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ABSTRACT

This survey was conducted to establish research priorities in the field of technical and vocational education in North Carolina. Contacted by a mail questionnaire were 812 randomly selected community college administrators, private vocational school operators, State Department of Education personnel, and classroom teachers. In the questionnaire, respondents were asked to assign one of four priority rankings (not knowledgeable in this area, no priority, priority, or high priority) to each of 47 potential research items categorized into six general areas: curriculum, guidance, inservice and teacher education, evaluation, occupational education and manpower, and dissemination of occupational information. Additional priority rankings were made by respondents' job categories; by educational attainments; and by educational discipline. A priority ranking of suggested topics for research in vocational and technical education is appended to the study.
(author/ly)

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Priorities for Vocational-Technical Education
Research in North Carolina

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September, 1969

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PRIORITIES FOR VOCATIONAL-TECHNICAL EDUCATION RESEARCH IN NORTH CAROLINA

INTRODUCTION

This survey was conducted to establish operational priorities for a wide spectrum of research activity in vocational and technical education in North Carolina.

Contacted were educators in colleges and universities, community colleges and technical institutes, personnel of the North Carolina State Department of Education, directors of private vocational and technical education facilities, and directors of vocational rehabilitation facilities.

Organizations cooperating in the survey were the North Carolina Research Coordinating Unit*, and the North Carolina Department of Community Colleges.

Need for the Study

Rising costs in time, manhours, and moneys and the growing significance of vocational education to a rapidly expanding state population made mandatory an assessment of the areas of need for vocational and technical education research in North Carolina. Under the impetus of recent vocational education legislation, namely, the Vocational Education Act of 1963 and the Vocational Education Amendments Act of 1968, it became imperative that data be obtained on the relative importance or priority of competing research needs.

To provide such data this investigation was authorized.

Purpose of the Study

The primary purpose of the study was to enlist the expertise and assistance of North Carolina vocational educators in establishing research priorities in the fields of vocational and technical education.

Objectives of the Study

Primary objectives of the survey were as follows: (1) To determine those areas of vocational, technical, and occupational education which North Carolina educators felt were in greatest need of research activity. (2) To establish operational priorities for such education research.

*Lending valued consultant services in the survey were Dr. Joseph Clary, former director of the North Carolina Research Coordinating Unit, and Dr. William J. Brown, Jr., Assistant Director of the R.C.U.

Because North Carolina educators in all disciplines have been subjected to increasing pressures from within their own administrative and educative hierarchies, they have become increasingly concerned with rapidly rising costs; personnel, time and funds are in extremely short supply, and it becomes necessary to rigorously apply economy and a system of priorities to meet the research needs of the State.

To properly apply economy in the allocation of personnel, time and funds there must have been accumulated a collection of data upon which economy and priority decisions may be based.

This survey, which represents an attempt to provide such data, seeks to answer the following question: what vocational education research is deemed of priority importance to North Carolina educators, researchers, and practitioners?

Procedure

At the outset, the investigators limited the study to six general areas of major need for vocational education research: curriculum; guidance; in-service and teacher education; occupational education and manpower; evaluation; and dissemination of occupational information.

Within these general classifications a number of questions were composed and submitted for evaluation by five personnel of the North Carolina Research Coordinating Unit and of the North Carolina Departments of Community Colleges, and Vocational Education.

After evaluating the suggestions for researchability and timeliness, a list of 47 items was prepared across the six areas of interest; these were tabulated within each area, and a check sheet was prepared in which respondents could assign one of four priorities: (1) Not knowledgeable in this area; (2) High priority; (3) Priority and (4) No priority.

These terms were defined as follows:

Not knowledgeable in this area: That lack of experience or learning which prohibits the exercise of a value judgement as to priority.

High priority: That priority which reserves to the item of interest the greatest attention of educators and administrators when they are allocating funds, personnel and time to the conduct of educational research.

Priority: That priority which reserves to the item of interest a degree of attention from administrative and educators above and beyond the casual treatment of administrative matters when they are allocating funds, personnel, and time to the conduct of educational research.

No Priority: That priority which reserves to the item of interest no special attention or interest from administrators and educators when

they are allocating funds, personnel, and time to the conduct of educational research.

Contacted in the survey were personnel in four generic job classifications in the field of vocational-technical education: community college administration, state department of education administration, classroom teaching, and university teaching. These personnel included 25 faculty members in several disciplines on the campus of North Carolina State University; five vocational educators at the University of North Carolina at Chapel Hill and Greensboro; Eastern Carolina College, Duke University and Wake Forest; a random sample of 400 classroom teachers in Community Colleges and Technical Institutes; and 50 personnel of the Department of Community Colleges and Vocational Education of the North Carolina Board of Education.

In total, 812 questionnaires were mailed. Upon their return, the responses to the completed questionnaires were collated for the computer, and the results analyzed by the principal investigator.

Limitations of the Study

The survey is limited because it is not generalizable to broad groups of vocational educators. The needs for vocational education research in North Carolina cannot be applied to neighboring southern states nor to states in other regions.

FINDINGS AND DISCUSSION

I. Composite Priority Ranking

To permit a discussion of the findings of the study, a universal or "Composite Priority Ranking" was prepared. The "Composite Priority Ranking" was obtained by calculating the mean of the four priority rankings assigned by each of the four types of personnel surveyed in the study: community college administrative personnel, personnel of the state department of education, classroom personnel, and university faculty members.

Data from the Composite Priority Ranking study show, in general, that the areas of most concern to North Carolina educators are curriculum and guidance. The areas of in-service and teacher education, evaluation, occupational education and manpower, and dissemination of occupational information were ranked behind the two highest priority items in that order.

The Composite Priority Ranking of the items within Curriculum area reflected the educators' concern for the degree of articulation of non-articulation between industry and education. It was evident by the survey data that North Carolina educators may feel that industry is not participating sufficiently within the educational environment; and conversely, that educators are not concerning themselves with lessons already learned by industry as far as employee training techniques are concerned; and, moreover, with the skill levels of entering employees and the upgrading of the job skills of current employees.

Such concern by North Carolina educators in the Curriculum area was also reflected in their expression about the needs for adjusting curriculum to the changing needs of the educational milieu.

In general, North Carolina educational administrators and others within the power structure not only envision a continuing need for occupational education at all levels, but they also project a systems concept in which pre-vocational, secondary, and post-secondary vocational education are most rigorously integrated. In addition, North Carolina educators continue to emphasize the need for upgrading the cultural acceptance of vocational education in the state; their responses suggested the implementation of intensive publicity campaigns aimed at orienting the North Carolina citizen to his needs for occupational education.

In the second area of the composite priority ranking, guidance, North Carolina educators feel that the vocational guidance effort should be extended to grades 7, 8, 9, 10, 11 and 12. Such an expression may be a reflection of a frequently expressed national need for vocational guidance, orientation and exploratory experiences within as early an academic grade as possible; so that students, as they approach the age of majority, can make coherent and intelligent decisions about their careers.

In the area of in-service and teacher education, North Carolina educators would like to investigate the effectiveness of in-service training programs as a means of keeping their vocational education skills up to date. Perhaps this concern is a reflection of poor experiences by many North Carolinians in one, two- and three-day workshops or in the short, three-week summer sessions at the commuter-type university.

In the area of occupational education and manpower, North Carolina educators, moreover, are concerned with the best means for maintaining their own employment needs, educational and job requirements, and occupational training and entry-level skills. Although these data are quite easily obtained through the U. S. Department of Labor, U. S. Department of Commerce and U. S. Employment Service, educators feel that their need for such information should be fulfilled on a routine, regular basis.

In the area of evaluation, North Carolina educators desire to identify a systematized method for evaluating vocational technical education; in other words they want to know how well they are doing. Has the effort been worth the cost in money and manpower?

Finally, data from the Composite Priority Ranking show paradoxically, that North Carolina educators are only slightly interested in the dissemination of occupational information. The lack of concern of North Carolina educators in this area seems surprising not only in view of increasing contemporary problems on a national scale in the disseminating of occupational education research findings, but also because the educators had seen a new far wider cultural acceptance of the role of occupational education in North Carolina.

II. Practitioners' Suggested Topics for Research

Following are lists of topics for research, categorized by interest area. These were selected from numerous suggestions made by North Carolina vocational educators for possible study in the state.

None of the lists represents all the suggestions made within each category.

These topics were selected because they met the criteria of applicability for North Carolina needs, and of potential contribution to vocational education research.

CURRICULUM

Because there were numerous duplications in the open-end replies to the questionnaire, the duplicate responses have been removed and the following represents a selective list of the 147 suggestions made by North Carolina vocational educators for possible research studies in the area of Curriculum. (The numerical order of the following does not imply priority ranking.)

* * * * *

1. Research to establish a master curriculum plan for the entire state of North Carolina.
2. Research to determine how to identify and later to implement vocational curricula which are immediately adaptable to local needs.
3. Research to determine the best methods for changing the behavior of vocational guidance counselors so that they will present an unbiased dissemination of occupational information to their clients who can later more effectively determine their own needs as far as college or vocational schools are concerned.
4. Research to determine the effectiveness of special rehabilitation units in special education at the secondary level.
5. Research to determine the feasibility of establishing a comprehensive four-year vocational high school curriculum for students who are not adapted to general academic or college preparatory training.
6. Research to establish those courses in distributive education which may be most readily adaptable for the special need student or those students whose IQ is less than 70.

7. Research to establish theories and practices for the design of facilities which would make possible the construction of educational buildings which are immediately adaptable to environmental and to curriculum need.
8. Research to study the feasibility of providing elective vocational courses for college-bound students.
9. Research to determine why parents and students universally express low opinions of vocational education and exhibit little--if any--desire to attend vocational schools.
10. Research to determine types of courses or types of instruction to motivate students to select that curriculum whether vocational or college bound, which is best suited for his ability as determined by appropriate evaluative techniques.
11. Research to determine the feasibility of establishing a Core Vocational Cluster Program so that curricula needs can be provided before actual vocational specialization.
12. Research to determine a model for determining accurately and efficiently the changing needs of a community for vocational, technical, or occupational education.
13. Research to determine the feasibility of establishing adult basic education departments in vocational schools.
14. Research to determine the need for expanding cooperative and distributive types of vocational education to the elementary, secondary, and post-secondary schools.
15. Research to determine the feasibility of establishing technical and vocational curricula in which a student may advance solely according to his own abilities and desires.
16. Research to establish a means by which job classifications and job requirements can be obtained from industry within the industrial setting in order to pin-point specific needs toward which vocational educators can train their students.

GUIDANCE

In the area of guidance there were 101 responses of potential areas for vocational education research.

Among those items specially selected for their researchability and applicability to North Carolina needs are the following:

1. Research to determine the role and the effectiveness of vocational and technical counseling conducted by the U. S. and State Employment Security Offices.
2. Research to identify and to improve, if necessary, the self-concept of the "slow learner" and the under-achiever at the high school level.
3. Research to determine why students choose not to remain in the rural sections of North Carolina.
4. Research to establish guidance procedures for motivating disadvantaged youths.
5. Research to establish the feasibility of developing a dial access system which would permit the student to refer his "world of work" vocational questions to a computerized facility for answer.
6. Research to determine a realistic paradigm for guiding and assisting low-ability and disadvantaged interest groups.
7. Research to determine maximum methods of guiding and counseling parents of vocational education students at high school and post-high school levels.
8. Research to determine the feasibility of involving industry in adult vocational counseling and guidance.
9. Research to determine the applicability of the GATB test for one-year and two-year vocational and technical students.
10. Research to establish GATB test applicability after one- and two-year exposure to vocational and technical education.
11. Research to determine the feasibility of training elementary teachers, junior high school teachers, and parents of vocational education students in the techniques of vocational guidance.
12. Research to determine the effect of planned vocational experiences in grades 7 through 12, on the career of the student.
13. Research to determine the feasibility of an extensive program to re-establish the prestige and dignity of technicians and tradesmen in our society.
14. Research to determine methods and means for involving all school personnel into the vocational guidance program of the vocational school.

15. Research to establish the value systems of North Carolina students in grades 3 to 14 toward career development and toward occupational orientations.

16. Research to establish ways and means of motivating the mentally retarded student to remain in school.

IN-SERVICE AND TEACHER EDUCATION

In response to the survey there were 79 suggestions for research in the area of In-Service and Teacher Education.

Of these the following were determined to be researchable and of some significance to the future of North Carolina:

1. Research to determine how best to train "retreads", those persons who enter vocational education as instructors from industry, the military, or from retirement and who have not been academically prepared in college.

2. Research to determine what in-service programs and courses are required for teachers as ranked by a priority of need expressed by the teachers concerned.

3. Research to determine the feasibility of utilizing graduates of vocational-technical institutes as teachers in vocational-technical education.

4. Research to establish the feasibility of a program to acquaint teachers with the requirements and environments of a number of occupations in industry.

5. Research to determine the effectiveness of James T. Conant's model for the in-service training of teachers as it might be applied to vocational teacher training.

6. Research to determine the feasibility of establishing means of informing teachers about vocations and industries irrespective of the teaching area.

7. Research to determine what training is necessary for personnel of day-care centers and nursery schools.

8. Research to determine the amount of training to be provided technical-vocational students who are in need of remedial training.

9. Research to determine the best means of implementing research findings.

OCCUPATIONAL EDUCATION AND MANPOWER

In the area of Occupational Education and Manpower there were 40 responses which suggested areas for vocational education research.

Of the 40 replies, the following responses were evaluated as being researchable and of interest to North Carolina vocational educators:

1. Research to establish the vocational education needs of "hard-core" unemployed in urban and rural areas.
2. Research to establish those vocational education areas which are most suitable for the mentally retarded, to include information on job requirements, limitations on their ability, the skills that would be required for their occupations in the future, and so fourth.
3. Research to establish the training costs per students in community colleges, and in technical education centers.
4. Research to determine the feasibility of distributing periodic reports to keep vocational educators informed about changing manpower needs.
5. Research to determine the effects of decisions made by the community power structure on the availability and type of vocational curricula as opposed to the actual manpower needs of the community.
6. Research to determine the feasibility of active participation of industrial advisory committees in high school vocational programs.

EVALUATION

There were 35 responses made on the questionnaire in the area of Evaluation of which the following were deemed to be researchable and appropriate to North Carolina needs:

1. Research to establish the effectiveness of sheltered workshops which are operated by the State Department of Public Instruction.
2. Research to determine the differences in the effectiveness of occupational or vocational instruction given to younger students and the same instruction given to older students.
3. Research to determine the effectiveness of vocational education offered to high school students vis-a-vis that education given to post-high school vocational students.
4. Research to determine the feasibility of establishing a continuous feedback network with data being provided by graduates of vocational and technical schools as to the contributions of their vocational instruction to their occupational success and failure.

DISSEMINATION OF OCCUPATIONAL INFORMATION

During the survey there were 32 responses made to the question "What areas of dissemination of occupational information should be studied?"

The following is a selected list of research topics which met certain criteria as to researchability to North Carolina needs:

1. Research to establish the feasibility of using the computerized analysis of want-ads to predict future trends in occupational needs.
2. Research to determine the attitude of the North Carolina public toward vocational guidance.
3. Research to determine the extent to which the ERIC system is being used by educators and others.
4. Research to determine why North Carolina educators are not making use of research findings already available within vocational and technical education.
5. Research to determine the effectiveness of the advisory committee for the North Carolina Research Coordinating Unit.
6. Research to determine the actual communications network and types of communications engaged in between researchers in education and teachers and classroom workers in the field.

COMPOSITE

Priority Ranking

These priorities, as listed below, were obtained by calculating the mean of responses received within each occupational category: community college administrator, State Department of Education, employee, etc. As such, these priorities are a synthesis of all responses. The mean was calculated as a mean of four responses assigned by respondents to each item: not knowledgeable in this area, no priority, priority and high priority.

CURRICULUM

<u>Priority Rank</u>	<u>Mean</u>
1. Research into the effectiveness of the current articulation between industry and education.	3.33
2. Research into the effectiveness of current methods of selecting and re-selecting curricula to meet the changing and evolving needs of the community which the school serves.	3.25
3. Research to develop a model for articulating occupational education content at all levels: pre-vocational, secondary, and post-secondary.	3.23
4. Research into the effectiveness of current methods of projecting the curriculum needs of vocational schools for five, ten and 25 years in the future.	3.13
5. Research to determine the effectiveness of work-experience education.	3.09
6. Research into methods of "bringing up" the educational levels of pre-vocational, pre-technical students; and/or vocational students already enrolled.	3.03
7. Research and development to develop patterns for maximizing vocational education in the small rural school.	2.97
8. Research to identify vocational education opportunities in less populated areas.	2.96
9. Research to develop guidelines for articulating vocational and related subjects at a vocational school.	2.86
10. Research to identify vocational education opportunities in highly populated areas.	2.84
11. Research to identify and describe the role of youth organizations in vocational education.	2.58

Priority Rank

Mean

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| 12. Research into the effectiveness of the current interface between engineering, industrial, and technical education at the four-year university level, and corresponding educational activity for technicians at the two-year Community College level. | 2.44 |
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GUIDANCE

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| 1. Research to determine the effects of guidance and counseling on students in grades 10-12. | 3.31 |
| 2. Research to determine the effects of vocational orientation and exploratory experiences in grades 7-9. | 3.28 |
| 3. Research to determine the effects of vocational orientation and exploratory experiences in grades 10-12. | 3.27 |
| 4. Research to identify and describe the dropout at secondary and post-technical schools. | 3.21 |
| 5. Research into improved methods for pre-vocational school testing of students and for assigning them to the curriculum for which they are best prepared. | 3.16 |
| 6. Research to determine the effects of guidance and counseling on students in grades 13-14. | 2.93 |
| 7. Research to determine the effects of vocational orientation and exploratory experiences in grades 13-14. | 2.81 |
| 8. Research to identify the reasons why students choose to <u>remain</u> in North Carolina vocational-technical schools. | 2.69 |
| 9. Research to determine the effects of guidance and counseling on students in grades 1-6. | 2.62 |
| 10. Research to determine the effects of vocational orientation and exploratory experience in grades 1-6. | 2.60 |
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IN-SERVICE AND TEACHER EDUCATION

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| 1. Research on the effectiveness of in-service programs as a means of keeping vocational-technical personnel current in their teaching field. | 3.24 |
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Priority Rank	Mean
2. Research to determine the effectiveness of and uses for internship programs as a tool for training vocational education teachers.	3.02
3. Research into the effectiveness of teacher aides and similar paraprofessionals in vocational education.	3.01
4. Research and development activities to be conducted by the RCU for the in-service training of classroom researchers.	2.55
5. Research to determine the needs of classroom teacher-researchers for in-service training in the use of the ERIC system components: microfiche, and the publication, <u>Research in Education (RIE)</u> , <u>Abstracts of Instructional Materials (AIM)</u> and <u>Abstracts of Research Materials (ARM)</u> .	2.19

OCCUPATIONAL EDUCATION AND MANPOWER

1. Research into methods of maintaining adequate current information on employment needs, educational needs, job requirements, occupational trends, and entry-level skill requirements.	3.44
2. Research to develop a feedback network relating manpower needs and curriculum.	3.09
3. Research into the effect of population mobility and student mobility on local curriculum offerings.	2.90

EVALUATION

1. Research to develop and field-test a model for evaluating vocational-technical education.	3.02
2. Research to develop interpretative papers on the effectiveness and uses of individualized instruction.	2.90
3. Research to determine the occupational status of former vocational and technical enrollees.	2.89
4. Research and development activities designed to establish pilot vocational programs with flexible scheduling.	2.88

PRIORITIES Assigned by Community College Administrative Personnel.

These priorities were assigned by administrative personnel of the North Carolina Community College System: presidents, deans of instruction, coordinators of Adult Education and general service programs personnel in this category returned 121 questionnaires.

The mean was calculated as a mean of three responses to each item: no priority, priority, and high priority.

CURRICULUM	
Priority Rank	Mean
1. Research into the effectiveness of the current articulation between industry and education.	3.47
2. Research to develop a model for articulating occupational education content at all levels: pre-vocational, secondary and post-secondary.	3.38
3. Research into the effectiveness of current methods of selecting and re-selecting curricula to meet the changing and evolving needs of the community which the school serves.	3.33
4. Research into the effectiveness of current methods of projecting the curriculum needs of vocational schools for five, ten and 25 years in the future.	3.14
5. Research into methods of "bringing up" the educational levels of pre-vocational, pre-technical students; and/or vocational students already enrolled.	3.13
6. Research to determine the effectiveness of work-experience education.	3.00
7. Research to determine job clusters in vocational-technical education.	2.99
8. Research to develop guidelines for articulating vocational related subjects at a vocational school.	2.94
9. Research and development to develop patterns for maximizing vocational education in the small rural school.	2.88
10. Research to identify vocational educational opportunities in less populated areas.	2.84
11. Research to identify vocational education opportunities in highly populated areas.	2.81

Priority Rank	Mean
4. Research to develop interpretative papers on the effectiveness and uses of team teaching.	2.88
5. Research to develop interpretative papers on the effectiveness and uses of: <u>computer-assisted instruction</u> .	2.79
6. Research to develop interpretative papers on the effectiveness and uses of: <u>computer-assisted instruction</u> .	2.69
7. Research to evaluate vocational-technical education by cost-benefit analysis.	2.65
8. Research into the effectiveness of the North Carolina Research Coordinating Unit (RCU) as an organization for encouraging state-wide research in occupational education.	2.54
9. Research to evaluate the effectiveness of MDTA programs and their role in the total field of vocational education.	2.39

DISSEMINATION OF OCCUPATIONAL INFORMATION

1. Research and development of programs which develop increased public acceptance of vocational education.	3.28
2. Research to determine effective methods to be used by the North Carolina Research Coordinating Unit for disseminating research findings among classroom teachers and other researchers.	2.89
3. Research to determine to what extent occupational educators in North Carolina have been informed about the statewide consultant and information retrieval services of the North Carolina Research Coordinating Unit.	2.66
4. Research into the effectiveness of AIM (<u>Abstracts of Informal Materials</u>) as an information dissemination device informing occupational educators about instructional materials.	2.32
5. Research on the effectiveness of pilot programs to increase the accessibility of ERIC microfiche cards upon which are stored abstracts of articles on occupational education.	2.18

Priority Rank	Mean
12. Research into the effectiveness of the current interface between engineering, industrial, and technical education at the four-year university level, and corresponding educational activity for technicians at the two-year Community College level.	2.72
13. Research to identify and describe the role of youth organizations in vocational education.	2.41

GUIDANCE

1. Research to identify and describe the dropout at secondary and post-technical schools.	3.40
2. Research to determine the effects of guidance and counseling on students in grades 10-12.	3.39
3. Research to determine the effects of vocational orientation and exploratory experiences in: grades 10-12.	3.35
4. Research to determine the effects of vocational orientation and exploratory experiences: grades 7-9.	3.28
5. Research into improved methods for pre-vocational school testing of students and for assigning them to the curriculum for which they are best prepared.	3.23
6. Research to determine the effects of guidance and counseling on students in: grades 7-9.	3.18
7. Research to determine the effects of guidance and counseling on students in: grades 13-14.	3.04
8. Research to determine the effects of vocational orientation and exploratory experiences in: grades 13-14.	2.89
9. Research to identify the reasons why students choose <u>to remain</u> in North Carolina vocational-technical schools.	2.88

<u>Priority Rank</u>	<u>Mean</u>
10. Research to determine the effects of guidance and counseling on students in: grades 1-6.	2.61
11. Research to determine the effects of vocational orientation and exploratory experiences in: grades 1-6.	2.61

IN-SERVICE AND TEACHER EDUCATION

1. Research on the effectiveness of in-service programs as a means of keeping vocational-technical personnel current in their teaching field.	3.17
2. Research to determine the effectiveness of and uses for internship programs as a tool for training vocational educational teachers.	3.15
3. Research into the effectiveness of teacher aides and similar paraprofessionals in vocational education.	2.93
4. Research and development activities to be conducted by the RCU for the in-service training of classroom researchers.	2.57
5. Research to determine the needs of classroom teacher-researchers for in-service training in the use of the ERIC system components: microfiche, and the publication, <u>Research in Education</u> (RIE), <u>Abstracts of Instructional Materials</u> (AIM) and <u>Abstracts of Research Materials</u> (ARM).	2.28

OCCUPATIONAL EDUCATION AND MANPOWER

1. Research into methods of maintaining adequate current information on employment needs, educational needs, job requirements, occupational trends, and entry-level skill requirements.	3.40
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<u>Priority Rank</u>	<u>Mean</u>
2. Research to develop a feedback network relating manpower needs and curriculum.	3.20
3. Research into the effect of population mobility and student mobility on local curriculum offerings.	2.80

EVALUATION

1. Research to develop and field-test a model for evaluating vocational-technical education.	3.12
2. Research to determine the occupational status of former vocational and technical enrollees.	3.01
3. Research to develop interpretative papers on the effectiveness and uses of: <u>team teaching</u> .	2.92
4. Research to develop interpretative papers on the effectiveness and uses of: <u>computer-assisted instruction</u> .	2.90
5. Research to develop interpretative papers on the effectiveness and uses of: <u>individualized instruction</u> .	2.87
6. Research and development activities designed to establish pilot vocational programs with flexible scheduling.	2.80
7. Research to evaluate vocational-technical education by cost-benefit analysis.	2.72
8. Research to develop interpretative papers on the effectiveness and uses of: <u>field trips</u> .	2.60
9. Research to evaluate the effectiveness of MDTA programs and their role in the total field of vocational education.	2.56
10. Research into the effectiveness of the North Carolina Research Coordinating Unit (RCU) as an organization for encouraging state-wide research in occupational education.	2.51

Priority Rank

Mean

DISSEMINATION OF OCCUPATIONAL INFORMATION

1. Research and development of programs which develop increased public acceptance of vocational education. 3.39
2. Research to determine effective methods to be used by the North Carolina Research Coordinating Unit for disseminating research findings among classroom teachers and other researchers. 2.77
3. Research to determine to what extent occupational educators in North Carolina have been informed about the statewide consultant and information retrieval services of the North Carolina Research Coordinating Unit. 2.73
4. Research into the effectiveness of AIM (Abstracts of Informational Materials) as an information dissemination device for informing occupational educators about instructional materials. 2.33
5. Research on the effectiveness of pilot programs to increase the accessibility of ERIC microfiche cards upon which are stored abstracts of articles on occupational education. 2.20

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