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A council of Oklahoma representatives of vocational and technical teacher education, technical institutes, and the vocational research coordinating unit organized to (1) identify and define the role of Oklahoma State University in the field of vocational and technical education, (2) provide a form for exchange of ideas among the vocational-technical services, (3) contribute to the development of a dictionary of terms for vocational and technical education, and (4) identify common research problems and disseminate research findings. This document contains their definition of the role of the Oklahoma State University in vocational education. Four branches of the university which deal with vocational-technical education are discussed. The roles and relationships of teacher education, research, and technical institutes with the technical field, the college of education, public schools and counselors, the state department of vocational education, other vocational-technical departments, research both in the technical field and the fields of education and vocational education, with business and industry, and with the administration of the university are considered. (FP)

OKLAHOMA VOCATIONAL-TECHNICAL EDUCATION,
OKLAHOMA STATE UNIVERSITY CONFERENCE

The Role of Vocational-Technical Education in the University

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

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I have been asked to discuss the role of vocational-technical education in the university. I will attempt to represent, in this presentation, the newly formed OSU Vocational-Technical Education Council. I would like first to acquaint you with the organization and objectives of this Council. The formation of this group resulted from meetings Dean O'Toole held with a number of vocational-technical educators on the staff of the university. This organization includes representatives of vocational and technical teacher education, the Technical Institutes on the campus and at Oklahoma City, Oklahoma State Tech. at Okmulgee and the Vocational Research Coordinating Unit.

The objectives of the Council are:

1. To identify and define the role of Oklahoma State University in the field of vocational and technical education.
2. To provide a forum for exchange of ideas among the vocational-technical services.
3. To contribute to the development of a dictionary of terms for vocational and technical education.
4. To identify common research problems and to disseminate research findings.

You will note that our first objective is to identify and define the role of Oklahoma State University in the field of vocational and technical education. I believe that a large step has been taken today toward accomplishing this first objective; but I hope that this Council can, in future meetings, further clarify our position.

Introduction

As we think about the role of vocational-technical education in the university I think that we must consider four unique, but closely related functions performed by those of us who work for OSU in this area. These four areas are: Teacher Education, Research, the Technical Institutes, and Oklahoma State Tech. I would like to take a look at the role of each of these areas as a separate yet closely

related function of the institution. As we consider the role of each of these divisions let us think of Purpose, Relationships, Present Situation and Needs. Most of my time will be spent on the relationships which these divisions have with each other and with the university, the State Department of Vocational Education, and other state agencies and organizations. I hope that the OSU Vocational-Technical Council will have an opportunity to present its views at a later date after we have had an opportunity to revise this preliminary statement.

Teacher Education

First let us look at the role of Vocational-Technical Teacher Education in this university.

Purpose

To provide an adequate supply of well trained teachers for vocational programs in the state.

There is an extreme shortage of qualified, well trained vocational-technical teachers nationally as well as in the state. Dr. Robert Taylor, Director of the Center for Research in Vocational Education found in late 1965, from a survey of 46 states, that there will be a 30% increase in the number of high school vocational teachers, but the states foresaw a 60% increase in the number of post high school teachers needed by 1965. In Oklahoma, we face the hard choice of lowering standards for teachers or decreasing the number of vocational departments. The decision has been made, and I think we must agree that it is a wise one: not to lower the criteria for teacher qualification. A more acceptable long-time solution to this problem is in a recruitment program which will attract those students who show promise into programs of teacher training.

Oklahoma State University has trained from 50 to 100% of the vocational-technical teachers now teaching in Oklahoma. Some vocational teacher training departments at OSU have traditionally supplied vocational teachers to other states in sufficient numbers and of high quality so that these departments are recognized as excellent sources of teachers by other state's departments of vocational education.

Relationships

Vocational-technical teacher education departments must maintain and strengthen relationships with a number of departments and agencies both within the university and in the state. To cement these relationships for more effective programs is a major objective of each teacher education department and of the Council I mentioned earlier. Let us explore these relationships for a moment.

1. Relationship with the technical field.

Each teacher training department depends upon its related college or department to provide the technical training its students need.

Vocational Agriculture looks to the College of Agriculture.

Home Economics Education depends upon the College of Home Economics for training in clothing and textiles, child care, etc.

Distributive Education and Business and Office Education students receive their technical training in the College of Business.

The Technical Institutes and Industry supply much of the technical training for teacher trainees in Technical Education and Trade and Industrial Education.

2. Relationship with College of Education:

While the individual vocational teacher education department trains its students in methods of teaching, these departments depend upon the College of Education for instruction in Psychology, Curriculum, Administration, Philosophy, and other courses which have a common application to all phases of education for teachers.

3. Relationship with public schools:

Our teacher education departments must work with the public schools through the Director of Student Teaching to provide centers for student teaching.

4. Relationship with State Department of Vocational Education Personnel:

A close working relationship must exist with personnel of the State Board for Vocational Education. Estimates on the number of teachers needed in each of the divisions as well as valuable feedback information needed for curriculum improvement can only be supplied by these supervisory

personnel, and by teachers themselves.

5. Relationship with other Vocational-Technical Departments.

Closer cooperation between vocational-technical teacher education departments must be achieved if we are to make the most efficient use of people available at the university. Each prospective teacher should have an opportunity to understand the total field of vocational education through free exchange of students and teachers within the departments of vocational-technical education. I might add, parenthetically, that such an understanding of all prospective teachers would be mutually beneficial.

6. Other Relationships

There are many other relationships which should be considered if time would permit -

Research can contribute greatly to improved methods and curriculum content.

Closer contact with those training guidance counselors can clear up many of the problems we may have in student selection.

Our relationships with the business and industry community which eventually hires the students of our trainees can give valuable assistance in maintaining applicability within our programs.

Needs in Vocational-Technical Teacher Education:

Now let us take a look at some of the most pressing needs of our teacher education departments.

Most of the teacher educators stressed first, the need to expand and strengthen the relationships which have been mentioned above. They also noted that effective relationships can only be established with the cooperation of both parties involved and that a constant striving of all the agencies and departments mentioned would result in a more effective program of vocational education in the state.

Other needs mentioned by a majority of those in teacher education included:

1. Additional staff or special emphasis by present staff in the area of curriculum and the development of teaching materials for teachers.
2. The expansion of extension classes for present teachers - both credit and non-credit in-service training.

3. The option in the graduate program, particularly at the doctorate level, for a major in vocational education which would qualify persons wishing to work in positions dealing with all the divisions of vocational education.
4. More effective methods of teacher recruitment.
5. Development of effective means of improving the status of occupational education.
6. Greater flexibility in certification requirements, allowing students to broaden course of study to include some courses in other vocational departments, particularly seminars which would mix students from all fields of teacher education.

The Role of Vocational Research in the University

One of the primary functions of the university is in the area of research. Most of the research now going on in vocational education is being done in the universities, with the cooperation of State Departments and the public schools. Dr. David Bushnell, Head of the Division of Adult and Vocational Research of the U.S. Office of Education, states that 9 out of every 10 proposals submitted to DAVR involve a university's resources at some point. He further states, "the involvement of university resources in assessing, assisting and understanding vocational education in the United States is at an all-time high and there is substantial evidence that the new relationship is having a good effect on both vocational education and the university."

The Vocational Research Coordinating Unit supported jointly by the U.S. Office of Education, The Oklahoma State Board for Vocational Education, and Oklahoma State University has the responsibility for coordinating, stimulating, and assisting research in vocational education. The Unit serves as a clearing house for research information and assists with the development and approval of proposals for submission to the U.S. Office of Education. The RCU, with the assistance of its consulting and advisory boards, supervisory personnel, and university staff has defined a set of problem areas which need particular attention if we are to progressively improve vocational-technical education. These research priority areas are:

Curriculum Development

1. To develop programs of vocational education for low ability students.

2. To develop a pre-vocational program for the junior high level.

Counseling

1. To establish improved methods of providing occupational information to counselors, students and parents
2. To develop improved methods for selecting students for vocational-technical education programs.

Communication

1. To develop better communication techniques between school vocational-technical education and business and industry by:
 - a. Defining the roles of business and industry in vocational-technical education.
 - b. Developing procedures for determining needs of business and industry on a continuing basis - and reflecting those needs in vocational-technical education courses.

Oklahoma now has a total of 14 federally funded research projects in vocational-technical education. Funds from the Vocational Education Act, Section 4 (c) for approved research projects in Oklahoma, amount to just under \$600,000. In addition to U.S.O.E. projects, there are a large number of vocational research projects being carried out through the State Board for Vocational Education, other Federal agencies and in the graduate programs of our vocational-technical education departments.

Research, if it is to play its role effectively, should be able to supply decision making data needed by administrators of vocational-technical education at all levels which will assist them in making decisions which will improve vocational education in the state. The Research Coordinating Unit needs to be established as a permanent part of the university and the State Board for Vocational Education, whether federal funds are available or not.

Technical Institutes

The technical institutes at Oklahoma State University and Oklahoma City are another important phase of the University Vocational-Technical Education Program. These institutes provide college level engineering technology curricula of the type accredited by the Engineers Council for Professional Development. These programs lead to the

Associate in Technology Degree and are two years in length. Many of these programs are given at night and serve industry by upgrading its present employees.

Important relationships which have been built over the years assist these institutes in maintaining their excellence.

1. Relationship with Business and Industry.

Some 135 different business organizations are represented in contacts with the institutes to advise on programs and course content. The evening programs which train present employees give constant feedback to directors and teachers. An industry scholarship program further attests to the effectiveness of the relationship with industry.

2. Relationship with Vocational-Technical Teacher Education:

The technical institutes provide the basic technical know-how required of trainees in the teacher education programs. Students wishing further education move from our high school programs into the technical training programs.

3. Relationship with Research:

Much of our research is being conducted in cooperation with the Technical Institutes. The role of the institutes in allowing researchers free access to teachers and students should result in improved programs and better understanding of the role of technical training in our society.

4. Relationship with Public Schools:

Personnel in the Technical Institutes have maintained a close relationship with the public schools. Representatives of the institutes are well received in the public schools and are given an opportunity to explain their program to prospective students. Constant efforts to keep counselors informed of the opportunities available in these programs and to appraise

them of the type of students needed is a part of the role of the institutes which is handled very effectively.

5. Relationship with the State Board and OSU Administration:

The relationship that the institutes have with the members of the State Board for Vocational Education and the Administration of Oklahoma State University are excellent. These men inform me that they have no problems that money won't solve.

Needs

Seriously, the greatest need of the Technical Institutes is expanded facilities. They have some beautiful plans for new buildings whenever this is possible. Another need which the institutes share with all of vocational-technical education is an improved image in the minds of some individuals. A strong on-going program of high quality is considered as the best method of attracting the right kind of students and teachers.

It is felt that a clear statement of the levels of education available to Oklahoma students is needed and that Oklahoma State University can assist in this statement.

Oklahoma State Tech. - Okmulgee

Purpose:

To provide an extensive program in 35 vocational and technical areas serving industry, business, foods, and related fields. Emphasis is placed on theory, skills, and general education applied specifically to the needs of the vocation. Successful completion of these programs qualify one for entrance into the area of skilled jobs between the semi-skilled crafts and the professions. The graduate fills the position of an industrial technician or highly skilled craftsman referred to as as trouble shooting technician or service technician.

1. Relationship with Business and Industry:

To maintain the proper relationships with business and industry, the personnel of Oklahoma State Tech are in daily contact with representatives of employers. 316 business organizations or firms have had representatives on the campus - most of them searching for employees. Advisory committees in the 10 major areas of instruction give advice on programs and course content. This close contact with business and industry is an important role of the school at Okmulgee.

2. Relationship with Teacher Education:

Tech should be a good source of T & I and technical teachers, if we can find a way to move students from Tech to university programs in teacher education.

Tech depends upon Vocational-Technical Teacher Education to give teachers instruction in methods of teaching.

3. Relationship with Public Schools:

Tech maintains a close relationship with the public schools in Oklahoma through work with principals and counselors. Tech plans an important role in high school career days and senior tours of the institution. State-wide workshops for counselors are held on the tech campus at which time tours of the facilities are conducted. Instructors from Tech visit frequently in the high schools and sponsors are encouraged to bring interested students to Tech for a visit.

4. Relationship with Administration:

The concept of a training program for any student who has graduated from high school or who is old enough to have graduated from high school, is being accepted by the rest of the university and by people in vocational-technical education. The unique role of this branch of Oklahoma State University is filling a definite need in the state's educational system.

Needs

Constant efforts must be given to student and teacher recruitment. Programs must be designed to fit each pupil's mental and physical ability. Each student's individual talents and interests must be found and developed to fit him for our society. Present programs available are not being fully utilized. We must be sure trainees are available before new programs are established. The appearance of campus life and improved facilities will attract more and better students.

Another need which individuals at Tech see is an understanding of the expense involved in a program such as theirs, as compared to other programs. The need for constant updating of equipment and programs, and the low teacher pupil ratio required for effective teaching, make these programs relatively expensive.

We need to find ways of judging teacher proficiency other than whether or not they have a certificate. The teacher must first be a technician, but the need for ability to teach is fully realized.

Summary

I have discussed four branches of the university which deal with Vocational-Technical Education. These are: Vocational-Technical Teacher Education, Research, the Technical Institutes and Oklahoma State Tech at Okmulgee.

I have attempted to point to the many relationships which make up the role of these departments. These relationships are: with the technical field; with the College of Education; with the public schools and public school counselors; with the State Department of Vocational Education. Relations with other Vocational-Technical Departments; with Research both in the technical field and in the field of education and vocational education; and the relationships with business and industry that are ultimate consumers of our products; and finally our relationship with the administration of the University.

It is only as we in Vocational-Technical Education are able to be effective in establishing and maintaining these many relationships that we can help vocational-technical education meet the challenge of providing an education for all people, of all ages, in all sections of the country, who need and want training or retraining.