The professional development of vocational education personnel is becoming a critical issue as a result of the expanding role of vocational education, federal legislation, and an impending teacher shortage. Current efforts to meet this challenge are described in 18 reviews which concern opinion leaders, disadvantaged youth, career development, teacher education, emerging occupations, teaching methods, postsecondary programs, teacher recruitment, dropout prevention, manpower training, performance criteria, preservice education, and national conferences on teacher education. "Plain Talk," a continuing column by the editor, discusses the importance of establishing and implementing educational priorities. The bibliography lists an additional 28 related reports. (CH)
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The Vocational Educator and Personnel Development

WILLIAM G. LOOMIS

Professional soul-searching, not unlike making a good five-minute speech, is at its hardest as a guest editor or "critic of the month." The monthly RV allocation of introductory space to a professional topic imposes special constraints to the editor, veteran as he is of "say it and run." Possibly to the guest editor, it is a true test of professional friendship, or at least a personal clash with his vocabulary in making few words count most.

William G. Loomis, a veteran vocational educator, runs the educational gamut this month. As chief, Vocational Education Development Branch of the OE's Bureau of Educational Personnel Development (currently on leave of absence from the Oregon State Department of Education), he is in a strategic position both to see and influence change in the preparation of vocational personnel for more effective teaching, leadership and supplementary services for our vocational youths and adults.

If there is a comparable label for "Mr. Manpower," Dr. Loomis could acquire the moniker, "Mr. Vocational Education Manpower." His stand is solid and firm that good teaching and leadership are the alpha and omega of relevant vocational education. Does this postulate show through in his editorial? RV is indebted for his efforts.—GLB

If vocational-technical education is to reach its potential in the public school system of this country, our educational values must undergo some radical changes. The key to change in education is change in people. The number and quality of people who staff our vocational-technical education programs determine the effectiveness of such programs.

We've been a long time learning this seemingly elementary concept. We have been preoccupied with the problems of buildings and programs and levels of financing. But no vocational education program, regardless of the kind of building in which it is conducted, regardless of its content, regardless of how well it may be financed, can be effective without people prepared to make it so.

At no time in the 50-year history of our nationwide system of vocational education has its future potential been so great—and yet also so dependent upon the availability and competency of professional practitioners.

Vo-Ed Faces Teaching Shortage. The big news in American education last fall was that the national teacher shortage which has plagued us since World War II was finally beginning to ease. Unfortunately, we cannot be as sanguine about the situation in vocational-technical education. The latest statistics available indicate that we are going to have to double our vocational education teaching force over the next five years—just to stay even with increasing enrollments. And we simply aren't producing vocational education personnel in anywhere near the required quantity.

The projected enrollment increase will occur without any special effort on the part of educators—either vocational or academic. It will occur because society demands it.

Thus it behooves those of us engaged in vocational-technical education to make a conscious effort both to accelerate the process of bringing new practitioners into the field and to improve the effectiveness of those who now staff our vocational education program, including ourselves. We can do a more effective job and increased effectiveness can be learned. But substantial increases in self-effectiveness can be accomplished only by a personal commitment on the part of each of us.

State Plans Are Developing. The federal government and most states are beginning to do their share. With federal assistance under the new part F of the Education Professions Development Act (Title II of the Vocational Education Amendments of 1968), the states are developing, for the first time in most instances, both short and long-range statewide vocational education personnel development plans. Central to such plans are new approaches to professional development and greatly enhanced opportunities for experienced teachers and other personnel to participate. This includes a new national graduate leadership program. Details about a specific state program may be obtained from the office of the state director of vocational education.

A major objective of these activities is to break down the barriers between inservice and preservice training. The preparation of vocational-technical education personnel should become continuous, with col-
points were categorized as considering themselves opinion-leaders. Individuals who were familiar with all respondents (district supervisors of agricultural education) were asked to rate each of them on the degree of opinion leadership he demonstrated in a specialized area of the program. This method was used to determine the effectiveness of the key-informant technique.

The sociometric technique was found to be an effective method of identification of opinion leaders; however, the need for this technique to be administered to all teachers of vocational agriculture with a state may make its widespread utilization unlikely. More realistic is the key informant technique, which correlated highly with the sociometric technique. The results of this testing indicate that state supervisory staff members can readily identify opinion leaders.

The second objective of the study—determining whether personal and social characteristics can be used in the identification of opinion leaders—produced the finding that very few personal or social characteristics differentiate this group from other teachers.

See Bibliography for Information on availability of complete studies

**Topic Two: BUSINESS EDUCATION**

**Preparing Teachers To Work With Disadvantaged Youth**


This institute, together with ones at Hunter College and Temple University, constituted Phase IV of a program for improvement of office education programs for the disadvantaged. Other phases consisted of identification of the perceptions of disadvantaged youth toward office work, and development and field testing of new materials for use with these students.

The two-day institute, which was held at San Francisco State College in June 1968, was attended by 20 selected participants. It attempted to develop materials helpful to teachers in preparing themselves for work with disadvantaged youth. Specifically, the institute was planned to:

1. Analyze the sociological and environmental factors relevant to office education for disadvantaged youth.
2. Learn of special programs within the business community to train and employ disadvantaged youth.
3. Learn to make effective use of community agencies concerned with the problems of the disadvantaged.
4. Develop activity units to assist inservice teachers in becoming more aware of the learning problems of disadvantaged youth.
5. Develop various units as examples of content and method appropriate for use in office education classes for the disadvantaged.

Among activities of the institute were four types of field experiences: (a) visits to community agencies and other neighborhood environments; (b) interviews with supervisors and workers in offices where disadvantaged youths were employed; (c) observation of classes and other formal training programs in business, and (d) participation in a business class in a senior high school and a class in a junior high school with large enrollments of disadvantaged students.

Follow-up activities included the implementation of new methods and materials through reports at department and district curriculum meetings, working with professional organizations, use in classes, and influencing other teachers, administrators and counselors. The effect of the institute was assessed through a last-session evaluation, and through reports to the institute covering topics of change in teaching methods, influence on other teachers and administrators, change in student attitudes and achievements, reactions of other teachers, and the use of materials developed during the institute.

The report includes examples of three types of materials developed during the institute:
1. Sensitivity units designed as suggested activities to develop teacher awareness of the learning problems of disadvantaged students.
2. Instructional units particularly appropriate for use with disadvantaged students.
3. Suggested titles for additional sensitivity units.

See Bibliography for Information on availability of complete studies

**Topic Three: DISTRIBUTIVE EDUCATION**

**Career Development**


This training project was Phase II of a two-phase project conducted during the summers of 1966 and 1967 at the University of Minnesota. Phase I had provided 30 DE teachers with distributive occupational experience in two business firms. The purposes of this phase were to: (a) explore the value of directed occupational experiences and observations in developing selected teacher competencies; (b) update the teachers' occupational experiences, and (c) develop sets of occupationally oriented learning activities for preparatory and cooperative classes at high school and post-high school levels from the occupational experiences of the training project members.

Three forms of instruction (didactic, group process, and an integrative seminar) were utilized to achieve the goals of Phase II of the workshop. These goals were stated as:
1. To implement in the distributive education curriculum values ac-
Numerous colleges, school systems, and industry are participating as both producers and consumers. The role of the individual practitioner in all this is self-renewal. And self-renewal requires self-discipline. In professional activities this should be directed toward increased effectiveness which can be measured in terms of student performance. As educators, we are paid to deliver educational services in the most effective manner possible.

Self-Discipline Is Necessary. Professional personnel in vocational-technical education frequently are not supervised closely or in detail. They must direct themselves, and ideally, much self-direction includes self-discipline which requires:

First, that you analyze your time and eliminate unnecessary activities.

Second, that you think through your own goals and those of your organization and have a concern for values.

Third, that you capitalize on available resources, including your associates, your organization, and your own strengths.

Fourth, that you identify major priorities and decide which task or priority warrants your immediate concentration.

Finally, that you learn to make decisions in a systematic manner. Making effective decisions normally involves clearly defining the elements and following a distinct sequence of steps.

Self Development Is Crucial. Our present educational system presumes that large-scale operations can be effective in terms of student achievement. Increasingly these systems depend upon the performance of the teacher as a professional. He must perform as an effective manager of his operation and assume responsibility for the results of the whole. By the nature of his knowledge and work he makes decisions which have an impact upon the performance of the entire system. Thus, the self-development of effective vocational education personnel—especially the teacher—is crucial to the development of the entire educational organization, whether it be a secondary school, a community-junior college, an area vocational school, or a state or federal education agency. As the individual increases his effectiveness, he raises the performance level of the entire organization. He raises his own sights—and those of others as well.

Your Help Is Needed. Unfortunately, truly effective educational systems appear to be in the minority. They are even more of a rarity than effective professional personnel. Educational systems and the personnel who staff them need to work systematically on increasing effectiveness.

The development of vocational education personnel effectiveness, based on performance criteria, obviously is essential if we are to deliver educational services to the increasing flood of students enrolled in vocational-technical programs. A model personnel development program may exist in your state or organization, but in the final analysis your own personal "inservice" self-development program, built upon self-discipline, is the key to effective personnel development throughout the vocational education community.

The federal government and the states are beginning to do their share. They need your help.

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**Topic One: AGRICULTURAL EDUCATION**

Identification of Opinion Leaders Among Teachers


A problem in vocational agriculture education is the nonutilization of research results by practitioners. It has been suggested that one cause of the gap between research and practice is the lack of a linking agent or interpreter between the researcher and the teacher. A search of the literature on this subject further suggested that "opinion leaders" be utilized as a means through which change agents (researchers) might reach the ultimate audience comprised of teacher practitioners.

This project was conducted to develop a means of identifying opinion leaders among teachers of vocational agriculture and to determine selected personal and social characteristics of opinion leaders among vocational agriculture teachers.

A review of research and literature related to the identification of opinion leaders determined three basic techniques of measuring the extent to which one is an opinion leader: the sociometric, the self-designating, and the key informant techniques.

The sociometric technique consists of asking group members to whom they go for advice and information about a specific idea. This technique is most frequently used.

Second most often used is the key informant technique which consists of asking persons likely to know who the opinion leaders are to designate opinion leaders.

The self-designating technique consists of asking a respondent a series of questions to determine the degree to which he perceives himself to be an opinion leader.

A questionnaire was administered to 272 of the 279 vocational agriculture teachers of South Carolina at the time the study was conducted. For testing of the sociometric technique, teachers were asked to identify other teachers of vocational agriculture in the state from whom they would seek advice and information before they would make a major change in their program. In addition, they were asked to name individuals whose advice they would seek in each of 11 program categories. The number of times a teacher was named in each of these 11 categories determined his sociometric score, with those being named four or more times being classified as opinion leaders.

Use of the self-designating technique was made through a six-item scale, with a possible score of from 0-6 points. Teachers scoring 4-6
quired from directed occupational experiences and observations in Phase I for the purpose of facilitating career development.

2. To identify additional concepts of occupational behavior and work in a changing society which should be incorporated into the distributive education curriculum.

3. To translate and implement principles and concepts of career development theory and occupational information within the distributive education curriculum.

4. To develop and try out occupational-oriented learning and guidance materials and activities that aid students in their career development.

5. To demonstrate ways in which personal development can be facilitated through vocational application of instruction.

6. To teach ways of utilizing occupational stimuli provided by the supervised occupational experience for the purpose of clarifying the student's self and goals.

7. To help youngsters develop self-exploratory, judgment and decision-making skills.

8. To develop greater effectiveness in human relations and competency in human relations training.

9. To develop self-understanding, attitudes and skills which will enable the teacher to perform more effectively in supervision and counseling.

A demonstration class of 15 high school students was used as a testing ground for techniques being taught to project participants. Two teacher-participants were assigned to counsel each student and to coordinate his on-the-job training.

Responses to a Self-Report Questionnaire completed by participants following the workshop indicated trainees felt that they had gained a better understanding of themselves and others. It was recommended that individual counseling be a part of distributive education programs, and that DE teachers should receive special training in this field.

Also, training in the psychological and social dimensions of work should be provided for cooperative students. Sensitivity training, small-group seminars and individual counseling are valuable in helping the teacher to become more effective in interpersonal relations. It was recommended that this type of training course be offered to all DE teachers.

Project Plan of Instruction

The seminar evaluated in this publication was held in two geographical sections, one for the East and one for the West, in May 1967. In all, there were 52 participants, the majority of whom were teacher-educators. Development of knowledge and understanding of the project method of instruction, both in theory and in actual classroom use, was the main purpose of the seminar. Improvement of the content and design of teacher education programs related to project method teachers was sought.

The seminar program included papers presented by guest lecturers and development of reports by task force groups consisting of seminar participants. Task force reports were developed around the project plan in the school and classroom and in teacher education.

Three publications resulted from the seminar: Readings in Distributive Education—The Project Plan of Instruction and Related Teacher Education; Guidelines for Implementing the Project Plan of Instruction in Distributive Education in the Schools, and Guidelines for Implementing the Project Plan of Instruction in Distributive Education Through Teacher Education. These publications are available through ERIC.

An evaluation performed 15 months after the seminar evidenced the following outcomes:

1. The seminar had stimulated participant thinking and understanding of the nature and process of the project plan of instruction.

2. Participants had taught the project plan method to more than 680 teachers, who, in turn, had reached more than 2,400 students in project method courses.

3. Presentations had been made to more than 80 audiences by participants regarding the project plan.

4. Seminar publications were being used in teacher education classes.

5. Fourteen books, papers, or articles on the plan had been published or accepted from participants.

6. Seven research or curriculum studies on the plan had been undertaken.

Support from the U.S. Office of Education for resource production and knowledge dissemination of the project plan was recommended. Teacher education seminars, workshops, curriculum development projects and follow-up studies were also recommended means for further informing teachers and prospective teachers about the project plan.

Topic Four: HEALTH OCCUPATIONS EDUCATION

Teacher Education Institute

Twenty new teachers in the field of health occupations education participated in this institute from July 29 to Aug. 16, 1968. Although they were well prepared in health specialties, few had little previous formal teacher preparation. This institute was designed to provide participants with basic knowledge and skills for teaching.

Proceedings at the institute included formal classroom presentations, self-instruction, assignments, informal "gab sessions," and micro-teaching.

Major areas of instruction were concerned with training participants to: (a) make decisions regarding working with students based upon knowledge of the process of learning; (b) write and use objectives stated in behavioral terms; (c) select appropriate type and depth of learn-
ing experiences necessary for implementing a suggested or previously developed curriculum; (d) develop guidelines for microteaching; (e) show familiarity with a variety of instructional methods; (f) make effective classroom presentations; (g) show familiarity with a variety of instructional media, and (h) construct valid classroom tests.

Effects of the institute were evaluated through pre- and post-institute tests. An institute evaluation form, follow-ups by both the trainees and their immediate supervisors, ratings of the trainees' microteaching presentations, and an instructor evaluation. It was concluded that the institute had been successful in accomplishing its goals.

Suggestions for improvement of future institutes included the need for involvement of both instructors and trainees from health fields other than nursing, limitation of the institute to a length of two weeks, and the necessity of having additional introductory materials available which could be sent to participants prior to the institute.

Topic Five: HOME ECONOMICS EDUCATION

Maximizing Teacher Potential by Group Counseling


This study was based on the premise that prospective female teachers often face a dilemma of conflict of professional expectations and commitments with their personal and marital commitments. The experiment attempted to determine whether group counseling would be helpful in sorting out their conflicting demands and to clarify the relation of their future professional status to role standpoints.

Objectives of the study were:

1. To investigate the influence of group counseling in reducing anxiety, and identity stress among prospective home economics teachers.
2. To study the interrelationships among scores on measures of professional commitment, self-concept, self-actualization, and concern for the student.
3. To determine, through content analysis of transcriptions of recorded counseling sessions, the nature and sources of actual and anticipated conflict indicated by students who are entering the final state of preparation for teaching.
4. It was hypothesized that students in groups which had experienced group counseling would differ significantly in test scores from those who had not experienced counseling. Tests used to measure changes in self-actualization and self-concept were Loftis' Measure of Professional Commitment, Bills' Index of Adjustment and Values, Shostrom's Personal Orientation Inventory, and Ray's Student's Estimate of Teacher Concern.

A second hypothesis was that no difference would occur between the grades achieved in professional courses and in scores on the Rating Scale for Student Teachers for the two groups.

Counseling provided for test groups was of a non-directive, laissez-faire type and coincided with three integrated courses which were offered in the first of a two-term sequence of professional preparation for prospective home economics teachers.

The first hypothesis of the study was not borne out by test scores of the two groups. "There were no systematic differences attributable to the experimental treatment, therefore it was concluded that the particular regimen of group counseling attempted in this study was not effective in bringing about differentiated behaviors and attitudes on the part of the participants."

Because of evidence procured from records of counseling sessions that prospective teachers were experiencing conflict, anxiety and identity stress, there remains a possibility of finding measurable differences between counseled and non-counseled subjects through development of a measure devised by abstracting the transcribed statements. This measure consists of various personal professional role preference factors described as: professionally centered, problem centered, family centered, self centered, and opportunity centered role preferences.

Results of the study indicate need for further experimentation with group counseling and teacher education for both men and women. Transcripts of counseling sessions evidence many additional fields of conflict other than the professional/marital role conflict upon which this study was planned.

Preparing Teachers For Occupational Programs


The new focus brought to home economics education by the 1963 Vocational Education Act—that of occupational home economics training—requires the development of training programs to prepare teachers for occupational education.

This institute was scheduled to (a) identify policies and examine existing philosophies of vocational education affecting teacher education in home economics; (b) identify qualifications needed by teachers for the various types of occupational programs; (c) plan flexible and adaptable programs for preparation of home economics teachers for occupational education teaching; and (d) develop guidelines for the evaluation of teacher effectiveness in occupational education programs in order to revise the teacher education programs.

The institute was held at Iowa State University from July 24 to Aug. 11, 1967, with 30 teacher-educators participating. The program included daily sessions involving lectures, discussions, observations, and individual and group work. Reference lists and materials were made available for home economics educators participating in the institute.
available to the participants in conference rooms.

Each participant worked individually or in small groups preparing a specific teacher education plan. Refinement of these plans was continued after the institute, with revised plans being returned to the institute director by Jan. 1, 1968. Summaries of teacher education plans which were developed are included in the report.

Ideas and conclusions developed by institute participants regarding the purposes and philosophies of home economics education were that:

1. The philosophy of vocational education must fit into a larger educational philosophy and a philosophy of life.

2. The best opportunities for learning come from the combined efforts of teachers involved in the team approach.

3. The three major purposes of home economics education are to prepare learners for gainful employment, to prepare youth and adults for homemaking or family living, and to prepare women for their dual roles as homemakers and wage-earners.

4. Basic beliefs should be evaluated before applying new techniques, designing new courses or developing new projects.

5. Resistance to change may be a manifestation of insecurity.

6. The commonalities of homemaking teachers and occupational home economics teachers should be identified.

7. There is a need for a sound philosophy of vocational education, a firm commitment that home economics can serve the dual purpose of training for homemaking and wage-earning, and enthusiasm and interest in helping inservice and preservice teachers become involved in developing creative ideas for implementing programs.

8. There are possibilities of strengthening the gainful employment classes by supplementing with useful homemaking courses.

9. The degree of success which home economists achieve in fulfilling the goal of preparing persons for gainful employment is directly related to positive and firm commitment toward this aspect of the total educational program.

The need for cooperation and integration within vocational education was expressed in the following statements of institute participants:

1. Educators can interact constructively on common problems when the environment for interaction provides new experiences in non-threatening situations.

2. When all of those engaged in vocational education work together more closely, a better understanding of the purposes of each group will be developed.

3. Integration of effort is needed among the local teachers, teacher educators, and state department of education as well as between business and education.

4. One vital part of cooperation is willingness to support an idea.

Implementation of plans, it was concluded, should include informing the community of the possibilities for wage-earning programs for home economics-oriented jobs, and a “soft sell” of the home economics occupational programs when a community needs to justify the effort.

The institute brought recognition to the problem of research: the need for utilization of research that has been done, the need for more “good” research, as well as the need for accessibility of research to the practitioner.

Suggestions for teacher preparation and growth were:

1. The teacher needs to know what he is teaching, the subject matter content, but even more important is the feeling he has for another human being—his awareness, understanding and empathy for the individual as an individual and as a member of a group.

2. Gainful employment should be an integral part of the total program.

3. Home economics teachers who are to teach courses designed to prepare persons for gainful occupations need to be involved in developing materials, in work experiences, and in making surveys and job analyses.

4. Teachers and supervisors need to re-orient themselves to the world of work because of the innovations in methods, materials and organizational structure of industry.

5. If professional people expect to keep up-to-date it is important that they attend professional meetings.

It was suggested that the techniques developed in this institute could be used to strengthen other areas of teacher education and other aspects of the total college program.

Food Service Supervision


Fifteen selected teachers, supervisors and teacher-educators from seven southern states attended this three-week institute. Its purpose was to develop the ability in the participants of initiating, developing and evaluating programs for training workers in selected occupations utilizing home economics knowledge and skills. Specific objectives were to:

1. Become acquainted with procedures for initiating occupational education programs.

2. Gain up-to-date knowledge about food service.

3. Develop skill in planning programs at the post-high school level in food service.

4. Develop resource materials and suggested instructional aids for use in such programs.

5. Become acquainted with procedures for evaluating occupational education programs and to develop evaluation devices for programs in food service.

Three related phases of effort were planned as a means of reaching the objectives. Phase I consisted of instruction in procedures for initiating and organizing occupational education courses, and in up-to-date course content in food service. In Phase II materials and instructional aids for occupational courses for food service workers were developed. Evaluation of programs was treated in Phase III.

Curriculum materials developed at the institute were twice evaluated: concurrently with their development, and after the materials had been developed.
used for a year. The second evaluation was conducted at a three-day work session attended by one-half of the original participants.

Institute participants self-evaluated their progress at the end of the workshop through two checklists: "What Do I Know About Initiating Occupational Home Economics Programs?" and "What Do I Know About Food Service Programs?" In addition, each participant made a personal commitment for 1966-67 and 1967-68 to work toward implementation of the programs in some way.

The report contains a description of the organization of the program, job descriptions and analysis of a food service supervisor, and a proposed curriculum and objectives for preparing of food service supervisors.

Volume II of this study focuses on an identical institute conducted in the area of child care services. It is available as ERIC ED 026 524. (See bibliographic entries for further information.)

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**Topic Six: INDUSTRIAL ARTS EDUCATION**

**Recruiting Prospective Industrial Arts Teachers**


This pilot program consisted of a four-week recruitment period in which students at local high schools were chosen as prospective industrial arts teachers, and a three-week institute at which the chosen students were oriented to the work of an industrial arts teacher. These two phases were followed by a 13-month evaluation period.

Forty-eight high school seniors selected to participate in the program were divided into experimental and control groups. The experimental group attended the institute at Virginia State College.

Participants were housed in school dormitories, fed in cafeterias, and had access to library and other campus facilities. The educational time schedule and activities (extracurricular) at the institute were comparable to those of a high school. Three field trips to industrial and government installations were included.

Topics considered at the institute were: (a) purposes and goals of industrial arts; (b) guidance and its place in industrial arts; (c) mathematics and some of its applications in industrial arts; (d) communications—"The Must" in industrial arts; and (e) support of industrial arts by state and national agencies. In addition, laboratory experiences were provided in general drawing, general metals, woods, plastics, and basic electricity-electronics.

Problems encountered during this project included that of recruiting eligible participants. Of students enrolled in industrial arts curriculums in high schools, most were not also enrolled in curriculums which would qualify them for admission to an accredited college. In addition, the four-week time period scheduled for recruiting was found not to be sufficient. The teaching responsibilities of the project director conflicted with the many duties he had in administering the institute. Despite these problems, the author of the report believed that the institute had accomplished its stated objectives.

Comparison of the experimental and control groups showed that a larger number of the experimental group entered college and majored in industrial arts and related fields than did those from the control group. It was felt that participants in the institutes had established clearer understanding of industrial arts education as a career, and it was recommended this type of program be continued.

**Teaching Practices For Preventing Dropouts**


The purpose of this study was the identification, evaluation and in-depth study of selected beliefs regarding teaching practices which are effective in preventing dropouts from industrial education programs. Specifically, the author attempted to determine "whether those industrial education teachers who qualified as contributing to school-team 'holding power' and the 'usual' industrial education teachers in inner and outer-city Detroit public senior high and vocational schools differed in their beliefs concerning teaching practices that affect the dropout."

The study consisted of the development of an instrument for identification and evaluation of teaching practices affecting dropouts, and the use of this instrument in comparing the beliefs of three groups of industrial education teachers. The teachers were divided into (a) a group of inner-city teachers identified as having "holding power," (b) a "usual" group of industrial education teachers from the inner-city, and (c) a "usual" group from the outer-city.

Seventy-eight teaching practices which can be utilized to prevent dropouts were identified, and 18 practices which contribute to the dropout problem were also identified. Differences were discovered in the attitudes of "holding power" inner-city teachers and "usual" inner- and outer-city teachers with regard to these practices. The holding-power teachers generally agreed that the positive teaching practices could be successfully implemented and that the negative practices could be overcome in industrial education classrooms in Detroit.

The researcher recommended that, in order to improve the holding power of the schools, a list of the 78 positive teaching practices along with information for their implementation and a list of the 18 negative practices with information for surmounting them should be made available to all teachers, teacher-educators, and administrators in industrial education.

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See Bibliography for Information on availability of complete studies
Area Manpower Institutes for Staff Development


AMIDS (Area Manpower Institutes for Development of Staff) is a nationwide network of specially designed technical assistance and staff development programs focused on understanding and teaching the disadvantaged, human resource development, and the learning and human needs of persons in manpower training and upgrading activities. AMIDS centers are located in Detroit, Los Angeles, Montgomery, Ala., Oklahoma City, Okla., and Washington, D.C.

The purpose of the projects is related to the effective preparation of Manpower project instructors and to the upgrading of the capabilities of those responsible for teaching, training, counselling, and rehabilitating the disadvantaged. Training is offered in methods of coping with and understanding the special needs and problems of the disadvantaged.

Some of the specific objectives of the AMIDS institutes were:
1. Individualization—the recognition and understanding of each trainee's unique qualities.
2. Purposeful expression of feelings—the recognition of the trainee's need to express his feelings freely.
3. The controlled emotional involvement—the trainer's sensitivity to the trainee's feelings.
4. Acceptance—the trainer perceives and deals with the trainee as he really is.
5. The non-judgmental attitude—the training function excludes assigning guilt or innocence for causation of the problems or needs.
6. Trainee self-determination—the practical recognition of the right and need of trainees to freedom in making their own choices and decisions in the training process.
7. Confidentiality—the preservation of secret information concerning the trainee which is disclosed in the professional relationship.

The AMIDS programs consisted of several institutes, seminars and workshops held in the regions of the five AMIDS centers. The Washington (Northeast) AMIDS conducted 19 institutes and 17 special seminars from August 1968 to June 1969. The North Central (Detroit) AMIDS conducted 17 two-week seminars and 6 one-to-five day workshops from May 1968 to June 1969. The Los Angeles AMIDS conducted eight workshops at its main location and six workshops at satellite locations.

Performance Tests of Instructor Competence


This study was concerned with the assumption that teachers would perform better than non-teachers in a test of teaching proficiency. In order to test the assumption, sets of objectives dealing with two areas of vocational instruction—electronics and auto mechanics—were developed.

These objectives were given to pairs of teachers and non-teachers, who were instructed to devise a sequence of instruction suitable for accomplishing the objectives in nine to ten hours of instruction. The instructors were also given resource materials which would assist them in devising an instructional plan, but they were permitted to use any instructional procedures they wished.

Pre-tests and post-tests were developed and administered to the students in classes selected for the program, in order to determine the results of the instruction. In addition, questionnaires were administered to students and teachers at the end of the instruction. Three classes were
given the Wonderlic Personnel Test in order to measure certain other variables.

Many problems were encountered during the project. The unit originally designed to be taught to the electronics trouble shooting classes had disappointing results in field trials and was replaced by a unit on Basic Power Supplies. Investigators found it difficult to locate a school district which would cooperate, and difficulties were also encountered in finding teachers and non-teachers to instruct the classes.

Analysis of test scores in both the auto mechanics and electronics courses revealed no significant difference between classes taught by teachers and non-teachers. Reasons stated for this outcome were that "teachers are not systematically trained to be changers of pupil behavior" and that "few teachers are consistently reinforced by their administrators, school system or community for being particularly skilled in modifying pupil behavior."

Concluding that a performance test measure of teacher effectiveness should be the only legitimate index of teaching proficiency, the author suggests that training and reinforcement be given teachers in methods of modifying student behavior. He feels that "performance test measures seem to be the most serviceable of those currently available to educators who require legitimate indices of teaching proficiency."

Cooperative Education-Industry Program


This project consisted of preservice and inservice institutes for vocational-technical education teachers. They were designed to test the hypothesis that vocational education and industry, by working closely together, can develop and operate viable new programs to prepare and update teachers of vocational and technical subjects.

As stated in the report, the project objectives were:
1. Establish ways to bring vocational shop, laboratory and classroom instructors in selected industrial occupational areas as close as possible to current industrial practices and technology.
3. Stimulate and assist in establishing similar ongoing programs.

These teacher training programs were conducted within facilities of the U.S. Atomic Energy Commission Oak Ridge Y-12 Plant. Institutes for inservice training consisted of two nine-week sessions held in the summers of 1966 and 1967. The preservice institutes were conducted for two entire nine-month academic years, and provided one year of off-campus technical and professional studies toward a bachelor of science degree in industrial education. College credit was provided for both institutes.

Evaluation of the project consisted of surveys of participant attitudes and reactions during the institutes, follow-up questionnaires and visits, critical analysis by staff personnel, and observance by panels representing education, industry, and government.

The industry-education combination in teacher training was found to be particularly effective. Also, this cooperation helped each group to gain insight into the requirements and capabilities of the other. It was found that the updating of experienced vocational-technical teachers through an institute in an industrial setting surpassed traditional methods in both effectiveness and adaptability to individual needs.

Specific observations, made after experimentation in recruitment, scheduling and program content conducted during the two preservice cycles, were that:
1. Qualified persons in industry would be interested in teaching if they were aware of the possibility and if preparatory programs were made more convenient.
2. Retired military personnel are good prospective teachers.
3. The preservice institute in an industrial setting is an efficient means of training new vocational-technical teachers.

Similar programs established as a result of the Oak Ridge experiment are a six-week, summer inservice institute at Hampton, Va., made possible through cooperation of the National Aeronautics and Space Administration, the State Industrial Education Service and Old Dominion College, and another project combining the resources of the Georgia Department of Vocational Education, University of Georgia and Lockheed-Georgia Corp.

Effectiveness of Two Teaching Methods Compared


The severe shortage of qualified vocational teachers in Minnesota resulted in the need for a program of minimum basic instruction in the rudiments of teaching recruits. A pilot project had developed a preservice vocational-industrial teacher education course which was recorded on video tape for use in television transmission. The purpose of the study described in this report was to compare the relative effectiveness of the video-taped course with that of an integrated lecture-discussion course. Both initial learning differences in the two methods and differences in student attitudes and opinions were measured.

A sample of 30 potential instructors were selected, with test results from 20 of them used in the final analysis. The sample was divided into two groups: one which would be given the course during the fall semester, and a second group which would be given it in the summer. Each semester the group was subdivided into an experimental and a control group, with the experimental group receiving the video-taped course and the control group receiving the lecture course. Each course contained 24 clock hours of classwork, with courses lasting 12 weeks.
A pre-test covering the content of the course was given, and results demonstrated that neither the control nor the experimental groups had any appreciable prior knowledge of the content of the course.

The course given the experimental groups consisted of materials developed by the Department of Industrial Education of the University of Minnesota. During each weekly meeting the instructor (a) briefly reviewed the prior lesson, answering relevant questions from the subjects, and introduced the film presentation; (b) showed the one-half hour film lesson; (c) used the accompanying materials and Seminar Discussion Leader's Guide to conduct a one-hour discussion on the content of the film lesson, and (d) administered a unit achievement test at the conclusion of the discussion. He reviewed the answers following the test.

The control group received a face-to-face lecture-discussion of the same essential content as the experimental group's films. Instructors were permitted to utilize any sequence, visuals and equipment which they would normally use.

In addition to the unit achievement tests and final course examination, an end-of-course opinionnaire was completed by all of the students. The instructors' impressions and reactions to the course and to their students' reactions were recorded in unit-by-unit narrative reports.

Subjects in the experimental film-discussion groups showed consistent and statistically superior performance on the criterion tests. However, these differences did not seem to be educationally important inasmuch as both methods of offering the course facilitated initial learning. The advantages of the film-discussion method were in the consistency of presentation, adaptability and flexibility in discussion, and economic and convenience advantages. It can be conducted at the convenience of the trainees, with varying class sizes.

It is recommended that the film-discussion package be improved and tried out on a much larger scale. The films need revision, including rewriting portions of the script, use of experienced actors as presenters, and improvement of the technical quality of the films. Unit tests and final examinations should be improved through rewriting to remove ambiguities and difficult vocabulary. Evaluation by several states is recommended.

**Topic Nine: TEACHERS AND ADMINISTRATORS**

**Minnesota Preservice Teacher Training Course**


The purpose of this project was the organization, presentation and revision of a 12-lesson course of professional preservice education for potential vocational-education teachers in Minnesota.

Twelve one-half hour video-taped training lessons were developed and televised on KCTA, the Minnesota educational TV station, two times each week from March 7, 1966, through May 23, 1966. Topics covered by units were: Teaching in Vocational-Technical Schools; Analyzing for Instruction; Organizing Course Components; Planning the Lesson; Teaching for Understanding; Teaching for Motor-Skill Development; Teaching With Instructional Aids; Developing Instructional Aids; Evaluating Instructional Outcomes; Developing Evaluative Materials; Managing Teaching-Learning Facilities, and Planning Teaching Careers.

Sixty trade competent persons interested in becoming vocational teachers observed the televised lessons, either in groups or individually at home. After each lesson a seminar was held at four different locations for the convenience of participants. Seminars consisted of administration of a test to assess understanding of each lesson presentation and group discussion of major points of the presentation.

All sixty of the original participants completed the course; six of the group had already been hired for teaching at the time the report was written. The television tapes were transferred to 16 mm sound film in order to increase flexibility of use. In addition, kits for each unit have been prepared in the form of teaching guides containing an introduction to the unit, clarified objectives, lesson materials, the method of approach to be used, a resource appendix, a unit examination, answer sheets, test key, audio and video script, and an introduction-summary of the succeeding unit.

The report states that the project has been "rated by everyone associated with it as a truly successful venture."

Suggestions for further research in this plan include proposals to develop activity instruction sheets and programmed instruction with home-study activity. There is also a research proposal to make a comparative analysis and evaluation of the learning efficiency and effectiveness and the relative costs of the three instructional methods: video tape and television transmission, regular teacher-trainer presentation with activity instruction sheets, and programmed instruction with home-study activities.

**Teacher Education Seminar**


Attended by 215 participants, this seminar was conducted to discuss and plan new and innovative programs in relation to (a) differentiated staffing (development, training and utilization of various levels of professional and semiprofessional staff in the total context of occupational teacher education), and (b) teaching the disadvantaged (preparation of vocational and technical teachers to work with students with special needs).

Major papers on each topic had been prepared earlier by task forces...
of recognized leaders in each field, and they were distributed to seminar participants prior to the seminar.

The primary objectives of the seminar were:

1. To develop an awareness and interest in the topics of differentiated staffing and preparing teachers for the disadvantaged.

2. To analyze the results of recent research, experimental programs and new developments as they relate to the seminar topics.

3. To explore the most effective and promising approaches to initiating an active program in each state which would implement activities explored during the seminar.

In addition to the task force papers, which are a part of this report, presentations made by three other persons are included. Don Davies, associate commissioner for Educational Personnel Development, U.S. Office of Education, spoke on “EPDA and Vocational Education.”


State Directors’ Seminar


Because of the need for improved statewide planning in vocational and technical education, the theme of this conference was “Master Planning for State Programs of Vocational Education.” Attended by more than 100 state directors and other leaders in vocational education, the conference featured presentations of experts from private industry, government and state departments of education. The presentations were grouped into three sub-topics: “Master Planning in Business, Industry and Education,” “Planning Within the Political Structure,” and “Techniques and Tools in the Planning System Process.”

Stated objectives of the seminar were:

1. To provide intensive examination of long-range master planning as it related to programing in vocational and technical education.

2. To provide a forum for the exchange of information concerning exemplary and innovative programs of the states.

3. To inform seminar participants of the latest and most relevant research and development and training activities conducted by The Center for Vocational and Technical Education and other appropriate agencies.

4. To contribute to the professional development and self-improvement of state directors and their staffs.

Curtis W. Fritzte, vice president-corporate planning, Control Data Corp., told of “Control Data’s Interactive Planning System: Long-Range Planning in Business.”

DeMarquis Wyatt, assistant administrator, Program Planning and Analysis, National Aeronautics and Space Administration, discussed the subject, “Long-Range Planning in Government.”


Lowell A. Burkett, executive director, American Vocational Association, presented “Manpower Development—Who Will Have the Responsibility.” After discussing the status of manpower bills being considered by the Congress, Mr. Burkett stated that school administrators, chief state school officers and people who have a knowledge of what education should and could do for manpower development must take the responsibility for helping Congress interpret the consequences of the proposed legislation.

John A. Beaumont, consultant in vocational education, spoke on “Planning Within the Power Structure.”

B. Dean Bowles, University of Wisconsin, outlined “Political Aspects of Planning.”

Arthur M. Lee, chairman, Legislative Information Committee, American Vocational Education Research Association, outlined the role of “Congressional and Legislative Liaison” in master planning.

Joseph F. Malinski, Minnesota Department of Education, presented “Planning, Programing and Budgeting Systems.”

Desmond L. Cook, Educational Program Management Center, The Ohio State University, described “Project Planning and Control Through PERT.”

Donald P. Anderson, assistant dean, College of Education, The Ohio State University, presented “The Delphi Technique.” As he described it, the technique, which is built on the strength of informed intuitive judgment, is intended to get expert opinion without bringing the experts together in a face-to-face confrontation. Contact is generally made with the experts through successive questionnaires and feedback.

Preparation of Personnel


This report presents the proceedings of a four-day seminar held at the University of Nebraska in June 1968, and a summary of a one-year follow-up of relevant participation activities. Of 97 persons participating in the seminar, 43 were college administrators, 54 were state directors of vocational education, vocational-technical teacher educators, staff from the U.S. Office of Education and State Department of Education personnel.

The major purpose of the seminar was to enable selected college deans to consider and make recommendations concerning organizational and operational strategies for resolving critical vocational education personnel supply and demand problems, and to recommend ways of implementing legislation.

The first two-thirds of the seminar consisted of presentations by nationally recognized leaders on problems bearing on the seminar objectives. The final third of the seminar was devoted to task group workshop sessions in which participants and consultants developed strategies for organizing and operating preparation programs for vocational-technical educators. Guidelines, operational policy statements and model suggestions were presented to the seminar by these groups.
Synthesis and Priorities. Synthesis—the holy grail of research—is elusive. The hangups of establishing priorities are much more professional and political fun however disastrous to the youth and adults of educational programs. The current hangup of statesmanship versus veto, assuming that there is statesmanship to begin with, and an eight-month lag in providing educational opportunity, is a case in point. But RV continues the search for examples of synthesis and application of research and study results.

A good example of priority and synthesis treatment, especially with strong meaning for educational personnel development, showed up recently in ERIC News Plus+. The newsletter gives eight priorities for the youth and adults of education—

1. The means and methods by which school personnel are prepared to work with pre-school-age children in such settings as Head Start programs and nursery and kindergarten classes.

2. The ways in which lifelong teaching competencies can be developed, maintained, and extended through the collaboration of collegiate institutions, local schools, governmental agencies, private enterprises, other organizations, and individuals.

3. The ways in which supportive or inhibitive factors are related to the incidence of innovative and exemplary practices in the preparation and continuing development of school personnel.

4. The selection, preparation and development of teacher-educators (collegiate and school level.)

Sharpening Up Priorities. These priorities are generally applicable to vocational and technical personnel preparation, but interpretation is needed. Moreover, if current trends continue it is obvious that the preparation of professional personnel and its auxiliaries is not the sole task of colleges and universities. The basic truth and challenge of the matter suggest that every professional in the business should take very seriously his influence and participation in preparing teachers and other personnel in his and her immediate realm of activity.

What, then, is the crux or core of each priority statement as applied to vocational and technical education? With deference to ERIC News Plus+; RV reframes the priorities in question form:

1. If skills in teaching and other forms of professional leadership can be taught through structured practice and experiences, who shall take the initiative in this provision? What methods are most relevant and provocative?

2. Basically, what occurs in teaching and learning? To what extent does this process and outcome have implications for teaching, supervision, administration, coordination and specialized staff operation, and the development of leadership in each? What are the implications for the preparation of these personnel and the auxiliary staff which supports them?

3. If educational services include provisions other than instruction and guidance, specifically what are they, to what extent are they acceptable in the service concept of the schools, and in what ways can vocational personnel be developed to provide and perform them? (Note: These "other" services are the hallmarks of current, pending manpower legislation. The challenge and question is very clear: Will the schools [including vocational and technical education] assume this total role, or is this the task of another agency?)

4. What are "special needs" of all the people, and to what extent do special needs influence the preparation of vocational personnel? Do we need a corps of special personnel to meet special needs?

5. In what ways can vocational personnel be prepared to understand and work effectively at multi-levels (junior and senior high school, post secondary, collegiate) and in multi-agency programs in the various sectors in which vocational and technical education is and will be given in the future?

6. If the concept of continuing education and development is meaningful to vocational personnel, what coalition or consortium of forces and agencies should make the development opportunities and programs available and effective?

7. What are the new (innovative and exemplary) practices in preparation and continuing development of vocational personnel? What conditions tend to support or inhibit promising practices and experimentation in personnel development?

8. To what extent are the foregoing priorities (or variations of them) important in the selection, preparation and development of teachers for their total role in leadership and personnel development?

Priority of Professionalism—A Closing Note. For many reasons, historical and otherwise, our profession is a complacent one. Optimistically and despite the growing pains which are ahead, there are trends and issues in the profession which are much more than straws in the wind. These, too, should be taught in teacher education; otherwise, to what avail are

masters of subject matter and methodology if their professional destiny rides on the whims of politics and public opinion? The control of education and the control of the profession are two distinct issues despite our professional behavior since colonial times to the contrary. If the profession of medicine showed similar status and progress, we should, indeed, feel more than a little uneasy.

A first serious suggestion is to grow up politically—shed the Victorian notion that "politics" is an unsavory word, or coin another term which better describes the educational arena.

Secondly, and not far removed from the power of politics, confront the issue of solidarity in vocational education and the importance of people in it. Wisdom and astuteness suggest that the public interest and welfare will not be served by any single, specialized area of vocational education and practical arts, regardless of our personal obsession with its merits and belief that it is the panacea of all mankind.

Even an impartial observer of the political scene with no axes to grind must have an empty feeling of citizenship as he watches time run out and the wheel-spinning statesmanship which seems oblivious to human needs and welfare. But time does run out for Congress and "Plain Talk." Be of good cheer!

"The trouble with Congress," H.L. Mencken once said, "is that it does represent the American people." While most of us may sometimes share Mencken's exasperation with Congress and the democratic process in general, let us hope that all our institutions continue to be infected with this democratic malady. Judging from the results since Congress first sat in 1789, neither the people of the United States nor their representatives have done such a bad job.

"Nor, I am convinced, will they do a bad job now that they have forced their way into the throne room of public education. We boardmen-kings and administrator-kings, having been forced to abdicate our autocratic rule, must now join the rest of our fellow-citizens in the patient pursuit of the possible.

"May the institution of our profession be infected with this democratic malady."

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RV Publishes Bound Volume for 1969-70

The third edition of Research Visibility may be ordered now from AVA at the price of $3.25 a copy, including postage. It includes the nine monthly sections published during the present school year.

Bound volumes of RV are still available for the 1967-68 and 1968-69 school years. All three volumes may be purchased, while the supply lasts, at the special price of $6 for the set. Order promptly to assure availability of complete sets.

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Topic Six: Industrial Arts Education

Top Ten: Manpower Training


Top Eight: Trade and Technical Education


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DOCUMENT SOURCES

The material reported on in Research Visibility may be obtained from several sources. The source of each publication is indicated in each entry. The key to the abbreviations used there and instructions for obtaining the publications are given below:

CFSTI—Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151. Copies of reports with this symbol may be purchased for $3 each (paper) or 65 cents (microfiche). Send remittance with order directly to the Clearinghouse and specify the accession number (AD or PB plus a 6-digit number) given in the listing.

ERIC—Educational Resources Information Center, EDRS, c/o NCR Co., 4936 Fairmont Ave., Bethesda, Maryland 20014. Copies are priced according to the number of pages. The MF price in the listing is for microfiche; the HC price is for paper copies. Send remittance with order directly to ERIC-EDRS and specify the accession number (ED plus a 6-digit number) given in the listing. How to Use ERIC, a recent brochure prepared by the Office of Education, is available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402; the catalog number is FA 5212. 12037-A; price: 50 cents.


MA—Manpower Administration. Single copies free upon request to U.S. Department of Labor, Manpower Administration, Associate Manpower Administrator, Washington, D. C. 20210.

OTHER SOURCES—Where indicated the publication may be obtained directly from the publisher at the listed price.

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