also quite an eventful year for vocational education research--as you recall--when vocational education research funds were divided between the states and the federal government. In 1971, there was a clear focus for the first time on decentralization. Research itself in the federal establishment started to move from institutional support to program purchase. These words you have heard many times.

In 1972 was the year of the focus on higher education with the Higher Education Amendments. These Amendments weren't higher education at all--it was a postsecondary act not a higher education act and, again, it was a shift from institutional support to individual support--support for the student. It was the first recognition that the decline of higher education enrollments were here and were going to continue. In 1972-73, there was a genuine accommodation of revenue sharing and decentralization through existing legislation as well as new legislation done by the interpretation of law.

In 1974--bringing us up to this year--was the Comprehensive Manpower Bill of which you have heard a great deal. This is a quick run-through of the years that sort of stand out. Again, what transcends all this? What transcends this dozen years--what themes get stronger--what does this have to say to us?

First of all, there is a continuing absence of attractive jobs and practically no job creation except in the public sector. All of the job creation focused in the new manpower bill is in the public sector, not in the private sector. If there is something that reappears in the Advisory Committee of the National Manpower Advisory Committee, it is the need to focus on job creation, not only job giving. And, if there's a clue in this to learn from, we sort of assume that there is a reservoir of untrained talent and that there is a training program to send them through out to the waiting jobs--somehow classified or numbered. The fact is that the model or the concept may be wrong itself.

Maybe the reservoir is not the reservoir that we think exists. Maybe the training program is not the one that should exist and certainly the existence of jobs waiting to be filled is not an accurate description.

Secondly, the focus of vocational and manpower programs has been largely, if not solely, on skill training or skill acquisition. I've said this--it's the second time I've said it--skill training has been the single minded focus of manpower programs and vocational training programs to solve everything--to solve redistribution of income--to solve unemployment--to solve civil rights--to solve area redevelopment--if we have a single manpower policy in this country it's focused on a single cure, skill training.

Thirdly, the focus of all programs has been on the young or largely on the young. Approximately 75 percent of Manpower Development and Training Act Programs have been on those under 22 years of age. About 90 percent of vocational education programs have focused on those under 22 years of age. There is no way to assume that all of our problems in skill training and manpower policy programs would be relieved by our efforts within one group.

Fourthly, almost all job training has been for jobs at or near the minimum wage. We are focusing almost entirely at the lower end of the job spectrum, and maybe focusing too much, during the last five to six years, on the disadvantaged making the bottom rungs of the ladder too crowded and not giving any space there or any space on the rest of the ladder for movement. It's entirely possible.

Fifth, programs have focused on a slippery area between income maintenance, guaranteed incomes and transfer payments. If you don't know what transfer payments are, that's a nice gratuitous word for welfare and indeed some of the things that Art Lee has put into his study about the cost of training are absolutely accurate in absolute terms, but not accurate in relative terms because many of the MDTA programs are not intended to be the costs of skill training. They have two things--welfare and skill training--and I mentioned this over and over again, primarily because Cal Dellafield's committee has told us many times that vocational education can become stigmatized or become a stigma. But, there is an additional stigma that can come on vocational education if it gets wrapped around welfare.

There are other transcended elements that I would like to give more attention to than these. During this period of time there's been a shift from a progress orientation to a product orientation at the beginning of the decade. There was a great emphasis on process. Almost all of the national curriculum development, whether it is mathematics under SMSG or physics under PSSE or Science all focused on process and then there has been a sharp shift to product. The best example of this was the most recent GAO report to Congress--if you don't have this you should get it--if you're doing a great deal of utilization and implementation of curriculum studies then you need it badly. It's the report to Congress entitled, "Educational Laboratory and Research Development Center Programs Need To Be Strengthened." They say that they need to be changed because they describe how weak they are. It is focused on the National Institute of Education and it's by the Comptroller General of the United States--that's GAO.

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They prescribe how evaluations should be done and they give no emphasis whatever to process, only to produce. Indeed, they talk about comparative evaluation. If you want the address for this you can get it from me. I encourage you to take a look at it if you are involved in any way with curriculum studies. I don't agree with it entirely, because I believe it focuses too much on product. Another notion that transcends the ten-year period is the rapid growth of what I refer to in my notes as the PPBS mentality. I think there's a little fadism involved. I think some of you agree that that's true. Let me tell you what some people are saying about this mentality. When it is carried to its extreme thinking, planning and decision-making is almost always separated from doing this. This is precisely why the RCU's got into business in the first place--to allow these things to occur in the same shop. Second, very few resources which are discretionary are possible under the PPBS mentality. Discretionary money is almost out and you heard it from the panel earlier that one of the main virtues of how the RCU's began was discretionary money within the RCU. It's not very possible within the PPBS mentality. Thirdly, accounting becomes the most powerful management tool. Fourth, the preferred organizational pattern is rigidly hierarchical. Fifth, human motivation is no longer problematic, it is all but assumed. And, according to Victor Thompson, a political scientist in Illinois who is very interested in this and other mentalities, the PPBS mentality is a style that moves away from the climate of innovation. I'm not suggesting that if these things are true then you should be alert to not making the big mistakes that can accompany this mentality. What's the manifestation of this mentality in research or in management--or in research management. One of the manifestations of it is frequent reorganization and the second manifestation of it is an increasing reliance on the RFP to initiate research. Thirdly, one of the things that has happened is the thing that transcends the dozen years is the rather interesting pattern of agency reviews. Right now the NIMH is undergoing a twenty-five year review. Last year the USDA conducted by the National Academy of Sciences, and their conclusions--their big conclusions are rather interesting--listen to these--these are things that the USDA and the Experiment Stations would never have accepted without the review. Poor research management, a heavy burden of administration and planning effort--overdirected research and heavy handed administration. Thirdly, a too burdensome bureaucracy and too many reorganizations. Well, after the report was filed with the Secretary of Agriculture there was one more reorganization. Now the experiment stations have been looking around as have the other research operations in the Department of Agriculture for a different pattern for organizing their research effort.

The National Science Foundation has undergone a rather thorough re-examination in what has been referred to as the research applicable to national needs--A Rand Study, done by the Committee on Public Engineering Policy of the National Academy of Engineering, National Science Foundation. It is curious that the national needs described in this study haven't mentioned education at all--much less vocational education. Most of you know that the National Center for Educational Research and Development went through a certain kind of evaluation about two years ago as its functions were transferred to the NIE. It was really not a review--it was an effort to distribute the pain unequally by self-inflicted wounds. It was a nice idea and it almost always leads to early reorganization which they did. It also got Mr. Glennan into

position of making enemies faster than friends and he had to go to the Congress later, too. The Department of Labor is now underway with a wholesale review also being done by the National Academy of Science where they are reviewing all the research, methods, Manpower Development and Training Act--ten years ago. And the purpose of the entire review is to establish guidelines for the future. It's the one that I'm most familiar with since I am chairing the National Academy of Science Committee, which is conducting this review. It has two parts. It has already completed the experimental Manpower Laboratory phase underway, with remainder of the institutional grants and small contracts and the projects. The Department of Health, Education and Welfare is on the threshold of doing a similar kind of review of all vocational and technical education research and this has been spearheaded, thank goodness, by Cal Dellafield, who is on later in this program.

I look to it as being something that will additionally illuminate the values and validity of the RCU's, but it is one of the reasons that I started out by suggesting that you should on your own take a look during the next year--at your record during the past decade. Don't rely upon what I may like or on that which precedes me. I'm not getting much data into this presentation.

Within about eight weeks, because the pattern of national reviews and problems of research administration have been so difficult--so difficult to ferret out where research is going in the federal government, as a part of this responsibility to the National Academy of Science I am calling together, through the National Academy, a group of individuals that are referred to in the Academy as the Big Ten, just to discuss some of the problems of research and research management. Here is the group, who are responsible at the federal level, for more than 90 percent of the 16 billion dollars for research that we spend annually. They are:

1. Robert White of the Weather Bureau
2. Louis Mackowski of the Division of Extramural Research
3. David C. Bloom, Social and Behavioral Sciences in the Army Research Institute
4. Stephen Seudaka of the Office of Population of AID
5. Bill Plotte, Department of State, Division of External Research
6. Col. Kibbler who is responsible for all research in the Department of Defense
7. Howard Hjelm who is in Vocational-Technical Research
8. Tom Glenman, Director of NIE
9. Mike Moscow, who used to be with the Department of Labor who is now Assistant Secretary of HUD
10. Howard Rosen from the Department of Labor

There are a number of others that might, I think, like to sit and listen to this discussion--the problems of administering large scale governmental research efforts and how this is gone about in various agencies. What directions they are moving and what recommendations could be made to the government bureaus.

This is the record--this is what I've tried to explain as the background of the past decade--the past twelve years. Now, I'd like to turn attention to the successes--the runs, if you please. The Research Coordinating Units are unusual as a system--they had an initial rise--a slight fall--and then another rise. This is true in terms of members of RCU's and true also in the amount of money expended and received. They've gone through that cycle; that is unusual in itself. Most agencies or systems of research that start to fall continue it while, RCU's got back in business--many times with state support and it's an indication of durability of the system. The RCU's have done an excellent job of measuring up to almost any kinds of standards that one wants to identify for research but particularly for research utilization. Just as an illustration of this, I'm taking a couple of pages out of a report that we've done on Manpower Laboratories in the Department of Labor and identified some of the key elements of good organizations for research. Here are some of them. This one is taken from the National Academy Report to House Committee on Science and Astronomies. Here they are:

1. The key individuals in the research organization are fully aware and sympathetic to the principal goals of the organizations, but at the same time, the research mission is defined in broad enough terms so that it retains its validity as circumstances in the state of technology change. RCU's measured high on this scale.
2. People within the organization are willing to move between fundamental research and work more closely concerned with occupations and are also willing to change specialties and scientific disciplines. The artificial barriers sometimes exist between disciplines and between fundamental work and applications are at a minimum. Here again, it is my opinion at least, that RCU's stack high on the scale.
3. The organization is quick to recognize new ideas and to fund work based on them at least up to the point where the feasibility or desirability of a larger commitment can be established. Again, it seems to me, that RCU's are high on this scale.
4. At each organizational level the individual has the freedom in really tying the resources at his disposal without extensive review by higher authority. That is the class where RCU's are high on the scale. They do have the freedom for deploying resources except there is full communication through all stages of the research and development process from original research to ultimate implication and I wish to say something about utilization and dissemination later on--just to emphasize that point because I think that RCU's as a system are higher on that scale than any other.
5. And, in the category of success, the RCU system is already a decentralized system. It operates from several fund sources and is as decentralized as almost any system you can think of today. This is a desirable thing. It happened by design rather than by accident and it is one of the genuine strengths of the entire system.
6. It is a durable system. Can you find another research system in this country today that's nine years old? Can you find a system that's nine years old and still has optimism? They're tough to find and, while you may talk as though you're an underdog, you should get rid of that underdog role in a hurry because you're the standard bearer. This is one of the more durable systems in operation.

Dissemination and Utilization--Here's where I come to the point where I want to get the most emphasis to. A few years ago Lee Cronback, writing in the Phi Delta Kappa Journal - The Phi Delta Kappan in talking about research and development in the health sciences quoted someone by saying that the tragedy in the health sciences is that there is such a tremendous gap between what we know and what we do. In vocational education, the tragedy is not the gap is so large, but that the gap is so small. Dissemination of vocational education research often occurs before the project is completed--it is so fast and so complete partly because of the system of RCU's that we need not, anymore, concern ourselves about the absence of utilization and dissemination--it is extremely rapid. The tragedy is not that the gap is so wide; the tragedy is that the gap is so narrow. The question no longer is whether or not the research is being disseminated, but a more important question is whether or not that we are researching the right things; and, I hope that many of you appear before hearings--the oversight hearings on vocational education that you'll emphasize this point--you can find illustration after illustration to demonstrate this. You can find more illustrations of good dissemination than bad dissemination and the ratio is about thirty to one. Dissemination is well handled and it's because of the system that was created nine years ago. Let me say that you should continue to emphasize dissemination and utilization, but, in vocational education the tragedy is the narrowness of the gap and not its breadth. We need, as I want to point out later, more emphasis, more resources into research because any field that is going to go very far and very fast had better have somewhat of a gap between what we know and what we do.

Now, let me turn my attention to what you call errors, which I am not going to emphasize; but, which I would like to call opportunities. First of all, I think that one of the great opportunities is the Lee Study--The Baseline Study--the kind of studies that transcend state lines. There is much in that data that Art has been allowed to get. I find it fascinating reading--even the Tables--as one goes through; but, the kinds of studies and the opportunities that exist are the kinds of studies that transcend state lines. And, if we're going to have comparative studies of the evaluation of curriculums we'll need to cross state lines. Secondly, I think you should look at the allocation of funds to RCU's. Now admittedly, the allocations in Arts' study do not indicate how much state money--it only indicates the amount of federal money, but take a look at the amounts--maybe I should do it this way. Take a look at this data and see how much money is allocated to RCU's. My guess is that if you take a look at his Tables and you take the RCU's that have between fifty and one hundred and twenty five thousand dollars or more federal money going to the RCU you will have 75 percent of the total. There is a high correlation between one and two. All I'm suggesting here is that there is some need for money. There is a need for more funds. A number of good RCU's rely almost entirely or largely on state resources but there is a need to feel that money can be called the RCU system.

Thirdly, there is an opportunity, I think, in focusing on policy as well as practice. I think that this is important. I think that most of the research that has been done during the post decade has been focused on practice--curriculum studies--teacher education and a variety of practice

oriented studies. I believe that RCU's can and should involve themselves in policy and indeed it seems that it seems to be the thing that grows out of RCU--the creation of policy. Many of them have their focus on policy change.

When I spoke to this group in Dallas or Houston, wherever it was, in 1970, I think I called it an early warning system. I think an early warning system is necessary for policy. I think that this is something that will repay your study and will repay your time. Let me remind you that in this country we talk about vocational education policy and we talk about manpower policy, but we have no such thing as an overall human resource policy. Therefore, it is not something we talk about in states. What's the human resource and you're going to need to give more attention to it with the decentralization of manpower funds. As a matter of fact, there is going to be a question about who's in charge of it with the identification of prime sponsors to supercede the states in the allocation of manpower resources and maybe if the institutional training portions of manpower funds are going to contribute in any way to the overall policy of vocational education, it is time that there is a focus on policy type studies. There's one single word that transcends the manpower legislation as well as its rules and regulations, and that's evaluation. I submit that unless you're going to make a decision you may as well not evaluate and many of the decisions which will be made as the result of manpower evaluations will be policy oriented. It seems to me that it's time that RCU's give more attention to policy oriented research that they can do. Next, I'd like to emphasize--as I have before--the need for fundamental research. I don't want to call it basic research. I don't want to necessarily say that you should de-emphasize applied research, but I believe that fundamental research, whatever you determine that to be, dealing with the structures of knowledge that we use in the field. I'm pleading for that because I believe that's the way to widen the gap between what we know and what we do and it has to be widened some. I think that much of what has been done is because it is very understandable to a constituency. I think it has been presumed that fundamental research is not. I think our constituents will agree with us there is need for fundamental research for widening rather than narrowing the gap.

The last point I want to make is just a re-emphasis of points I have made. Research Coordinating Units as well as all vocational education have tried to cast themselves in the role of an underdog--they're always fighting their way somewhere. It's kind of a complex that we've had. It seems to me that we now need to rid ourselves of that. RCU's are one of the most durable and one of the most acceptable systems of research in the country and the standard bearers should not be the people with an inferiority feeling. You're not an underdog; you're leading the way for a lot of other people and, if one year from now you have gone through a very thorough review and analysis of where you are and where the National Academy of Science begins to ask many of you...How well have you done? Where are you? What have you accomplished and where are you going? That you will stack as high on the list as you did on Edith Greene's list when she evaluated you in 1967.

THANK YOU.

NOTE: This typed record of the Keynote Address was taken from a tape of the Conference. It is recorded verbatim; therefore, it may seem somewhat informal.

ABSTRACTS
of OUTSTANDING RESEARCH ACTIVITIES

Conducted by:
STATE RESEARCH COORDINATING UNITS

Prepared for:
TENTH ANNUAL NATIONAL RCU PERSONNEL CONFERENCE

MARCH 16-19, 1975
HOLIDAY INN - DENVER DOWNTOWN
DENVER, COLORADO

FOREWORD

This publication was prepared for the Tenth Annual National RCU Personnel Conference. The major theme of the Conference is, "Vocational Education Research Management -- The Next Decade." The Conference was held at the Holiday Inn Denver Downtown on March 16-19, 1975.

The major Conference activities centered around the various management techniques used by the Research Coordinating Units in their respective states. Specific presentations were made based on three organizational models. The models included:

- 1) RCU's located in a Division of Vocational Education in a State Department of Education;
- 2) An RCU located in a State Department, but not in a Division of Vocational Education;
- 3) An RCU located at a university.

Several state and national leaders participated in the program.

Prior to the Conference each state was asked to prepare three Project Resumes representing their most outstanding activities. These were submitted to the regional planning representatives for inclusion in this document. All Resumes submitted by February 20, 1975, were edited and incorporated herein. No attempt was made to group them in any specific categories except that they were organized alphabetically by state.

This publication was prepared through the courtesy of the Illinois Division of Vocational and Technical Education Research and Development Unit and the Illinois Curriculum Management Center of the Illinois Office of Education.

A special thanks is extended to those who made this publication possible by submitting their Resumes. Special appreciation is expressed to Mrs. Barbara Rocco who edited the material for printing.

Dr. Ronald D. McCage
President
Tenth Annual National RCU Personnel Conference

PROJECT RESUME

PROJECT TITLE: Career Education Project

AGENCY: Mobile County Public Schools
Mobile, Alabama

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Dr. Henry H. Pope, Mobile County Public Schools
504 Government Street, Mobile, Alabama 36601
Phone: (205) 438-6011

Place Photo Here

DURATION: From August 1, 1973 To June 30, 1974

FUNDING: Federal \$ State \$ 57,000.00 Other \$

PURPOSE OF PROJECT: The major purpose of the project was to implement the career education model, developed by the Mobile County Public Schools under Part C of Public Law 90-576 during fiscal year 1973, throughout the entire school system.

DESCRIPTION OF PROJECT

This project is the first of a three phase program to implement the model in the total system. Phase I implementation included continued supervision in the 10 schools (4 elementary, 4 middle, and 2 high schools) which had been involved in the previous year's research and development project and expansion to a total of 15 schools with 15,986 students and 719 teachers. The 5 additional schools in which the model was implemented included 3 middle and 2 high schools.

Phase I also included leadership training of instructional supervisors, principals of Phase I schools, and all counselors in preparation for implementation assistance in Phases II and III as well as Phase I.

Utilization of community resources was directed toward identifying and making use of available human and experiential resources which served as world-of-work orientation and work-experience for students and teachers in grades K-12. Some 1,590 presentations by community resource persons were given in the project schools.

PROJECT RESUME

PROJECT TITLE: Determination of the Most Effective Procedures for Implementation of School-wide Junior High Career Exploratory Experiences & for the Placement & Follow-up of all Exiting Students K-14.

AGENCY: Division of Vocational Education and Community Colleges
Alabama State Department of Education
Montgomery, Alabama 36104

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Dr. T. L. Faulkner, State Director, Vocational Education & Community Colleges, State Office Building, Montgomery, Alabama 36104 Phone: (205)269-6345

Place Photo Here

DURATION: From June 1, 1973 To November 30, 1974

FUNDING: Federal \$ 175,643.00 State \$ 63,220.00 Other \$ _____

PURPOSE OF PROJECT: The purpose of the project was to determine the most effective career exploration methods and the most effective methods for establishing school-based placement services.

DESCRIPTION OF PROJECT: The project was conducted under Part C of Public 90-576. The project had two components, one dealing with career exploration and one dealing with school-based placement services.

Experimental activities in the exploration component were carried out at the middle and junior high school level in five school systems. Control and experimental groups were identified at each site. Approximately 1,200 students and 40 teachers were involved in project activities. Pre and post test data were gathered using the Crites Career Maturity Inventory. Methods for providing career exploratory experiences ranging from concrete to abstract were tested.

Five different school systems participated in research activities with the general objective of identifying effective methods for establishing school-based placement services in a variety of settings. The five participating systems included a large metropolitan system, three small rural systems, and a medium-sized city system. In each of the systems a full-time placement coordinator sought to identify and meet the placement needs of all students exiting the system, either as graduates or dropouts. Approximately 1,700 students participated directly or indirectly in the research activities of the placement component.

PROJECT RESUME

PROJECT TITLE: Development and Implementation of a Statewide Vocational Education Terminee Follow-up System for Alabama

AGENCY: Occupational Research and Development Unit
Department of Vocational and Adult Education
Auburn University

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Dr. James Bob Drake, Director, Occupational Research & Development Unit, Auburn University, Auburn, Alabama
Phone: 826-5320

Place Photo Here

DURATION: From July 1, 1973 To June 30, 1974

FUNDING: Federal \$ _____ State \$ 129,207.00 Other \$ 45,130.00

PURPOSE OF PROJECT: The purpose of this project was to develop and implement a statewide terminee follow-up system which will efficiently and effectively follow up all students who have had vocational preparatory training in vocational education programs in the secondary school system.

DESCRIPTION OF PROJECT:

The Division of Vocational Education and Community Colleges contracted with the Occupational Research and Development Unit at Auburn University to develop and implement a statewide follow-up system for all secondary vocational terminees in all service areas. Key components of the system which were implemented for data reporting, evaluation, and decision-making concentrated on: (1) Occupational patterns of terminees (4 month, 1 year, 3 year and 5 year); (2) Job satisfaction of terminees; (3) Job getting assistance; and (4) Curriculum adequacy.

All terminees from vocational programs were followed up in a series of three attempts to obtain the necessary information through a mail survey. Approximately 24,500 students were surveyed, and the results analyzed in final reports for each of six occupational program areas and consumer home economics.

PROJECT RESUME

PROJECT TITLE:

A Comparative Study of Alternative Methods and Techniques in Stenographic Training

AGENCY:

Pulaski County Special School District
924 Marshall Street
Little Rock, Arkansas 72202

Place Photo Here

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Doris Robey
Business Education Instructional Specialist
Pulaski County Special School District

DURATION: From July 1, 1974 To June 30, 1975

FUNDING: Federal \$ 10,200 State \$ _____ Other \$ 11,124
(Local)

PURPOSE OF PROJECT: The major objective of this project is to determine if modified methods and techniques utilizing Machine Shorthand are superior to traditional Shorthand.

DESCRIPTION OF PROJECT

This research and development project is a comparative study to ascertain whether students can achieve a higher level of skill through the use of machine shorthand or by the traditional approach. Some 75 students will be involved in the study. In response to a student survey, some 40 students expressed a desire to participate in machine shorthand training.

In order to ascertain whether the machine method is a more effective approach for teaching shorthand, it will be necessary to establish experimental and control groups. Efforts will be made to match the students in each group and to compare the traditional method with two modified approaches.

One experimental class using the machines will be given a maximum amount of instruction, dictation and assistance from the instructor. Another experimental class using the machine approach will be organized in which the students will receive a minimum amount of instruction, dictation and assistance from the instructor. This latter group will primarily be taught through the medium of tapes and other self-instructional aids.

A control class will be maintained in which students will be taught through the traditional student-teacher classroom method, using the traditional Gregg shorthand. The proposed teacher for this project is well qualified with several years of shorthand teaching experience. This teacher will teach all classes involved in this comparative study.

PROJECT RESUME

PROJECT TITLE:

A Unified School-Community Approach to Remodel Guidance Services and Expand Next Step Placement and Follow-Up

AGENCY:

Arkansas Department of Education
Division of Vocational, Technical and Adult Education

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
James Dasher, Specialist (Phone: 501 /371-1760)
Exemplary Programs
Department of Education, Little Rock, Arkansas

Place Photo Here

DURATION: From June 15, 1974 To December 15, 1975

FUNDING: Federal \$ 90,526 State \$ _____ Other \$ _____

PURPOSE OF PROJECT: The overall purpose of this project is to develop and implement a school-community based guidance, counseling, placement, and follow-up program that will place the counselor and support personnel in an optimum position to meet the individual career-planning needs of every student. Model

(OVER)

DESCRIPTION OF PROJECT:

In each participating school, a local project director will be employed, and a project team identified. This team will include at least a counselor, prevocational group guidance teacher, cooperative education coordinator, and the project director, who will also serve as a school-community coordinator.

Through a combined effort the project team will endeavor to establish a community-based guidance program. The school-community coordinator to be added at each site will work with the existing personnel in gathering employment information and with business and industry by securing their assistance in serving as (1) resource people for career mini courses and vocational orientation classes, (2) host for shadowing and study trips, and (3) employers of students in part-time and full-time employment. The community relationship can be of great value to the counselor staff and the prevocational group guidance teacher in establishing an effective group guidance program.

It would appear that through a planned ongoing in-service program, counselors would engage in meaningful dialogue and experiences to strengthen their skills as counselors, update their philosophical viewpoints and challenge their creativity to make valuable innovative contributions to the model program.

ADDITIONAL INFORMATION:

PURPOSE OF PROJECT (continued)

comprehensive secondary guidance and counseling programs will be developed in four school districts which will be more responsive to the needs of the school and community.

PROJECT RESUME

PROJECT TITLE:

Decision-Making in Families of Mexican Descent

AGENCY:

Arizona State University
Department of Home Economics
Tempe, AZ 85281

Place Photo Here

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Georgianne Baker, Assistant Professor

DURATION:

From January 15, 1974

To

June 30, 1974

FUNDING:

Federal \$ 4,717

State \$

Other \$

PURPOSE OF PROJECT:

An exploratory, pilot study on the decision-making in families of Mexican heritage as they confront problems which may determine life satisfactions and future earnings in a large urban center.

DESCRIPTION OF PROJECT:

Areas of concern to families were generated through exploratory discussions with respondents with varying ages, roles, experiences, and work histories. The Family Problem Instrument was administered to a select group of families living in Phoenix. Decision Profiles were constructed and a guide for their use was developed. Because of the small sample and the selection process, the researchers do not feel the results are generalizable. The findings on this select sample indicated that place of birth was instrumental in shaping values and behavior patterns. The Decision Profiles may be useful in both secondary and university home economics and related courses, to formal and informal bilingual adult education projects, and to counseling with individuals or families.

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PROJECT RESUME

PROJECT TITLE:

Determination of Spanish Surnamed Impressions of Educational Relevancy

AGENCY:

Glendale High School District No. 205
7650 North 43rd Avenue
Glendale, AZ 85301

Place Photo Here

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Frederick Whitney, Director, Data Processing
Ronald Murphey, Assistant Superintendent

DURATION: From July 9, 1973 To August 31, 1973

FUNDING: Federal \$ 663.80 State \$ 1,680 Other \$ _____

PURPOSE OF PROJECT:

To determine attitudes of the Spanish-speaking community towards education, vocational education, and the secondary school.

DESCRIPTION OF PROJECT:

A specific barrio was chosen and an individual who was raised in the barrio interviewed a random sample of graduates, dropouts, students, adults for attitudes and opinions in relation to past and present program offerings for the purpose of obtaining information to restructure vocational course offerings and counseling services to better meet the needs of the bilingual population. Additional vocational education facilities, a cooperative education program geared to assisting selected Mexican-American students in the social service areas, a shift in work study funding emphasis to assist potential Mexican-American dropouts due to financial needs, an application for a project which includes cooperative enrollee peer tutoring in human relation and job placement components, and counselor/teacher in-service activities on the unique needs of Mexican-Americans in career awareness and prevocational experiences.

PROJECT RESUME

PROJECT TITLE:

Survey and Task Analysis in Employment of the Retarded

AGENCY:

Arizona Training Program
P. O. Box 1467
Coolidge, AZ 85228

Place Photo Here

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

John Harrington, Coordinator of Vocational Education

DURATION:

From February 1, 1973 To June 30, 1973

FUNDING:

Federal \$ 2,695 State \$ _____ Other \$ _____

PURPOSE OF PROJECT:

To identify those occupations in which retarded persons at the Arizona Training Program would be most likely to obtain employment and to conduct a task analysis on each of these occupations.

DESCRIPTION OF PROJECT:

An advisory committee concept was used in compiling the occupations to be used in the task analysis. In most cases, the analysis was conducted in several different locations in order to obtain comprehensive results. The findings of this project were viewed in regard to the degree of difficulty and the amount and degree of cognitive skills required that would have a bearing on the occupational success of retarded persons. Job analysis booklets were prepared on each of 13 occupations. The data will be incorporated into the vocational training programs at the Arizona Training Program and the task analysis model and methodology will be used to update the data in the future. The incorporation of these analyses into the vocational training programs in special education programs in the public schools would add a realistic dimension to the training.

PROJECT RESUME

PROJECT TITLE:

The Career Education Curriculum Laboratory

AGENCY:

Career Education Center, Curriculum Laboratory
Florida State University

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Romeo M. Massey, Coordinator (Phone: 904/644-3066)
Career Education Curriculum Laboratory, Florida State
University-W.H. Johnston Bldg., Tallahassee, Florida

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DURATION: From July 1, 1974 To June 30, 1975

FUNDING: Federal \$ 333,000 State \$ _____ Other \$ _____

PURPOSE OF PROJECT: The objectives of this project are to provide the Division of Vocational, Technical and Adult Education with the capability for responding to priority requests dealing with the identification, classification, and dissemination of curriculum information and multi-media curriculum materials, or (over)

DESCRIPTION OF PROJECT:

The proposed project will expand the capability of The Resources and Information Center to search local, state, and national sources of curriculum information and materials, and establish and maintain selective collections. The Resources and Information Center, when appropriate, will disseminate information and/or materials.

The Curriculum Laboratory will have a professional staff of curriculum experts and instructional designers, as well as a Publications Center and a Visual Communications Center which will allow it to respond to requests which may include the reproduction and dissemination of curriculum materials.

It can be expected that this project will establish systematic and institutionally-based procedures which will reduce the cost and duplication of effort presently being expended by educational agencies around the state searching for and/or attempting to develop validated, professional quality instructional programs.

The project will establish systematic and institutionalized procedures for meeting identified curriculum needs.

The project will assist Florida educators on the local district, VTAE Area, and State levels in their formulation of comprehensive plans in the areas of curriculum development and curriculum planning by providing validated instructional materials to achieve specific instructional objectives.

ADDITIONAL INFORMATION: (PURPOSE OF PROJECT cont'd.)

the adaption and/or design and development of such materials, when search and evaluation procedures show that existing materials are inadequate to meet the identified needs. These two functions of the Curriculum Laboratory, i.e., the curriculum clearinghouse function and the curriculum development function would make it possible for VTAE to respond to requests on both a short term and long term basis.

DESCRIPTION OF PROJECT (cont'd.)

The project will be able to reduce the time lag currently existing between the identification of priority curriculum needs and the availability of curriculum materials and curriculum information which can meet those needs.

PROJECT RESUME

PROJECT TITLE:

A Comprehensive Vocational Education Program for Career Development K-University

Place Photo Here

AGENCY: Manatee School District, Bradenton, FL 33506
University of South Florida, Tampa, FL 33620
Manatee Junior College, Bradenton, FL 33507
Sarasota School District, Sarasota, FL 33577

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. James Selman, Project Manager
University of South Florida
Tampa, Florida 33620 (Phone: 813/974-2100-X366)

DURATION: From June 15, 1974 To June 14, 1977

FUNDING: Federal \$ 546,516 State \$ _____ Other \$ _____

PURPOSE OF PROJECT:

The purpose of this proposal is to develop a K-University comprehensive educational program focused on career opportunities and requirements for job entrance and advancement. Career development experiences will serve as (over)

DESCRIPTION OF PROJECT:

For grade levels K-6, participation in a unified, action-centered, career-related curriculum designed to:

Develop positive attitudes about the personal, social and economic significance of work;

Develop self-awareness and self concepts related to skills, knowledge and attitudes necessary for a worker;

Develop occupational awareness through concrete and abstract career development activities.

For grades 7 and 8, participation in a unified, action-centered, career-related curriculum providing:

Exploration of personal interests, abilities, values, and needs as they relate to occupational roles and choices;

Exploration of selected broad occupational clusters in tentatively selected careers.

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ADDITIONAL INFORMATION: (PURPOSE OF PROJECT cont'd.)

the vehicle for teaching basic academic skills to youth. Students in grades K-6 will become familiar with careers, in grades 7-9, they will explore a wide variety of occupational programs, and in grades 10-12, they will acquire job entry skills, and make plans for continued education or entry into the world-of-work.

Post-Secondary and University programs will prepare for skilled, highly technical or professional occupations. The career education theme will serve as a common thread to unify the educational efforts at all levels.

DESCRIPTION OF PROJECT (cont'd.)

For grades 9 and 10, participation in a unified, action-centered, career-related curriculum providing:

Exploration of personal interests, abilities, values and needs as they relate to occupational roles and choices;

Exploratory and training experiences in one or more occupational clusters to develop job entry level skills in at least one occupational area, leaving open the option to move between clusters.

For grades 11 and 12, participation in a unified, action-centered, career-related curriculum providing:

Exploration of personal interests, abilities, values and needs as they relate to occupational roles and choices;

Training experiences for intensive preparation in a selected occupational cluster, or in a specific occupation and to demonstrate job entry skills necessary for success in an occupational and/or further education.

At the post-secondary level, participation in a unified, action-centered, career-related curriculum designed to provide:

Exploration of personal interests, abilities, values and needs as they relate to occupational roles and choices;

Training programs which develop highly technical skills for skilled trades or technical occupations;

College training programs which develop academic and occupational skills needed in a profession;

Retraining programs and career counseling for adult students wishing to upgrade occupational skills or train for a new occupation.

Criteria for the selection of activities to promote career development will be based upon student's needs, abilities, insights, interests, and aspirations; environmental constraints; principles of the psychology of learning, and human

growth and development. Implementation of the program will improve vocational education in that more students will explore occupations, and more students will develop positive attitudes toward the contribution of work to society. There will be more vocational programs available resulting in an increase in the number of students making occupational choices earlier. New and innovative teaching techniques will be used. Increased guidance and counseling services will decrease the number of students leaving school before graduation, and make possible an increase in the number of students placed in a job, or enrolled in further educational programs. Special components are:

- A. Occupational Orientation - Teachers in six elementary and one middle school will integrate an occupational awareness program into the existing curriculum to expand student familiarization and aspirations related to the personal and social significance of work.
- B. Job Clusters - Teachers in two junior high schools and one exceptional child education center will implement a curriculum providing exploration and in-depth study of job families or clusters. Individual and group guidance and counseling will be integrated with the curriculum.
- C. Job Skill Courses - Courses at the secondary level, designed to prepare students with entry-level job skills, will be introduced in the curriculum at the ninth grade level. Courses for the development or more advanced job skills, including cooperative type programs and intensive job skill training will be available in grades 10-12 at two high schools. Courses providing additional exploration in job clusters will be available for students. Courses at the post-secondary level at two area vocational technical centers and one junior college will provide preparation for highly skilled or technical occupations, or will provide preparation for the professions at the university.
- D. Occupational Guidance, Counseling, Cooperative Work, Experience, Placement and Follow-up - Occupational guidance and counseling will be integrated throughout the K-University model. Cooperative work experience will be available at all levels. Placement and follow-up services will be provided to all students leaving or completing the career education program at the secondary and post-secondary levels.

The program for which goals and objectives are formulated, is a comprehensive, systematic and cohesive plan of learning. It is organized in such a manner that all persons, including disadvantaged and handicapped, will have a continuous opportunity to acquire useful information about: the occupational structure of the economy; the alternatives of career choice; the obligations of individuals productively involved in the work force; the intelligent determination of personal capabilities and aspirations; the requisites of selected occupations; opportunities; opportunities to prepare for gainful employment in a variety of institutional settings; placement in post-secondary educational program for continued preparations; placement in work situations or a combination of the above.

In addition to the establishment of a model comprehensive vocational education program for career development in grades K-University for Florida schools, an articulated delivery system will be developed to assist districts, junior colleges and universities to provide a coordinated career education program having open-entry open-exit features to serve the career needs of students.

PROJECT RESUME

PROJECT TITLE: Development of a Curriculum Delivery System for Individualizing Instruction in Vocational-Technical Education

AGENCY: Florida Agricultural & Mechanical University
South Boulevard Street
Tallahassee, Florida 32307

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Dr. Barbara Johnson, Director
Suite 303 Winchester Building
Tallahassee, Florida 32304 (904/488-1954)

Place Photo Here

DURATION: From June 15, 1974 To December 14, 1975

FUNDING: Federal \$ 248,360 State \$ _____ Other \$ _____

PURPOSE OF PROJECT: The purpose of this proposal is to develop an integrated curriculum delivery system for individualizing instruction in vocational-technical education. The study will focus on the components and processes needed for developing and validating criteria utilized by educators in selecting, organizing and using learning experiences and instructional strategies.

DESCRIPTION OF PROJECT:

Such a curriculum delivery system would consist of the following components or processes for development of:

1. Goals or mission statements.
2. Catalogs of performance objectives.
3. Validated criteria for identifying selected learning content, experiences and strategies, and organizing learning experiences for continuity, sequence and integration.
4. Catalogs of criterion-referenced exercises to determine product achievement.
5. An evaluative process by which product and process assessment can be determined.

The crucial problem with which this proposal deals is total integration of all components or processes of the curriculum delivery system.

Broadly stated objectives of the proposed project are to develop:

1. A total curriculum delivery system including components and relationships among components.
2. Validated criteria for the selection, organization and presentation of learning experiences used by vocational-technical teachers in the teaching-learning process.

ADDITIONAL INFORMATION:

Specific objectives for the proposed project include:

1. Development of a theoretical framework for the curriculum delivery system.
2. Identification of contributing components and processes of the system.
3. Development of validated criteria to be used in the selection, organization and presentation of learning experience.
4. Field-testing and refinement of criteria used in the teaching-learning process.
5. Promulgation of the curriculum delivery system, including components and processes.

To achieve the objectives of this proposed project, it will be necessary to develop a theoretical framework for the curriculum development system; to identify prior and current studies which contribute to the system and to focus on the teaching-learning process by which instruction is individualized. It is anticipated that emphasis will be placed upon development of the latter activity although the other activities are prerequisite to development of the teaching-learning process.

Development and validation of criteria utilized in the selection and organization of learning experiences are anticipated outcomes of this proposed project. The products will be used widely by educators as catalogs of performance objectives and criterion-referenced exercises are completed. Another anticipated outcome will be development of a curriculum delivery system which is performance oriented and assessed.

The first major component of the plan calls for establishment of a curriculum development task force composed of nine experts in the field of education, representing Florida School Districts, Community/Junior Colleges and Universities. The task force will develop a position paper outlining the theoretical framework of the system and the relationship of its components. In addition the task force will serve as a general steering committee and advisory group to the comprehensive activities of the project manager.

Upon completion of the paper, criteria which learning managers utilize in the individualization of learning experiences, teaching techniques and organization of learning experiences will be developed. Two concurrent activities will occur as criteria are being developed for selecting learning experiences, selecting learning strategies and organizing learning experiences for continuity, sequence and integration.

First, a national panel of experts in curriculum theory and research will be selected. The purpose of the panel will be to review and critique the theoretical framework, its processes and the criteria to be used in the learning manager process. The modified Delphi technique will be utilized for review and critique.

The second concurrent activity and component will be the selection of teachers-learning managers who are experts in the individualization of instruction. The purpose of this component will be validation of criteria developed by the task force and critiqued by the panel.

The validation period will continue for six months. Extensive and accurate data and information of criteria utilization and evaluation will be recorded. Instruments to provide data collection will be developed by evaluation experts on a consulting basis. Data will be analyzed and only those criteria determined valid will be promulgated. It is anticipated that all instruments selected or developed for the purposes of this project will be tested for validity and reliability.

Data analyses, results and conclusions will be developed into technical and non-technical reports and widely disseminated for use in pre- and in-service teacher education and staff development programs in districts, community junior colleges and universities.

It is anticipated that a special sub-sample of learning managers for disadvantaged and handicapped youth and adults will be included in the sample so that validated criteria will be appropriate for target groups of students having special needs.

Anticipated outcomes will include: (1) a position paper describing the theoretical framework and implications of the curriculum delivery system; (2) completion of the curriculum delivery system components and processes; (3) validated criteria by which learning managers may individualize instruction; and (4) assessment instruments to be used in process measurement. Through the completion and utilization of this curriculum delivery system, vocational educators can strengthen and improve vocational-technical programs through the individualization of instruction.

The proposal has national significance for vocational-technical education in that it will provide a curriculum delivery system for performance-oriented education and processes by which the individual needs of persons of all ranges of ability could be accommodated and improved evaluation of efficiency and effectiveness of vocational-technical programs.

The proposed project will provide an organized, systematic plan for curriculum development, and is structured so that all persons, including disadvantaged, handicapped and minorities will have continuous opportunity to enter, progress and complete vocational-technical courses and programs.

PROJECT RESUME

PROJECT TITLE:

Follow-Up Survey of Vocational Education Graduates
in the University of Hawaii Comm. Colleges, 1972-73

AGENCY:

Office of the Hawaii State Director for Vocational
Education

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Ms. Sybil Kyi, Coord. for Research & Development
2444 Dole St., University of Hawaii, Bachman 101
Honolulu, Hawaii 96822 Phone: 948-7461

Place Photo Here

DURATION: From February 1974 To December 1974

FUNDING: Federal \$ approx. 10,000 State \$ ---- Other \$ ----

PURPOSE OF PROJECT: Measure the effectiveness of vocational education instructional programs in terms of graduate satisfaction; determine the extent of individual "success" in the labor market; and assess the appropriateness of major programs, individual courses and supporting college services such as counseling and placement to student needs and job opportunities.

DESCRIPTION OF PROJECT:

This project is a statewide coordinated effort aimed at tracking postsecondary vocational education graduates from the state's six community colleges. It continues a second year of development of a system for monitoring graduates including 1) testing and modification of a survey instrument; 2) tabulation and analyses of data collected; and 3) conclusions and recommendations for vocational education programs, courses and student counselling services. The survey attempts to track all of the vocational education graduates from the community colleges and to provide comparable data and measurable trends (if any) for vocational graduates' experiences in the state's labor market.

PROJECT RESUME

PROJECT TITLE:

A Guide to Occupations in Hawaii, 1974

AGENCY:

Career Information Center, Office of the Hawaii
State Director for Vocational Education

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Ms. Sharen Wago, Project Director
Career Information Center, 707-A Waiakamilo Rd.
Honolulu, Hawaii 96817 Phone: 841-4555

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DURATION: From January 1974 To August 1974

FUNDING: Federal \$ 30,000 State \$ --- Other \$ ---

PURPOSE OF PROJECT:

Provide a resource manual to give students, parents and educators concise, meaningful and readable occupational information.

DESCRIPTION OF PROJECT:

A Guide to Occupations in Hawaii is an eight-volume compilation of information to help Hawaii's high-school students choose a vocation and learn how to prepare for it. The information is presented in two ways. First, an introduction, common to all volumes, gives advice to students on how to choose the kind of work they want to do, how to find and apply for a job, and how to succeed in it once they get it. The introduction concludes with special advice to potential dropouts, the handicapped, and disadvantaged students, and descriptions of local counseling, training, and work-experience programs that may help them. Then, each volume turns to a certain family of occupations, telling what it is like to work in them and giving descriptions of a sample of individual jobs.

The eight occupational families, and hence the titles of the eight volumes, derive from the eightfold classification of occupations by the Hawaii State Department of Education.

Business and Agricultural Occupations
Personal/Public Service Occupations
Health Occupations
Food Service Occupations
Construction/Civil Technology Occupations
Mechanical Occupations
Electricity/Electronics Occupations
Technical Graphics Occupations

ADDITIONAL INFORMATION:

This guide is addressed primarily to high school students and to those who advise them. Students can use the guide to serve an immediate, specific need or a general need for career guidance and occupational information. Advisors may use the guide in the same ways. They will probably find information of particular use in the Note to the Counselor, the Explanation of Categories in the Job Descriptions, the bibliographies, and the lists of resource speakers.

Assumptions and Limitations

Following the pattern of the 1972 Occupational Resource Manual for Hawaii which this guide replaces, we have concentrated on describing occupations for which the baccalaureate degree is not required, although some of the most common professions are covered. The U.S. Department of Labor has forecast that by the end of this decade 8 out of 10 jobs will not require the baccalaureate. And the U.S. Office of Education says that by 1980, 50 per cent of all job openings will require training beyond high school but less than four years of college. Those trends, and the general feeling among educational leaders that counseling has perhaps neglected the non-college-bound student, support the decision to narrow the scope.

We have made no systematic attempt to forecast the employment outlook for any job. Though information on whether a certain job is going to boom or bust is essential for students planning their careers, most forecasts are extrapolations of past trends, and are gross at best. Where employers, union officials, or other knowledgeable people we surveyed felt that a definite change in the demand for certain jobs was imminent, we pass along their opinions, but we have declined to make firm statements on such a slippery issue.

Our salary figures should be regarded as approximations. They come from diverse sources because no single source gives earnings for all the jobs we cover.

Authorship and Methods

Research for this guide was done by graduate students in the Department of Educational Psychology, University of Hawaii at Manoa directed by the editor, Mrs. Christine D'Arc Sakaguchi. The revision was begun by comparing the first edition of the manual with current written sources. The findings were then verified and amplified in interviews with representatives of unions, community colleges, federal, state and county offices, private firms, and workers themselves.

Time and space have not permitted exhaustive coverage of all non-baccalaureate jobs nor a complete picture of any one job. We merely hope to suggest to the student and counselor a representative sample of jobs that are available, what they are like, how one can prepare for them, and where to go for further information.

PROJECT RESUME

PROJECT TITLE:

Hawaii Career Development Continuum (K-14) for Hawaii's Schools, Phases I and II

AGENCY:

Educational Research and Development Center, College of Education, University of Hawaii (under contract to the Hawaii State Department of Education)

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Project Coordinator & Principal Investigator:
Dr. T. Antoinette Ryan, Dept. of Educational Psychology, University of Hawaii, 1776 University Ave., Honolulu, Hawaii 96822

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DURATION: From March 3, 1972 To June 30, 1973

FUNDING: Federal \$ 37,058.00 State \$ 34,183.01 Other \$ ----

PURPOSE OF PROJECT:

Design a conceptual framework for a career development continuum from grades K-14 and produce appropriate curriculum guides.

DESCRIPTION OF PROJECT ^{1/}

The Career Development Continuum Project was a curriculum development effort undertaken by the Hawaii State Department of Education (elementary-secondary levels) to fulfill a recognized need for a comprehensive program of vocational and career development with guidelines for implementing such a program.

The product documents of the project are as follows:

1. A Conceptual Framework for a Career Development Continuum K-14^{2/} for Hawaii's Schools

This document describes the rationale and concept of the Career Development Continuum as well as the goals, subgoals and objectives of the curriculum.

2. Hawaii Career Development Continuum Curriculum Guide K-3
3. Hawaii Career Development Continuum Curriculum Guide 4-6
4. Hawaii Career Development Continuum Curriculum Guide 7-9
5. Hawaii Career Development Continuum Curriculum Guide 10-12

^{1/} Condensed from "A Review of the Hawaii Career Development Continuum (K-14) for Hawaii's Schools" by Dr. George Y. Omura, Director, Pacific Region Planning and Research Center, Inc., Honolulu, Hawaii, December 1973.

^{2/} Grades 13-14 curriculum guides will be developed at a later date by the U of H Community Colleges through the Office of the State Director for Vocational Ed.

ADDITIONAL INFORMATION:

These four guides contain a description of the conceptual framework and specify learning experiences for the respective grade levels. The learning experiences consist of learning tasks which are designed to help pupils attain the learner objectives. The guides also include a report describing the project and appendices listing sources for obtaining learning materials.

The Career Development Continuum concept encompasses four important areas of individual growth and development: self-realization, economic efficiency, social relationships and civic responsibility. These growth areas are inter-related and overlap in some instances.

The sequence of learning experiences are from awareness to exploration to skill development with the relative emphasis each of the three levels is to receive at the various grade levels.

PROJECT RESUME

PROJECT TITLE:

Comprehensive Illinois Occupational Education
Demonstration Center

AGENCY: Illinois Division of Vocational and Technical
Education, State Board of Vocational Education and
Rehabilitation

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. Ronald D. McCage, Coordinator (Phone: 217/782-4620)
Research & Development Unit
1035 Outer Park Drive, Springfield, Illinois 62706

Place Photo Here

DURATION: From July 1, 1973 To June 30, 1976

FUNDING: Federal \$ 539,000 State \$ 180,000 Other \$ _____
Part D, VEA

PURPOSE OF PROJECT: The purpose of this Project is to demonstrate innovative
programs and new approaches in career and occupational education.

DESCRIPTION OF PROJECT:

The main objectives of the project are: 1) to integrate a number of already developed and tested research and developmental activities sponsored by the Division into two educational sites, grades K-14; 2) to provide an opportunity for a variety of persons to receive information and visit demonstration centers that exemplify proven learning techniques in education; and 3) to evaluate the effectiveness of the centers in terms of providing career development, marketable skills, and instruction for continuation of formal education.

Since the intent of the project is to implement and disseminate information about activities previously funded by the DVTE, two sites (each consisting of an elementary, secondary, and community college component) have been selected, through the Division's Request for Proposal process, to serve as national demonstration centers. The centers are: Site A-Joliet Elementary School District, Joliet Township High School District, and Joliet Junior College, and Site B-Cumberland Unit School District and Lake Land College.

The project has been designed to extend over three distinct phases. These are: Phase I-- 7-73 to 6-74 -- Planning; Phase II -- 7-74 to 6-75 -- Implementation; Phase III-- 7-75 to 6-76 -- Demonstration.

During the first two phases, teachers and administrators in the sites will identify and incorporate many different program components into their instructional activities. The components include: 1) programs designed to increase the

ADDITIONAL INFORMATION:

self-awareness of each student, 2) programs to develop in each student favorable attitudes about the personal, social, and economic significance of work, 3) programs to assist each student in developing and practicing appropriate career decision-making skills, and 4) programs to provide occupational preparation at grade levels 10-14.

In the project's third phase, the demonstration center technique will be used to create an awareness within educational practitioners and other interested individuals of the programs. More specifically, the centers will: 1) share resource materials, curriculum innovations, and examples of community student-school involvement in planning and implementing viable career and occupational programs; and 2) provide educational expertise or the exchange of ideas, solutions to problems, technical assistance and consultant services to persons interested in implementing selected activities.

Through the results of this Project, it is anticipated that other local educators will become more motivated and take the initiative in providing relevant programs to meet the needs of their students.

PROJECT RESUME

PROJECT TITLE:

Illinois Multifarious, Student-Based, Management-Oriented Information System

MANAGEMENT INFORMATION SYSTEM

AGENCY: Division of Vocational & Technical Education
Board of Vocational Education & Rehabilitation
1035 Outer Park Drive
Springfield, Illinois 62706

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. Garth Yeager
Phone: (217) 782-4864
Address: Agency

which is currently being developed to serve both **State** and **LEA** vocational administrators and planners

DURATION: From July 1, 1974 To December 31, 1975

FUNDING: Federal \$ 148,640.00 Part C Research Discretionary Funds

PURPOSE OF PROJECT: To produce the first iteration of a Management Information System that will ultimately include nine informational-gathering activities integrated into a single, viable, interactive system capable of providing sound information for planning vocational education programs.

DESCRIPTION OF PROJECT:

The Illinois Division of Vocational and Technical Education has been actively involved in research and development efforts during the past three years to conceptualize, design, and refine informational-gathering activities to facilitate decision-making and management at the state and local level. The Multifarious, Student-Based, Management-Oriented Information System project is producing the first iteration of the system by incorporating student supply data and manpower demand data.

The goal of the project is twofold. First, to operationalize a student data base, using modern optical scanning technology, that will facilitate the reporting, planning, and regulatory requirements of IDVTE. In a populous state such as Illinois where the enrollment in vocational education exceeds 600,000 students, an economical and manageable automated approach is needed if the student data base is to include more than biographic or demographic characteristics. The second part of the goal is to operationalize a manpower demand data base including demand projections. Historically, manpower requirements (demand data) have been unsuitable for educational planning because of the disparate gap which exists between educational programs and occupational classifications. Four counties, situated at the southwest border of Illinois, have been selected for extensive pilot-testing of the various aspects of the two components throughout the eighteen (18) month grant period to ascertain the overall benefits and efficiency of the first iteration of the Multifarious, Student-Based, Management-Oriented Information System.

ADDITIONAL INFORMATION:

The ultimate goal is to include nine informational-gathering components in the Management Information System. Each component has been defined to serve special functions as outlined below.

1. STUDENT SUPPLY COMPONENT

- Will collect course and program data on vocational students each semester;
- Will report student information back to each school;
- Will provide enrollment summaries and other student information to other parts of MIS like Follow-up, Supply/Demand Interface, Three-Phase Evaluation;
- Will replace much work currently involved in reporting student enrollment data to the State; and
- Will speed the calculation of reimbursement.

2. MANPOWER DEMAND COMPONENT

- Will collect data on the job market and the demand for vocational trainees in certain occupations;
- Will report this data to local schools, regional planners, and DVTE personnel; and
- Will provide this data to other parts of the MIS, such as Supply/Demand Interface.

3. SUPPLY/DEMAND INTERFACE COMPONENT

- Will receive data from the Student Supply Component and the Manpower Demand Component;
- Will project future completers of vocational programs at the district, county, regional, and State levels for five years into the future;
- Will compare the supply of vocational program completers with the demand for their services in the labor market; and
- Will report this information to vocational planners and administrators at the school, county, regional and State levels.

4. COST COMPONENT

- Will collect data on all costs of vocational courses and programs, such as equipment, supplies, personnel, space, and overhead costs;
- Will calculate the cost of running various vocational courses and programs throughout the State;
- Will provide cost data to other parts of the MIS, such as Three-Phase Evaluation; and
- Will report cost information to vocational planners and administrators at the district, county, regional, and State levels.

5. THE FOLLOW-UP COMPONENT

- Will collect data on vocational program alumni from the former students themselves and their employers;
- Will support current LEA follow-up efforts to eventually replace some, if not most, of their follow-up responsibilities;
- Will provide follow-up data to other parts of the MIS, such as Three-Phase Evaluation and Supply/Demand Interface; and
- Will report follow-up information to the LEA's and the State on an annual basis.

6. THE THREE-PHASE EVALUATION COMPONENT

- Will collect data from the vocational program approval and evaluation activities currently in use at DVTE;
- Will draw data from other parts of the MIS to assist in such activities as the writing and approval of Local District One and Five Year Plans, and the evaluation of local vocational courses and programs; and
- Is currently functioning within DVTE at this time, but has not been integrated into the MIS.

7. TEACHER SUPPLY/DEMAND COMPONENT

- Will collect data on the availability of vocational teachers, according to their geographic location and areas of professional competence;
- Will collect data on demand for vocational teachers in new and expanding programs;
- Will compare supply with demand and report such information to teacher education institutions, and local and State education agencies; and
- Can assist in the preparation of teacher in-service programs.

8. PLACEMENT COMPONENT

- The details of this component have not been finalized as yet. However, it is intended that this component will develop information to assist school counselors in their guidance and placement responsibilities.

9. OCCUPATIONAL EDUCATION COORDINATING COUNCILS (OECC)

- Currently under study is the concept of establishing approximately twenty multi-county vocational planning and advisory councils to use the output of the MIS and coordinate vocational education placement, and follow-up activities on a regional basis.

PROJECT RESUME

PROJECT TITLE: Production of Multiple Copies of a 15-30 Minute 16mm Film Based on Illinois Developments in Career Education

AGENCY: Division of Vocational and Technical Education
Research and Development Unit
1035 Outer Park Drive
Springfield, Illinois 62706

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. Ronald D. McCage or Mr. John S. Washburn
(same address as above) (Phone: 217/782-4620)

Place Photo Here

DURATION: From June 15, 1973 To December 31, 1974

FUNDING: Federal \$ 24,345 State \$ --- Other \$ 39,785

PURPOSE OF PROJECT: To produce, edit, and print multiple copies of a 15-30 minute 16mm film directed toward a K-8 teacher audience describing the concept and development of career education and its component parts.

DESCRIPTION OF PROJECT: A research and development activity has sponsored the development of a 16mm color film that is designed to motivate teachers at the elementary level to get career education started in their classrooms. The film was prepared cooperatively by Southern Illinois University/Carbondale and Edwardsville, and was produced and directed by Mr. Craig Hinde.

The film entitled, "A Rose By Any Other Name" gives an exciting view of what happens when career education moves into the elementary school classroom. The film itself is 31 minutes in length and portrays career education as depicted in actual classroom activities in a variety of Illinois locations. A 10 minute Epilogue (available on a limited number of copies) is designed for use by Division consultants conducting career education workshops and depicts in non-narrated form the component parts of the Illinois Career Education Model.

The film is presently being field-tested by Success Research Consultants, Inc., in a variety of different target groups, i.e., teachers, administrators, career educators. Preliminary results of the field-test show a warm and enthusiastic response from the target audience. Complete field-test data will be available by March 10, 1975.

The film is presently being distributed for use by Illinois schools for field-testing and workshop purposes. If additional information is required with respect to purchase of the film, either contact person listed above can provide details when requested.

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PROJECT RESUME

PROJECT TITLE:

Career Education for Region 12 (Hazard)

AGENCY:

Kentucky Valley Educational Cooperative

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. Owen D. Collins
Career Education in Region 12
511 Broadway
Hazard, Kentucky 41701 (606) 439-2312

Place Photo Here

DURATION: From February 1, 1973 To January 30, 1976

FUNDING: Federal \$ _____ State \$ _____ Other \$ _____

PURPOSE OF PROJECT: To develop a regional approach to the implementation of a Career Education program, 1-14, and to develop the components of awareness, exploration, preparation with guidance throughout the total program. To develop and present career development concepts through modifications, in the curriculum content, revised instructional activities, and increased guidance services.

DESCRIPTION OF PROJECT: The eight-county area of Region 12 in Kentucky is set in the rural, mountainous region within the Appalachian range. The Regional Career Education Staff, working with the Career Education Coordinators (CEC's), the thirteen (13) Local Educational Agencies (LEA's) and cooperating personnel from the Department of Education, Bureau of Vocational Education, and universities are providing comprehensive in-service for the school personnel as they begin to reorient their curriculums toward the goals of the career education program.

Despite a syndrome of geographical and economical difficulties, the Career Education participants desire to further develop a viable program that will be relevant to the students by integrating the academic to the world of work. The region consists of eleven (11) local school districts with an enrollment of 30,392 students in grades 1-14, ninety-two (92) different schools: seventy-six (76) elementary schools, sixteen (16) secondary schools, one (1) state vocational-technical school, five (5) area vocational education centers, and one (1) community college. In addition to one thousand two hundred forty-seven (1,247) classroom teachers in the region, there are eighty-three (83) administrative and supervisory personnel, twenty-one (21) guidance counselors, and one hundred twenty-eight (128) vocational personnel in these schools.

Through this first year and a half of development, the Career Education effort has provided workshops for administrative personnel, teachers, and curriculum

ADDITIONAL INFORMATION:

developers which has resulted in 1,202 fused Career Education units taught:

- a. reached over 20,689 school children.
- b. utilized 1,287 resource persons in classrooms.
- c. field trips of 388 were conducted in behalf of Career Education.

The program also reaches the community (Public Relations and Community Involvement) by completing:

- a. school advisory meetings - 94.
- b. floats - 27 in parades depicting Career Education.
- c. media coverage - 290 newspaper articles and/or pictures concerning Career Education.

The second year (being completed) has placed its thrust in the "Exploration" phase while maintaining the "Awareness (1-14)" phase. Again, inservice is the key to program development for administrative, guidance, and classroom personnel. The Exploration segment is presently field-testing the eighty(80) cluster units which feature interdisciplinary teaching. The "Awareness" is being maintained via workshops and the development of 170 fused units of instruction.

The third year will give its impetus to "Preparation" while at the same time permitting the "Awareness" to fade (as a main thrust) back to the 1-6 grades and the "Exploration" to the 7-9 grades.

Therefore, as can be discerned, the overwhelming concern during the first year was to develop an Awareness effort, even in the Exploration and Preparation components. The reason: "we were, of course, just beginning a Career Education program and Awareness needed to be developed at all grade levels."

The overriding objective for the second year is to develop the Exploration effort, although energies are being expended in strengthening and increasing the Awareness component. Preparation activities and guidance efforts are also receiving attention. The third year will focus upon the Preparation phase which will be more difficult (schedules and subject matter orientation) to implement than the previous two (2) phases.

Any design developed to implement a Career Education program on a regional (multi-school district) basis must contain provisions for relying on the collective expertise available in each local educational agency. More importantly, the Regional Career Education Staff is dedicated to the principle that Career Education must also be the local educational agency's program.

PROJECT RESUME

PROJECT TITLE:
A Triangular Teaching Process in
Mass Communications

AGENCY:
Daviness County School System

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Mr. Ed Allen, Apollo High School
2280 Tamarack Road
Owensboro, Kentucky 42301 (502) 685-3121

Place Photo Here

DURATION: From July 1, 1974 To June 30, 1975
FUNDING: Federal \$ State \$ Other \$

PURPOSE OF PROJECT: To provide for and teach a high school level course in Radio-TV Communications with the expertise of staff and the resources of three institutions. To prepare students in the technical and editorial fundamentals of Radio and Television.

DESCRIPTION OF PROJECT: Two instructors from Apollo High School, a consultant assistant from Kentucky Wesleyan College, and the Television Lab of the Owensboro Area Vocational Education Center serves as the triangular approach to teaching secondary students from Apollo High School. Local radio and TV (WVJS-WSTO) and Cablevision will provide air time and job opportunities for the participants. These separate institutions will pool cooperative resources to broaden and enhance the students' career development by presenting opportunities for students to explore the general area and to prepare for specific responsibilities in the field.

All three(3) institutions serve the Owensboro area where Apollo students and graduates attend both the Area Vocational Education Center and Kentucky Wesleyan. The three institutions offer courses related to the mass media field:

Apollo High School	Journalism I & II Mass Media Drama Speech
Area Vocational Education Center	Communication Electronics
Kentucky Wesleyan College	Language Drama



ADDITIONAL INFORMATION:

The basis for this exemplary effort is that job satisfaction depends on correspondence of a person's abilities with job requirements and the correspondence of a person's needs with the reinforcers available from the work. Therefore, simulated job experiences will enable persons to better determine for themselves whether a certain type of work will enable them to receive the kind of reinforcers they seek from life.

The course has combined classroom study of both technical and editorial skills, later to be applied in a practical manner in the production of in-school telecasts and weekly radio programs on a local commercial station. Instruction includes techniques of operating related equipment, filming, writing and editing scripts, using cue cards, and also sound and lighting techniques.

PROJECT RESUME

PROJECT TITLE:
Vocational Education Public Information
Program for the Pennyrile Region

AGENCY: Vocational Education Region II
Pennyrile Region
Madisonville, Kentucky 42431

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Mrs. Joyce Logan, Regional Coordinator
Vocational Education Programs
P.O. Box 608
Madisonville, Kentucky 42431

Place Photo Here

DURATION: From November, 1973 To June, 1975
FUNDING: Federal \$ 7,052 State \$ 785 Other \$ _____

PURPOSE OF PROJECT: To coordinate efforts of all persons involved in dissemination of vocational education information to develop a planned program of information dissemination reaching every segment of the population and to increase public awareness for all types of vocational education programs.

DESCRIPTION OF PROJECT: During FY 1974 the Pennyrile Project conducted a series of surveys, including a content analysis of print media in the region, to determine knowledge of and attitudes toward vocational education in each county of Region II. The surveys also reported respondents' primary sources of information; present information activities in the region and their extent and effectiveness; and any additional information activities which vocational personnel in the region feel would be worthwhile for development.

The study was able to identify eight (8) trends, which included: a listing of which groups were best able to define and identify vocational education; the population's knowledge of vocational education, the identification level of various programs in the region; the rating of these programs; the importance of various media as communication channel as determined by the respondents; and the total media utilization of vocational education information during the analysis period.

During FY 1974 the project will develop various dissemination support devices (such as a display board, slide-tape presentations on the program areas, a "tips and techniques" booklet for dissemination) and a region-wide public information plan for vocational education programs in the region. The project activities during FY '75 are expected to increase identification at significant levels and be identifiable in light of the various noted trends.

ADDITIONAL INFORMATION: Phase III of the project, which will be funded in FY '76, will initiate a post-survey of the sample groups to determine if the dissemination plan and activities have been successful. The dissemination plan will then be ready for field-trial and establishment in the other regions.

PROJECT RESUME

PROJECT TITLE:

GUIDANCE IN VOCATIONS AND EDUCATION

AGENCY: Bureau of Vocational Education, Dept. of
Educational & Cultural Services, Augusta,
Maine 04330

Place Photo Here

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Roy Bagley, c/o Supt. of Schools, Cumberland Center,
Maine 04021 Tel 207 - 829-5557

DURATION: From July 1, 1974 To June 30, 1975

FUNDING: Federal \$ 27,558.00 State \$ _____ Other \$ 10,800.00

PURPOSE OF PROJECT: To develop career awareness, an attitude of career direction, and decision making skills among the students of SAD #51. To provide each student with a saleable skill.

DESCRIPTION OF PROJECT

A center located at Gyger Gym will become the center for career education. Field trips, guest speakers, inservice, and special projects will be arranged through the central staff. Small groups of students will meet at the center to explore careers. The center will feature a cluster a month for all students to explore.

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PROJECT RESUME

PROJECT TITLE:

INDEPENDENT LIVING

AGENCY: Bureau of Vocational Education, Dept. of
Educational & Cultural Services, Augusta,
Maine 04330

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Mrs. Glenna Atwood, Hampden Academy,
Hampden, Maine 04444 Tel. 207 862-3791

Place Photo Here

DURATION: From July 1, 1974 To June 31, 1975
FUNDING: Federal \$ 6600.00 State \$ _____ Other \$ 3,591.00

PURPOSE OF PROJECT: Help prepare the student, regardless of vocation, for
life beyond high school.

DESCRIPTION OF PROJECT

The student will be exposed to consumer buying through the use of credit, contracts, budgets and comparative shopping. He will be introduced to proper sources to use in the future so that he may continue areas of self-improvement. The Home Economics Department, the Social Studies Department, and the Business Department will teach the portion best suited to its specialities. They will make use of community resource people, pamphlets, books, and films.

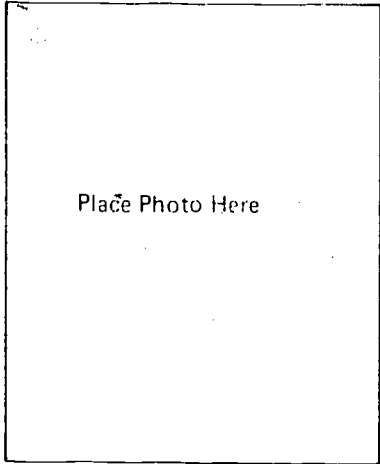
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PROJECT RESUME

PROJECT TITLE: AN IN-SCHOOL JOB PLACEMENT SERVICE FOR SECONDARY SCHOOL STUDENTS

AGENCY: Bureau of Vocational Education, Dept. of Educational & Cultural Services, Augusta, Maine 04330

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Kenneth Gray, Director of Guidance, MSAD #75,
Mt. Ararat High School, Topsham, Maine 04086
Tel. 207 729-8761



DURATION: From July 1, 1974 To June 30, 1975
FUNDING: Federal \$ 20,470.00 State \$ _____ Other \$ _____

PURPOSE OF PROJECT: To develop, field test, and evaluate a secondary school job placement model which is integrated into an existing guidance program.

DESCRIPTION OF PROJECT:
A job placement team model will be developed to use in small high schools without large guidance departments. Job placement will be provided for graduating seniors, students seeking summer employment, students terminating their education early, and those looking for part-time work during the school year. The model will be organized into five segments or activities: needs assessment, job development, placement dissemination, and follow-up and evaluation.

PROJECT RESUME

PROJECT TITLE:

Career Education Dissemination Services
(CEDIS)

AGENCY: Division of Occupational Education -
Greater Lawrence Regional Vocational Technical
High School

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Norman J. Oppenheim (Phone: 617/458-7151)
117 Perry Street, Lowell, Massachusetts 01852



cedis

The Division of
Occupational Education,
Massachusetts Department
of Education

DURATION: From July 1, 1974 To June 30, 1975

FUNDING: Federal \$ 134,000 State \$ _____ Other \$ _____

PURPOSE OF PROJECT: To acquire, organize, and disseminate relevant information to Occupational/Career Education practitioners so they may better prepare students for meaningful employment and careers.

DESCRIPTION OF PROJECT:

Career Education Dissemination Services (CEDIS) offers information services to 127 educational institutions through a comprehensive dissemination network. The clearinghouse component functions as an integrated professional information system by organizing the vast amount of existing information and making it available for use.

CEDIS has also received a special grant to: (i) identify and summarize all national and local career guidance information systems (ii) conduct a needs assessment of educators in Massachusetts regarding Occupational Information Services, (iii) develop a data bank which contains indepth information to support those career guidance systems identified, and (iv) initiate a dissemination program leading to full utilization information on Occupational Information Systems.

CEDIS serves as a "link" between local schools and educational developments across the nation. In addition to the complete collection of ERIC (Educational Resources Information Center), CEDIS has developed a microfiche file of materials developed in Massachusetts for use as a local resource bank for educators, and an In-house Resource Collection of Occupational and Career Education materials. Two monthly publications, "Thru the Grapevine" and "The Resource Guide", which target relevant education documents, are distributed to over 3,000 educators throughout the state. CEDIS also represents Massachusetts in the National Network for Curriculum Coordination in Vocational Technical Education, bringing additional resources to local users.

CEDIS serves 64 of its primary users through a formal participating school relationship. Requisite to the establishment of this relationship, the school agrees to purchase microfiche-reading equipment and the ERIC indexes, and appoint a Linker to serve as the permanent liaison. The Linker and entire faculty of the school are then trained in a wide range of researching techniques and are made aware of the services available from CEDIS. CEDIS' services are used on a less formalized basis by an additional 65 educational institutions.

PROJECT RESUME

PROJECT TITLE: Project CAREER

Computer Assisted REsearch for Educational Relevance

AGENCY: Division of Occupational Education
Massachusetts Department of Education
182 Tremont Street
Boston, Massachusetts 02111

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Vincent P. Lamo, Director
301 North Main Street
Randolph, Massachusetts 02368

Place Photo Here

DURATION: From July 1, 1971 To June 30, 1975

FUNDING: Federal \$ _____ State \$ _____ Other \$ _____

PURPOSE OF PROJECT: To develop occupationally-oriented information for its infusion into the daily curriculum in order to relate learning to working. The goal is to motivate learning and maximize potential by increasing career awareness, choices, and accessibility.

DESCRIPTION OF PROJECT:

Project CAREER is a federally-funded research and development grant administered by the Division of Occupational Education, Massachusetts Department of Education. As part of the Project's activities, a computerized data bank of occupational performance objectives has been developed for various occupational areas. For each objective, the following elements are included: necessary prerequisite competencies, component skills or procedures for attaining the target objective; environmental variations within and/or through which to learn the objective, and related concepts which could be taught in conjunction with the objective. There is also a coding process for the handicapped which identifies those objectives which can be performed by certain classes of handicapped students.

The performance objectives were developed through a system of conversion and validation by educators, curriculum specialists, and tradesmen.

Project CAREER provides the services of curriculum development workshops and follow-up, technical assistance as the data are introduced to and implemented in the schools. Instructional, guidance, and administrative personnel are familiarized with the design, potential uses, and access modes of the data. Project CAREER staff then lend individualized assistance to specific problem areas and needs within the schools.

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ADDITIONAL INFORMATION:

Purpose and Products of Project CAREER

On July 1, 1971, Project CAREER was charged with the task of developing a computerized bank of information about various occupations. This world of work information was to be written in the form of "performance objectives", individual statements representing "specific, discrete skills required in each occupation (122 occupations are presently under investigation by Project CAREER). Representatives from business and industry, job incumbents, were recruited to review, or "validate", each skill for its present and future necessity to the job.

Taking into consideration the fact that not all students learn at the same rate, a "handicapped coding strip" was added to each skill statement. This additional information represents the judgments of special needs experts as to the relative attainability of that skill by persons with certain handicaps. (Fourteen disability areas are included in the coding.) Each skill is judged as either "attainable" or "attainable with modification" of certain equipment or the work environment. In some cases, judgment is reserved. The emphasis, however, is always on ability rather than disability. Ceilings, or limits, on achievement are never imposed or even suggested.

The final section of information added to the design of each skill statement was the "four column bridge" -- four different types of information about the skill necessary for the teacher to know before instruction of that skill begins. First, a list appears of the prerequisite learnings involved -- abilities such as reading level, mathematical computations, etc., which the student must already have before attempting to master a particular skill. Second, the component tasks represent the sequential steps required for successful completion of the stipulated performance. Next, alternative environments are suggested. These are possibilities for ideas as to how to improvise if certain equipment or settings are not available. And finally, the fourth type of information is a listing of the concepts -- math, science, communications, law -- which relate to the skill. This column indicates how other academic areas of learning apply to the skill. Thus, these four types of information were added to provide a bridge, or a transition from the hard, occupational data to the instructional, classroom information necessary for the learning of skills.

The complete product to date is a bank of 34,000 skill statements. Each computerized performance objective indicates a skill required in an occupation -- "coded" for its attainability by persons with certain disabilities and "translated" for its use in preparing and training students for employment.

In order to avoid duplication and to easily manage the initial writing of skills, a "task outline" is written for each occupation. This broad outline indicates the major responsibilities and duties involved in the occupation. Job holders are recruited and trained to write the specific skills, using the broad areas in the outline as a guide.

Impact

In describing the benefits of these products, five broad impact areas are usually pinpointed: (1) interdisciplinary approaches to teaching; (2) individualized learning; (3) integration of special needs learners into "regular" classrooms; (4) pupil personnel services; and (5) community involvement in education.

Project CAREER provides these basic data to educators in order that new curriculum materials can be developed in the schools. This information has been gathered directly from business and industry and has been packaged to accommodate a variety of teaching and learning styles. Further this world-of-work information, related to 122 occupations, can be relied upon as an accurate up-to-date source of required occupational competencies.

The transfer of occupational competence from business and industry (employers) to students (prospective employees) can be conducted within many educational arenas. At the elementary, junior high, senior high, and post-secondary levels, within guidance and counseling, and as a concern of special education, career oriented instruction is a major necessity in today's economy and society.

Utilization

The Project spent the first three years (July, 1971 - June, 1974) researching, designing, developing, and pilot testing the bank of performance objectives. In July, 1974, the dissemination and implementation process began as regional workshops were held throughout Massachusetts. At this point in time over 100 local school systems are utilizing the Project CAREER data.

Various manuals, handbooks, and models have been developed to sketch and suggest numerous approaches to the utilization of the Project CAREER data bank of skills. The goal is to provide occupational competence, and the purpose is to maximize human potential.

Therefore, the past three years of research provide a substantial foundation upon which to advance and improve the preparation and employment of handicapped persons. The problem statement and the goals, objectives and procedures which follow constitute a specific focus direction for application of the Project CAREER data for special needs persons.

PROJECT RESUME

PROJECT TITLE: DEVELOPMENT OF A STATEWIDE EVALUATION SYSTEM FOR VOCATIONAL EDUCATION PROGRAMS FUNDED UNDER PL90-576

AGENCY: NEVADA RESEARCH COORDINATING UNIT/
UNIVERSITY OF NEVADA RESEARCH AND
EDUCATIONAL PLANNING CENTER

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Dr. Joseph W. Erlach; Research and Educational Planning
Center; University of Nevada, Reno; Reno, Nv. 89507
(702) 784-4921



DURATION: From July 1, 1973 To June 30, 1975

FUNDING: Federal \$ @ \$16,000 State \$ _____ Other \$ _____

PURPOSE OF PROJECT Develop and implement a system which could be used by the Nevada State Advisory Council for Manpower Training and Career Education for evaluating vocational education programs funded under PL90-576.

DESCRIPTION OF PROJECT In FY '73, the Nevada State Advisory Council for Manpower Training and Career Education contracted with the Research and Educational Planning Center (REPC) of the University of Nevada, Reno (which houses the Nevada RCU) for the development of an evaluation design which could be applied in subsequent years so that the Council could gain an accurate and comprehensive picture of vocational education programs funded under PL90-576.

The process parameters having been established, in FY '74 RCU/REPC personnel researched and drafted the instruments and procedures for operationalizing this evaluation. Sixteen features of an idealized vocational education program were identified. A ten-paged questionnaire was devised to sample the relative state of development of each of these features in each program.

In FY '74 an evaluation team, comprised of REPC personnel and individual members of the State Advisory Council, visited one-half the schools of the State and all other institutions funded under PL90-576. Interviews and tours of facilities were structured around the Questionnaire content. Before leaving the school the team left copies of the Questionnaire and requested that the Principal and/or vocational personnel subjectively evaluate their program--guided by the concluded team visitation.

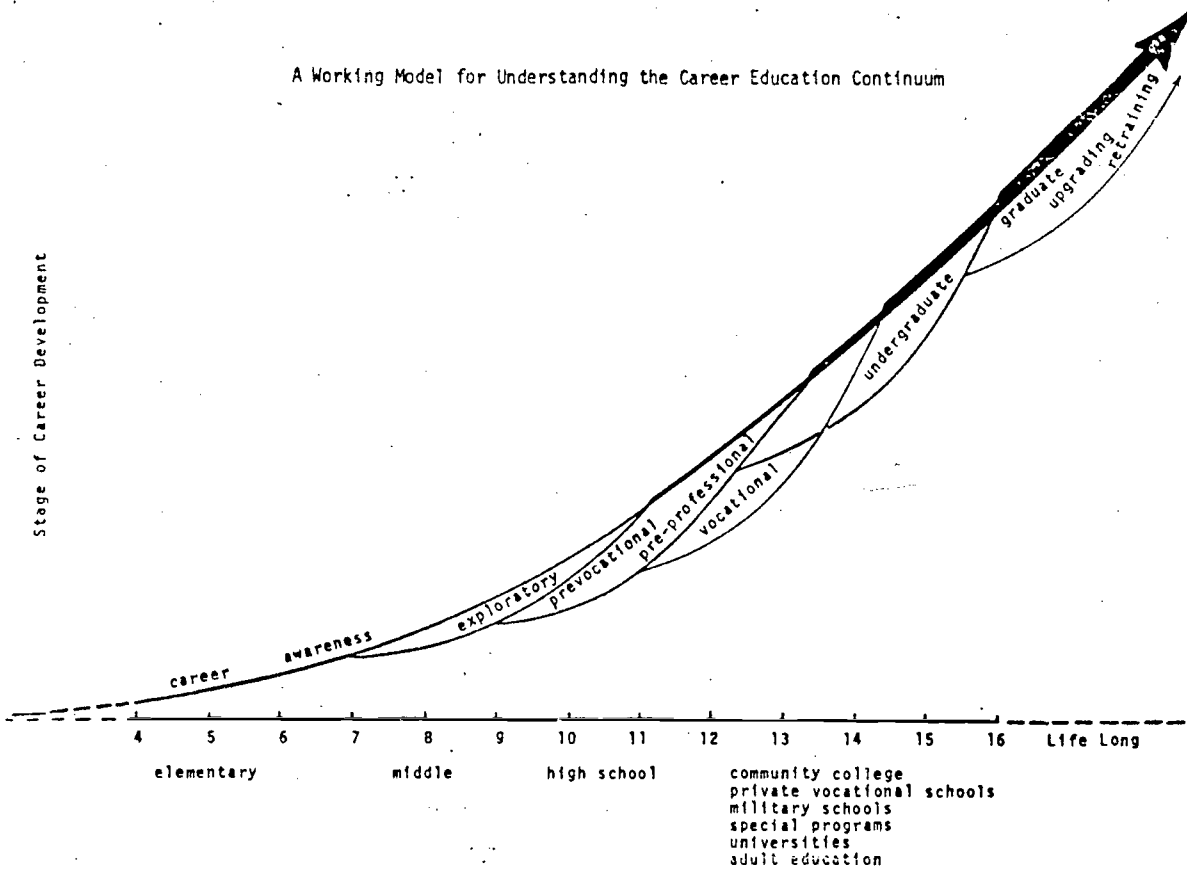
The State Council received a comprehensive report from the REPC which they summarized into their report to the State Board of Education. For the first time they had systematized, first-hand knowledge of programs to underpin their

~~ADDITIONAL INFORMATION:~~

recommendations and with which to sharpen the focus of future evaluations. FY '75 will see the evaluation team visit the remaining schools funded under PL90-576.

One major finding has been that there should be greater coordination among career and vocational education programs so that each program can be related to its place on the Career Education Continuum as diagrammed by Dr. Joseph Erlach specifically for the presentation of these evaluation results (see below).

A Working Model for Understanding the Career Education Continuum



PROJECT RESUME

PROJECT TITLE: ESTABLISHMENT OF STATEWIDE NETWORK OF LOCAL ADVISORY COMMITTEES

AGENCY: NEVADA RESEARCH COORDINATING UNIT

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Dr. Joseph W. Erlach; Research & Educ. Planning Cntr.;
University of Nevada, Reno; Reno, Nv. 89507
(702) 784-4921

DURATION: From July 1, 1974 To June 30, 1975

FUNDING: Federal \$ @ \$6,000 State \$ _____ Other \$ _____

- PURPOSE OF PROJECT:
1. Develop a statewide network of advisory committees.
 2. Survey operational problems they experience.
 3. Survey the literature; develop a handbook for State Advisory Committee operation and problem-solving.

DESCRIPTION OF PROJECT: In July 1974, Nevada RCU personnel were called upon by the Nevada State Advisory Council for Manpower Training and Career Education to structure a 3-day workshop for local advisory committee representatives throughout the State to assess the degree of development of these committees and problems and procedures in their operation. As a result of that workshop, the State Council determined to develop a State network to assure that these committees will perform with full competency and efficiency in their areas.

RCU personnel were called upon to research the literature on local advisory committees, to develop a handbook for their operation, and to recommend a structure for communications throughout this network.

The result of these and related efforts will be a more direct and positive effect of the committees on updating education and the gaining of added leverage in the State Legislature when it is considering the financing of vocational education in the State.

PROJECT RESUME

PROJECT TITLE:

COMMUNITY NEEDS ASSESSMENT FOR VOCATIONAL EDUCATION
PLANNING IN NEW HAMPSHIRE

AGENCY:

Milford School District
Nashua Street
Milford, New Hampshire 03055

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. Richard Gustafson, Special Assistant to President
Hale Administration Building, Keene State College
Keene, NH 03431 (Phone: 603/352-1310) (over)

DURATION:

From January 1, 1973 To September 1, 1973

FUNDING:

Federal \$ 6,770 State \$ _____ Other \$ 2,730 (local)

PURPOSE OF PROJECT:

To design and test an operational model for local needs assessment for Vocational Education planning.

DESCRIPTION OF PROJECT:

The Milford, New Hampshire School District was selected by the New Hampshire State Department of Education, Division of Vocational-Technical Education to design and implement a model community needs assessment procedure which could be used by other New Hampshire areas in planning for their vocational program. The model developed was designed to yield two products.

First, the procedures, forms, and data collection techniques were compiled into a New Hampshire Needs Assessment Handbook for Vocational Education Planning. This handbook (which is not available) is designed to make the Milford model available to other local directors by providing them with a "how to do it package".

Second, using the forms and procedures developed for the handbook, Milford conducted their own community needs assessment to demonstrate the use of the model and the final product produced when the handbook was used.

The needs assessment was designed to detail the vocational program offerings in Milford and to map a direction for the future based upon input from a variety of sources. Four major areas were examined to complete this study. They were:

JOB MARKET ANALYSIS
POPULATION ANALYSIS

EXISTING PROGRAMS ANALYSIS
RESOURCE ANALYSIS

ADDITIONAL INFORMATION:

Once data were compiled in these four areas of inquiry, discrepancy analyses were performed and priorities for future planning were determined. The final report concludes with the establishment of the priorities for vocational education in Milford.

Former Project Director was:

Mr. Melvin Severance,
Co-op Coordinator
Milford High School
West Street
Milford, NH 03055

PROJECT RESUME

PROJECT TITLE:

MODEL MACHINE SHOP FOR DRAFTING INSTRUCTION

AGENCY:

White Mountains Regional High School District
Whitefield, NH 03598

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Mr. Carl Jackson, Instructor
White Mountains Regional High School District
Whitefield, NH 03598 (Phone: 603/837-2528)

Place Photo Here

DURATION: From March 1970 To February 1974

FUNDING: Federal \$ 41,075 State \$ _____ Other \$ 23,165 (local)

PURPOSE OF PROJECT:

Develop a model machine shop to be utilized in training drafting students in machine shop fundamentals and familiarization with work in industry.

DESCRIPTION OF PROJECT:

Development of a T&I drafting program with installation of machines and tools integrating drafting and related machine shop training to enable the drafting student to learn by practical application the use of tools and machine capabilities. The draftsman must have an understanding of modern manufacturing methods, otherwise, just the study of drafting is a waste of time. This program was designed to establish justification that the student of drafting needs the benefit of related machine work or that he or she will be qualified for suitable employment upon graduation.

This activity greatly improved the T&I Drafting course, provided the student with identification with industrial work, motivated and released from within the student latent abilities. In addition to training, drafting served as a career development program for the students were exposed to several fields of work. The project introduced exciting career endeavors in computer programming, numerical control, machine setup and operation, and problem solving. The science department is cooperating with the above program. Vocational and academic students are working together using the "cluster concept" to develop attitudes of acceptance and ability to work with each other.

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PROJECT RESUME

PROJECT TITLE:

PRE-NURSING STUDY AND VOCATIONAL SKILLS PREPARATION

AGENCY:

New Hampshire Vocational-Technical College
Milan Road, Berlin, NH 03570

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Mrs. Olive Paine, R.N. (Phone: 603/752-1113)
Coordinator, Practical Nursing Program, NHVTC
Milan Road, Berlin, NH 03570

Place Photo Here

DURATION: From August 1970 To July 1972
FUNDING: Federal \$ 4,845 State \$ 340 Other \$ _____

PURPOSE OF PROJECT:

To decrease the high (20%) dropout rate of disadvantaged students in a post-secondary Practical Nursing program.

DESCRIPTION OF PROJECT:

The project was conducted at the New Hampshire Vocational-Technical College in Berlin. A course entitled Practical Nurse Summer Study Skills was created to counteract the high academic dropout rate of regular Practical Nursing candidates (over 20% per year). The staff analyzed what the dropouts had in common and isolated one common positive characteristic and four common negative characteristics:

- A) Positive - highly motivated
- B) Negative -
 1. older or late starters
 2. weak in Science and Math
 3. weak in verbal skills
 4. anxious and afraid of school situation

A seven-week summer program was developed which focused on the identified problems. Students registered for the fall term who fit the pattern consistent with previous dropouts were admitted for 108 hours of classroom instruction. The results indicate that students were better able to adjust to the school situation and were better prepared to enter the Practical Nursing program.

ADDITIONAL INFORMATION:

Experience with the summer project indicates that if instruction is individualized, disadvantaged learners reach their goal with less frustration and with a greater sense of self-worth.

PROJECT RESUME

PROJECT TITLE:

Career Education Curriculum Development

AGENCY: Curriculum Management Center
Vocational-Technical Curriculum Laboratory
Building 4103 - Kilmer Road
New Brunswick, New Jersey

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. Joseph F. Kelly

Place Photo Here

DURATION: From October, 1973 To _____

FUNDING: Federal \$ _____ State \$ 100,000 Other \$ _____

PURPOSE OF PROJECT: To provide LEA's with expertise resource material, editorial assistance and evaluation in the development of Career Education curriculum materials for all grade levels, including guidance media and special needs.

DESCRIPTION OF PROJECT:

In October, 1973, the Vocational-Technical Curriculum Laboratory developed a Statewide Model for the development of career education curriculum on the local level. The model provided for development of career education curriculum materials for all grade levels and for the development of guidance, media, and special needs materials.

The plan provides special attention to areas of determined need, and allows for complete coverage of grades K-12.

Development of materials includes interdisciplinary approaches, the occupational clusters, and the academic subject areas as well as experimentation with a variety of instructional approaches.

Projects are individual and/or team endeavors with participants developing materials related to one or more of the 15 occupational clusters as identified by the United States Office of Education. Wherever possible individuals working on different levels or the same clusters have been grouped to foster sharing of ideas in order to prevent duplication of effort.

In addition to the individuals and small group curriculum writers, six LEA's are involved in developing an interdisciplinary approach to career education as well as a special project with a state college. Other participants are developing media, guidance and special needs programs as they pertain to career education.

Products are organized into a standardized format where possible by laboratory staff who also provide participants with advice, resource material, editorial assistance and publication. Completed manuscripts are field-tested be-

ADDITIONAL INFORMATION:

fore being disseminated.

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PROJECT RESUME

PROJECT TITLE:

Cooperative Curriculum Research In Vocational Education

AGENCY: New Jersey Department of Education
Glassboro State College
Vineland Public Schools

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
George Russ, Director, Vocational Teacher Education
and Certification-Division of Vocational Education
225 West State St., Trenton, N.J. 609-292-5720

Place Photo Here

DURATION: From July 1, 1974 To August 31, 1975

FUNDING: Federal \$ 123,746 State \$ 20,000 Other \$ 38,800

PURPOSE OF PROJECT: To initiate and test a curriculum for vocational education and career guidance at both the elementary and secondary levels of instruction

DESCRIPTION OF PROJECT: The objectives of this research study are to

1. Initiate career guidance activities within the existing elementary school curriculum areas and measure the effectiveness of this program as compared to the program now being utilized.
2. Develop and compare an in-school career guidance and self-awareness curriculum with the existing curriculum in the seventh and eighth grades at the junior high school level.
3. Develop and test the effectiveness of individualized and performance based career oriented academic core curriculums at the senior high school level.

In addition to the above stated broad based objectives, this research study is designed to

1. Utilize the assessments and evaluations by students in the elementary, junior high, and senior high school for modification of curriculum content and strategies.
2. Integrate a degree of career guidance and vocational awareness at all levels of public instruction.
3. Use teachers and professionals from the elementary, secondary and college levels along with expertise of State Department personnel to develop and refine a career oriented curriculum.
4. Provide a tested curriculum model for vocational education and career guidance at all levels of public instruction which could provide an alternative for other school systems in and out of New Jersey.
5. Improve student awareness of vocational education through adjustment

ADDITIONAL INFORMATION:

of the basic related core curriculum, consisting of History, English, Mathematics Science and Health and Physical Education to provide meaningful individualized and performance based associated curriculum.

6. Design instruments and techniques to provide for the gathering opinions and judgments of students, teachers, guidance personnel, administrators and parents in evaluating curriculum effectiveness.

7. Design, evaluate and use criterion measures of success with vocational education and career guidance at all levels of instruction, as a means of measuring curriculum effectiveness.

This research is designed to initiate individual, performance oriented, vocationally associated academic subjects for individuals who are pursuing vocational education at the high school level. These courses within the Vineland School District consist of English, Mathematics, History, Health and Physical Education, and Science at secondary school levels. However, for purposes of this research these academic subjects will only be identified for those individuals at the high school level grades 11 and 12.

For the purposes of research within the junior high school level only the 7th and 8th grade students will be considered, and for the purposes of the elementary levels, schools will be selected at the elementary level for each grade. The curriculum will be developed, pilot tested, revised and field tested for all levels indicated.

For the purpose of this curriculum research undertaking an intense research activity will be initiated during the summer of 1974. A coordinator of research at each level within the Vineland system will be identified with one director of all the research activities. This means that the organization for this research at Vineland would consist of one individual as a director of research, one individual as the elementary school research coordinator and one as the secondary school research coordinator. Curriculum specialists within the identified levels and academic areas will consist of Glassboro State College personnel. These individuals will work cooperatively with Vineland personnel to develop individualized and performance based curriculum for vocational students within the existing structure at Vineland High School. They will also assist in developing an associated career guidance curriculum at the elementary and junior high school levels.

At the junior high school level for students in grades 7 and 8 a program to study American Industry will be designed and tested for effectiveness. Included will be role playing activities for the students so that they can participate in all levels of career guidance activities to include marketing, management, personnel and organization, representative of vocations that exist in business, and industry and government. Another curriculum structure to study human ecology is to be developed through Home Economics personnel. These pilot courses are to be designed to develop vocational exploration for students in the 7th and 8th grades. However, for purposes of this research activity only one section from each grade will be tested during this research period.

PRESENTATION SUMMARY

PRESENTATION TITLE:

A County-Based Planning and Funding Model

Place Photo Here

PRESENTER (Name, Title, Organization):

Harold R. Seltzer, Associate State Director
Division of Vocational Education
New Jersey Department of Education

ABSTRACT OF PRESENTATION:

The role of the county coordinating council is described and explained with emphasis on council composition and function.

The development of county planning for the long range delivery of vocational-technical and career education programs.

The utilization of county funding formulas for the purpose of funding vocational-technical and career education programs.

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PROJECT RESUME

PROJECT TITLE

Development of Orientation To Work Among Children

AGENCY: Human Care Systems Research
Rutgers, The State University of New Jersey
New Brunswick, New Jersey

Place Photo Here

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. Bernard Goldstein

DURATION: From July 1, 1973 To June 30, 1974

FUNDING: Federal \$ _____ State \$ 27,520 Other \$ _____

PURPOSE OF PROJECT: To determine when and how the world of work impacts on children and their sequential reaction to that impact as a basis for informed policy recommendations.

DESCRIPTION OF PROJECT:

Through the use of specially designed instruments and interviewer techniques, 1200 children from K through 5 and 7th grade reacted to various aspects of the world of work. Children below grade five, except with regard to one or two instruments, were interviewed individually. Children in grades five and seven typically responded in writing to group administration of questionnaires.

The data set contains nearly 500 pieces about each child in the sample. It is felt that this represents the most extensive cross-sectional data set to date in the field of occupational socialization.

The project continues.

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ADDITIONAL INFORMATION:

Research attention is directed to a variety of theoretical areas, including the following:

1. Cognitive States:

What do children know about the "world of work"? About specific occupations? About connections between work and the satisfaction of economic and psycho-social needs? What information (and misinformation) constitutes the "Child's eye" view of work-related reality?

2. Evaluative/Affective States:

What are children's work-related attitudes and feelings? Do they, for example, define work as a burden to be borne in a none-too-pleasant future? Or do they, perhaps, look forward to it as the "adult version" of play?

3. Developmental Issues:

Are there identifiable patterns or stages associated with the child's cognitive, affective, and evaluative growth with respect to the social institution of work? If so, do such stages coincide with developmental patterns previously identified elsewhere, or do they represent points of departure that require exploration?

4. Structural and Demographic Influences:

What social factors, or combinations thereof, contribute to differences in children's work orientations? Are differences predominantly age-related, or do other variables also play significant roles? Do sex, race, intelligence, social status, and place of residence perform mediating functions in the process? If so, can certain groups of traits be considered to be to children's "advantage" or "disadvantage" in terms of normal development in this respect?

PRESENTATION SUMMARY

PRESENTATION TITLE:

A Model Plan For An Internal State Dissemination Network

Place Photo Here

PRESENTER (Name, Title, Organization):

Dr. Joseph F. Kelly
Director, Bureau of Occupational Research Development
Division of Vocational Education
New Jersey Department of Education

ABSTRACT OF PRESENTATION:

Background on the County System

The Task of the County Career Education Coordinator

- a. As a planner
- b. As an implementer
- c. As a public information specialist
- d. As an evaluator
- e. As a coordinator
- f. As an initiator
- g. As an occupational analyst

The County Coordinator: A Vital Link in Dissemination

(A Tape-Slide Presentation will be used)

PROJECT RESUME

PROJECT TITLE:

Training in the Evaluation of Vocational-Technical Education Programs

AGENCY: Trenton State College

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Gary Oakley, Trenton State College
Trenton, New Jersey 08625 609-771-2543

Place Photo Here

DURATION: From December 5, 1973 To June 30, 1974

FUNDING: Federal \$ 15,000 (EPDA) State \$ _____ Other \$ _____

PURPOSE OF PROJECT: To develop a model for evaluating vocational-technical education programs and to train vocational educators in its use by field testing.

DESCRIPTION OF PROJECT:

The project consists of five phases:

Phase 1 - Initial model planning and development.

Phase 2 - Workshops for participants.

Phase 3 - Pilot testing and revision of model.

Phase 4 - Field testing by evaluating programs in cooperation with a county vocational-technical school.

Phase 5 - Model revision.

ADDITIONAL INFORMATION:

The results of the project have proven quite successful and decision has been made to further test the model in different vocational education set-ups, such as full-time vs. shared time systems, postsecondary programs in secondary schools, adult vocational programs, special needs, comprehensive vs. separate vocational schools.

For information regarding continuing progress of the project, please contact:

Dr. Joseph F. Kelly
Director, Bureau of Occupational Research
Development
(RCU)
Division of Vocational Education
New Jersey Department of Education
225 West State Street
Trenton, New Jersey 08625

PROJECT RESUME

PROJECT TITLE:

"Biographical and Academic Correlates of High School Completion"

AGENCY: North Carolina State Department of Public Instruction and The Institute for Behavioral Research in Creativity, Salt Lake City, Utah

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Dr. Charles H. Rogers, Occupational Research Unit, North Carolina State Department of Public Instruction, Raleigh North Carolina 27611, Phone (919)829-4348

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DURATION: From November 1, 1971 To March 30, 1973

FUNDING: Federal \$ 12,075 State \$ 4,025 Other \$ _____

PURPOSE OF PROJECT: To analyze factors associated with varying rates of high school dropouts, emphasizing the effects of training in occupational education.

DESCRIPTION OF PROJECT:

In recognition of the need for an early identification of the potential dropout and for an understanding of the characteristics which differentiate the dropout from students who graduate, this research study sponsored by the North Carolina Occupational Research Unit, evaluated the degree to which biographical characteristics and academic achievement information could predict which students would drop out, either by choice or because of suspension. The specific objectives of this study were as follows:

1. To evaluate the effectiveness of the biographical data in terms of predicting number of years of education completed for students in each of the nine samples including the total sample, the male sample, the female sample, the white sample, the black sample, the white male sample, the white female sample, the black male sample, and the black female sample.
2. To determine the effectiveness of the biographical data in forecasting other kinds of behavior problems where data permitted.
3. To evaluate through multiple regression techniques the effectiveness of the biographical data in conjunction with other available measures, in predicting all of the criteria listed in objectives 1 and 2 above.

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ADDITIONAL INFORMATION:

This study took advantage of a large data bank collected previously on North Carolina students during the Spring of 1967. The data bank included a 300 item multiple choice Biographical Inventory (BI) as well as extensive data from school records. The biographical items originated from a variety of successful studies conducted by the project investigators in other settings which included studies of scientists, engineers, nurses, college students, etc.

The term biographical items refers to a collection of multiple choice questions through which an individual describes himself and his background, with many of the questions being similar to those found on an application blank. The rationale in using such an approach is very simple -- that past behavior can be used as an indicator of future behavior and performance.

In summary, this study was undertaken to investigate the effectiveness of various measures including biographical information, achievement test scores, intelligence measures, vocational courses, etc., in identifying dropouts and reducing attrition. The developers felt that an ideal solution would be an early identification system which was highly accurate in identifying the potential dropout and an effective treatment system which would prevent the prediction from coming true. While the ideal for neither identification nor treatment has been obtained, some real progress has been made.

Although the multiple regression analyses did not provide substantial increases in validity, the results did indicate that a combination of variables from biographical information, academic performance measures, etc. are important to the early identification of potential dropouts. The data obtained from the effects of the vocational courses indicate that some form of academic success is a crucial variable in reducing attrition. Further, the information from the biographical correlates of attrition suggested other possible remedies, such as trying to involve parents in school activities, providing opportunities for students to become more involved in school activities, and whenever possible providing opportunities for growth and self-esteem so that learning situations become more tolerable and enjoyable rather than something to be avoided.

PROJECT RESUME

PROJECT TITLE:

"The Development of an Occupational Education Model for the Primary Grades"

AGENCY:

North Carolina State Department of Public Instruction

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. Loretta Golden, Frank Porter Graham Child Development Center, University of North Carolina at Chapel Hill
North Carolina 27514 (919) 966-4121



DURATION: From August 1, 1972 To December 31, 1973

FUNDING: Federal \$ 40,960 State \$ 4,540 Other \$ 7,596

PURPOSE OF PROJECT: To develop and test an occupational awareness model for the primary grades utilizing the dramatic play technique.

DESCRIPTION OF PROJECT:

The purpose of this study was to assess the effectiveness of a new program in occupational education which used dramatic play as a technique for teaching social studies and occupational awareness in the elementary grades. Three self-contained classes of 70 second grade children participated in a social studies program that featured dramatic play one day a week in a model community constructed by the students. Two classes participated in an open classroom facility provided for that purpose and one class received the program in a regular self-contained classroom. The dramatic play groups were compared to two control classes of 46 children who were taught social studies by more conventional methods.

The results supported the conclusion that dramatic play was effective in producing greater gains in factual knowledge, occupational awareness, and productive thinking in relation to social and community organization than more traditional methods. The program was as effective in this regard in the self-contained setting as in the open classroom setting. Also, the program was as beneficial to children from lower socio-economic backgrounds and ability groups as to children who were more socially and intellectually advantaged. Evidence was not obtained to suggest that the dramatic play program had a differential effect on behavior patterns in the classroom or on achievement in reading, mathematics or language. The findings generally support the conclusion that dramatic play may be used as an effective alternative to more conventional methods

ADDITIONAL INFORMATION:

for teaching elementary social studies and occupational awareness.

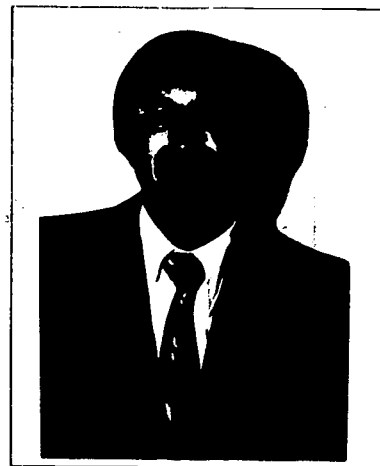
Three major products have grown out of the project. They are: (1) a two-part teacher guide to occupational awareness through dramatic play, (2) a slide-script presentation and (3) a video tape presentation depicting various aspects of dramatic play in action with second grade students.

PROJECT RESUME

PROJECT TITLE:
"Manpower Information Manual: A Manual for Local Planning"

AGENCY:
North Carolina Department of Community Colleges

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Mr. Marcus D. Allred
North Carolina Department of Community Colleges
Raleigh, North Carolina 27611



DURATION: From July 1, 1971 To June 30, 1973

FUNDING: Federal \$ 58,165 State \$ 19,388 Other \$ -0-

PURPOSE OF PROJECT: To produce a model information development system for technical institutes and community colleges in order to improve their capability in planning; the planning system includes: a component for surveying business and industry, a component to determine the aspiration of local high school seniors, and a component for follow-up surveys of students who have left an institution.

DESCRIPTION OF PROJECT

The product of this project was the development of instruments and procedures for collecting, assembling, and disseminating the necessary information for initiation of long-range plans at the local level. These developed methods have been published in the manual, Manpower Information Manual - A Manual for Local Planning.

Many studies have been prepared on the need for manpower information to facilitate long-range planning, curriculum development, and counseling for vocational education. Few studies addressed themselves to the complete effort required to develop an information system that can be used for full guidance for vocational education. This project was intended to fill this recognized information gap.

The developed methods have served as the guide for long-range plans in the 57 Technical Institutes and Community Colleges in the North Carolina System.

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ADDITIONAL INFORMATION:

The developed information systems consisted of three information gathering processes. Methodology was kept simple and was designed to collect only the information required for long-range planning. Extraneous information was eliminated. The three information gathering systems are:

1. A system for surveying business and industry to collect information on the occupational distribution of the local labor force and on the projected trends in employment by occupations.
2. A system to determine the aspirations of the local high school seniors to identify potential students for technical institutes and community colleges.
3. A system for follow-up surveys of students who have left an institution to determine the relationships between their job and the occupational education and training they received at the institution. This survey included both graduates and early leavers with marketable skills.
(ELMS)

Procedures were developed to assemble the data from the three survey systems into a form which may readily be used by planners and others. The total five-year needs by occupation, coded by the Dictionary of Occupational Titles, the number of graduates and ELMS by educational programs and occupations, and the high school student career interest by occupation are all listed on one report. From this report, the planner is readily able to discern the number of jobs to be filled in the local economy, the skills required to work in the various occupations, and the number of graduates and ELMS in the identified jobs. In addition, student interest in the various occupations is indicated. The compilation of information provides the necessary basic data that is required for the initiation of the long-range planning process. Shown below is an example of the type of planning information provided by this compilation:

D.O.T.	Occupation	Projected 5-year need	Employment by Curriculum 1970-71		Interested
			Graduates	ELMS	
860.381	Carpenter	964	T-001(1),V-007(1) V-003(1)	V-022(1)	23
816.884	Welder	201	V-050(3),V-013(1)	V-050(1)	8

Information such as that shown above can give the educational planner a basis for considering expanded course offerings; it can give the community college or technical institute an estimate of enrollment in various programs; it can provide the institution with a method of evaluating the successful placement of its graduates; and it can provide the high school counselor with useful information for guiding students in their choice of careers.

PROJECT RESUME

PROJECT TITLE:

Assessment of Impact of the Wisconsin Vocational Research Coordinating Unit

AGENCY: The Center for Vocational Education
Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

N.L. McCaslin
John Walton (Phone: 614/486-3655)

Place Photo Here

DURATION: From June 1973 To September 1974
FUNDING: Federal \$ 14,900 State \$ --- Other \$ ---

PURPOSE OF PROJECT: To describe the impact on vocational education in Wisconsin of research and exemplary projects funded during the period January, 1966 through June 30, 1973.

DESCRIPTION OF PROJECT:

This study consisted of four phases. Phase I included activities designed to establish an on-going interface with the Wisconsin Research Coordination Unit (RCU) and Wisconsin Department of Public Instruction (DPI) personnel and to develop final evaluation designs to meet the objectives specified in the proposal. Phase II included the instrument development phase of the project. Concurrently, plans for data collection and data analysis were completed. Phase III dealt with the activities necessary to collect the data. Finally, Phase IV was directed toward the data analysis and the preparation of the final report. The activities in Phase I, II, and III are discussed in more detail in the remainder of this chapter. Phase IV activities are detailed in Chapter III.

The objectives restated as questions are as follows:

1. What has been the impact of research and exemplary activities funded by the Wisconsin RCU and DPI during the period January 1, 1966 to June 30, 1973?
2. To what degree does the RCU and DPI assist participating educational institutions and agencies in preparing for and implementing change through research and exemplary activities?
3. What is the degree of impact on occupational education and organizational and administrative procedures in Wisconsin and individual districts as a result of RCU research and exemplary activities?

ADDITIONAL INFORMATION:

4. What are the patterns of monetary support for RCU and DPI sponsored research and exemplary projects?
5. Is the approval process for proposed research and exemplary activities used by the RCU and DPI adequate?

Responses by 67 project coordinators, directors and administrators indicated that 79.2% indicated that research findings are used in their districts, 54.2% said their research findings are used in other districts, 68.8% indicated that exemplary products are in use, and about 50% indicated the process or procedure is still in operation. Nearly half of the projects continued after termination of funding.

A large number of individuals participated in the RCU's sponsored projects, e.g., 44,609 students, 1,954 teachers, 176 guidance counselors, 437 other school personnel, and 6,321 other non-school personnel.

66 students and 46 teachers perceived the projects as helping students in several areas, such as: (1) Motivation to stay in school, (2) Familiarity with occupations, (3) Counseling and guidance on occupations, (4) Improved job skills, (5) Experiences on a real job, (6) Placement in full-time employment, (7) Financial assistance, (8) Assistance in obtaining and selecting a job.

Institutional impact indicated 46 in-district schools visiting the projects, 67 schools expressed interest in the projects, 17 schools implement outputs on a trial basis, and 4 schools implemented the output on a regular basis. Correspondingly, 69 out-of-district schools visited the projects, 189 schools expressed interest in the projects, 59 schools implemented the output on a trial basis, and 43 schools implemented the project on a regular basis. A total of 481 non-VTAЕ schools participated in RCU funded projects that responded.

For impact of DPI administered projects based on 28 project director responders the following data is presented: 75% said the projects continued after funding terminated, and 81.3% said products are still in use. A large number of people took part in the DPI projects, e.g., 15,505 students, 2,484 teachers, 145 guidance personnel and counselors, 56 local vocational coordinators, 577 other school personnel, and 970 other non-school personnel.

Institutional impact of DPI sponsored projects include: 99 schools visited the projects, 963 schools expressed interest in the projects, 199 schools implemented the output on an experimental basis, and 45 schools implemented the output on a regular basis.

The degree of accomplishment of RCU objectives is indicated in Table 10, page 46, from compilation of responses from 38 VTAЕ district and research directors and WBVTAЕ state staff. Data indicate that RCU objectives #1, (Stimulation of research), #3 (Dissemination), and #6 (Library of resources) were moderately to highly met by RCU.

The degree of impact of Research and Exemplary Projects on Occupational Education and Organizational and Administrative Procedures in individual districts and in Wisconsin indicates "Moderate" to "Extremely High Impact"

were indicated in Curriculum Development. "Little" to "moderate" levels of impact on organizational and administrative procedures were obtained for 4 categories of exemplary projects and all categories of research projects, e.g., professional staff development, curriculum development, student services, administrative planning, and special studies.

Patterns of monetary support were also analyzed. Ten recommendations included re-assessment of level of commitment, RCU objectives, annual priorities, project approval processes, increase of other funding sources, monitoring of projects, and dissemination of pre-post project information.

PROJECT RESUME

PROJECT TITLE:

THE FINANCING OF VOCATIONAL EDUCATION IN WEST VIRGINIA

AGENCY:

Bureau of Vocational, Technical and Adult Education
West Virginia State Department of Education

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Dr. Dan Koble, The Center for Vocational Education,
The Ohio State University, Columbus, Ohio 43210
(Phone: 614/486-3655)

Place Photo Here

DURATION: From May 1974 To August 1974

FUNDING: Federal \$ 10,793 State \$ 1,200 Other \$ _____

PURPOSE OF PROJECT: To develop a set of equitable, efficient and effective policies and procedures for the budgeting and allocation of funds in support of vocational education in West Virginia.

DESCRIPTION OF PROJECT:

This project was designed to study the financing of vocational education in West Virginia as it occurs at both state and local educational agency levels. A comprehensive review of fiscal resources availability and fiscal policies and procedures at federal, state and local levels, was conducted. Fiscal resource needs for program operation and expansion purposes, revisions needed in state and local fiscal policies and procedure and the recommendation of alternative approaches to the funding of vocational education was also included in the project.

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PROJECT RESUME

PROJECT TITLE: Vocational Education Planning Districts in Ohio: An Economic Evaluation of Foregone Benefits from Limited Participation

AGENCY: Division of Vocational Education, Department of Education, State of Ohio in contract with Ohio University.

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Dr. Ismail A. Glazalah, Chairman, Dept. Economics
Ohio University, Athens, OH 45701
614: 594-6601

Place Photo Here

DURATION: From December 1, 1972 To February 28, 1974

FUNDING: Federal \$ 13,350.00 State \$ - Other \$ -

PURPOSE OF PROJECT: To obtain the social benefits and costs for each of 107 VEPD's if enrollment is increased to 40% of age group in job training programs of the secondary school level.

DESCRIPTION OF PROJECT:

Detail cost data was obtained in four vocational education planning districts (VEPD) for each of 55 taxonomies of job training.

Each VEPD was computed to have x-percent enrollment during FY73. The formula for computing the net social benefits in society was applied to each of the 107 VEPD programs.

The report lists these various data sections, the outcome of which, if the VEPD's of Ohio were to increase their job training enrollment to 40% would result in:

- 1) A state-wide increase in net social benefits to Ohio above all costs of \$108,918,528 for students who would otherwise have completed an academic program, and
- 2) a state-wide maximum increase in net social benefits to Ohio above costs of \$326,951,421 for students who would have dropped out of school after the tenth grade.

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PROJECT RESUME

PROJECT TITLE: The Development and Testing of a Linear Programming Technique for Optimizing Occupational Training Program Combinations

AGENCY:

Oklahoma State Department of Vocational and Technical Education, Division of Research, Planning, & Evaluation

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Charles O. Hopkins, State Department of Vocational and Technical Education, 1515 West Sixth Avenue, Stillwater, Oklahoma, 74074 (405) 377 2000, X280

Place Photo Here

DURATION: From _____ To _____

FUNDING: Federal \$ _____ State \$ _____ Other \$ _____

PURPOSE OF PROJECT: To develop a technique for optimizing occupational training program combinations in an effort to facilitate decision-making in the Oklahoma State Department of Vocational and Technical Education.

DESCRIPTION OF PROJECT:

The project has required: (1) analyzing decision-makers information needs concerning program mix, (2) establishing data collection procedures for all variables in the model, (3) developing a user-oriented L.P. (linear programming) output solution format, (4) relating the L.P. technique to the decision-making process in layman terms, and (5) operationalizing the L.P. technique on a model basis for each program planning level.

Analysis indicated the key constraints impacting on optimum program mix were total costs, reimbursement rates, student supply, programs required, demand, student profile, job placement, and graduates produced. These constraints required original data collection effort and refinement of existing data.

The application of solutions from the model has utility for cost/benefit analysis, determination of occupational emphasis, funding negotiations, curriculum design, and program addition/deletion. The L.P. solutions for each program planning level are produced in formats for each objective function. Currently, the L.P. model generates solutions based on either maximization of entry wages, job placement, students served, and social benefits, or minimization of program costs.

ADDITIONAL INFORMATION:

As a result of the project, several publications with restricted distribution have been developed. The listing of those publications here are only for the purpose of indicating the kinds of data that can be made available through a similar project.

1. Standardized Capital Outlay and Annual Operating Costs for Area Vocational-Technical School Program Planning
2. Standardized Capital Outlay and Annual Operating Costs for Collegiate/Full-Time Adult Vocational and Technical Education Program Planning
3. Standardized Capital Outlay and Annual Operating Costs for Comprehensive High School Vocational and Technical Education Program Planning
4. A Counselor Oriented Report of General Aptitude Test Battery Data
5. An Analysis of Selected Elements Impacting Upon the Counseling Activity

PROJECT RESUME

PROJECT TITLE:

A Survey of Attrition Factors of Vocational Teachers

Place Photo Here

AGENCY:

Oklahoma State Department of Vocational & Technical Education, Division of Research, Planning, & Evaluation

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. J. B. Morton

DURATION: From April, 1974 To December, 1974

FUNDING: Federal \$ In-house State \$ _____ Other \$ _____

PURPOSE OF PROJECT: To determine reasons for attrition of vocational teachers.

DESCRIPTION OF PROJECT:

During April, 1974, a survey instrument was sent to each individual who had left an Oklahoma vocational teaching position during or following the 1973-1974 school year. The instrument included 47 items on which respondents could indicate as being "most important", "highly important", or "of some importance" to them in their decision to leave. The items were grouped into seven broad areas: salary, advancement and security, administration and supervision, family situation, teaching situation, community situation, and miscellaneous. Seventy of nearly 120 former teachers responded.

Overall, salary received the most responses in the "most important" category, followed closely by administration and supervision, and family situation. The items marked most often were "salary too low compared to the number of hours worked", "desired work with fewer hours and more time for family", "too many non-teaching duties," "too many extra-curricular activities," and lack of interest and cooperation from administration."

From the results of the survey, it was concluded that low salaries, long work days, lack of administration support, and lack of personal freedom are major reasons for teacher attrition. Obvious recommendations are that prospective teachers be made aware of job requirements over and above the 9 to 3 school day, and that school administrators and others be made aware of potential reasons for teacher attrition.

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PROJECT RESUME

PROJECT TITLE:

Career Education Institute

AGENCY:

Central Susquehanna Intermediate Unit #16
Box 213
Lewisburg, Pennsylvania 17837

Place Photo Here

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. Carl Pepperman (address same as above)
(Phone: 717/524-4431)

DURATION:

From December 1973 To June 1975

FUNDING:

Federal \$ 119,527 State \$ _____ Other \$ _____

PURPOSE OF PROJECT:

The Career Education Institute was a systematic effort to train teachers and counselors in the use of career education information in their respective work with students.

DESCRIPTION OF PROJECT:

The formal inservice program for participants during the first year covered an intensive three-week period during which they were excused from other duties. The participants each developed a media production of a business or industry within their school district and other instructional units using behavioral objectives. Career education specialists were utilized in a supportive role as resource persons.

Major objectives of the institute include:

1. sensitizing teachers and other educators to the need for career development education,
2. assisting teachers to develop instructional units based on already existing curricula into which career education activities will be inferred,
3. collecting various community resources for the utilization by teachers in their instructional units,
4. assisting counselors and other support personnel to provide backup and concurrent classroom support to the teachers and
5. to encourage curriculum development activities among all staff.

PROJECT RESUME

PROJECT TITLE:

Implementation of a School-Based Job Placement Model

AGENCY: Reading-Muhlenberg AVTS, Box 3068, Reading, PA 19064; Greater Johnstown AVTS, 445 Schoolhouse Road, Johnstown, PA 15904; Columbia-Montour AVTS, R.D. #5, Bloomsburg, PA 17815

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Mr. Charles Matters, Director, Reading-Muhlenberg AVTS
Mr. Robert Kifer, Director, Greater Johnstown AVTS
Mr. Robert Eckrote, Director, Columbia-Montour AVTS

Place Photo Here

DURATION: From February 1974 To June 1975

FUNDING: Federal \$ 70,800 State \$ _____ Other \$ _____

PURPOSE OF PROJECT:

To develop lines of communication between employment services and educational agencies to enhance job placement services.

DESCRIPTION OF PROJECT:

Three area vocational-technical schools in cooperation with the Bureau of Employment Security are implementing a school-based job placement service model. Each AVTS and BES office have lines of communication which differ in some administrative respects and in labor market needs. Commonalities of the model sites are: (1) sharing of facilities and equipment; (2) cooperative job development; (3) cooperative matching of students with jobs; (4) sharing student records; (5) conducting workshops for vocational education staff; (6) orientation to vocational education program areas; (7) interviewing students; (8) testing; (9) follow-up, and (10) cooperation with other state AVTS and BES offices.

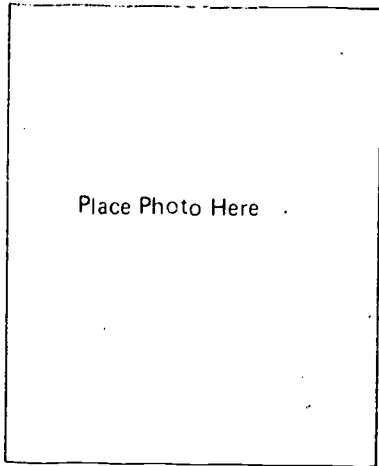
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PROJECT RESUME

PROJECT TITLE:
Parameters of the Future Food Service
Industry World of Work

AGENCY:
Research Coordinating Unit
Pennsylvania Department of Education

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Thomas F. Powers, Professor in Charge
Food Service & Housing Administration
20 Human Development Bldg., University Park, PA
(Phone: 814/865-1736)



DURATION: From July 1, 1974 To June 30, 1975
FUNDING: Federal \$ --- State \$ 61,799 Other \$ 22,428

PURPOSE OF PROJECT:
To supply a basis for curriculum planning which takes into account the future expected developments in the food service industry.

DESCRIPTION OF PROJECT:
The object of this project is to develop an understanding of likely work roles in the food service industry of 1985-1990. On the basis of a seven-month planning study and literature search accomplished last year, an inter-related set of optimistic scenarios and a pessimistic scenario will be used to construct models of the future food service world of work. This scenario will then be used to describe the skill and knowledge bases of future food service workers. The published results of the project are expected to be used in vocational-technical curriculum planning, principally at the secondary level.

PROJECT RESUME

PROJECT TITLE:

A STUDY OF FACTORS AFFECTING STUDENT ENROLLMENT AND SCHEDULING IN VOCATIONAL EDUCATION PROGRAMS

AGENCY:

Associated Educational Consultants, Inc.

Place Photo Here

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. Dan K. Jacobs
9800 McKnight Road
Pittsburgh, Pennsylvania 15237 (Phone: 412/931-2244)

DURATION: From August 1974 To January 1975

FUNDING: Federal \$ 8,903 State \$ 995 Other \$ _____

PURPOSE OF PROJECT: To identify factors which inhibit the ability of West Virginia secondary school students to enroll or maintain their enrollment in vocational education programs.

DESCRIPTION OF PROJECT:

This project consists of 1) a review of state, county and local school curriculum requirement to determine the degree to which they prevent students from enrolling or continuing their enrollment in vocational education programs, 2) a review of administrative policies and procedures at institutional, local Board or State Board of Education levels to those having an impact and effect upon enrollment, 3) a review of procedures utilized to make students aware of existing vocational education program opportunities, including programs of student identification, counseling, recruitment, selection and program placement, 4) the identification of other factors affecting vocational education enrollment and the degree to which they limit student participation or completion of vocational education programs.

A sampling of four (4) each, large, medium and small local educational agencies were used in the study. Interviews were conducted with vocational administrators, counselors, teachers and secondary principals. Surveys of vocational and non-vocational students and parents were also completed.

Findings of this study are designed to provide information which will assist the State Board in policy review and program planning to assure availability of vocational education to all secondary students who need, want and can profit from vocational education program participation.

PROJECT RESUME

PROJECT TITLE:

Development and Evaluation of a Statewide Career Education Delivery System

AGENCY:

North Texas State University
Denton, Texas

Place Photo Here

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Lewis M. Abernathy, Manpower Institute, NTSU, Box 5357
Denton, Texas 76203, 817/788-2263, and William A. Luker,
Center for Economic Education, NTSU, Box 5427, Denton,
Texas 76203, 817/788-2098

DURATION: From August 1, 1973 To June 30, 1975

FUNDING: Federal \$ 59,282 State \$ --- Other \$ 6,586

PURPOSE OF PROJECT:

To develop and evaluate a statewide delivery system for career education. To identify and define thirty basic career and world-of-work education concepts.

DESCRIPTION OF PROJECT:

The research project is composed of three phases:

Phase I: The first phase of the project involved identification and definition of 30 basic career education concepts.

Phase II: (October 1, 1973 - January 1, 1974) was directed toward the development of a complete multi-media teacher training program. This program was supported by a network which performed several duties: 1) selling the concept of career education, 2) institutionalizing the goal of career education, 3) reinforcement (materials development and dissemination), and 4) constant evaluation of the delivery system.

Phase III: (February 1 - June 30, 1974) is the pilot and evaluative phase and includes the pretesting and post-testing of both teachers and students using control and experimental groups. The testing will be scheduled in the spring of 1975 to allow for the results to be compiled, analyzed and prepared for publication by the end of June.

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PROJECT RESUME

PROJECT TITLE:

General Follow-Up Study

AGENCY:

Windham School District
Texas Department of Corrections

Place Photo Here

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Charles M. Whitson, Vocational Assistant Administrator,
Windham School District, P. O. Box 40, Huntsville,
Texas 77340 (Phone: 713/295-6371 X434)

DURATION: From July 1, 1974 To June 30, 1975

FUNDING: Federal \$ 52,101 State \$ --- Other \$ 5,789

PURPOSE OF PROJECT: To determine the effect of academic and vocational education upon the post-release behavior of former inmates of the Texas Department of Corrections. Both college and high school level academic and vocational programs will be incorporated in the study.

DESCRIPTION OF PROJECT:

This study may be classified as an equivalent post-test only design. The expected size of the total sample is 250 subjects. The four groups of subjects in the study are Windham School District vocational graduates, college vocational graduates, work furlough participants, and subjects who did not participate in the vocational programs offered in the Texas Department of Corrections.

The treatment groups will represent those subjects released to the community for at least one year and not more than two years prior to the time of the study. Frequency distributions will be completed to determine the variables which will necessitate some form of control. A control group will be matched to the critical variables which should be controlled to minimize their effect upon the dependent variables of post-release behavior. Particular attention will be paid to the following variables: high school diploma and completion of G.E.D., Educational Achievement Score, marital status, age, race, method of release, intelligence quotient, type of military discharge, medical status, number of convictions, actual length of last sentence, and type of offense.

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PROJECT RESUME

PROJECT TITLE:

Vocational Education in Texas High Schools: An Ethnic Comparison

AGENCY:

University of Houston
Center for Human Resources
Houston, Texas

Place Photo Here

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. J. Earl Williams, Director, Center for Human Resources, University of Houston, Cullen Boulevard, Houston, Texas 77004 (Phone: 713/740-3755)

DURATION:

From March 1, 1973

To

August 31, 1974

FUNDING:

Federal \$ 128,648

State \$ ---

Other \$ 14,293

PURPOSE OF PROJECT: (1) to conduct feedback workshops for school districts surveyed in the Mexican American Project; (2) to profile and document the educational training experiences of Black, Mexican American, and Anglo youth in selected regions in Texas; (3) to provide a data base on vocational education (over)

DESCRIPTION OF PROJECT:

Phase I: Included questionnaire development and preparation for field work. School and community contracts were initiated and workshops conducted in several school districts of feedback results of Mexican American Project.

Phase II: Over 2,500 students in eleven school districts were interviewed.

Phase III: Included analysis of data and writing of final reports. By the summer of 1974, final reports detailing the findings were completed. These reports:

Black Youth and Occupational Education in Texas

Occupational Education in Texas: An Ethnic Comparison

Manpower and Vocational Education in Texas

A Demographic Profile of Texas and Selected Cities: Some Recent Trends, 1950-1970

Occupational Education in Texas: Summary and Conclusions

are available through the Division of Occupational Research and Development, Texas Education Agency, 201 East 11th Street, Austin, Texas 78701.

ADDITIONAL INFORMATION: (PURPOSE OF PROJECT cont'd.)

enrollment patterns, current manpower trends and demographic information for all ethnic groups in Texas; and (4) to make recommendations based on the data gathered which will assist vocational education planner in the state of Texas.

PROJECT RESUME

PROJECT TITLE:

Clusters Approach to Career Orientation

AGENCY:

Virginia Polytechnic Institute and State University,
Blacksburg, Virginia 24061

PROJECT DIRECTOR OR CONTACT PERSON (Name, Address, Phone):

Dr. Ralph Ressler / Dr. William E. Dugger, Jr.
Price House (Phone: 703/951-5444)

Place Photo Here

DURATION:

From July 1, 1974 To June 30, 1977

FUNDING:

Federal \$ _____ State \$ 103,000 Other \$ _____

PURPOSE OF PROJECT: The design, field testing, and implementation of a curriculum to orient middle and junior high school students to careers.

DESCRIPTION OF PROJECT:

A one year course will be generated which will help students focus on their work-related personality characteristics, relating these to appropriate work environments which are found in the world of work, and finally identifying where, within each career cluster, such environments are found. Opportunity for career/educational planning will be provided.

The course will be field tested during the second year of the project and "packaged" for use throughout the state in the final year. The latter includes training teachers and teacher trainers, publishing instructional materials and evaluating the effectiveness of the experience with students in ten field sites about the state.

As a result of the experience, students will be able to more intelligently select junior high school exploratory courses, determine appropriate vocational and academic preparation in the high school and plan alternate "career paths" or avenues to reach their goals. The course will be highly activity-oriented and offer simulation experiences which represent the total world of work.

PROJECT RESUME

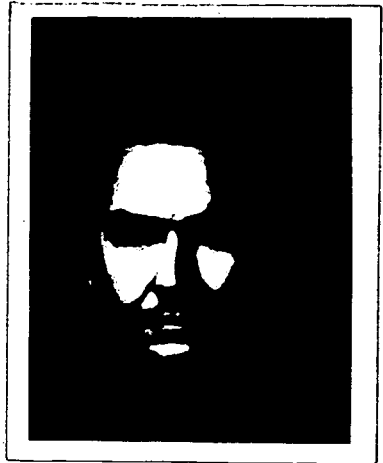
PROJECT TITLE

The Development and Implementation of Career Education in Public Schools of Virginia

AGENCY

Virginia State Department of Education

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Dr. Robert L. Crawford, Supervisor of Career Education
State Department of Education
Richmond, Virginia 23216 (Phone: 804/770-4568)



DURATION: From July 1, 1974 To June 30, 1977

FUNDING: Federal \$ 60,033 State \$ 43,427 Other \$ _____

PURPOSE OF PROJECT:

To provide leadership at the state and local levels for the development and implementation of a career education program in the public schools of Virginia.

DESCRIPTION OF PROJECT

A full-time State Supervisor of Career Education and a full-time secretary have been employed. The project is being funded for a period of 24 months as a Part Research Project. After this initial funding, the State Department of Education will assume the funding responsibility. The Career Education Supervisor reports directly to the State Assistant Superintendent for Instruction. The State Supervisor's duties have included:

1. Providing leadership within the State Department of Education and involving all divisions of the Department that deal with instruction, guidance, and special services in planning and implementing career education. A State Department Career Education Coordinating Committee has been formed and meets regularly.
2. Assisting the State Department of Education Bureau of Teaching Materials and Media Examination Center to develop libraries of career education.
3. Assisting local school divisions in planning and initiating career education programs.
4. Planning and conducting inservice training on career education for local school personnel.

PROJECT RESUME

PROJECT TITLE:

Developing Performance Objectives and Criterion-Referenced Measures in Vocational Education

AGENCY: Division of Vocational and Technical Education, College of Education, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. J. Dale Oliver, Division of Vocational and Technical Education, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061 Phone: 703/951-5237



DURATION: From January 1, 1974 To June 30, 1975

FUNDING: Federal \$ 83,538 State \$ 9,282 Other \$ _____

PURPOSE OF PROJECT:

To develop catalogs of performance objectives and criterion-referenced measures in selected occupational areas.

DESCRIPTION OF PROJECT:

One of the primary purposes of vocational education is to prepare individuals for gainful employment as semi-skilled or skilled workers or technicians or subprofessionals in recognized occupations and in new and emerging occupations. In order to accomplish this, it is necessary that the preparation be closely related to the occupations which the individuals plan to enter. Two important questions arise: (1) What are the tasks performed by workers in the various occupational areas?, and (2) What performance objectives and criterion-referenced measures are needed in order to train people to enter the occupational areas? This research will seek answers to these questions for two occupational areas and work will be initiated in two additional areas.

The product of this research will be catalogs of performance objectives and criterion-referenced measures. The following procedures will be followed in developing the catalogs:

1. Conduct a State-of-the-Art Study.
The purpose of this study is to assess the work that has been accomplished and to incorporate that material which appears to be useful in the project being developed.
2. Develop a Task Inventory List.
A comprehensive list of the tasks performed by incumbent workers will be developed. The task list will be based upon materials found in the State-of-the-art study, a review of technical procedures

ADDITIONAL INFORMATION:

- used by workers, and the use of instructors to identify tasks.
3. Survey a Group of Incumbent Workers.
The task inventory list will be mailed to a sample of incumbent workers asking them to check the tasks performed and to indicate the relative amount of time spent on the tasks using a scale of 1 to 7.
 4. Analyze the Survey Results.
The purpose of the analysis is to determine the percent of workers performing each task and an index of the time spent on each task.
 5. Prepare a Catalog.
Information from the incumbent workers will be combined with the knowledge of selected instructors, curriculum specialists and educational researchers to develop a catalog of performance objectives and criterion-referenced measures. The catalog will be field tested to determine its instructional acceptability. The finished catalog will reflect the results of the field test.

Nine states are cooperating in this work through the Vocational-Technical Education Consortium of States (V-TECS), a regional effort administered by the Commission on Occupational Education Institutions, Southern Association of Colleges and Schools, Atlanta, Georgia. This research will assist in fulfilling Virginia's obligation as a member of V-TECS.

PROJECT RESUME

PROJECT TITLE

The SI Metric System, an Individualized Instructional Package

AGENCY:

Renton Vocational-Technical Institute

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PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Dr. Robert C. Roberts
3000 Northeast Fourth Street
Renton, Washington 98055

DURATION:

From December 1, 1973

To

June 30, 1974

FUNDING:

Federal \$ 6,944.00

State \$ _____

Other \$ 1,000.00

PURPOSE OF PROJECT:

To develop an individualized instructional package on the basics of the Metric System.

DESCRIPTION OF PROJECT

An individualized instructional program presented in three sessions. Each session consists of four parts and is developed around the use of a Student Study Guide, 35 MM Slides, and both synchronized and unsynchronized Audio Cassettes. Session One deals with the Metric System Overview, Metric History and the Powers of Ten. Session Two develops the concepts of prefixes, length measurement, area, volume and mass. Session Three addresses Metric Conventions, force, energy, Power and pressure, and conversion.

Two formats (programs) are provided for each session. The first program is sound/slide and the second program is a workbook. All students are expected to study in the sound/slide program. Most students will require study in both the sound/slide program and the workbook. Some students will require the assistance of their instructor, in addition to their sound/slide and workbook studies.

In both the sound/slide and workbook programs, provision has been made within each part for self-testing. Following each test, the student is provided with the information necessary to determine the next step.

An evaluation of this program reflects that the material is applicable at the post-secondary level.

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PROJECT RESUME

PROJECT TITLE:

CHILD DEVELOPMENT CURRICULUM

AGENCY:

WEST VIRGINIA UNIVERSITY

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

John Schultz, Chairman (Phone: 304/293-3402)
Department of Family Resources
College of Human Resources and Education

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DURATION:

From July 1974

To

June 1975

FUNDING:

Federal \$ 12,492

State \$ 2,500

Other \$

PURPOSE OF PROJECT:

The purpose of this project was to design a competency-based child care curriculum for high school students to prepare them for entrance into child care occupations.

DESCRIPTION OF PROJECT:

Twenty teachers across the state are involved in this project to develop a competency-based child care curriculum. Materials developed are to be field tested, revised and disseminated throughout the state. Workshops will be conducted to familiarize teachers with materials developed and details concerning their utilization.

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PROJECT RESUME

PROJECT TITLE: CONCEPTUAL FRAMEWORK FOR CONDUCTING COST-BENEFIT STUDIES IN POST-SECONDARY VOCATIONAL-TECHNICAL EDUCATION PROGRAMS

AGENCY: Wisconsin Board of Vocational,
Technical and Adult Education
Madison, Wisconsin

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PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):
Roland Krogstad, RCU Director (Phone: 608/266-3705)
Wisconsin Board of VTAE, HFSOB - 7th Floor
4802 Sheboygan Avenue, Madison, Wisconsin 53702

DURATION: From July 1973 To June 1974
FUNDING: Federal \$ 6,000 State \$ --- Other \$ ---

PURPOSE OF PROJECT: To develop a tentative conceptual framework for conducting cost-benefit studies in post-secondary vocational-technical education programs in Wisconsin.

DESCRIPTION OF PROJECT:

In this age of accountability, educators are being asked to demonstrate that they are making the best use of the resources at their disposal. As a result, administrators have turned to the use of new analytical tools, such as: Systems analysis, programming budgeting systems, management information systems, cost-benefit studies, etc.

Millions of dollars have been spent on vocational-technical education programs. These programs affect individuals, families, employers, society, and the National Defense and Welfare. Costs of various programs have been calculated, benefits have been determined. More study is needed in these areas. Questions to be answered include: How much does it cost to educate individuals in various programs? Do they profit from their education? What are the economic and non-economic costs and benefits of various post-secondary vocational-technical education programs? How are costs and benefits measured? Which vocational-technical education programs should be offered in terms of costs and benefits to individuals and in terms of costs and benefits to community, government and society?

During FY 1974 the WBVTAE, through a consortium of nine VTAE districts, conducted nine cost-benefit studies and has developed a preliminary conceptual framework for conducting cost-benefit studies. Findings indicate that VTAE districts have

ADDITIONAL INFORMATION:

various capabilities to conduct cost-benefit studies using four possible methods: (1) Present value of net benefits, (2) Benefit-cost ratio, (3) Rate of return, and (4) Pay back period. In summary, the tentative conceptual framework is as follows:

1. Private Benefits (Student or individual)
 - a. Economic
 - b. Non-economic
2. Private Costs (Student or individual)
 - a. Economic
 - b. Non-economic
3. Societal Benefits (Including institutional, community and government)
 - a. Economic
 - b. Non-economic
4. Societal Costs (Including institutional, community and government)
 - a. Economic
 - b. Non-economic

Several hypothesis have been developed and some have been tested. Several research designs have been suggested and used, e.g., (1) Simulated Before-After Design, (2) Two Groups, No Control, Experimental, (3) Two Groups, No Control, Ex-Post Facto, and (4) Experimental Group - Control Group. Several data collection problems have been encountered, e.g., difficulty in allocation of indirect and supportive costs to specific programs, putting dollar values on non-economic benefits, ascertaining the proportion of economic benefits directly influenced by the educational program.

Several worthwhile findings have been obtained. Several variables have been identified within each general area. Several assumptions have had to be made. More study is needed.

PROJECT RESUME

PROJECT TITLE:

Determining Professional Development Needs and Priorities

AGENCY:

Wisconsin Board of Vocational, Technical and Adult Education
Madison, Wisconsin

Place Photo Here

PROJECT DIRECTOR OR CONTRACT PERSON (Name, Address, Phone):

Roland Krogstad, RCU Director
Phone: 608/266-3705

DURATION:

From September 1973 To December 1974

FUNDING:

Federal \$ 1,500 State \$ N/A Other \$ N/A

PURPOSE OF PROJECT:

To ascertain staff perceptions of their general and special education needs and to determine priorities of vocational education staff development activities for Wisconsin.

DESCRIPTION OF PROJECT:

There are two facets to this "project": (1) Determination of staff educational needs through administration of an instrument at the district level and compilation of a report at the state level; and (2) Re-assessment of priorities for vocational education staff development activities through a state-wide EPDA advisory committee.

Two Likert-type scales have been developed. Sample formats are attached.

The results of (1) are used as one resource by the EPDA committee which meets in a one-day conference and develops items for the instrument in (2) which is completed by the EPDA committee members. Results are processed through computer. A report is prepared and disseminated to teacher educators, state department and local administrators.

The priority items are reviewed by the state staff EPDA committee when developing project applications under 553, Part F, EPDA.

Findings under (1) above are used to coordinate and develop regional or state-wide professional development activities.

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