PRODUCTS AND SERVICES WHICH SHOULD BE

PROVIDED BY THE OKLAHOMA DEPARTMENT

OF VOCATIONAL AND TECHNICAL

EDUCATION AS PERCEIVED BY

VOCATIONAL INSTRUCTORS

AND ADMINISTRATORS

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ii

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planned but never had the time to pursue. To my parents, Richard and Polly Dobbin, and my grandparents, O. L. "Doc" (deceased) and Cleora Smith, I express sincere thanks for all the love and encouragement you've given me throughout my life. Thank you all for the sacrifices you've made over these many years so that I could fulfill my ambitions. I don't say it often enough -- but I love you!

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

RESEARCH PROBLEM

Introduction

Legislative mandates and changes in technology are forcing vocational educators to take a hard look at vocational programs and services. The purpose of the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990 is:

> . . . to make the United States more competitive in the world economy by developing more fully the academic and occupational skills of all segments of the population. This purpose will principally be achieved through concentrating resources on improving educational programs leading to academic and occupational skill competencies needed to work in a technologically advanced society (American Vocational Association, 1990, p. 49).

This law charges the states to develop accountability systems to document the progress of vocational students and programs (Hoachlander, 1991). State educational agencies are being given increased responsibilities in carrying out the intent of the law, yet no monies are being provided to perform those functions. There is a need to determine what functions can be passed down to the local schools so that efforts can be focused on providing technical assistance to administrators, instructors, and other staff to carry out the mandates of the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990 as well as to engage in other

activities deemed necessary to promote program improvement to ensure program quality.

The mission of the Oklahoma Department of Vocational and Technical Education (ODVTE) is ". . . to provide quality state of the art, flexible, and responsive programs, services, and activities that benefit Oklahomans and the state economy." The state vocational education agency's activities center around nine strategic goals set forth for the 1990s:

- Enhance the quality of the vocational programs and services through appropriate, state-of-the-art delivery systems;

- Provide programs, services, and activities (statewide) to assist students in making informed career choices;

- Incorporate workplace basics and living skills into the curriculum;

- Provide programs and services in an environment which will accommodate different learning styles;

- Implement programs, services, and activities which will help at-risk students succeed in vocational programs;

- Provide appropriate training and services to promote economic growth;

- Promote articulation of programs within levels of educational institutions to eliminate duplication;

- Enhance public awareness of vocational education and knowledge of the benefits, services, and opportunities provided by vocational-technical education; and

- Keep abreast of change, both internally and externally, within the vocational system (ODVTE, 1991, p. 10).

To this end, Oklahoma Department of Vocational and Technical Education staff may need to assume the role of technical assistant as well as that of coordinator or supervisor. Traditionally, most of the direct contact with area vocational-technical schools and comprehensive schools has been through the occupational supervisors,

regional administrators, and field services coordinators. The major functions of the occupational supervisor center around providing assistance to instructors; working with local administrators and vocational education personnel regarding program planning, organization, and implementation; assisting with evaluation of local programs; and providing guidance and leadership to vocational student organizations. At times, occupational supervisors also work with part-time adult programs, monitor equipment inventories, and assist with workshops. Regional administrators work primarily with school administrators. Their major duties are to interpret and communicate Oklahoma Department of Vocational and Technical Education policies and procedures for school districts offering vocational programs (Educational Services, 1991).

Statement of the Problem

> The State Board of Vocational and Technical Education in Oklahoma accepts all of the responsibilities involved in the administration, operation, or supervision of vocational education in Oklahoma and delegates none of this responsibility to any other state agency (Oklahoma State Board of Vocational and Technical Education, 1991, p. 34).

"State agencies are being caught in at least two perplexing paradoxes" (Fuhrman, 1986, p. 594). Primarily, states are being asked to provide more of a leadership role in promoting school improvement at the same time that fewer resources are being provided to carry out those school improvement activities. Secondly,

> despite evidence that increasing the number of regulations and procedures often increases bureaucratization rather than school effectiveness and despite evidence that school improvement is best accomplished at the building level, many state agencies have come up

with new strategies that are demonstrably effective in improving local
schools" (Fuhrman et al., 1986, p. 594).

The Education Commission of the States (ECS) proposes that states enact policies and

develop programs that foster creativity and excitability at the local level. It is also

crucial that state and federal mandates be handled in such a manner that local schools

can support them.

Although funding for the Oklahoma Department of Vocational and Technical

Education has remained fairly level, more of the monies are being passed on to the

schools. In addition, funds have been earmarked for priority areas such as Tech

Prep, High Schools That Work, and Youth Apprenticeship. Historically, the

Oklahoma Department of Vocational and Technical Education has offered a vast array

of services and products to vocational educators in Oklahoma. These products and

services include instructional materials, competency profiles, filing systems, technical

assistance, professional improvement workshops, supply and demand data,

competency tests, technology updates, and a multitude of others. Dr. Roy Peters,

State Director of the Oklahoma Department of Vocational Education, emphasized that

". . . at the state level, vocational education faces a pivotal point in its future. This

session of the legislature faces a critical budget shortfall. Challenges and

opportunities lie before us" (Oklahoma Vocational Association, 1993, page 1). In the

face of reduced resources, the question becomes "Is the Oklahoma Department of

Vocational and Technical Education providing the services and products necessary to

provide quality vocational education?" The problem central to this study is the

effective use of financial and human resources in a changing paradigm of roles of

vocational education.

Purpose of the Study

The purpose of this study was to identify what products and services should be provided by the Oklahoma Department of Vocational and Technical Education staff to administrators and vocational instructors in comprehensive high schools and area vocational-technical schools to assist them in providing quality vocational programs at the local level.

Significance of the Study

It was believed that the study would provide information that would be of value to Oklahoma Department of Vocational and Technical Education staff members in providing needed products and services to Oklahoma area vocational-technical schools and comprehensive high schools to improve program quality. Because all states receiving Carl Perkins Vocational and Applied Technology Education Act funding must comply with the legislative mandates, results of this study should be of interest nationwide.

Research Questions

The following questions were developed to provide direction for the study:

1. What products and services should the Oklahoma Department of Vocational and Technical Education staff be providing to vocational instructors and administrators in area vocational-technical schools and comprehensive high schools to promote program quality?

2. What products and services received the highest priority ratings?

3. Based on the mean rankings by respondent groups, can the products and services be organized in meaningful clusters?

4.   Is there a significant difference in the mean rankings of products and services between and among the area vocational-technical school and comprehensive high school instructors and administrators?

Scope and Limitations of the Study

This study was not representative of all vocational educators in Oklahoma. Only instructors and administrators who were directly involved with full-time vocational programs at comprehensive high schools and area vocational-technical schools were represented in the study. The survey was specifically designed for Oklahoma and may not be generalizable to other states.

Many factors lead to program quality. However, the researcher chose to study only those products and services related to program quality which were identified by the Delphi panel of experts. The products and services generated in the Delphi survey were based upon the perception of a selected group of 24 vocational instructors and administrators. The products and services derived from the survey may not be provided by the Oklahoma Department of Vocational and Technical Education.

Chapter Summary and Overview of the Study

Chapter I, Research Problem, included the following sections: (1) Introduction, (2) Statement of the Problem, (3) Purpose of the Study, (4) Significance of the Study, (5) Research Questions, and (6) Scope and Limitations of the Study. It is the mission of the Oklahoma Department of Vocational and Technical Education to provide services and products to enhance program quality which ultimately leads to job placement and continued education for Oklahoma's citizens. Reduced funding,

hiring freezes, and legislative mandates work together to create challenging situations for vocational educators. State agency staff must take a hard look at those products and services which are needed to promote program quality. Much thought must be given to what activities must be added to and what can be eliminated from the state vocational education agency's responsibilities.

The remainder of the study is presented in four chapters. Chapter II provides a review of literature pertinent to the study. Chapter III explains the research design including the development of the instrument and selection of the sample. The findings of the study are presented in Chapter IV. Summary, conclusions, and recommendations are given in Chapter V.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The purpose of the review of literature was to present an overview of publications and research studies that were relevant to this study. A review of literature that relates to the role of the state vocational education agency staff in performing their duties and responsibilities yielded little results. Regardless, the literature review centered on the responsibilities of a state educational agency in fulfilling legislative mandates as well as providing those products and services needed to promote quality vocational education.

Identification of the Need

There are several reasons why those involved in the administration of programs from the state level would be interested in the results of this study. Uppermost in the minds of state vocational educators would be to provide those products and services required to carry out legislative mandates in the most expedient manner while keeping the training needs of the students in mind.

Federal and State Legislation

Oklahoma Statutes

The Oklahoma Board of Vocational and Technical Education is legally

authorized to approve vocational institutions and programs. This authorization

includes public postsecondary and adult vocational training in the area vocational

schools, as well as secondary institutions and programs as stated in the Oklahoma

Statutes of 1991, Title 70, Article 14, Section 103, Paragraphs 1 through 7.

The State Board of Vocational and Technical Education shall have the

following powers and duties:

1. Have the supervision of the State Department of Vocational and Technical Education, which department shall keep its principal offices at Stillwater, and appoint and fix the compensation and duties of the director and other personnel of such department.

2. Have the supervision of the vocational and technical schools and colleges of Oklahoma, except Oklahoma State University of Technical Training at Okmulgee and the Oklahoma State University Technical Institutes of Oklahoma City and Stillwater, which, however, shall be eligible to participate in federal programs administered.

3. Cooperate with, and enter into agreements with, and administer programs of, and receive federal funds from the United States Department of Education and other federal agencies in matters relating to vocational and technical education and manpower training, and be the sole state agency for such purposes.

4. Provide the formulation and adoption of curricula, courses of study, and other instructional aids necessary for the adequate instruction of students in the vocational and technical schools and colleges of this state.

5. Purchase or otherwise acquire equipment, materials, supplies, and other property, real or personal, as may be necessary for the operation of the vocational and technical schools of this state, and provide for maximum utilization of such property through a coordinated and cooperative use thereof.

6.   Enter into such agreements and contracts with the State Board of Education, Boards of Trustees of community junior colleges, Boards of Education of independent and dependent school districts, Boards of Education of area school districts for vocational and/or technical schools, private educational or training institutions, public or private industry, and Boards of Directors of community action programs, as may be necessary or feasible for the furtherance of vocational and technical training within the state.

7.   Cooperate and enter into agreements with Oklahoma State Regents for Higher Education.

Carl D. Perkins Vocational and Applied Technology

Education Act Amendments of 1990

The Carl D. Perkins Vocational and Applied Technology Act Amendments of 1990, which was enacted on September 25, 1990, amends the Carl D. Perkins Vocational Education Act (20 U.S.C. 2301 *et seq.*[1988]). Amendments to the Act were made by Public Law 102-103, 105 Statute 497 (1991). The Act authorizes federal assistance for vocational education through fiscal year 1995 and gives increased emphasis to vocational education program quality and outcomes. Federal funds now focus on improving vocational education, with particular interest on improving vocational education and services for members of special populations, including individuals with handicaps, educationally and economically disadvantaged individuals, individuals of limited English proficiency, individuals who participate in programs designed to eliminate gender bias, and individuals in correctional institutions. Under the Act, each State must ensure that members of special populations will be provided equal access. Assurances must also be made that members of special populations receive supplementary services and other services necessary to succeed. The Act has provided states with more flexibility to direct

funds to improve vocational programs. However, this flexibility brings with it new requirements which make both the state and the recipients more accountable for their vocational programs. States are required to develop and implement a statewide system of core standards and measurements of performance for secondary, postsecondary, and adult vocational education programs. Based on these statewide standards and measures, a recipient of funds under Title II, Part C of the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990 must annually evaluate the effectiveness of its projects, services, and activities. When substantial progress is not being made toward meeting the standards and measures, the recipient must implement a local program improvement plan (*Federal Register*, 1992). The Oklahoma Board of Vocational and Technical Education, with approval of the state committee of practitioners as required by the Act, has established core standards and measures of performance as shown in Appendix A.

Under the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990, state boards of education are responsible for administering federal subsidies to state-level activities. The powers of the state boards are subject to existing state law. Administrative responsibility for federal allocation to state level vocational programs and activities are assigned to the state educational agency. The vocational funding is to be focused on program enhancement and improvement rather than maintenance (Ramirez & Swanson, 1991).

Subpart B, 403.10 of the Carl D. Perkins Vocational and Applied Technology Education Act specified that any state that participates in the programs authorized by the Act must designate or establish a state board of vocational education in accordance with existing state law. The state board is then considered to be the sole state agency

responsible for the administration or the supervision of the state's vocational and applied technology education program. The Carl D. Perkins Vocational Education Act of 1984 also required each state to designate or establish a state board of vocational education to serve as the sole state agency for administering programs at both secondary and postsecondary institutions. Only eight states -- Colorado, Hawaii, Indiana, Minnesota, Oklahoma, and South Dakota -- have an agency other than the state board of education that serves as the state board of vocational education (McKinney, 1987). However, in their study of fifty states' policies and practices regarding five education and training programs, McDonnell and Zellman (1993) listed Colorado, Idaho, Indiana, Maryland, North Dakota, and Oklahoma as states in which specialized vocational education boards govern vocational education.

The Oklahoma State Department of Vocational and Technical Education and its governing board were created as a result of Title 70, Article 14, Section 103 as listed in the 1991 Oklahoma Statutes. According to those statutes, the state vocational education agency is comprised of such divisions, units, and positions as deemed necessary by the State Board of Vocational and Technical Education. The department is under the control of the State Board and it is the State Board that formulates policies and adopts rules and regulations for the administration and operation of the department.

<div align="center">Roles of State Educational Agencies and Boards</div>

The state plan for Hawaii listed eight guiding principles for vocational education in that state. One of the principles stated that "Vocational education should be committed to excellence in the delivery of all of its various programs, activities,

and services, and be receptive to new, innovative, and experimental ideas to improve effectiveness and quality" (Hawaii State Board for Vocational Education, 1986, pp. 26-28). The following vocational education priority directions were set forth for the Hawaii state vocational education agency: programs/facilities and equipment upgrading, training and upgrading of vocational instructors, emphasizing the importance of basic academic skills, encouraging the implementation of competency-based instruction, improving horizontal and vertical articulation of students into vocational programs, stressing the use of high technology applications such as latest computers and telecommunications, and increasing accessibility to special populations (Hawaii State Board for Vocational Education, 1986).

State boards, in order to be effective, must plan and lead as well as remain flexible to change and maintain open communications. "One of the most important goals of state boards should be to understand and interpret the needs of the state" (State Higher Education Executives Office, 1987, p. 3). In most cases, these needs would center around equity and accessibility to all programs and improved quality of instruction for all students.

According to Cohen (1987), most state boards of education have been empowered to:

- establish certification standards for teachers and administrators;

- establish high school graduation requirements;

- establish state testing and assessment programs to define performance standards for students and accountability for educators;

- review and approve the budget of the state educational agency; and

- develop rules and regulations for state administration.

Cohen goes on to state that most policy making is delegated to the state educational agency staff and state director. It is the major role of the state board to give final approval for policies and procedures. Current educational reforms are linked to improving quality of educational practices rather than only increasing services and resources. Efforts are now being focused on sophisticated strategies for regulating, monitoring, reporting, and providing technical assistance. The challenge lies in promoting the use of new technologies, raising academic and performance standards, and upgrading teachers' technical expertise and abilities to work with various types of students. He further stated that it isn't enough to just expand practices; they need to be improved (Cohen, 1987).

Throughout 1990, RAND and the National Center for Research in Vocational Education conducted telephone interviews in fifty states with administrators of secondary vocational education, postsecondary vocational education, Job Training Partnership Act programs, welfare-to-work programs, and state-funded job training programs as well as the state's broader education policy agenda and strategies. In their study of the fifty states' policies and practices, McDonnell and Zellman (1993) reported that specific responsibilities varied slightly from state to state. However, most of the responsibilities of the governing boards' responsibilities were broad, including policy development, planning, establishment of program standards, program review and approval, teacher certification and oversight, and evaluation. In addition to evaluation, state agencies provided school districts with technical assistance and technical support through on-site visits and workshops.

In a closely related area, West and Brown (1987) examined policies and guidelines in departments of education. Six questions related to consultative services

for special education programs and personnel were posed to state directors of special education. Responses were received from 35 states. Three-fourths of the states responding to the questionnaire recognized the need for a delivery method which included consultative assistance to the regular classroom teacher. West and Brown concluded that state departments of education needed to help local schools to develop and implement programs for special needs students as well as assist "regular" teachers in providing those transitional or supplemental services necessary to mainstream disadvantaged students and students with disabilities into the classroom/shop/laboratory (West & Brown, 1987).

One advantage of state control over local control is the increased emphasis on quality education for target groups such as the special populations group identified in the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990. This emphasis comes about through state assurance that every student has access to any vocational program and that special measures will be taken to provide transitional services so that each student can be mainstreamed into the program of his/her choice (Hadderman, 1988).

The Illinois State Board of Education (1990) looked at the need for change in the state's role in regulating education. First, the study examined how quality education was being provided to the students. It then asked what form the state's role should take in regulating education. It was determined by the researcher that emphasis should be placed on student outcomes. The state's concern focused on activities leading to school improvement and provided support to local school districts. Technical assistance and other agency resources were tied to school improvement.

The state agency is an important player in carrying out legislative mandates. First and Quaglia (1990) wrote that state educational agencies have two major functions: administrative and policy formulation. They emphasized that state departments having strong departments of planning, research, and evaluation will be better able to guide the educational reform movement which began in the 1980s to a successful conclusion in the 1990s.

In recent years, states have enacted a variety of policies which are aimed at improving educational outcomes. States are upgrading curricula and standards, requiring more testing, and providing more rigorous teacher training. However, in those states where state government has established competencies that must be taught in approved programs, local schools have considerable leeway in deciding which programs to offer and how to spend state funds (McDonnell & Zellman, 1993).

Barrick (1985) surveyed local and state agriculture supervisors and vocational agriculture teachers in Ohio to determine their perceptions of the current and expected roles of those supervisors and whether there was a difference between the perceptions of the supervisors and the instructors. A random sample of 6 state and 19 local agriculture supervisors was selected and a systematic random sample of 150 agriculture instructors was selected. The samples were randomly assigned to complete one of two questionnaires--one group completed the questionnaire asking for perceptions of the current role of the supervisor and the other group provided their perceptions of the expected role. Responses were marked on a scale of 6 (strongly agree) to 1 (strongly disagree). Mean scores were calculated from each of the 47 statements and t tests were run to see if there were any significant differences between the groups. It was determined that state and local supervisors should provide

assistance in planning, curriculum development, classroom and laboratory instruction, and purchasing of equipment. Barrick concluded that teachers should be made aware of the role of the supervisor and that teacher preparation programs should stress that supervisors are available and ready to assist.

Benson (1978) surveyed comprehensive high school administrators and instructors to ascertain their perceptions of 1) the roles that were being performed by the Oklahoma State Department of Vocational and Technical Education staff, and 2) those roles that should be performed by that agency. She found that there was a difference between what functions were actually being performed by the staff as listed on the survey questionnaire as compared to what functions the staff should perform during the following school year according to the administrators and instructors. The functions were classified into eleven categories: supervision, student organizations, instructional improvement, public relations, planning and evaluation, professional development, facilities and equipment, adult education, special needs programs, advisory committees, and other. Four sets of comparisons were made. Teachers' perceptions of what was being done were compared with what they thought should be done; a similar comparison was performed on the administrators' perceptions. Further comparisons were made between how instructors and administrators differed on what they each said the State Department of Vocational and Technical Education staff had done and what each group perceived the educational agency staff should be doing. The study revealed that there was an overall tendency for administrators to rate the degree of performance of functions lower than the instructors had rated them. It was also concluded that instructors wanted more supervision from the state staff; while administrators wanted more local control. Benson recommended that similar

studies be conducted with populations such as area vocational-technical school personnel, teacher educators, advisory council members, and others.

Delphi Technique

> When faced with an issue where the best information obtainable is the judgement of knowledgeable individuals, and where the most knowledgeable group reports a wide diversity of answers, the old rule that two heads are better than one, or more practically, several heads are better than one, turns out to be well founded (Dalkey, 1972, p. 4).

The Delphi technique was created by Dalkey and his associates at the Rand Corporation in 1950 as a method for forecasting technological events. The Rand Corporation recognized the advantages of using "several heads" to forecast events, and consequently many of the studies conducted by the Rand Corporation staff were concerned with using group information more effectively. In 1953, Dalkey and Helmer added iteration with controlled feedback as another step to the group information process (Delbecq, 1975). The intended use of the Delphi process was to predict what scientific and technological events would occur and when. In the late 1960s and early 1970s, the Delphi technique was used extensively by industries to forecast technological events as well as by organizations responsible for making policy decisions in education, public transportation, public health, etc. (Dalkey, 1972).

Delphi is a group process which utilizes written responses rather than bringing individuals together to interact face-to-face. Researchers have concluded that interacting in a group setting inhibits creative thinking when the task of a group is to generate information on a problem. When ". . . the emphasis is on *idea generation*, individual inhibitions and [preconceived] evaluation in interacting groups result in a

decrease in quality of group ideas in terms of creativity, originality, and practicality" (Delbecq, 1975, p. 17).

The Delphi technique has three characteristics: anonymity, controlled feedback, and statistical group response. Anonymity reduces the effect of dominant individuals. There is no face-to-face contact; the identity of the panel members is not known to others in the study. All communication between the participants occurs through the written questionnaires and feedback reports which are provided by the researcher(s). Controlled feedback includes conducting the study in a series of rounds with a summary of each previous round being provided to the participants. By using a statistical group response, pressure to conform is reduced or eliminated and therefore assures that every participant's response is represented in the final report (Dalkey, 1982).

Judd (1972) listed four characteristics of the Delphi technique: anonymity of response, multiple iterations, convergence of the distribution of answers, and a statistical group response (median, interquartile range). The statistical group response keeps a distribution intact even though it may still remain wide. Judd stated that the use of the Delphi technique in the education arena seemed to concentrate in three areas: educational goals and objectives, curriculum and campus planning, and development of evaluation criteria.

Cyphert and Gant (1971) stated that consensus was traditionally obtained through face-to-face discussions among persons in order to arrive at a group opinion. Consensus was often obtained as a result of an overly dominant person or one with the greatest authority, the loudest voice, or the most persistence, or merely someone wanting to join the bandwagon. The Delphi technique was developed to overcome

those problems. Participants are not aware of the identity of others involved in the study and individual responses are not reported.

Although Delphi was originally developed as a forecasting tool, it has implications for applications in the educational arena as well. The Delphi can be used as a method for studying the process of thinking about the future; a teaching tool which forces people to think about the future in a more complex way than they ordinarily would; and a planning tool which may aid in identifying priorities held by members and constituencies of an organization (Weaver, 1971, p. 271).

Although Delphi studies typically ask respondents to focus on what is *likely to happen*, studies cited by Weaver asked participants to focus on what they would *like to see happen*. Weaver (1971) stated that the Delphi procedure typically includes a questionnaire which is mailed to respondents. The respondents remain anonymous to each other. Respondents generate concise statements in response to a broad question or set of questions. Statements are compiled and returned to the respondents so that they can provide estimates as to the probability of each event happening. The responses are compiled once again and sent back for a third round so that the participants can revise their estimates if they so choose. These responses are compiled and returned to the participant once more. If the respondent's estimate is outside the interquartile range, he or she is asked to justify the position, whether or not the respondent wishes to change his or her position. In the late 1960s, another procedure was added to include questions about how familiar the participants are with the events. Respondents are also occasionally asked to rate the desirability of the events, should they occur, and what impact the event might have (Weaver, 1971).

Delphi As a Means of Determining Roles and Goals

Brooks (1974) used a modified Delphi technique to ascertain how the public

perceives the roles and goals of vocational and technical education. He believed that

knowing these perceptions could provide vocational educators with the information

necessary to make appropriate decisions. The data could also be used to evaluate

existing roles, public relations, and dissemination of vocational education information.

A second purpose of Brook's study was to determine if there were differences

among the group's ratings in regard to their perceptions of the roles of vocational

education. Six groups were surveyed: parents, teachers, school board members,

school administrators, school counselors, and students. Because Brooks was not

attempting to obtain a consensus, only two rounds of questionnaires were used. The

participants were randomly selected from each of the planning districts in Oklahoma.

Brooks found that statements which were concerned with skill training and work

values received the higher ranking. Statements regarding specific curriculum received

the lowest overall ranking. For twelve of the sixty-five statements, the statistical tests

revealed that a significant difference did exist among the groups' ratings of the

statements. Those differences were present among the administrators' and counselors'

mean ratings versus the school board members' and teachers' mean ratings. There

was an insufficient number of parent and student respondents to include their input

into the statistical analysis of the data. One of the conclusions drawn by the

researcher was that ". . . the participant's perception of the roles of vocational and

technical education are not aligned with those of professional vocational and technical

educators or of the state and federal mandates" (p. 100). Brooks concluded that the

wide variety of statements which were obtained from the first round could have been a result of the heterogenous groups participating and that Delphi studies are more accurate in reflecting opinions for homogenous groups (Brooks, 1974).

Stone (1982) used the Delphi technique to ascertain what areas of concern related to program improvement were uppermost in the minds of selected State Department of Vocational and Technical Education staff. Two separate Delphi studies were conducted because of differing relations with vocational programs among the divisional staff. Staff in the Supportive Services Division were grouped in one study; staff in the Occupational, Area Schools, Training for Industry Programs (TIPS), and Productivity Divisions were grouped in the second study. The latter group was referred to as Educational Services since the staff had a more direct relationship with supervision of local programs.

The findings of the study indicated that the concerns of the Supportive Services Division differed from those in the Educational Services Division both in scope and priority. One exception was the need for identifying new and emerging technologies, practices, and/or programs appropriate to vocational and technical training. This area was the number one priority for both groups. Other areas included in the top ten for both groups were 1) determining the effectiveness of the program evaluation system, and 2) using computers as teaching devices. The Supportive Services Division staff were more concerned with the quality of the course content -- the validity of both the cognitive and performance skills being taught. (Are the instructors teaching the right skills and how can they measure what the student has learned?) The Educational Services Division staff responses seemed more concerned with the attitudes of students, industry, and the general public towards vocational education. Many

concerns were common to both groups although the degree of importance varied: perceptions of major industry and the general public towards vocational education; effects of career counseling, recruitment, and placement activities on enrollment; relationship of involvement in student organizations to future job performance; State Department of Vocational and Technical Education staff in-service needs; quality of instruction in high schools versus area vocational-technical schools; and the recruitment and retention of quality instructors (Stone, 1982).

Delphi as a Strategic Planning Tool

A modified Delphi study (OSDVTE, 1989) was conducted by the Research and Planning Units of the State Department of Vocational and Technical Education during the state vocational educators' summer conference held in Tulsa, Oklahoma, during August of 1989. The purpose of the study was to determine needs, actions, barriers, and potential directions for Oklahoma vocational education as perceived by Oklahoma vocational educators. The study consisted of two rounds of questionnaires. Vocational educators were asked to identify issues and concerns through a series of open-ended questions and come to a consensus on how these issues and concerns ranked in terms of importance to the group. Round one contained five open-ended questions concerning needs, action which could be taken, and existing barriers to enhancing the quality of vocational education in Oklahoma. Round-one questionnaires were distributed and collected on the first day of the conference. Round-two questionnaires were made available at divisional meetings on the third day of the conference. Each of the six sections on the round-two questionnaire contained a list of the responses to the round-one questionnaire. Respondents were asked to circle the

ten items which they perceived to have relevance to or impact on their program area or school. Of the 1,498 respondents, 74 percent were instructors.

Section I of the round-two instrument dealt with the perceived deficiencies or obstacles which at the time of the study impeded the delivery of high-quality vocational education. "Lack of appropriate salaries, benefits, and support staff" received the highest number of responses. The second through fifth items were grouped relatively closely. They included: "Students' lack of basic skills;" "Enrollment/scheduling conflicts for students and instructors;" "Lack of program funding;" and "Lack of appropriate equipment and instructional materials." "Inappropriate student placement and counseling based on student needs" and "Lack of state government support" ranked sixth and seventh. "Lack of updated curriculum" was thirteenth. At the lower end of the ranking were items that dealt with lack of instructor training, obsolete technical knowledge, lack of professionalism and peer support, and inadequate communication between the State Department of Vocational and Technical Education and area schools.

Section IIA identified responses concerning the "most significant needs regarding the delivery of high-quality vocational education in [the respondents'] program area or school." The highest ranking item, by 134 responses, was "Increased funding for equipment and facilities." Of the top four ranked items, "Reduced paperwork" was the only item not related to finances and funding. "More state leadership and technical assistance" ranked 25th out of 30 items.

Section IIB dealt with the actions that respondents would like to see taken regarding the delivery of high quality vocational education. Of the 32 items that resulted from round one responses, "Provide equitable pay/increased salaries"

received the highest ranking. This item was selected 130 times more than the second ranked item. Of the top five items, four concerned funding and finances. "Improve accountability" and "Improve program evaluation" were both ranked low.

Section IIIA identified personal needs which, if met, would help the respondent better perform his/her job. "Increased salary/benefits" was selected by over 150 more respondents than "Reduced paperwork," which ranked second. "Improved technical assistance/communication with State Staff" again rated low.

Section IIIB dealt with the actions respondents would like to see taken to help them better perform their job." Again, the five top-ranking items pertained to funding issues. "Reduce state paperwork" was ranked sixth. The eighth ranked item was "Continued opportunities and funding for workshops/inservices/coursework." "Increase and support direct contact with SDVTE" was ranked 34th out of 36 items.

Section IV dealt with the kinds of assistance that the Oklahoma Vocational Association could provide to respondents to support their work with legislators. "Call legislators' attention to vo-tech achievements and successes" was ranked first.

In every section of the round-two questionnaire, except Section IV, the highest ranking item dealt with funding. In four of the five sections, appropriate salaries and benefits were the focus of the funding issue. Another consistent concern was the amount of paperwork being required of vocational educators.

Chapter Summary

This chapter presented a review of literature relevant to this study. Federal and state legislative mandates have created the need for more accountability although little funding has been provided to carry out the requirements. The decreased

financial and human resources have prompted state educational agencies as well as local educational agencies to scrutinize the activities being provided and to develop new ways of ensuring program quality.

In reviewing studies related to serving vocational instructors, it became apparent that having adequate funding for equipment and supplies, instructional materials, and staff was a key factor to promoting quality vocational education. Reducing the amount of paperwork required by state educational agencies was also a major concern of the instructors.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this study was to identify the products and services which

should be provided by the Oklahoma Department of Vocational and Technical

Education staff to administrators and vocational instructors in comprehensive high

schools and area vocational-technical schools to assist them in providing quality

vocational programs at the local level. This chapter is devoted to the method of data

collection and its analysis and is divided into the following sections: (1) General

Research Design; (2) Research Questions; (3) Population; (4) Selection of the Delphi

Panel; (5) Development of the Instrument; (6) Selection of the Survey Sample; (7)

Data Collection; and (8) Data Analysis.

General Research Design

The researcher proposed to determine which products and services were rated

as highest priorities by vocational instructors and administrators at area vocational-

technical schools and comprehensive high schools. Another aspect investigated was

whether there was a significant difference in the mean rankings given to products and

services by the various response groups. A panel of experts was identified through nominations of Oklahoma Department of Vocational and Technical Education staff. A modified Delphi technique utilizing two rounds of questionnaires was used to solicit responses from the panel of experts regarding products and services which the Oklahoma Department of Vocational and Technical Education should be providing to vocational educators to promote program quality. The products and services identified as priorities by the panel of experts were compiled into a survey questionnaire to be used to elicit responses from a proportionate stratified random sample of vocational instructors and administrators in comprehensive high schools and area vocational-technical schools across Oklahoma. The survey questionnaire was pilot tested in a vocational-technical skills center prior to being sent to participants in the study. This study was reviewed by the Oklahoma State University Institutional Review Board for Human Subjects Research as stipulated by 45 CFR 46 and was approved as exempt (Appendix B).

Surveys were mailed to instructors and administrators in comprehensive high schools and area vocational-technical schools. Means and standard deviations were calculated to determine the highest priority ratings. A factor analysis was performed to identify factors or categories to use as clusters for data interpretation. A Kruskall-Wallis H test was used to determine whether there was a difference in mean rankings for the ten factors or clusters between the administrators and vocational instructors. The Mann-Whitney U test was used to determine if there were significant differences on the constructs between mean rankings of pairs of response groups (i.e., administrators and instructors, area vocational-technical schools and comprehensive high schools, area vocational-technical school administrators and high school

administrators, and area vocational-technical school instructors and high school instructors).

Research Questions

The following questions were developed to provide direction to the study:

1. What products and services should the Oklahoma Department of Vocational and Technical Education staff be providing to vocational instructors and administrators in area vocational-technical schools and comprehensive high schools to promote program quality?

2. What products and services received the highest priority rankings?

3. Based on the mean rankings by respondent groups, can the products and services be organized into meaningful clusters?

4. Is there a significant difference in the mean rankings of products and services between and among the area vocational-technical school and comprehensive high school instructors and administrators?

Population

The population for this study included 1,043 vocational instructors and 948 administrators in comprehensive high schools and 970 vocational instructors and 106 administrators in area vocational-technical schools. For this study, high school administrators included local vocational directors, superintendents, and principals. Area vocational-technical school administrators included superintendents, assistant superintendents, site directors, principals, and directors in charge of full-time programs. Instructors included in the population were those listed in the Oklahoma Department of Vocational and Technical Education's Information and Analysis Division teacher file as full-time instructors teaching in a vocational program at a comprehensive high school or area vocational-technical school.

Selection of the Delphi Panel

The Area School Division staff were asked to provide the names of ten area vocational-technical school administrators who work most closely with coordination of full-time programs and who were respected for their perceptions of vocational education. Regional administrators were asked to provide ten names of comprehensive high school administrators who work most directly with vocational programs. Each occupational state supervisor provided names of three full-time vocational instructors in area vocational-technical schools and three vocational instructors in comprehensive high schools who they felt were knowledgeable about vocational education and who were considered by their peers to be excellent practitioners. Each of the potential panel members was notified by telephone to solicit his/her agreement to participate and to explain the Delphi process. A total of 24 participants were contacted, six panelists from each group.

Development of the Instrument

Delphi is a name that has been applied to a research technique frequently used for obtaining a group response. It is a planned program of sequential individual interrogations using questionnaires which are opinion-based. The method was originally used by the Rand Corporation as a tool for long-range forecasting by experts (Delbecq, 1975; Dalkey, 1972). Delphi was chosen as one of the research techniques for this study in order to obtain unstructured opinions from the participants as a basis for developing the research instrument.

Each of the 24 potential panel members was contacted via telephone during the first week of April 1993 to solicit his/her agreement to participate. A letter was mailed and/or faxed the day of contact thanking them for their participation in the study, explaining the procedure, assuring them of their anonymity, and asking them to list a maximum of ten services and/or products which they perceive would assist them in providing quality vocational programs and services (Appendix C). The cover letter was co-signed by Ms. Amy Polonchek, Coordinator of Research, with the researcher to stress the importance of this study to the Oklahoma Department of Vocational and Technical Education.

Administrators and instructors were asked to return the first-round questionnaires by April 12, 1993. Self-addressed, postage-paid envelopes were enclosed with the questionnaires to facilitate their return. The Oklahoma Department of Vocational and Technical Education fax number was also listed on the questionnaire for those respondents who preferred that method of return. Nineteen panel members returned their round-one questionnaires. Followup calls were made to the five nonrespondents. Two nonrespondents had misplaced their round-one questionnaires and requested replacement copies. All of the nonrespondents re-affirmed their willingness to participate in the study. Twenty-two of the twenty-four panel members returned their questionnaires by April 27, 1993. The uncategorized list of responses obtained through round one can be found in Appendix D.

A review team consisting of the State Planner, Research Division Coordinator, Assistant State Director for Supportive Services, retired Research Division Coordinator, and the researcher reviewed the individual responses and compiled them into twelve broad categories to provide a more manageable list: instructional

materials, assessment, coordination, professional development, computer support/ telecommunications, public relations, career development, technical assistance, planning and evaluation, funding, vocational student organizations, and reports and information. The round-two questionnaire and cover letter (Appendix E) were then sent to the 24 Delphi panel members so that each service or product could be rated on a 7-point continuum, with "1" referring to a service or product having the least importance and "7" being critical for program quality. Respondents were encouraged to add other products and services to the list.

Upon receipt of the completed round-two questionnaires, the ratings were entered into the computer using WordPerfect 5.1. Data were then transferred to a Lotus 1-2-3 spreadsheet so that mean ratings could be established for each service and product (Appendix F). The services and products were then ranked in descending order. It had been predetermined by the researcher that those products or services receiving a mean of less than 4.0 on the Likert scale would be discarded. The lowest rated item received a mean rating of 4.324; therefore, no items were eliminated from the questionnaire.

The survey questionnaire was then pilot tested by administrators and instructors at an Oklahoma vocational-technical skills center. Administrators and instructors at the pilot site were asked to review the instructions for completing the questionnaire and the list of products and services and to offer recommendations on how to improve the clarity and readability of the instructions and items listed on the questionnaire. The members of the pilot test group agreed that the instructions were clear, but felt that the continuum should contain fewer ratings and that the list of products and services should be shortened. Suggested changes and clarifications were

made in the survey instrument as a result of the pilot test. The continuum was shortened from a 7-point scale to a 5-point scale. The list of 106 products and services was reduced to 81 items, using a natural break in mean rankings at the 5.09 level.

<div align="center">Selection of the Survey Sample</div>

In constructing the survey sample, members were drawn at random from the various strata in proportion to the strata found in the population. A proportionate stratified random sample of administrators and vocational instructors was selected to complete the products and services questionnaire. The population for the study consisted of instructors and administrators in area vocational-technical schools and comprehensive high schools in Oklahoma. A proportionate stratified random sample of these instructors and administrators was selected from the local educational administrator (LEA) file and the teacher file maintained by the Information and Analysis Division at the Oklahoma Department of Vocational and Technical Education using a SAS sampling program.

The Delphi panel of experts was excluded from the random sampling. It was determined that exclusion of these participants would not cause a sampling bias. Based on the total population of 3,067 instructors and administrators, a sample size of 345 was selected. Because of the time of the year and the low rate of response typically resulting from a mail survey, the researcher determined that approximately 50 percent of the respondents could be expected to return the survey. Therefore, the size of the sample was increased to ensure that an adequate number of surveys would be received. The sampling procedure yielded 501 participants: 235 comprehensive

high school instructors, 214 comprehensive high school administrators, 221 area vo-tech school instructors, and 21 area vo-tech school administrators (Table I).

TABLE I

PROPORTIONATE STRATIFIED RANDOM SAMPLE
OF ADMINISTRATORS AND INSTRUCTORS

Position	Population	Percentage	Sample
High School Instructors	1043	34%	235
High School Administrators	948	31%	214
AVTS Instructors	970	32%	221
AVTS Administrators	106	03%	21
	3067	100%	501

Data Collection

The survey questionnaire and cover letter were mailed to each potential respondent on May 25, 1993 (Appendix G). Because some of the schools had already completed classes for the school year, instructors' surveys were sent by bulk mail to their home addresses. Administrators' surveys were mailed first-class to their school addresses. Participants were asked to return the completed questionnaires by June 7, 1993. From this mailing, 110 of the administrators and 150 of the instructors returned their surveys.

Nonrespondent instructors were contacted via a follow-up letter sent first-class asking for their cooperation and enclosing another copy of the questionnaire. (Refer to Appendix H for a copy of the followup letter). Nonrespondent area vocational-technical school administrators were contacted by telephone. Three of the

administrators stated that they had been busy but planned to complete the questionnaire. Two others stated that they did not feel qualified to rate the products and services and declined to participate in the study. Home addresses were not available for high school administrators. Nonrespondent instructors were asked to return the questionnaire no later than June 21, 1993. The followup letter prompted the return of 96 surveys, resulting in a response rate of 71 percent. Twelve additional instructor surveys were returned because of incorrect addresses. Because the first mailing was sent bulk mail, the error in addresses was not discovered until the second mailing.

Data Analysis

Two descriptive statistical measures were used to find the measure of central tendency (mean) and the measure of variability (standard deviation). In educational research, the mean is used more frequently than any other measure of central tendency. The standard deviation is typically used to describe variability when the mean is used to describe central tendency (Popham, 1973). The means derived from the respondents' ratings were used to rank the products and services according to priority.

The goal of factor analysis is to reduce a large number of variables down to a smaller set. For this reason, a factor analysis was used to cluster the products and services into more manageable and interpretable data. Researchers typically follow three steps in performing a factor analysis to obtain solutions: "(1) preparation of an appropriate covariance matrix; (2) extraction of initial (orthogonal) factors; and (3) rotation to a terminal solution" (Kim & Mueller, 1978, p. 10). Factor analysis can be

used for exploratory or confirmatory results. For this study, the results were used to identify factors or clusters for easier interpretation of the data analysis. The factor analysis procedure was performed using the SAS factor procedure.

Once the factors have been determined in a factor analysis, the researcher must interpret them. This becomes a subjective process. By rotating the common factors, an attempt can be made to minimize the subjectivity. This rotational procedure does not change the statistical explanatory power of the factors and it appears that no rotation is any better than another from a statistical standpoint. The most preferable rotation is that which is most easily interpreted (SAS Institute, 1988). For this study, the SAS promax rotation option was chosen.

The first factor is defined in such a way that the most information is contained in it. The factor explains the largest amount of variance in the data. The number of factors or components to retain is typically determined by selecting those which have eigenvalues greater than one. The number of factors retained is usually so large that insignificant and/or uninterpretable factors can be dropped after the rotation (Kim and Mueller, 1978). As a rule of thumb, loadings in excess of .30 are eligible for interpretation, whereas lower ones are not. A factor loading of .30 indicates at least a 9 percent overlap in variance between a variance and a factor. Loadings in excess of .71 (50 percent variance) are considered excellent; .63 (40 percent) very good; .55 (30 percent) good; .45 (20 percent) fair; and .32 (10 percent) poor. Choice of the cutoff for the size of the factor loading is largely interpreted as a matter of researcher preference (Tabachnick & Fidell, p. 411). A commonly used rule-of-thumb is that there should be at least three variables per factor (SAS Institute, 1988). For this

study, sixteen factors had eigenvalues of greater than one. Only ten of the factors had loadings of at least three variables.

The Kruskall-Wallis H test was used to determine whether the independent samples came from the same population. The test is designed to test for differences between two or more groups when the data are capable of being ranked. The test considers all scores as if they were from one group and assigns ranks. The ranks of each sample group are then compared to the overall group ranks. The Kruskall-Wallis does not require an equal number of subjects for each sample. However, when one or more of the samples contains more than five cases, the H value is interpreted for level of significance using a chi-square table of critical values. The values for H were corrected for ties in ranks. This correction increases the calculated value of H and tends to make the result more significant than if the correction for tied ranks was not made. A significant Kruskall-Wallis H does not reveal which groups are significantly different. However, several procedures exist that can be used to make multiple comparisons to determine which among all the groups are significantly different from the others (Popham & Sirotnik, 1973; Huck, Cormier, & Bounds, 1974).

According to Huck, Cormier, and Bounds (1974), the most frequently reported follow-up or post hoc test for the Kruskall-Wallis one-way analysis of ranks or H test is the Mann-Whitney U. For this study, the Mann-Whitney U was used to perform multiple comparisons among the four respondent groups. When the number of cases in the smaller group exceeds 20, then the U is interpreted using the z value and the normal curve. SPSS^x procedures were used to calculate the Kruskall-Wallis H and the

Mann-Whitney U tests using the ten factors identified through the factor analysis. Means derived from the items were ranked by overall group and by subgroups to determine the rankings. These rankings were then compared to determine whether there were significant differences.

CHAPTER IV

PRESENTATION OF FINDINGS

Introduction

The purpose of this study was to identify what products and services should be provided by the Oklahoma Department of Vocational and Technical Education staff to administrators and vocational instructors in comprehensive high schools and area vocational-technical schools to assist them in providing quality vocational programs at the local level. A panel of experts was used to generate a listing of products and services. The panel then rated the listed items using a 7-point Likert scale. A list of those products and services receiving the highest mean rankings was mailed to a proportionate stratified random sample of area vocational-technical education and comprehensive high school administrators and vocational instructors.

This chapter presents the findings of the research and is organized around the four research questions. The first section identifies the products and services suggested by the panel of experts and specifies how the final list of products and services was compiled. The second section identifies how the products and services were rated by the respondents in the sample and identifies those products and services which were rated as most critical for program quality. The third section describes the factor analysis process used for clustering the items. The fourth section describes the

differentiation of mean rankings by the four groups: comprehensive high school instructors, comprehensive high school administrators, area vocational-technical school instructors, and area vocational-technical school administrators.

Research Question Number One

What products and services should the Oklahoma Department of Vocational and Technical Education be providing to administrators and vocational instructors in area vocational-technical schools and comprehensive high schools to promote program quality? The Delphi technique was used to answer this question. A panel of 24 experts representing comprehensive high school and area vocational-technical school administrators and instructors participated in the development of the survey instrument. During the initial round of the Delphi study, the expert panelists generated 184 responses (Appendix D). This list was comprehensive and touched on issues that were related to current policies and practices. Duplicate responses were combined to produce a list of 106 products and services for inclusion on the second round of the Delphi study.

The mean ratings generated on the second questionnaire were used to determine which products and services would be included on the questionnaire used in the major research study. It was predetermined by the researcher that all items receiving a mean rating of 4.0 or higher would be included in the round-two questionnaire. However, all products and services rated by the Delphi panel received a mean rating of 4.0 or higher on a Likert scale of 1 - 7. Because the pilot test members recommended that the list be shortened, the researcher deleted 25 products and services using a cutoff point between the mean ratings of 5.05 and 5.09 (Table

II). Eighty-one products and services were identified using that cutoff point. Raising the cutoff point to a mean rating of 5.09 would have caused a minimum of six additional products and services to be eliminated from the survey questionnaire.

TABLE II

RANKED ORDER LISTING OF PRODUCTS AND SERVICES
IDENTIFIED BY DELPHI PANEL

Products and Services	Means
Inservice training for vocational/career counselor in comprehensive schools	6.23
Computer-aided instruction programs to assist students in preparing for competency tests	6.23
Site license agreements for commonly used computer software programs	6.18
Directory of available ODVTE services and names of contact persons	6.09
Promoting local vocational programs to community	6.05
Computer-based instruction specific to occupational area(s)	6.00
Computers and software for programs	6.00
Software support for all systems developed and provided by ODVTE	5.95
Competency tests to correspond to duty/task lists	5.91
Up-to-date technical resource supplements	5.86
Funds for instructional aids	5.82
Appropriate test instruments for special populations	5.77
Communication system for comprehensive high school administrators similar to AVTS system	5.77
Computer support specialist to assist in software selection/networking of instructional programs	5.77
Pretests/posttests for specific occupational areas	5.77
Technical assistance for development of career guidance documents & 4-year graduation plans	5.77
Technical assistance for integration of academics and vocational skills	5.77
State-level promotion of area vo-tech schools for student recruitment	5.76
Placement & followup data in timely manner	5.73
Establishing rapport between area vo-tech schools and comprehensive schools	5.73
"Core" curriculum guides	5.68
Increased vocational opportunities for students with disabilities	5.68
Technical assistance for development of career awareness programs in elementary grades	5.64
Training workshop on instructional improvement/effective teaching strategies	5.64
Training workshop on motivating students	5.64
Integration of academic and vocational skills in instructional materials	5.64
Updated videos specific to occupational area(s)	5.64
Occupationally specific instructional materials	5.64
Specific breakout sessions at summer conference for sharing program information	5.64
On-site technical assistance when needed for local program improvement	5.59
Expansion of Oklahoma Career Search to include broad scholarship base to keep up with competition	5.59
Software training classes (Windows, networking, etc)	5.59
Competency profiles that correspond with duty/task list	5.57
Occupationally specific duty/task lists	5.55
Samples of excellent materials utilized in program accreditation process	5.55
Instructional materials designed for use with special populations	5.55
Training workshop on technical equipment	5.50
Promotional videos for special needs students	5.50
Help-desk type forum composed of teachers to answer other teachers' questions on computers/software	5.50
Assistance in developing strategies for school-to-work transition for students with disabilities	5.50
Alignment of vocational curriculum with State Dept of Education testing/evaluation process	5.50
Exemplary practices	5.48
Training workshop on leadership skills for instructors/administrators	5.45
Computer bulletin board to be used by teachers to share information and ideas	5.45
Computerized competency profile management system	5.45
Consistency between teacher education programs and teacher certification in occupational areas	5.45
Information sheet/overview of each ODVTE occupational competency test	5.45
Uniform policy and procedures for VSO registrations, conferences, and contests	5.45
Instructional materials relating to decision-making and problem-solving	5.41
Training workshop on leadership skills for students	5.36
Training workshop on working with members of special populations	5.36
Video for parents of middle-school & high school students to assist in career development	5.36
Examples of completed forms required by ODVTE	5.36

TABLE II (continued)

Products and Services	Means
CD-ROM Eric systems for schools	5.33
Business and industry partnerships with area vo-tech schools	5.33
Technical assistance in developing Youth Apprenticeship programs	5.32
Annual report on available programs and sources of funding for rural populations	5.32
Funding for job coaches/developers for special needs students for on-the-job training	5.32
Training workshop on identifying basic skills	5.32
Procedural guidelines for vocational IEP addendum	5.32
Pilot sites for developing curricula through the integration of the SCANS competencies with the new learner outcomes	5.27
Uniform IEP forms for vocational education state-wide	5.27
Tests to accompany ODVTE learning activity packages (LAPs)	5.27
Speakers' bureau (counselors/instructors) to assist in recruiting students	5.23
Procedural guidelines for placing students in vocational programs	5.23
Career resources and assistance in establishing career development centers	5.23
Incentive assistance for vocational/career counselor	5.23
Assistance in selection of aptitude tests and interest inventories	5.18
Workshops (required) for parents of special populations students for on-the-job training	5.18
Training workshop on safety practices	5.18
Supply & demand data -- state and regional	5.18
Computer software programs for classroom management	5.18
Technical programs for broadcasting AVTS programs to comprehensive school sites	5.14
Teaching materials/tests that can be graded by scantron	5.10
Reports on trends/projects relevant to vocational education	5.09
Clearinghouse of employment opportunities for vocational education personnel	5.09
Joint staff development activities for comprehensive school and AVTS personnel	5.09
Training workshop on classroom professionalism	5.09
Long-range planning assistance	5.09
Intern program for preparing staff for administrative leadership roles	5.09
Training workshop on interpreting/utilizing competency test results	5.05
Development of program standards to be utilized for program improvement and/or program closing	5.05
Training workshop on individualizing instructional materials	5.00
Training workshop on grant proposal writing	5.00
Training workshop on designing instructional training aids	5.00
Training workshop on positive faculty relationships	4.95
Training workshop on presentation skills	4.95
Training workshop on cultural diversity	4.91
Training workshop on developing individualized education programs (IEPs)	4.91
Training workshop on administering competency tests	4.91
Training workshop for competitive events to prepare advisors for training students	4.86
Learning activity packages (LAPs)	4.86
Environmental scanning (internal/external considerations for strategic planning)	4.86
On-site program reviews with improvement suggestions and technical assistance	4.86
Training workshop on curriculum development	4.82
Regional focus groups on issues/concerns of vocational institutions/programs	4.82
Funding for Displaced Homemakers in addition to federal funds for transportation & child care	4.77
Technical assistance in planning curriculum and operations	4.73
Training workshop on teacher burnout	4.73
Equipment and supplies list	4.64
Transportation difficulties worked out with special needs students for on-the-job training	4.64
Training workshop on identifying basic skills	4.64
District/regional teachers' meetings to share information	4.50
Packet of forms/information needed for co-op students	4.48
Training workshop on stress management	4.36

Research Question Number Two

What products and services received the highest priority rankings? The answer to this question will, obviously, vary according to the respondent's group membership. Therefore, the answers to this question are presented for the group as a whole and then by each of the four respondent groups. Table III illustrates the comparison of means and mean rankings for each of the four response groups listed in order by overall group means. The mean rankings for all respondents resulted in only five products and services which rated 4.0 or higher on a Likert scale of 1 - 5, which suggests that the respondent groups did not share high degrees of agreement. The overall ranks are clearly the products of the larger respondent groups' rankings.

The number of highest priority rated products and services varied with each respondent group. Of the seven highest ranked items, three of the four groups gave a mean rating of 4.0 or higher on six of these products and services. All four groups rated the following at least 4.0: more monies designated for supplies and equipment, computers and software for programs, and funds for instructional aids. Three of the four groups rated promoting vocational programs to the community, training workshops for motivating students, and alignment of vocational curriculum with the State Department of Education testing/evaluation process a mean rating of at least 4.0.

The area vocational-technical school administrators rated 25 products and services 4.0 or higher. Fifty-two of the items were rated between 3.000 and 3.999. Only four products or services received a rating between 2.842 and 2.999. Most of the additional comments submitted by the area vocational-technical school administrators centered around updating instructional materials, competency tests,

duty/task lists, and competency profiles and making sure they were tied to certification (Appendix J).

The comprehensive high school administrators rated ten products and services 4.0 or higher. Seventy-one of the items were rated between 3.075 and 3.999. One administrator wrote that alignment of the vocational curriculum with the State Department of Education testing/evaluation process was critical. Another administrator rated that item a 5+++. Two comments were made in reference to needing computer support (Appendix K).

Area vocational-technical school instructors rated seven products and services between 4.0 and 5.0. Seventy of the items received mean ratings between 3.0 and 3.999. Four of the products and services were rated between 2.929 and 2.999. One instructor rated the business and industry partnership with area vocational-technical schools as 5+++. More monies designated for specific supplies and equipment was rated 5+++++ by another instructor (Appendix L).

Comprehensive high school instructors rated nine products and services between 4.0 and 5.0. Seventy-two of the items received mean ratings between 3.063 and 3.999. Many of the comments written by the high school instructors were geared toward funding as well as providing more support in the high schools (Appendix M). Therefore, it would appear that the answer to this research question varies depending on the type of school and the respondent's position as an administrator or instructor.

TABLE III

COMPARISON OF GROUP MEANS AND RANKS WITH ITEMS LISTED IN
RANK ORDER BY OVERALL MEANS

All Groups Mean (N=356)	Rank	Products and Services	Item No.	Administrators AVTS Mean (n=20)	Rank	High School Mean (n=93)	Rank	Instructors AVTS Mean (n=99)	Rank	High School Mean (n=144)	Rank
4.297	1	More monies designated for specific supplies & equipment	68	4.000	23	4.247	2	4.062	6	4.528	1
4.220	2	Computers and software for programs	69	4.150	12.5	4.355	1	4.020	7	4.280	3
4.200	3	Funds for instructional aids	70	4.300	7	4.151	3	4.102	5	4.285	2
4.071	4	Promoting local vocational programs to community	46	4.250	8	3.859	18.5	4.152	3	4.126	4
4.011	5	Updated videos specific to occupational area(s)	2	3.600	52.5	3.796	20	4.182	1	4.090	5
4.008	6	Alignment of vocational curriculum with SDE testing/evaluation process	11	4.150	12.5	4.129	5	3.866	9	4.007	9
3.983	7	Training workshop on motivating students	32	4.000	23	4.141	4	3.765	15	4.028	6.5
3.952	8	Integration of academic and vocational skills in instructional materials	4	4.050	18.5	4.086	6.5	3.745	18	3.993	10
3.895	9	Up-to-date technical resource supplements	1	3.700	42.5	3.914	13	3.786	13	3.986	11
3.879	10	"Core" curriculum guides	9	4.050	18.5	3.871	17	3.633	22	4.028	6.5
3.859	11	Computer-based instruction specific to occupational area(s)	3	3.650	46.5	4.086	6.5	3.794	12	3.785	15
3.834	12	Training workshop on instructional improvement/effective teaching strategies	31	4.450	3.5	4.033	10	3.531	38.5	3.830	13
3.817	13	Consistency between teacher education programs/teacher certification	25	4.500	2	3.946	11	3.823	10	3.634	30
3.791	14.5	Competency tests to correspond to duty/task lists	14	4.600	1	3.774	25	3.753	17	3.715	20
3.791	14.5	Software support for all systems developed and provided by ODVTE	36	3.900	30.5	4.054	9	3.577	31.5	3.752	18
3.766	16	Establishing rapport between AVTS & comprehensive schools	45	4.100	15	3.891	15	3.889	8	3.556	35.5
3.755	17	Occupationally specific instructional materials	8	4.400	5	3.763	27.5	3.816	11	3.618	31
3.754	18	Annual report on available programs & sources of funding for rural populations	67	3.400	64	3.892	14	3.305	54	4.014	8
3.751	19	Training workshop of leadership skills for students	29	3.350	65.5	3.935	12	3.439	45	3.902	12
3.736	20	Training workshop of safety practices	33	3.450	62	4.076	7	3.505	41.5	3.713	21
3.719	21	Expansion of Okla Career Search to include broad scholarship base to keep up with competition	57	3.350	65.5	3.769	26	3.635	21	3.796	14
3.717	22	Inservice training for vocational/career counselor in comprehensive schools	51	4.050	18.5	3.725	30	3.625	23.5	3.727	19
3.715	23	Pretests/posttests for specific occupational areas	13	4.150	12.5	3.720	31	3.557	34.5	3.757	17
3.709	24.5	Training workshop on technical equipment	26	3.950	26.5	3.859	18.5	3.515	40	3.709	22
3.709	24.5	Site license agreements for commonly used computer software program	37	4.150	12.5	3.880	16	3.619	25.5	3.599	32
3.674	26	Directory of available ODVTE services & names of contact persons	78	3.750	38	3.581	44	3.724	19	3.690	22

TABLE III (Continued)

All Groups Mean	Rank	Products and Services	Item No.	Administrators AVTS Mean	Rank	High School Mean	Rank	Instructors AVTS Mean	Rank	High School Mean	Rank
3.656	27	Instructional materials relating to decision-making/problem solving	7	3.450	62	3.624	39.5	3.551	37	3.778	16
3.652	28.5	Computer-aided instruction programs to assist students in preparing for competency tests	39	3.900	30.5	3.750	29	3.604	28	3.587	33
3.652	28.5	Communication system for comprehensive high school administrators similar to AVTS system	47	3.737	40	3.696	32	3.763	16	3.539	39
3.649	30	Technical assistance for integration of academics & vocational skills	60	3.900	30.5	3.659	35	3.552	36	3.674	27
3.632	31	Business and industry partnerships with area vo-tech schools	62	3.600	52.5	3.473	54	4.111	4	3.406	56
3.627	32	On-site technical assistance when needed for program improvement	61	3.600	52.5	3.648	36	3.531	38.5	3.683	26
3.619	33	Video for parents of middle-school & high school students to assist in recruiting students	55	3.600	52.5	3.560	46	3.608	27	3.667	28
3.607	34	Examples of completed forms require by ODVTE	75	3.750	38	3.613	41	3.434	46	3.701	23
3.605	35	Specific breakout sessions at summer conference for sharing program information	20	3.700	42.5	3.457	57	3.677	20	3.636	29
3.591	36	Software training classes (Windows, networking, etc.)	41	3.200	73	3.783	23.5	3.589	29.5	3.524	44.5
3.583	37	Computer support specialist to assist in software selection/networking of instructional programs	38	3.500	59	3.783	23.5	3.453	43	3.552	37.5
3.570	38	Uniform policy/procedures for VSO registrations, conferences, contests	74	4.200	9.5	3.391	62.5	3.589	29.5	3.585	34
3.557	39	Training workshop of leadership skills for instructors/administrators	28	4.050	18.5	3.837	20	3.216	61.5	3.538	40
3.548	40	State-level promotion of area vo-tech schools for student recruitment	48	4.450	3.5	3.337	71	4.162	2	3.128	79
3.537	41	Computer software programs for classroom management	5	3.550	56.5	3.763	27.5	3.293	55	3.556	35.5
3.528	42	Tests to accompany ODVTE learning activity packages (LAPs)	15	3.850	35	3.624	39.5	3.361	50	3.535	41
3.524	43	Technical assistance for development of career guidance documents & four-year graduation plans	53	4.000	23	3.626	38	3.333	52	3.524	44.5
3.506	44	Uniform IEP forms for vocational education state-wide	81	3.950	26.5	3.645	37	3.340	51	3.464	50
3.501	45	Information sheet/overview of each occupational competency test	16	3.750	38	3.462	56	3.577	31.5	3.441	51.5
3.499	46	Samples of excellent materials utilized in program accreditation process	65	3.250	70	3.559	48	3.448	44	3.528	43
3.494	47	Competency profiles that correspond with duty/task lists	18	4.053	16	3.473	54	3.625	23.5	3.347	58
3.489	48	Clearinghouse of employment opportunities for vocational education personnel	21	3.150	75.5	3.228	76	3.505	41.5	3.692	24
3.470	49	Career resources/assistance in establishing career development centers	50	3.150	75.5	3.681	33	3.211	63	3.552	37.5
3.469	50	Procedural guidelines for placing students in vocational programs	80	3.900	30.5	3.398	60.5	3.427	47	3.483	48

TABLE III (Continued)

All Groups Mean	Rank	Products and Services	Item No.	Administrators AVTS Mean	Rank	High School Mean	Rank	Instructors AVTS Mean	Rank	High School Mean	Rank
3.450	51	Pilot sites for developing curricula through the integration of the SCANS competencies with the new state learner outcomes	72	3.250	70	3.667	34	3.151	68	3.532	42
3.438	52	Incentive assistance for vocational/career counselor	73	3.850	35	3.559	48	3.138	69.5	3.500	47
3.437	53	Training workshop on developing pretest/posttest	30	4.000	23	3.611	42	3.103	73	3.476	49
3.427	54	Long-range planning assistance	63	3.200	73	3.505	51	3.392	48	3.433	53
3.422	55	Procedural guidelines for vocational IEP addendum	79	3.900	30.5	3.527	50	3.232	60	3.413	55
3.404	56	Technical assistance in developing Youth Apprenticeship programs	58	3.500	59	3.385	64.5	3.567	33	3.291	68
3.399	57.5	Teaching materials/tests that can be graded by scantron	10	4.000	23	3.075	81	3.776	14	3.268	69.5
3.399	57.5	Training workshop on classroom professionalism	27	3.900	30.5	3.815	21	3.165	67	3.218	73
3.396	59	Occupationally specific duty/task lists	6	4.350	6	3.376	66	3.557	34.5	3.163	77
3.393	60	Funding for job coaches/developers for special needs students for on-the-job training	71	3.550	56.5	3.559	48	3.133	71	3.441	51.5
3.388	61	Reports on trends/projects relevant to vocational education	66	3.700	42.5	3.398	60.5	3.255	59	3.430	54
3.363	62	Speakers' bureau (counselors/instructors) to assist in recruiting students	56	3.250	70	3.121	79.5	3.619	25.5	3.359	57
3.352	63	Assistance in developing strategies for school-to-work transition for students with disabilities	59	3.200	73	3.473	54	3.316	53	3.322	64
3.344	64	Placement & followup data in timely manner	77	4.200	9.5	3.269	73	3.378	49	3.248	71
3.343	65	Increased vocational opportunities with disabilities	24	3.450	62	3.587	43	3.125	72	3.317	65
3.388	66	Computerized competency profile management system	17	3.632	48.5	3.366	67	3.260	58	3.338	62
3.334	67	Assistance in selection of aptitude tests and interest inventories	54	3.050	77	3.264	74	3.196	65	3.514	46
3.316	68	Technical assistance for development of career awareness programs in elementary grades	52	3.600	51.5	3.363	68	3.216	61.5	3.315	66
3.300	69	Supply & demand data -- state and regional	76	3.684	45	3.247	75	3.208	64	3.345	59.5
3.299	70	Training workshop on working with members of special populations	34	3.700	42.5	3.489	52	2.969	78.5	3.345	59.5
3.274	71	Promotional videos for special needs students	49	3.263	68	3.391	62.5	3.173	66	3.268	69.5
3.259	72	Intern program for preparing staff for administrative leadership roles	35	3.850	35	3.337	69.5	2.947	80	3.336	63
3.258	73	Instructional materials designed for use with special populations	12	3.600	52.5	3.402	59	2.929	81	3.343	61
3.256	74	CD-ROM Eric systems for schools	40	2.895	80	3.567	45	3.138	69.5	3.176	75
3.234	75	Exemplary practices	22	3.500	59	3.385	64.5	3.034	76	3.226	72
3.231	76	Workshops (required) for parents of special populations students for on-the-job training	64	3.300	67	3.220	77	3.289	56.5	3.190	74
3.224	77	Joint staff development activities for comprehensive school & AVTS personnel	23	3.650	46.5	3.413	58	3.041	75	3.168	76

TABLE III (Continued)

| All Groups | | Products and Services | Administrators | | | | | Instructors | | | |
| Mean | Rank | | Item No. | AVTS | | High School | | AVTS | | High School | |
				Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
3.218	78	Appropriate test instruments for special populations	19	3.632	48.5	3.275	72	2.969	78.5	3.294	67
3.166	79	Computer bulletin board to be used by teachers to share information and ideas	43	2.950	78.5	3.132	78	3.289	56.5	3.134	78
3.109	80	Help-desk type forum composed of teachers to answer other teachers' questions on computers/software	44	2.950	78.5	3.308	71	3.021	77	3.063	80
2.974	81	Technical programs for broadcasting AVTS programs to comprehensive sites	42	2.842	81	3.121	79.5	3.063	74	2.838	81

Research Question Number Three

The large number of products and services and the complex interaction between area vocational-technical schools and comprehensive high schools and administrators and instructors suggested a need for data simplification. Based on the mean rankings by respondent groups, can the products and services be organized into meaningful clusters? The Factor procedure in the SAS statistical package retains components on the basis of having eigenvalues greater than one. Sixteen factors resulted from the principal components factor analysis (Table IV). Only ten factors had three or more loadings based on the SAS promax rotation option. Those ten factors included products and services related to instructional materials and assessment; computer support; career counseling; forms and/or guidelines; working with members of special populations; leadership skills for administrators, instructors, and students; communication between area vocational-technical schools, comprehensive high schools, and the local community; planning; equipment and supplies; and funding or incentive assistance for various projects. There was one large eigenvalue, 27.2945 for instructional materials (factor one), which accounted for 33.7 percent of the standardized variance.

TABLE IV

FACTOR LOADINGS FOR THE SIXTEEN FACTORS HAVING
EIGENVALUES GREATER THAN ONE

Item No.	Products and Services	Factor 1	Factor 2	Factor 3	Factor 4
6.	Occupationally specific duty/task lists	.61431			
8.	Occupationally specific instructional materials	.54392			
9.	"Core" curriculum guides	.48664			
10.	Teaching materials/tests that can be graded by scantron	.70423			
11.	Alignment of vocational curriculum with SDE testing/evaluation process	.58755			
13.	Pretests/posttests for specific occupational areas	.70516			
14.	Competency tests to correspond to duty/task lists	.81084			
15.	Tests to accompany ODVTE learning activity packages (LAPs)	.67773			
16.	Information sheet/overview of each ODVTE occupational competency test	.68181			
17.	Computerized competency profile management system	.66239			
18.	Competency profiles that correspond with duty/task lists	.78217			
36.	Software support for all systems developed and provided by ODVTE		.79912		
37.	Site license agreements for commonly used computer software programs		.72289		
38.	Computer support specialist to assist in software selection/networking of instructional programs		.82457		
39.	Computer-aided instruction programs to assist students in preparing for competency tests		.85990		
40.	CD-ROM Eric systems for schools		.79261		
41.	Software training classes (Windows, networking, etc.)		.86794		
51.	Inservice training for vocational/career counselor in comprehensive schools			.73736	
52.	Technical assistance for development of career awareness programs in elementary grades			.79778	
53.	Technical assistance for development of career guidance documents & 4-year graduation plans			.77242	
54.	Assistance in selection of aptitude tests and interest inventories			.69111	
55.	Video for parents of middle-school & high school students to assist in career development			.80943	
56.	Speakers' bureau (counselors/instructors) to assist in recruiting students			.63058	
57.	Expansion of Oklahoma Career Search to include broad scholarship base to keep up with competition			.50547	
75.	Examples of completed forms required by ODVTE				.81664
76.	Supply and demand data — state and regional				.82425
77.	Placement and follow-up data in timely manner				.71596
78.	Directory of available ODVTE services and names of contact persons				.75646
79.	Procedural guidelines for vocational IEP addendum				.71841
80.	Procedural guidelines for placing students in vocational programs				.60767
81.	Uniform IEP forms for vocational education state-wide				.52908

TABLE IV (continued)

Item No.	Products and Services	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
12.	Instructional materials designed for use with special populations	.64491					
19.	Appropriate test instruments for special populations	.62223					
24.	Increased vocational opportunities with disabilities	.62514					
34.	Training workshop on working with members of special populations	.77578					
49.	Promotional videos for special needs students	.61586					
59.	Assistance in developing strategies for school-to-work transition for students with disabilities	.57077					
27.	Training workshop on classroom professionalism		.84775				
28.	Training workshop of leadership skills for instructors/administrators		.78842				
29.	Training workshop of leadership skills for students		.51502				
31.	Training workshop on instructional improvement/effective teaching strategies		.61819				
32.	Training workshop on motivating students		.68094				
33.	Training workshop of safety practices		.61544				
45.	Establishing rapport between area vo-tech schools and comprehensive schools			.76406			
46.	Promoting local vocational programs to community			.79690			
47.	Communication system for comprehensive high school administrators similar to AVTS system			.55038			
48.	State-level promotion of area vo-tech schools for student recruitment				.55404		
62.	Business and industry partnerships with area vo-tech schools				.81761		
63.	Long-range planning assistance				.51018		
68.	More monies designated for specific supplies and equipment					.76787	
69.	Computers and software for programs					.54060	
70.	Funds for instructional training aids					.65318	
20.	Specific breakout sessions at summer conference for sharing program information						.77600
22.	Exemplary practices						.58552

TABLE IV (continued)

Item No.	Products and Services	Factor 11	Factor 12	Factor 13	Factor 14	Factor 15	Factor 16
71.	Funding for job coaches/developers for special needs students for on-the-job training	.64113					
72.	Pilot sites for developing curricula through the integration of the SCANS competencies with the new state learner outcomes	.71153					
73.	Incentive assistance for vocational/career counselor	.54478					
74.	Uniform policy and procedures for VSO registrations, conferences, and contests	.50677					
1.	Up-to-date technical resource supplements		.76383				
2.	Updated videos specific to occupational area(s)		.90020				
26.	Training workshop on technical equipment			.78411			
3.	Computer-based instruction specific to occupational area(s)				.53760		
5.	Computer software programs for classroom management				.53597		
4.	Integration of academic and vocational skills in instructional materials					.66331	
7.	Instructional materials relating to decision-making/problem solving						.56843

Research Question Number Four

Is there a significant difference in the mean rankings of products and services between and among the area vocational-technical school and comprehensive high school instructors and administrators? A Kruskall-Wallis H test was performed to answer this question and the results are displayed in Table V. The results indicated that there were significant differences among the four respondent groups on six of the ten factors.

TABLE V

KRUSKALL-WALLIS H VALUES AMONG THE FOUR RESPONDENT
GROUPS ON TEN FACTORS

Factors	H	H_o*
Instructional Materials	10.3258	10.3408[a]
Computer Support	6.5543	6.5885
Career Counseling	.5738	.5762
Forms/Guidelines	8.9329	8.9687[a]
Special Populations	7.0650	7.0956
Leadership Skills	23.6190	23.7399[a]
Communication	7.7497	7.8849[a]
Planning	26.8375	27.1823[a]
Equipment	9.9798	10.3605[a]
Incentive Assistance	7.7135	7.7715

* Values of H corrected for ties in ranks.
[a] Significant at .05 level (df = 3).

In order to determine where the significant differences occur, a Mann-Whitney U was performed to compare respondent groups' mean rankings on the factors. Table VI indicates the results of the Mann-Whitney U test and illustrates that significant differences occurred between pairs of respondent groups on differing factors.

TABLE VI

RESULTS OF SELECTED INDIVIDUAL COMPARISONS USING
THE MANN-WHITNEY U TEST

Respondent Groups	Factors	z
AVTS Administrators vs. AVTS Instructors	Instructional Materials	2.2280[a]
	Computer Support	.2807
	Career Counseling	.4507
	Forms/Guidelines	2.8636[a]
	Special Populations	1.2904
	Leadership Skills	2.3294[a]
	Communication	.1884
	Planning	.6359
	Equipment	.1502
	Incentive Assistance	2.0813[a]
AVTS Administrators vs. HS Administrators	Instructional Materials	3.3126[a]
	Computer Support	.8220
	Career Counseling	.2258
	Forms/Guidelines	2.7177[a]
	Special Populations	.5194
	Leadership Skills	1.0946
	Communication	1.2166
	Planning	1.7523
	Equipment	.7789
	Incentive Assistance	.6799
AVTS Instructors vs. HS Instructors	Instructional Materials	.9097
	Computer Support	.3272
	Career Counseling	.7010
	Forms/Guidelines	.7343
	Special Populations	1.8544
	Leadership Skills	2.3504[a]
	Communication	2.5120[a]
	Planning	4.7881[a]
	Equipment	2.9989[a]
	Incentive Assistance	2.2023[a]
HS Administrators vs. HS Instructors	Instructional Materials	.2531
	Computer Support	2.5526[a]
	Career Counseling	.3244
	Forms/Guidelines	.1447
	Special Populations	.9292
	Leadership Skills	3.0071[a]
	Communication	1.0675
	Planning	.9907
	Equipment	1.5851
	Incentive Assistance	.0647

[a] Significant at .05 level.

Discussion of Findings

The list generated by the Delphi panel was lengthy and comprehensive. The list contained a multitude of products and services covering a wide variety of areas. The size and comprehensiveness of the list presents a dilemma to the Oklahoma Department of Vocational and Technical Education in light of the political and economic climate present today.

Funding of equipment and supplies and computer support were high priorities for all four groups, though less of a priority for the area vocational-technical school administrators. It would appear that state-wide or multi-school purchasing of equipment and supplies could provide a cost savings for local schools. This practice has been followed in some carpentry programs to purchase dustless concrete at a major cost savings.

The area vocational-technical school administrators' highest rated products and services centered primarily on competency tests, duty/task lists, competency profiles, and pretests/posttests. This emphasis might have resulted from the increased accountability on job placement and occupational competency brought about through requirements of the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990. It appeared that administrators were more attuned to accountability, while instructors leaned more toward instructional aids, including texts, resource materials, audiovisuals, and equipment and supplies. Administrators seemed to be more concerned with outcomes, while instructors were more focused on the day-to-day instruction.

While the number of comments added by the respondents was limited, some themes emerged. Several individuals in every respondent group expressed concern that the instructional materials, competency tests, and duty/task lists were not current and should be updated. Because industry certification is becoming a requirement for most "hard-trade" areas, care must be taken to ensure that products developed and/or adapted by the Oklahoma Department of Vocational and Technical Education are aligned with the certification tests given by such associations as Automotive Service Excellence and National League of Nursing.

There seemed to be a need for technical assistance and other support at the comprehensive high school level. Funds may not be as readily available for vocational programs at the local level as they are at area vocational-technical schools.

Three of the overall top ten rated products and services were not included in the clusters derived from the factor analysis. These products included updated videos specific to occupational areas, integration of academic and vocational skills in instructional materials, and up-to-date technical resource supplements. These three products could be offered in the same delivery method as the instructional materials cluster.

The Kruskall-Wallis H test revealed that there were significant differences between groups on six of the ten factors. When interpreting the results of the Mann-Whitney U test, the differences between the groups became more visible. Area vocational-technical school administrators rated the instructional materials and forms/guidelines factors significantly higher than the other respondent groups. Comprehensive high school administrators and instructors gave a higher priority

rating to the leadership skills factor. Area vocational-technical school instructors differed from their high school counterparts on five of the ten factors or clusters.

The majority of Trade and Industrial Education instructors were located in the area vocational-technical schools, while the high school respondents consisted primarily of Home Economics and Agricultural Education instructors. The difference in the focus of the occupational areas being taught may account for the differences in priority ratings between the types of schools. No attempt was made to determine if there were significant differences among the mean ratings for instructors of the occupational areas being taught. Trade and Industrial Education and Business and Computer Technology instructors' equipment and skills emphasis change rapidly because of new technology. This constant change makes it imperative that instructional products stay abreast of current and future technology. State staff would also need to remain current of new technology to provide technological updates to the instructors. Comprehensive high school administrators, with the exception of local directors, have responsibility for all programs being offered at the school; therefore their attitudes toward what products and services are needed in the vocational programs would be expected to differ from those instructors and administrators who work primarily with vocational education.

CHAPTER V

SUMMARY, CONCLUSIONS, AND

RECOMMENDATIONS

Introduction

The problem central to this study was the effective use of financial and human

resources in a changing paradigm of roles of vocational education. The purpose of

this study was to identify what products and services should be provided by the

Oklahoma Department of Vocational and Technical Education staff to comprehensive

high school and area vocational-technical school instructors and administrators to

assist them in providing quality vocational programs at the local level. Four research

questions gave focus to the study:

1.   What products and services should the Oklahoma Department of

        Vocational and Technical Education staff be providing to vocational

        instructors and administrators in area vocational-technical schools and

        comprehensive high schools to promote program quality?

2.   What products and services received the highest priority rankings?

3.   Based on the mean rankings by respondent groups, can the products

        and services be organized into meaningful clusters?

4. Is there a significant difference in the mean rankings of products and services between and among the area vocational-technical school and comprehensive high school instructors and administrators?

After an extensive review of the literature, the researcher selected a modified Delphi technique for generating a listing of products and services identified as most critical for program quality by a panel of vocational instructors and administrators in comprehensive high schools and area vocational-technical schools. Those products and services were then rated by a proportionate stratified random sample of administrators and vocational instructors using a 5-point Likert scale, ranging from not necessary for program quality to most critical. Means and standard deviations were calculated for the overall group and for the four subgroups to identify those products and services which received the highest priority ratings. The respondent groups' means were used in performing a factor analysis to identify those factors which accounted for the greatest standardized variance. A Kruskall-Wallis H test was used to determine whether there was a significant difference among the four response groups for each of the ten factors generated by the factor analysis. A Mann-Whitney U test was used to determine whether there was a significant difference between pairs of respondent groups.

Summary of Findings

Data analysis revealed the following results:

1. The Delphi panelists generated 184 responses. The 184 products and services listed by the panel of experts were reviewed by a panel of Oklahoma Department of Vocational and Technical Education staff members to eliminate

duplication. This list reduction resulted in a list of 106 products and services to be ranked by the Delphi panel. The mean rankings of the Delphi panel were used to select those items which would appear on the survey sample's questionnaire. Based on the mean ratings of the Delphi panel, 81 products and services were determined by the Delphi panel to be important for state staff to provide to local programs to promote program quality.

2. The highest priority was determined by a mean ranking of 4.0 or higher. On that basis, it was found that:

    a. The sample as a whole rated 5 products and services as highest priorities;

    b. Area vocational-technical school administrators rated 25 products and services as highest priorities;

    c. High school administrators rated 10 products and services as highest priorities;

    d. High school instructors rated 8 products and services above 4.0; and

    e. Area vocational-technical school instructors rated 6 products and services as highest priorities;

3. A wide range of products and services are being sought by local school personnel and there is often little agreement among the groups.

4. Ten clusters of three or more products and services were obtained using the factor analysis. Only fifty-six of the products and services were included in the ten clusters or factors. Of those ten factors, only six showed significant differences among the response groups. Twenty-five of the products and services were not

included in the factoring process, including three products which were listed in the top ten ratings.

5. There were significant differences between pairs of respondent groups.

6. Several individuals in every respondent group expressed concern that instructional materials, competency tests, and duty/task lists be updated.

Conclusions

The following conclusions were drawn based upon the interpretation of the findings of this study:

1. This study provides a basis for the Oklahoma Department of Vocational and Technical Education to deal with the difficult task of providing the appropriate products and services that are considered to be most critical for program quality.

2. The factor analysis makes it possible to group certain areas by factors or clusters. Timely and effective delivery of products and services to vocational educators could perhaps be increased by providing related products and services on a more comprehensive rather than specific basis.

3. The needs of the teachers and administrators may be so vast that the Oklahoma Department of Vocational and Technical Education cannot provide them. The state vocational education agency may have to be dependent on teacher educators and others to provide some of those products and services.

4. Inadequate attention has been given to keeping instructional materials, competency tests, and duty/task lists current.

5. Raw data from this study would provide individual units or divisions a basis for delivering products and services.

6. The Oklahoma Department of Vocational and Technical Education may have to rethink how products and services are being delivered to the field.

7. Based on the review of literature, current legislation, and the results of this study, there appears to be a trend away from state level supervision toward technical assistance and delivery of products and services.

8. Involving the end users of vocational education (the employers) might help to "balance" practitioners' disagreements.

Recommendations

Recommendations for Practice

Based upon the findings of this study, the following recommendations are made:

1. The Oklahoma Department of Vocational and Technical Education should coordinate with teacher educators to provide teacher training on test writing, adapting instructional materials, developing lesson plans, etc. which are tied to current and future educational and technological trends.

2. Priority attention should be given to the highest priority products and services which could be provided on a regional or statewide basis.

3. Efforts should be made to be on the cutting edge of curriculum and test development. Procedures for developing/adapting/adopting these materials in a more timely manner need to be examined.

2. Selected Oklahoma Department of Vocational and Technical Education staff should be surveyed to identify what products and services they feel should be provided to ensure program quality at the local level. The results of this study should then be disseminated to the same staff members. State staff should be surveyed again to determine if they are influenced by the school staff's input.

Research is paramount to remaining abreast of the needs of vocational educators. Data is needed to ensure that decision making does not take place in isolation. The experiences and beliefs of those directly involved in vocational education must be taken into account in order to provide those products and services required for optimum program quality.

BIBLIOGRAPHY

American Vocational Association. (1990). The AVA guide to the Carl D. Perkins Vocational and Applied Technology Education Act of 1990. Alexandria, VA: American Vocational Association.

Balian, E. S. (1982). How to design, analyze, and write doctoral research: The practical guidebook. Washington, D.C.: University Press of America.

Barrick, R. K. (1985). Current and expected roles of agriculture supervisors. The Journal of the AATEA, 44-52.

Benson, A. M. (1978). The role of the Oklahoma State Department of Vocational and Technical Education as perceived by selected administrators and instructors in comprehensive high schools. Unpublished doctoral dissertation, Oklahoma State University, Stillwater.

Brooks, R. J. (1974). A delphi study of parents', teachers', school board members', school administrators', school counselors', and students' perceptions of the roles of vocational and technical education in Oklahoma. Unpublished doctoral dissertation, Oklahoma State University, Stillwater.

Cohen, M. (1987). State boards in an era of reform. Phi Delta Kappan, 69(1), 60-64.

Cyphert, F. R., & Gant, W. L. (1971). The delphi technique: A case study. Phi Delta Kappan, 52(5), 272-273.

Dalkey, N., & Helmer, O. (1963). An experimental application of the delphi method to the use of experts. Management science: Journal of the Institute of Management Sciences, 9(3), 458-467.

Dalkey, N. (1969). The delphi method: An experimental study of group opinion. (Memorandum RM-5888-PR, June). The Rand Corporation.

Dalkey, N. (1972). Studies in the quality of life. Lexington, MA: Lexington Books.

Danzberger, J. P., Carol, L. N., Cunningham, L. L., Kirst, M. W., McCloud, B. A., & Usdan, M. D. (1987). School Boards: The forgotten players on the education team. Phi Delta Kappan, Sept., 53-59.

Delbecq, A. L., Van de Ven, A. H., & Gustafson, D. H. (1975). Group techniques for program planning: A guide to nominal group and delphi processes. Glenview, Il: Scott, Foresman, & Company.

Dillman, D. A. (1978). Mail and telephone surveys: The total design method. New York: John Wiley & Sons.

Educational Services. (1991). Program supervision...A realistic approach: A handbook for occupational supervisors. Stillwater: Oklahoma Department of Vocational and Technical Education (ODVTE).

First, P. F., & Quaglia, R. J. (1990). The evolving roles of state boards of education, state education agencies, and chief state school officers. (Occasional Paper Series, No. 8) University of Maine, College of Education.

Fraenkel, J., & Wallen, N. E. (1990). How to design and evaluate research in education. New York: McGraw-Hill.

Fuhrman, S., Huddle, E., & Armstrong, J. (1986). Improving schools: The state role. Phi Delta Kappan, 67(8), 594-596.

Hadderman, M. L. (1988). State vs. local control of schools. ERIC Clearinghouse on Educational Management. ERIC Digest Series, No. 24.

Hawaii State Board for Vocational Education. (1986). State master plan for vocational education: A foundation document., (rev. ed.). Honolulu: author.

Hoachlander, E. G. (1991). Designing a plan to measure vocational education results. Vocational Education Journal, 20-21, 65.

Huck, S. W., Cormier, W. H., & Bounds, W. G. (1974). Reading statistics and research. New York: Harper & Row.

Illinois State Board of Education. (1990.) The state's role in regulating education: 1990 report and recommendations. (ERIC Document Reproduction Service No. ED320198).

Judd, R. C. (1972). Use of delphi methods in higher education. Technological Forecasting and Social Change. 4, 173-186.

Justices of the Supreme Court (Eds.). (1991). Oklahoma Statutes 1991 (Vol. 5, Title 70, pp. 7048-7050). St. Paul, MN: West Publishing Co.

Kim, J., & Mueller, C. W. (1978). Factor analysis: Statistical methods and practical issues. (A SAGE University Paper Series: Quantitative Applications in the Social Sciences, No. 07-014). Beverly Hills: SAGE Publications.

Linton, M., & Gallo, P. S. Jr. (1975). The practical statistician: Simplified handbook of statistics. Monterey, CA: Brooks\Cole.

McDonnell, L. M., & Zellman, G. L. (1993). Education and training for work in the fifty states: A compendium of state policies. Berkeley: University of California/National Center for Research in Vocational Education.

McKinney, T. H. (1987). Sole state agency: Higher education's response. American Association of Community and Journal Colleges, 57(4), 18-19.

Moss, J. Jr, & Liang, T. (1990). Leadership, leadership development, and the National Center for Research in Vocational Education. Berkeley: University of California/National Center for Research in Vocational Education.

Oklahoma Department of Vocational and Technical Education. (1991). A vision of excellence: Strategic plan for Oklahoma vo-tech. The challenge of change. Stillwater, OK: author.

Oklahoma State Board of Vocational and Technical Education. (1991). FY 92-FY94 Oklahoma state plan for the expenditure of funds received under the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990. Stillwater: Oklahoma Department of Vocational and Technical Education.

Oklahoma State Department of Vocational and Technical Education. (1989). Strategic planning practitioner survey: Results from a modified delphi study conducted during August conference, 1989. (Unpublished report). Stillwater: Research Unit.

Oklahoma Vocational Association. (1993, February). OVAtion.

Orlich, D. C., Clark, P. A., Fagan, N. M., Rust, G. A. (1975). Guide to sensible surveys. Olympia: Washington State Commission for Vocational Education.

Popham, W. J., & Sirotnik, K. A. (1973). Educational statistics: Use and interpretation. New York: Harper & Row.

Ramirez, R., & Swanson, G. (1991). State councils on vocational education bridging the gaps and diminishing the uncertainties. (Working Paper). Berkeley: National Center for Research in Vocational Education. (ERIC Document Reproduction Service No. ED330867)

SAS Institute Inc. (1979). SAS user's guide. Raleigh, N. C.: author.

Siegel, S. (1956). Nonparametric statistics for the behavioral sciences. New York: McGraw-Hill.

State Higher Education Executives Offices (SHEEO). (1987, July). To act as a system: A statement by the SHEEO role and mission task force. Denver, CO: SHEEO.

SPSS Inc. (1983). SPSS^x user's guide: A complete guide to SPSS^x language and operations. New York: McGraw-Hill.

Stone, S. D. (1982). Research: Oklahomans looking ahead. Stillwater: Oklahoma State Department of Vocational and Technical Education, Research Coordinating Unit.

Tabachnick, B. G., & Fidell, L. S. (1983). Using multivariate statistics. New York: Harper & Row.

Weaver, W. T. (1971). The delphi forecasting method. Phi Delta Kappan, 52,(5), 267-271.

West, J. F., & Brown, P. A. (1987). State departments of education policies on consultation in special education: The state of the states. Remedial and Special Education. 8(3).

APPENDIXES

APPENDIX A

CORE STANDARDS AND MEASURES

OF PERFORMANCE

Carl D. Perkins Vocational and Applied Technology Education Act of 1990--Section 115 (b) (1)--measures of learning and competency gains, including student progress in the achievement of basic and more advanced academic skills;

Measure
Pre and posttesting

Standard(s)

Programs Operated by the State Board of Vocational and Technical Education	Programs Operated by the State Board of Regent for Higher Education
The learning and competency gains for student progress in basic and more advanced academic skills is at each posttesting point, each student will demonstrate a modified percentage gain of at least 20% FY93, 40% FY94, 60% FY95, to be achieved in each year respectively over the three year period. The following provisions will be assured: • Adherence to standard testing conditions. • Use of a valid testing instrument. • Inclusion of test items measuring basic skills applicable to the program.	Academic Skills Gain--forty percent modified percentage gain. A score increase which equates to forty percent of the available gain from the pretest score to the maximum score possible. Technical Skills Gain--a modified percentage gain of at least 20% FY93, 40% FY94, 60% FY95 to be achieved in each year respectively over the three year period on both written and any required performance portion from the pretest to the maximum score possible.

Each student who has completed occupation training, under testing conditions appropriate to their special needs, using valid testing instruments, will be competent in at least one occupation.

(A sample of test gain scores will be analyzed each year.)

Carl D. Perkins Vocational and Applied Technology Education Act of 1990--Section 115 (b) (2)--one or more measures of performance, which shall include (a) competency attainment and (b) job or work skill attainment or enhancement including student progress in achieving occupational skills necessary to obtain employment in the field for which the student has been prepared, including occupational skills in the industry the student is preparing to enter;

Measure
Appropriate occupational, written and/or performance test.

Standard(s)

Programs Operated by the State Board of Vocational and Technical Education	Programs Operated by the State Board of Regent for Higher Education
The standard for performance of competency and job or work skill attainment is that 100% of vocational students who complete occupational training will be competent in at least one occupation. Competency for a specific occupation will be achieved when the student scores a minimum of 70% on the cognitive assessment and 100% on the performance assessment.*	Seventy percent of cognitive data and 100% of required performance elements.

Oklahoma standard will be that each student who has completed occupational training, under testing conditions appropriate to their special needs, using valid testing instruments, will be competent in at least one occupation.

(To begin implementation during the 1992-93 school year and have fully implemented by the end of the 1994-95 school year.)

Completion of occupational training will be determined by the instructor.

Carl D. Perkins Vocational and Applied Technology Education Act of 1990--Section 115 (b) (2)--one or more measures of performance, which shall include (c) retention in school or completion of secondary school or its equivalent;

Measure
High school diploma, certificates of completion, equivalency GED.

Standard(s)	
Programs Operated by the State Board of Vocational and Technical Education	**Programs Operated by the State Board of Regent for Higher Education**
The standard for completion rates of secondary schools is that at least 90% of students who complete an approved vocational education program will complete secondary school or its equivalent.	Not applicable

(To be implemented during FY94)

Carl D. Perkins Vocational and Applied Technology Education Act of 1990--Section 115 (b) (2)--one or more measures of performance, which shall include (d) placement into additional training or education, military service, or employment;

Measure
Student completion/follow-up report.

Standard(s)	
Programs Operated by the State Board of Vocational and Technical Education	**Programs Operated by the State Board of Regent for Higher Education**
The standard for placement, based on the known status of all program completors, 90% will be placed in additional education, military, or employment.	Based on the known status of all who have completed applied associate degree or certificate requirements at the institution within the past year, 90% will be in the military, employed or will be continuing their education.

(To be implemented during the 1992-93 school year.)

APPENDIX B

INSTITUTIONAL REVIEW BOARD APPROVAL

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
FOR HUMAN SUBJECTS RESEARCH

Date: 05-12-93   IRB#:   ED-93-096

Proposal Title: A DELPHI STUDY TO IDENTIFY PRODUCTS AND SERVICES
WHICH SHOULD BE PROVIDED BY THE OKLAHOMA DEPARTMENT OF VOCATIONAL
AND TECHNICAL EDUCATION

Principal Investigator(s):   Dr. Mel Miller, Sheila Dobbin Stone,
                                 Dr. Garry Bice

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

APPROVAL STATUS SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW
BOARD AT NEXT MEETING.
APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A
CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR
BOARD APPROVAL.   ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO
BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Reasons for
Deferral or Disapproval are as follows:

Signature: _Marcia L. Tilley_   Date: May 14, 1993
            Chair of Institutional Review Board

APPENDIX C

COVER LETTER AND ROUND-ONE QUESTIONNAIRE

votech

OKLAHOMA DEPARTMENT
OF VOCATIONAL
AND TECHNICAL EDUCATION

April 1, 1993

1 ~

Dear 2 ~ :

The Oklahoma Department of Vocational and Technical Education places a high priority on quality training programs. It is our goal to help you to help students become as well prepared as possible for the work place. This study is designed to obtain information that would be of value to ODVTE staff members in providing needed products and services to further improve the quality of training programs being offered in comprehensive high schools and area vo-tech schools. Thank you for agreeing to participate on our panel of experts.

We would appreciate your answering the open-ended question on the attached sheet and returning it in the enclosed postage-paid reply envelope by 3 ~ . Our fax number is (405) 743-5142 if you prefer to fax your survey form. Responses from the panel of experts will be compiled and sent back to you so that you can rate the products and services as to their importance. We realize your schedule is a busy one and that your time is valuable, but we are sure that you want to help us improve the quality of ODVTE's products and services. We assure you that your responses will be kept strictly confidential.

If you have any questions, please call Sheila Stone at (800) 522-5810 ext. 515 or (405) 743-5515. Thank you for your cooperation.

Sincerely,

Amy Polonchek, Coordinator
Research Division

Sheila Stone, Coordinator
Evaluation/Accreditation Unit

ROUND ONE

What 10 products and/or services should the Oklahoma Department of Vocational and Technical Education be providing to Oklahoma area vocational-technical schools and comprehensive high schools to help promote program improvement? Products might include competency profiles, competency tests, duty/task lists, occupationally specific instructional materials. (If you need materials to be developed for specific occupations, please group them under a broad heading rather than treating them as separate products; e.g., Develop occupationally specific instructional materials for Engine Performance Specialist and Microcomputer Support Technician.) **Services** might include technical assistance in developing IEPs, integrating academics and vocational skills, working with special populations, writing individualized lesson plans, or teaching leadership skills; providing update training workshops; or providing labor and supply data. Please don't limit your responses to those listed above. Feel free to suggest products or services that are not currently being provided.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

Please return this form to Sheila Stone using the envelope provided or by faxing it to (405) 743-5142. Thank you in advance!

APPENDIX D

UNCATEGORIZED RESPONSES FROM ROUND-ONE

QUESTIONNAIRE

Develop a form that students could fill out the first day of class to determine academic/economic disadvantaged.

Occupational cluster independent study material for all marketing areas.

A packet designed for use with co-op students that includes all necessary forms and information needed by teacher.

More audiovisual materials to check out for marketing.

Computer software programs that could be checked out for classroom management and home economics areas.

Training workshops on topics such as writing grant proposals

Training workshops on technical equipment such as sergers.

Updated videos for classroom use in all areas of home economics.

Training workshops for stress management, classroom professionalism, positive faculty relationships, and teacher burnout.

Training workshops for promoting home economics to community (practical ideas that will make a difference).

Training workshops for FHA competitive events to better prepare advisor for training students.

Competency tests.

Integrating academics and vocational skills.

Examples of completed forms required by vo-tech.

Pretest and posttest.

More up-to-date learning activity packages

Core area list

Grant-writing information

More workshops (not just in the summer)

District meetings (This would enable instructors to get together and compare information about programs, etc.)

Pretest/posttest

Computer programs applicable and affordable to specific curriculum.

Hands-on teaching techniques and methods based on curriculum.

Provide more workshops relevant to teaching areas (even old "traditional")

Ag economics material relevant to high school students.

Competency tests

Skill tests

More job profiles

Update training

Leadership skill training

Up-to-date technical resource information in program areas.

Computerized competency profile management system

Teacher in-service and update workshops

Integration of basic skills with each occupational area.

Career resources and assistance in setting up career development centers

Competency test information

Pre and posttest development and inservice

Duty/task lists

Up-to-date curriculum

Inservice and assistance in curriculum development activities

Develop communication system for comprehensive high school administrators equal to (or better than) the one with AVTS administrators

Include comprehensive administrators in training and seminar activities available to AVTS administrators

Provide incentive assistance to the district and inservice training for a vocational or career counselor in comprehensive schools.

Routinely distribute labor and supply data in a practical, usable format

Develop workshops/seminars in the integration of vocational and academic education using specific occupational cluster materials

Conduct periodic regional focus groups on issues/concerns in all vocational institutions (high schools, area schools, junior colleges) and including representatives from all groups

Review literature, monitor progress, and report periodically on trends/projects relative to voc ed (i.e., programs in mentoring, tutoring, applied academics, project learning, apprenticeships, et al.)

Conduct teacher workshops on process of identifying basic skills, pre/posttest process, planning and administering competency tests. Administrator workshops on interpreting and utilizing results.

Review, monitor, and report on alignment of vocational curricula with SDE testing/evaluation process

Continue your already excellent technical assistance programs. Distribute yearly an updated directory of services available and names of contact persons

Technical assistance with the development of Youth Apprenticeship programs

Technical assistance to develop strategies for school-to-work transition for handicapped students

Instructional materials for ATAE programs in health careers

Establish pilot sites to develop curricula through the integration of the SCANS competencies with the new State Learner Outcomes

Labor and supply data -- state and regional

Technical assistance for the integration of academics and vocational programs

Technical assistance for interdisciplinary lesson planning between academic and vocational programs

Technical assistance for the development of career awareness programs in the elementary grades

Technical assistance for the development of career guidance documents and four-year graduation plans

Technical assistance for the selection of aptitude tests and interest inventories

Integrating academics and vocational skills

Working with special populations

Develop specific programs to prepare microcomputer technicians

Competency tests

Provide update training workshops which show relationship between academics and technical skills. Common school educators need more information in this area

Develop quality standards of performance in technical area. Make these available to employers

Develop program that will relate to group decision making, individual decision making, and group problem solving methods

Develop curriculum which will allow high school sophomores, juniors, and seniors to attend the area school for two-hour programs

Develop technical programs which will allow area school programs to be broadcast to common school sites

Develop programs which will allow for area school and common schools to form partnerships which will allow both districts to share each other's assets

Development of program standards to be utilized for program improvement and/or program closing.

Coordination of state-wide effort to identify tasks in specific occupational areas. (Schools would then build curriculum from that list)

Database consistency within ODVTE as it relates to curriculum development (occupational areas vs MAVCC)

Technical assistance -- IEP development, support special needs area

Intern-type program to help area schools prepare employees for administrative leadership positions (ADP, MMP, etc.)

Consistence with teacher education programs as it relates to teacher certification in the occupational areas

Samples of excellent materials utilized in program accreditation process

Up-to-date (within six months) summaries of follow-up, placement, and enrollment information

Labor supply and demand information

Support in the designing and/or purchasing of needed instructional training aids

Increased vocational opportunities for handicapped students. All programs or adapt existing programs to accommodate these students.

Produce video for parents of middle school and high school students to assist in career development

Continue assistance with workshops in teaching strategies; i.e., cooperative learning

advertise existence of speakers (counselors/instructors) to deliver workshops to classrooms and/or faculties to assist in recruitment of students

Supply appropriate test instruments for special programs/populations

Provide funding for Displaced Homemakers in addition to federal funds for transportation and child care

Annual report for available programs and sources of funding for rural populations

Revise and update the SRS system and include training for system operator in each area school

Develop succinct procedural guidelines for vocational IEP addendums

Disseminate information to common schools regarding procedural guidelines for placement of students in vocational programs

Conduct workshops with common school personnel involved with special populations to implement 5 and 6 above

Provide central distribution point at ODVTE for all employment opportunities for vocational personnel

Develop uniform policy and procedures for vocational student organization registrations, conference, and contests

Provide software support for all systems developed and provided by ODVTE

Provide updates of curriculum in a timely manner

Instructional improvement/effective teaching workshops for teachers/instructional leaders

Long-range planning assistance

Information on exemplary, commercially available curriculum products

Networking exemplary practices

Marketing assistance

On-site program reviews with improvement suggestions and technical assistance

Clear policies and technical assistance in service to special populations

"Core" curriculum guides

Environmental scanning, outside intelligence, "Heads-Up" reports

Environmental control, "keeping the dogs at bay"

Small schools need help with their video productions or maybe an inservice on how to use their equipment better

State-level promotion of all vo-techs for student recruitment purposes

Help AVTS establish business and industry partnerships

Provide meaningful workshops at August Conference (also eliminate mid-winter with budget reductions to area schools, many would resent spending money to sponsor mid-winter instead of instructional programs or services)

Placement and followup data in a more timely manner

Occupational specific instructional materials

Materials that enhance joint staff development activities; i.e., comprehensive schools and vo-tech

Screening instruments (program specific)

Duty/task lists

Occupationally specific instructional materials

Vocational instructional materials designed for special populations (special ed students)

Service and technical assistance on integrating academics and vocational skills

Update training workshops

Providing labor market research

Technical assistance in planning (curriculum, operations, etc)

CAD/CAM - Integrated instructional materials and support aids; videos, software, manuals, etc. (specific occupation)

Develop "math for industry" lab including measurements and SPC concepts

Competency tests to correspond to duty/task lists

Tests to accompany Oklahoma Department LAPS

A (help desk) type forum composed of teachers to answer other teachers' questions on computers or software

Teaching leadership skills

More help with getting through to students who don't seem to be interested in learning

Help with understanding what motivates students of different cultures or races

Expanding career search to include a broad scholarship base to keep up with competition

Develop an interest inventory and aptitude test to coordinate with career search occupational clusters

Teaching presentation skills

Updated competency profiles to go with duty/task lists

Writing pretests/posttests

Acquire site license agreements from software manufacturers for student computer-aided instructional programs

Acquire site license agreements from software manufacturers for programs commonly used by teachers

Develop an information sheet that outlines and gives an overview of each occupational competency test developed by the state

Provide computer support specialist who can assist in software selection and networking student-aided instruction programs

Develop computer-aided instruction programs which assist the student in studying for the cognitive part of each state occupational competency test

Develop computer-aided instruction programs which assist the student in preparing for the hands-on component of each state occupational competency test

Provide leadership training workshops for students

Acquire CD-ROM ERIC systems for schools

Do labor market research and provide results to schools

Develop a computer bulletin board to be used by teachers to share information and ideas

Provide software training classes during the year (Windows, Networking, etc)

Upgrade current application software books (through CIMC) (Lotus, Dbase, Dos)

Provide speakers for class

Provide technical support

Provide competency profiles

Provide support in pretesting/posttesting

Help establish rapport with comprehensive schools

Continue with summer conference on specific breakout sessions about what teachers are doing in their programs

Provide update technical workshops

Get curriculum finished in areas mandated by NATEF for certification in programs

Help develop IEPs

Provide videos that interact with curriculum

Provide LAPS for new curriculum

Competency profile for all special population curriculum across the state

Uniform IEP forms for vocational education across the state

Master list of resources for special populations curriculum

Placement not required for special needs population

Special populations exempt from pretest/posttest gains

More conference workshops dealing with special needs populations in T&I division or combine with divisions who do provide quality programs

Workshops (required) for parents of special population students for on-the-job training

Transportation difficulties worked out for special needs students (i.e. major discounts or free cabs)

Video (promotional) for programs for special needs students

Suggestions for incorporating computer-based instruction to programs (health)

Compiled list of related audiovisual materials for Allied Health Careers

Individualized instruction materials for diversified health occupations

Suggestions for equipment and supplies to carry our instructional goals and objectives for health occupations (opportunities to see list of what other schools are purchasing)

Recommendations for safety training

List of all services available to instructors would be extremely helpful

Integrating academics and vocational skills

Test pool for Allied Health

Share the expertise of others (I feel there is so much unnecessary duplication of products and services by instructors. It would be helpful to have access/share materials to save time and utilize the expertise of others.)

Computers and software for programs

Occupationally specific instructional materials

More financial aid specifically designated for certain supplies and equipment

Assistance in working with special populations

Competency profiles

Develop teaching materials and tests that can be graded by a scantron (such as Technology Education has in its modules)

On-site technical assistance when needed in a particular area

APPENDIX E

COVER LETTER AND ROUND-TWO

QUESTIONNAIRE

votech

OKLAHOMA DEPARTMENT
OF VOCATIONAL
AND TECHNICAL EDUCATION

September 1, 1993

1~

Dear 2~:

Thank you for your response to Round One of the Delphi study being conducted by the Oklahoma Department of Vocational and Technical Education to identify those products and services which you feel would help further improve the quality of training programs being offered in comprehensive high schools and area vo-tech schools. Round One responses have been compiled into categories and are listed in the attached questionnaire. We would appreciate your taking a few moments to answer the questionnaire and returning it in the enclosed postage-paid reply envelope by 3~. Our fax number is (405) 743-5541 if you prefer to fax your survey form.

If you cannot locate your original response as you read through the questionnaire and you feel strongly that it should be included, please add it at the end of the survey form. If reading through the list of products and services prompts you to think of additional ones, please add those also. Be sure to rate each of the products/services you add to the list.

We know you are busy with end-of-year activities, so we appreciate even more your willingness to give us a few moments of your time. After the ratings have been tabulated, we will send you a final report of the results of the study. Your input is of great value to us, and we are looking forward to your response. If you have any questions, please call Sheila Stone at (800) 522-5810 ext. 515 or (405) 743-5515. Thank you again for your cooperation.

Sincerely,

Amy Polonchek, Coordinator
Research Division

Sheila Stone, Coordinator
Evaluation/Accreditation Unit

ODVTE PRODUCTS AND SERVICES SURVEY

For each product/service, please circle the appropriate number to indicate how critical it would be for the ODVTE to offer that product/service to vocational instructors/administrators in order to enhance program quality.

	1 Not Necessary	4 Important	7 Critical

Instructional Materials	
1. Up-to-date technical resource supplements	1 2 3 4 5 6 7
2. Updated videos specific to occupational area(s)	1 2 3 4 5 6 7
3. Computer-based instruction specific to occupational area(s)	1 2 3 4 5 6 7
4. Integration of academic and vocational skills in instructional materials	1 2 3 4 5 6 7
5. Computer software programs for classroom management	1 2 3 4 5 6 7
6. Occupationally specific duty/task lists	1 2 3 4 5 6 7
7. Learning activity packages (LAPs)	1 2 3 4 5 6 7
8. Instructional materials relating to decision-making & problem-solving	1 2 3 4 5 6 7
9. Occupationally specific instructional materials	1 2 3 4 5 6 7
10. "Core" curriculum guides	1 2 3 4 5 6 7
11. Teaching materials/tests that can be graded by scantron	1 2 3 4 5 6 7
12. Equipment and supplies lists	1 2 3 4 5 6 7
13. Alignment of vocational curriculum with State Dept of Education testing/evaluation process	1 2 3 4 5 6 7
14. Instructional materials designed for use with special populations	1 2 3 4 5 6 7

Assessment	
15. Pretests/posttests for specific occupational areas	1 2 3 4 5 6 7
16. Competency tests to correspond to duty/task lists	1 2 3 4 5 6 7
17. Tests to accompany ODVTE learning activity packages (LAPs)	1 2 3 4 5 6 7
18. Information sheet/overview of each ODVTE occupational competency test	1 2 3 4 5 6 7
19. Computerized competency profile management system	1 2 3 4 5 6 7
20. Competency profiles that correspond with duty/task lists	1 2 3 4 5 6 7
21. Appropriate test instruments for special populations	1 2 3 4 5 6 7
Coordination	
22. District/regional teachers' meetings to share program information	1 2 3 4 5 6 7
23. Specific breakout sessions at summer conference for sharing program information	1 2 3 4 5 6 7
24. Regional focus groups on issues/concerns of vocational institutions/programs	1 2 3 4 5 6 7
25. Clearinghouse of employment opportunities for vocational education personnel	1 2 3 4 5 6 7
26. Exemplary practices	1 2 3 4 5 6 7
27. Joint staff development activities for comprehensive school and AVTS personnel	1 2 3 4 5 6 7
28. Increased vocational opportunities for students with disabilities	1 2 3 4 5 6 7
29. Consistency between teacher education programs and teacher certification in occupational areas	1 2 3 4 5 6 7

Professional Development	
Training workshops on: 30. Grant proposal writing	1 2 3 4 5 6 7
31. Technical equipment	1 2 3 4 5 6 7
32. Stress management	1 2 3 4 5 6 7
33. Classroom professionalism	1 2 3 4 5 6 7
34. Positive faculty relationships	1 2 3 4 5 6 7
35. Teacher burnout	1 2 3 4 5 6 7
36. Leadership skills for instructors/administrators	1 2 3 4 5 6 7
37. Leadership skills for students	1 2 3 4 5 6 7
38. Identifying basic skills	1 2 3 4 5 6 7
39. Developing pretests/posttests	1 2 3 4 5 6 7
40. Administering competency tests	1 2 3 4 5 6 7
41. Interpreting/utilizing competency test results	1 2 3 4 5 6 7
42. Instructional improvement/effective teaching strategies	1 2 3 4 5 6 7
43. Cultural diversity	1 2 3 4 5 6 7
44. Motivating students	1 2 3 4 5 6 7
45. Presentation skills	1 2 3 4 5 6 7
46. Safety practices	1 2 3 4 5 6 7
47. Curriculum development	1 2 3 4 5 6 7
48. Working with members of special populations	1 2 3 4 5 6 7
49. Developing individualized education programs (IEPs)	1 2 3 4 5 6 7

Training workshops (cont) 50. Designing instructional training aids	1 2 3 4 5 6 7
51. Individualizing instructional materials	1 2 3 4 5 6 7
52. Intern program for preparing staff for administrative leadership roles	1 2 3 4 5 6 7
Computer Support/Telecommunications	
53. Software support for all systems developed and provided by ODVTE	1 2 3 4 5 6 7
54. Site license agreements for commonly used computer software programs	1 2 3 4 5 6 7
55. Computer support specialist to assist in software selection/networking of instructional programs	1 2 3 4 5 6 7
56. Computer-aided instruction programs to assist students in preparing for competency tests	1 2 3 4 5 6 7
57. CD-ROM Eric systems for schools	1 2 3 4 5 6 7
58. Software training classes (Windows, networking, etc)	1 2 3 4 5 6 7
59. Technical programs for broadcasting AVTS programs to comprehensive school sites	1 2 3 4 5 6 7
60. Computer bulletin board to be used by teachers to share information and ideas	1 2 3 4 5 6 7
61. Help-desk type forum composed of teachers to answer other teachers' questions on computers/software	1 2 3 4 5 6 7
Public Relations	
62. Establishing rapport between area vo-tech schools and comprehensive schools	1 2 3 4 5 6 7
63. Promoting local vocational programs to community	1 2 3 4 5 6 7
64. Communication system for comprehensive high school administrators similar to AVTS system	1 2 3 4 5 6 7
65. State-level promotion of area vo-tech schools for student recruitment	1 2 3 4 5 6 7
66. Promotional videos for special needs students	1 2 3 4 5 6 7

Career Development	
67. Career resources and assistance in establishing career development centers	1 2 3 4 5 6 7
68. Inservice training for vocational/career counselor in comprehensive schools	1 2 3 4 5 6 7
69. Technical assistance for development of career awareness programs in elementary grades	1 2 3 4 5 6 7
70. Technical assistance for development of career guidance documents & 4-year graduation plans	1 2 3 4 5 6 7
71. Assistance in selection of aptitude tests and interest inventories	1 2 3 4 5 6 7
72. Video for parents of middle-school & high school students to assist in career development	1 2 3 4 5 6 7
73. Speakers' bureau (counselors/instructors) to assist in recruiting students	1 2 3 4 5 6 7
74. Expansion of Oklahoma Career Search to include broad scholarship base to keep up with competition	1 2 3 4 5 6 7
Technical Assistance	
75. Technical assistance in developing Youth Apprenticeship programs	1 2 3 4 5 6 7
76. Assistance in developing strategies for school-to-work transition for students with disabilities	1 2 3 4 5 6 7
77. Technical assistance for integration of academics and vocational skills	1 2 3 4 5 6 7
78. On-site technical assistance when needed for local program improvement	1 2 3 4 5 6 7
79. Business and industry partnerships with area vo-tech schools	1 2 3 4 5 6 7
80. Long-range planning assistance	1 2 3 4 5 6 7
81. Technical assistance in planning curriculum and operations	1 2 3 4 5 6 7
82. Workshops (required) for parents of special populations students for on-the-job training	1 2 3 4 5 6 7

Planning and Evaluation	
83. Development of program standards to be utilized for program improvement and/or program closing	1 2 3 4 5 6 7
84. Samples of excellent materials utilized in program accreditation process	1 2 3 4 5 6 7
85. On-site program reviews with improvement suggestions and technical assistance	1 2 3 4 5 6 7
86. Reports on trends/projects relevant to vocational education	1 2 3 4 5 6 7
87. Environmental scanning (internal/external considerations for strategic planning)	1 2 3 4 5 6 7
Funding	
88. Funding for Displaced Homemakers in addition to federal funds for transportation & child care	1 2 3 4 5 6 7
89. Annual report on available programs and sources of funding for rural populations .	1 2 3 4 5 6 7
90. More monies designated for specific supplies and equipment	1 2 3 4 5 6 7
91. Transportation difficulties worked out with special needs students (major discounts or free cabs)	1 2 3 4 5 6 7
92. Computers and software for programs	1 2 3 4 5 6 7
93. Funds for instructional training aids	1 2 3 4 5 6 7
94. Funding for job coaches/developers for special needs students for on-the-job training	1 2 3 4 5 6 7
95. Pilot sites for developing curricula through the integration of the SCANS competencies with the new state learner outcomes	1 2 3 4 5 6 7
96. Incentive assistance for vocational/career counselor	1 2 3 4 5 6 7
Vocational Student Organizations	
97. Uniform policy and procedures for VSO registrations, conference, and contests	1 2 3 4 5 6 7
98. Training workshops for competitive events to prepare advisors for training students	1 2 3 4 5 6 7

Reports and Information	
99. Examples of completed forms required by ODVTE	1 2 3 4 5 6 7
100. Packet of forms/information needed for co-op students	1 2 3 4 5 6 7
101. Supply & demand data -- state and regional	1 2 3 4 5 6 7
102. Placement & followup data in timely manner	1 2 3 4 5 6 7
103. Directory of available ODVTE services and names of contact persons	1 2 3 4 5 6 7
104. Procedural guidelines for vocational IEP addendum	1 2 3 4 5 6 7
105. Procedural guidelines for placing students in vocational programs	1 2 3 4 5 6 7
106. Uniform IEP forms for vocational education state-wide	1 2 3 4 5 6 7
Additional Products and Services	
107.	1 2 3 4 5 6 7
108.	1 2 3 4 5 6 7
109.	1 2 3 4 5 6 7
110.	1 2 3 4 5 6 7
111.	1 2 3 4 5 6 7
112.	1 2 3 4 5 6 7
113.	1 2 3 4 5 6 7
114.	1 2 3 4 5 6 7
115.	1 2 3 4 5 6 7

Please return this questionnaire to Sheila Stone using the envelope provided or by faxing it to (405) 743-5142. Thank you in advance!

APPENDIX F

OVERALL MEAN RATINGS FOR DELPHI PANEL

ODVTE PRODUCTS AND SERVICES SURVEY

For each product/service, please circle the appropriate number to indicate how critical it would be for the ODVTE to offer that product/service to vocational instructors/administrators in order to enhance program quality.

	1 Not Necessary	4 Important	7 Critical
Instructional Materials			
1. Up-to-date technical resource supplements	5.863636		
2. Updated videos specific to occupational area(s)	5.636364		
3. Computer-based instruction specific to occupational area(s)	6.000000		
4. Integration of academic and vocational skills in instructional materials	5.636364		
5. Computer software programs for classroom management	5.181818		
6. Occupationally specific duty/task lists	5.545455		
7. Learning activity packages (LAPs)	4.863636		
8. Instructional materials relating to decision-making & problem-solving	5.409091		
9. Occupationally specific instructional materials	5.636364		
10. "Core" curriculum guides	5.681818		
11. Teaching materials/tests that can be graded by scantron	5.095238		
12. Equipment and supplies lists	4.636364		
13. Alignment of vocational curriculum with State Dept of Education testing/evaluation process	5.500000		
14. Instructional materials designed for use with special populations	5.545455		

Assessment	
15. Pretests/posttests for specific occupational areas	5.772727
16. Competency tests to correspond to duty/task lists	5.909091
17. Tests to accompany ODVTE learning activity packages (LAPs)	5.272727
18. Information sheet/overview of each ODVTE occupational competency test	5.454545
19. Computerized competency profile management system	5.454545
20. Competency profiles that correspond with duty/task lists	5.571429
21. Appropriate test instruments for special populations	5.772727
Coordination	
22. District/regional teachers' meetings to share program information	4.500000
23. Specific breakout sessions at summer conference for sharing program information	5.636364
24. Regional focus groups on issues/concerns of vocational institutions/programs	4.818182
25. Clearinghouse of employment opportunities for vocational education personnel	5.090909
26. Exemplary practices	5.476190
27. Joint staff development activities for comprehensive school and AVTS personnel	5.090909
28. Increased vocational opportunities for students with disabilities	5.681818
29. Consistency between teacher education programs and teacher certification in occupational areas	5.454545

Professional Development	
Training workshops on: 30. Grant proposal writing	5.000000
31. Technical equipment	5.500000
32. Stress management	4.363636
33. Classroom professionalism	5.090909
34. Positive faculty relationships	4.954545
35. Teacher burnout	4.727273
36. Leadership skills for instructors/administrators	5.454545
37. Leadership skills for students	5.363636
38. Identifying basic skills	4.636364
39. Developing pretests/posttests	5.318182
40. Administering competency tests	4.909091
41. Interpreting/utilizing competency test results	5.045455
42. Instructional improvement/effective teaching strategies	5.636364
43. Cultural diversity	4.909091
44. Motivating students	5.636364
45. Presentation skills	4.954545
46. Safety practices	5.181818
47. Curriculum development	4.818182
48. Working with members of special populations	5.363636
49. Developing individualized education programs (IEPs)	4.909091

Training workshops (cont) 50. Designing instructional training aids	5.000000
51. Individualizing instructional materials	5.000000
52. Intern program for preparing staff for administrative leadership roles	5.090909
Computer Support/Telecommunications	
53. Software support for all systems developed and provided by ODVTE	5.954545
54. Site license agreements for commonly used computer software programs	6.181818
55. Computer support specialist to assist in software selection/networking of instructional programs	5.772727
56. Computer-aided instruction programs to assist students in preparing for competency tests	6.227273
57. CD-ROM Eric systems for schools	5.333333
58. Software training classes (Windows, networking, etc)	5.590909
59. Technical programs for broadcasting AVTS programs to comprehensive school sites	5.136364
60. Computer bulletin board to be used by teachers to share information and ideas	5.454545
61. Help-desk type forum composed of teachers to answer other teachers' questions on computers/software	5.500000
Public Relations	
62. Establishing rapport between area vo-tech schools and comprehensive schools	5.727273
63. Promoting local vocational programs to community	6.045455
64. Communication system for comprehensive high school administrators similar to AVTS system	5.772727
65. State-level promotion of area vo-tech schools for student recruitment	5.761905
66. Promotional videos for special needs students	5.500000

Career Development	
67. Career resources and assistance in establishing career development centers	5.227273
68. Inservice training for vocational/career counselor in comprehensive schools	6.227273
69. Technical assistance for development of career awareness programs in elementary grades	5.636364
70. Technical assistance for development of career guidance documents & 4-year graduation plans	5.772727
71. Assistance in selection of aptitude tests and interest inventories	5.181818
72. Video for parents of middle-school & high school students to assist in career development	5.363636
73. Speakers' bureau (counselors/instructors) to assist in recruiting students	5.227273
74. Expansion of Oklahoma Career Search to include broad scholarship base to keep up with competition	5.590909
Technical Assistance	
75. Technical assistance in developing Youth Apprenticeship programs	5.318082
76. Assistance in developing strategies for school-to-work transition for students with disabilities	5.500000
77. Technical assistance for integration of academics and vocational skills	5.772727
78. On-site technical assistance when needed for local program improvement	5.590909
79. Business and industry partnerships with area vo-tech schools	5.333333
80. Long-range planning assistance	5.090909
81. Technical assistance in planning curriculum and operations	4.727273
82. Workshops (required) for parents of special populations students for on-the-job training	5.181818

Planning and Evaluation	
83. Development of program standards to be utilized for program improvement and/or program closing	5.045455
84. Samples of excellent materials utilized in program accreditation process	5.545455
85. On-site program reviews with improvement suggestions and technical assistance	4.863636
86. Reports on trends/projects relevant to vocational education	5.090909
87. Environmental scanning (internal/external considerations for strategic planning)	4.83636
Funding	
88. Funding for Displaced Homemakers in addition to federal funds for transportation & child care	4.772727
89. Annual report on available programs and sources of funding for rural populations	5.318182
90. More monies designated for specific supplies and equipment	5.409091
91. Transportation difficulties worked out with special needs students (major discounts or free cabs)	4.636364
92. Computers and software for programs	6.000000
93. Funds for instructional training aids	5.818182
94. Funding for job coaches/developers for special needs students for on-the-job training	5.318182
95. Pilot sites for developing curricula through the integration of the SCANS competencies with the new state learner outcomes	5.272727
96. Incentive assistance for vocational/career counselor	5.227273
Vocational Student Organizations	
97. Uniform policy and procedures for VSO registrations, conference, and contests	5.454545
98. Training workshops for competitive events to prepare advisors for training students	4.863636

Reports and Information	
99. Examples of completed forms required by ODVTE	5.363636
100. Packet of forms/information needed for co-op students	4.476190
101. Supply & demand data -- state and regional	5.181818
102. Placement & followup data in timely manner	5.727273
103. Directory of available ODVTE services and names of contact persons	6.090909
104. Procedural guidelines for vocational IEP addendum	5.318182
105. Procedural guidelines for placing students in vocational programs	5.227273
106. Uniform IEP forms for vocational education state-wide	5.272727
Additional Products and Services	
107.	
108.	
109.	
110.	
111.	
112.	
113.	
114.	
115.	

APPENDIX G

COVER LETTER AND SURVEY QUESTIONNAIRE

votech
OKLAHOMA DEPARTMENT
OF VOCATIONAL
AND TECHNICAL EDUCATION

May 26, 1993

1 ~

Dear 2 ~ :

We need your help!!!

The Oklahoma Department of Vocational and Technical Education (ODVTE) places a high priority on quality training programs. It is our goal to help you to help students become as well prepared as possible for the work place. This study is designed to obtain information that would be of value to ODVTE staff members in providing needed products and services to further improve the quality of training programs being offered in comprehensive high schools and area vo-tech schools.

You can help us help you by rating the importance of those products/services listed on the enclosed questionnaire and returning the questionnaire in the postage-paid reply envelope by June 7, 1993. (If there are additional products or services which you feel should be offered to enhance program quality, please list them at the end of the questionnaire.) Our fax number is (405) 743-5142 if you prefer to fax your survey form. We realize your schedule is a busy one and that your time is valuable, but we are sure that you want to help us improve the quality of ODVTE's products and services. We assure you that your responses will be kept strictly confidential.

If you have any questions, please call Sheila Stone at (800) 522-5810 ext. 515 or (405) 743-5515. Thank you for your cooperation.

Sincerely,

Amy Polonchek, Coordinator
Research Division

Sheila Stone, Coordinator
Evaluation/Accreditation Unit

ODVTE PRODUCTS AND SERVICES SURVEY

Please circle the appropriate number to indicate how critical it would be for the ODVTE to offer each of the following products and services to vocational instructors/administrators in order to enhance program quality.

	1 Not Necessary	3 Important	5 Critical
Instructional Materials			
1. Up-to-date technical resource supplements	1 2 3 4 5		
2. Updated videos specific to occupational area(s)	1 2 3 4 5		
3. Computer-based instruction specific to occupational area(s)	1 2 3 4 5		
4. Integration of academic and vocational skills in instructional materials	1 2 3 4 5		
5. Computer software programs for classroom management	1 2 3 4 5		
6. Occupationally specific duty/task lists	1 2 3 4 5		
7. Instructional materials relating to decision-making & problem-solving	1 2 3 4 5		
8. Occupationally specific instructional materials	1 2 3 4 5		
9. "Core" curriculum guides	1 2 3 4 5		
10. Teaching materials/tests that can be graded by scantron	1 2 3 4 5		
11. Alignment of vocational curriculum with State Dept of Education testing/evaluation process	1 2 3 4 5		
12. Instructional materials designed for use with special populations	1 2 3 4 5		
Assessment			
13. Pretests/posttests for specific occupational areas	1 2 3 4 5		
14. Competency tests to correspond to duty/task lists	1 2 3 4 5		
15. Tests to accompany ODVTE learning activity packages (LAPs)	1 2 3 4 5		
16. Information sheet/overview of each ODVTE occupational competency test	1 2 3 4 5		
17. Computerized competency profile management system	1 2 3 4 5		
18. Competency profiles that correspond with duty/task lists	1 2 3 4 5		

19. Appropriate test instruments for special populations	1 2 3 4 5
Coordination	
20. Specific breakout sessions at summer conference for sharing program information	1 2 3 4 5
21. Clearinghouse of employment opportunities for vocational education personnel	1 2 3 4 5
22. Exemplary practices	1 2 3 4 5
23. Joint staff development activities for comprehensive school and AVTS personnel	1 2 3 4 5
24. Increased vocational opportunities for students with disabilities	1 2 3 4 5
25. Consistency between teacher education programs and teacher certification in occupational areas	1 2 3 4 5
Professional Development	
Training workshops on: 26. Technical equipment	1 2 3 4 5
27. Classroom professionalism	1 2 3 4 5
28. Leadership skills for instructors/administrators	1 2 3 4 5
29. Leadership skills for students	1 2 3 4 5
30. Developing pretests/posttests	1 2 3 4 5
31. Instructional improvement/effective teaching strategies	1 2 3 4 5
32. Motivating students	1 2 3 4 5
33. Safety practices	1 2 3 4 5
34. Working with members of special populations	1 2 3 4 5
35. Intern program for preparing staff for administrative leadership roles	1 2 3 4 5
Computer Support/Telecommunications	
36. Software support for all systems developed and provided by ODVTE	1 2 3 4 5
37. Site license agreements for commonly used computer software programs	1 2 3 4 5
38. Computer support specialist to assist in software selection/networking of instructional programs	1 2 3 4 5
39. Computer-aided instruction programs to assist students in preparing for competency tests	1 2 3 4 5
40. CD-ROM Eric systems for schools	1 2 3 4 5
41. Software training classes (Windows, networking, etc)	1 2 3 4 5

42. Technical programs for broadcasting AVTS programs to comprehensive school sites	1 2 3 4 5
43. Computer bulletin board to be used by teachers to share information and ideas	1 2 3 4 5
44. Help-desk type forum composed of teachers to answer other teachers' questions on computers/software	1 2 3 4 5
Public Relations	
45. Establishing rapport between area vo-tech schools and comprehensive schools	1 2 3 4 5
46. Promoting local vocational programs to community	1 2 3 4 5
47. Communication system for comprehensive high school administrators similar to AVTS system	1 2 3 4 5
48. State-level promotion of area vo-tech schools for student recruitment	1 2 3 4 5
49. Promotional videos for special needs students	1 2 3 4 5
Career Development	
50. Career resources and assistance in establishing career development centers	1 2 3 4 5
51. Inservice training for vocational/career counselor in comprehensive schools	1 2 3 4 5
52. Technical assistance for development of career awareness programs in elementary grades	1 2 3 4 5
53. Technical assistance for development of career guidance documents & 4-year graduation plans	1 2 3 4 5
54. Assistance in selection of aptitude tests and interest inventories	1 2 3 4 5
55. Video for parents of middle-school & high school students to assist in career development	1 2 3 4 5
56. Speakers' bureau (counselors/instructors) to assist in recruiting students	1 2 3 4 5
57. Expansion of Oklahoma Career Search to include broad scholarship base to keep up with competition	1 2 3 4 5
Technical Assistance	
58. Technical assistance in developing Youth Apprenticeship programs	1 2 3 4 5
59. Assistance in developing strategies for school-to-work transition for students with disabilities	1 2 3 4 5
60. Technical assistance for integration of academics and vocational skills	1 2 3 4 5
61. On-site technical assistance when needed for local program improvement	1 2 3 4 5
62. Business and industry partnerships with area vo-tech schools	1 2 3 4 5
63. Long-range planning assistance	1 2 3 4 5
64. Workshops (required) for parents of special populations students for on-the-job training	1 2 3 4 5

Planning and Evaluation	
65. Samples of excellent materials utilized in program accreditation process	1 2 3 4 5
66. Reports on trends/projects relevant to vocational education	1 2 3 4 5
Funding	
67. Annual report on available programs and sources of funding for rural populations	1 2 3 4 5
68. More monies designated for specific supplies and equipment	1 2 3 4 5
69. Computers and software for programs	1 2 3 4 5
70. Funds for instructional training aids	1 2 3 4 5
71. Funding for job coaches/developers for special needs students for on-the-job training	1 2 3 4 5
72. Pilot sites for developing curricula through the integration of the SCANS competencies with the new state learner outcomes	1 2 3 4 5
73. Incentive assistance for vocational/career counselor	1 2 3 4 5
Vocational Student Organizations	
74. Uniform policy and procedures for VSO registrations, conferences, and contests	1 2 3 4 5
Reports and Information	
75. Examples of completed forms required by ODVTE	1 2 3 4 5
76. Supply & demand data -- state and regional	1 2 3 4 5
77. Placement & followup data in timely manner	1 2 3 4 5
78. Directory of available ODVTE services and names of contact persons	1 2 3 4 5
79. Procedural guidelines for vocational IEP addendum	1 2 3 4 5
80. Procedural guidelines for placing students in vocational programs	1 2 3 4 5
81. Uniform IEP forms for vocational education state-wide	1 2 3 4 5
Additional Products and Services (Please list.)	
82.	1 2 3 4 5
83.	1 2 3 4 5
84.	1 2 3 4 5
85.	1 2 3 4 5

APPENDIX H

FOLLOWUP LETTER

votech

OKLAHOMA DEPARTMENT
OF VOCATIONAL
AND TECHNICAL EDUCATION

June 15, 1993

Dear Vocational Instructor:

We still need your help!!!

During the last week of May, you received a questionnaire from the Oklahoma Department of Vocational and Technical Education (ODVTE) asking for your assistance in identifying those products and services which we should be providing you and your school to help students become as well prepared as possible for the work place. In order to obtain as much input as possible, we have extended the deadline until June 21, 1993. The results of this study should be beneficial to all instructors.

If you have already returned your completed questionnaire to us, thank you. If not, you can still help us help you by rating the importance of those products/services listed on the enclosed questionnaire and returning the questionnaire in the postage-paid reply envelope by June 21, 1993. (If there are additional products or services which you feel should be offered to enhance program quality, please list them at the end of the questionnaire.) We realize your schedule is a busy one and that your time is valuable, but we are sure that you want to help us improve the quality of ODVTE's products and services. Completing the questionnaire should only take 5 to 10 minutes. We assure you that your responses will be kept strictly confidential.

If you have any questions, please call Sheila Stone at (800) 522-5810 ext. 515 or (405) 743-5515. Thank you for your cooperation.

Sincerely,

Amy Polonchek, Coordinator
Research Division

Sheila Stone, Coordinator
Evaluation/Accreditation Unit

Enclosures: ODVTE Products/Survey Questionnaire
                Postage-Paid Reply Envelope

APPENDIX I

MEANS AND STANDARD DEVIATIONS FOR

PRODUCTS AND SERVICES AS RATED

BY EACH OF THE FOUR

RESPONSE GROUPS

Products and Services	Administrators				Instructors			
	AVTS		High School		AVTS		High School	
	Mean N=20	S.D.	Mean N=93	S.D.	Mean N=99	S.D.	Mean N=144	S.D.
1. Up-to-date technical resource supplements	3.700	1.031	3.914	0.893	3.786	1.105	3.986	0.919
2. Updated videos specific to occupational area(s)	3.600	1.046	3.796	0.815	4.182	0.908	4.090	0.827
3. Computer-based instruction specific to occupational area(s)	3.650	0.745	4.086	0.816	3.794	1.216	3.785	0.976
4. Integration of academic and vocational skills in instructional materials	4.050	0.686	4.086	0.893	3.745	0.988	3.993	0.835
5. Computer software programs for classroom management	3.550	1.276	3.763	0.865	3.293	1.197	3.556	1.089
6. Occupationally specific duty/task lists	4.350	0.875	3.376	0.977	3.557	1.216	3.163	1.046
7. Instructional materials relating to decision-making/problem solving	3.450	0.826	3.624	0.966	3.551	1.037	3.778	0.942
8. Occupationally specific instructional materials	4.400	0.745	3.763	0.786	3.816	1.029	3.618	0.901
9. "Core" curriculum guides	4.050	0.826	3.871	0.958	3.633	1.170	4.028	0.982
10. Teaching materials/tests that can be graded by scantron	4.000	0.918	3.075	1.200	3.776	1.248	3.268	1.399
11. Alignment of vocational curriculum with SDE testing/evaluation process	4.150	1.040	4.129	0.981	3.866	1.264	4.007	1.007
12. Instructional materials designed for use with special populations	3.600	0.821	3.402	1.028	2.929	1.178	3.343	1.062
13. Pretests/posttests for specific occupational areas	4.150	1.089	3.720	1.077	3.557	1.307	3.757	1.219
14. Competency tests to correspond to duty/task lists	4.600	0.598	3.774	0.979	3.753	1.291	3.715	1.049
15. Tests to accompany ODVTE learning activity packages (LAPs)	3.850	0.813	3.624	0.908	3.361	1.332	3.535	1.043
16. Information sheet/overview of each ODVTE occupational competency test	3.750	0.910	3.462	0.841	3.577	1.206	3.441	1.039
17. Computerized competency profile management system	3.632	0.895	3.366	0.818	3.260	1.324	3.338	1.166
18. Competency profiles that correspond with duty/task lists	4.053	0.705	3.473	0.892	3.625	1.332	3.347	1.073
19. Appropriate test instruments for special populations	3.632	0.684	3.275	0.955	2.969	1.226	3.294	1.156
20. Specific breakout sessions at summer conference for sharing program information	3.700	0.801	3.457	0.882	3.677	1.123	3.636	1.011
21. Clearinghouse of employment opportunities for vocational education personnel	3.150	0.875	3.228	1.017	3.505	1.091	3.692	0.929
22. Exemplary practices	3.500	0.924	3.385	0.916	3.034	1.033	3.226	0.840
23. Joint staff development activities for comprehensive school/AVTS personnel	3.650	0.988	3.413	1.029	3.041	1.175	3.168	1.035
24. Increased vocational opportunities with disabilities	3.450	0.826	3.587	0.951	3.125	1.029	3.317	0.948
25. Consistency between teacher education programs and teacher certification	4.500	0.688	3.946	0.894	3.823	1.036	3.634	0.964
26. Training workshop on technical equipment	3.950	0.887	3.859	0.909	3.515	1.191	3.709	1.052
27. Training workshop on classroom professionalism	3.900	0.788	3.815	0.960	3.165	1.106	3.218	1.011
28. Training workshop of leadership skills for instructors/administrators	4.050	0.686	3.837	0.964	3.216	1.063	3.538	0.991
29. Training workshop of leadership skills for students	3.350	0.587	3.935	0.823	3.439	0.931	3.902	0.842
30. Training workshop on developing pretest/posttest	4.000	0.795	3.611	0.944	3.103	1.303	3.476	1.119
31. Training workshop on instructional improvement/effective teaching strategies	4.450	0.686	4.033	0.836	3.531	1.027	3.830	0.941
32. Training workshop on motivating students	4.000	0.973	4.141	0.846	3.765	1.063	4.028	0.934
33. Training workshop of safety practices	3.450	1.099	4.076	0.986	3.505	1.128	3.713	1.032
34. Training workshop on working with members of special populations	3.700	0.865	3.489	0.896	2.969	1.075	3.345	1.105

Products and Services	Administrators				Instructors			
	AVTS		High School		AVTS		High School	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
35. Intern program for preparing staff for administrative leadership roles	3.850	0.745	3.337	1.030	2.947	1.105	3.336	1.123
36. Software support for all systems developed and provided by ODVTE	3.900	1.021	4.054	0.830	3.577	1.135	3.752	0.987
37. Site license agreements for commonly used computer software programs	4.150	0.933	3.880	0.862	3.619	1.141	3.599	1.032
38. Computer support specialist to assist in software selection/networking of instructional programs	3.500	1.051	3.783	0.900	3.453	1.218	3.552	1.059
39. Computer-aided instruction programs to assist students in preparing for competency tests	3.900	1.071	3.750	0.820	3.604	1.128	3.587	0.981
40. CD-ROM Eric systems for schools	2.895	0.937	3.567	0.925	3.138	1.222	3.176	1.108
41. Software training classes (Windows, networking, etc.)	3.200	1.196	3.783	0.823	3.589	1.207	3.524	1.093
42. Technical programs for broadcasting AVTS programs to comprehensive school sites	2.842	1.068	3.121	1.094	3.063	1.128	2.838	1.076
43. Computer bulletin board to be used by teachers to share information & ideas	2.950	0.759	3.132	1.013	3.289	1.060	3.134	1.053
44. Help-desk type forum composed of teachers to answer other teachers' questions on computers/software	2.950	0.887	3.308	0.985	3.021	1.031	3.063	1.067
45. Establishing rapport between area vo-tech schools and comprehensive schools	4.100	1.165	3.891	0.988	3.889	1.106	3.556	1.145
46. Promoting local vocational programs to community	4.250	1.164	3.859	0.944	4.152	1.014	4.126	0.887
47. Communication system for comprehensive high school administrators similar to AVTS system	3.737	1.147	3.696	1.046	3.763	1.057	3.539	1.025
48. State-level promotion of area vo-tech schools for student recruitment	4.450	0.826	3.337	1.112	4.162	0.987	3.128	1.176
49. Promotional videos for special needs students	3.263	1.046	3.391	1.069	3.173	1.176	3.268	1.038
50. Career resources/assistance in establishing career development centers	3.150	0.745	3.681	0.893	3.211	1.020	3.552	0.969
51. Inservice training for vocational/career counselor in comprehensive schools	4.050	0.686	3.725	0.932	3.625	1.107	3.727	0.936
52. Technical assistance for development of career awareness programs in elementary grades	3.600	1.095	3.363	1.049	3.216	1.063	3.315	1.024
53. Technical assistance for development of career guidance documents & 4-year graduation plans	4.000	0.882	3.626	0.962	3.333	1.002	3.524	0.933
54. Assistance in selection of aptitude tests and interest inventories	3.050	0.887	3.264	0.929	3.196	0.975	3.514	0.973
55. Video for parents of middle-school & high school students to assist in career development	3.600	0.995	3.560	1.098	3.608	1.056	3.667	0.939
56. Speakers' bureau (counselors/instructors) to assist in recruiting students	3.250	1.020	3.121	1.124	3.619	1.075	3.359	1.074
57. Expansion of Oklahoma Career Search to include broad scholarship base to keep up with competition	3.350	0.587	3.769	0.955	3.635	1.027	3.796	0.993
58. Technical assistance in developing Youth Apprenticeship programs	3.500	0.946	3.385	0.952	3.567	1.136	3.291	0.953
59. Assistance in developing strategies for school-to-work transition for students with disabilities	3.200	0.951	3.473	0.911	3.316	1.080	3.322	0.924
60. Technical assistance for integration of academic and vocational skills	3.900	1.021	3.659	0.859	3.552	1.014	3.674	0.945

Products and Services	Administrators				Instructors			
	AVTS		High School		AVTS		High School	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
61. On-site technical assistance when needed for local program improvement	3.600	1.095	3.648	0.861	3.531	0.997	3.683	0.999
62. Business and industry partnerships with area vo-tech schools	3.600	1.142	3.473	1.015	4.111	0.946	3.406	1.121
63. Long-range planning assistance	3.200	1.005	3.505	0.861	3.392	1.026	3.433	1.002
64. Workshops (required) for parents of special populations students for on-the-job training	3.300	0.865	3.220	1.133	3.289	1.050	3.190	1.142
65. Samples of excellent material utilized in program accreditation process	3.250	0.967	3.559	0.938	3.448	1.025	3.528	0.965
66. Reports on trends/projects relevant to vocational education	3.700	0.571	3.398	0.980	3.255	1.058	3.430	1.075
67. Annual report of available programs and sources of funding for rural populations	3.400	0.995	3.892	0.914	3.305	1.082	4.014	0.982
68. More monies designated for specific supplies and equipment	4.000	0.858	4.247	0.803	4.062	0.852	4.528	0.719
69. Computers and software for programs	4.150	0.875	4.355	0.747	4.020	1.157	4.280	0.938
70. Funds for instructional training aids	4.300	0.657	4.151	0.765	4.102	0.879	4.285	0.898
71. Funding for job coaches/developers for special needs students for on-the-job training	3.550	1.146	3.559	1.058	3.133	1.163	3.441	1.098
72. Pilot sites for developing curricula through the integration of the SCANS competencies with the new state learner outcomes	3.250	0.910	3.667	1.004	3.151	1.103	3.532	1.125
73. Incentive assistance for vocational/career counselor	3.850	0.671	3.559	1.137	3.138	1.132	3.500	1.154
74. Uniform policy and procedures for VSO registrations, conferences, and contests	4.200	1.105	3.391	1.016	3.589	1.207	3.585	1.262
75. Examples of completed forms required by ODVTE	3.750	0.786	3.613	0.967	3.434	1.171	3.701	1.116
76. Supply and demand data -- state and regional	3.684	0.749	3.247	0.880	3.208	1.015	3.345	1.155
77. Placement and follow-up data in timely manner	4.200	0.616	3.269	0.849	3.378	1.041	3.248	1.160
78. Directory of available ODVTE services and names of contact persons	3.750	0.910	3.581	0.936	3.724	1.053	3.690	0.983
79. Procedural guidelines for vocational IEP addendum	3.900	1.119	3.527	0.985	3.232	1.005	3.413	1.030
80. Procedural guidelines for placing students in vocational programs	3.900	0.968	3.398	0.874	3.427	1.103	3.483	0.941
81. Uniform IEP forms for vocational education state-wide	3.950	1.099	3.645	1.028	3.340	1.135	3.464	1.109

APPENDIX J

WRITTEN COMMENTS OF AREA VOCATIONAL-

TECHNICAL SCHOOL ADMINISTRATORS

IN RESPONSE TO SURVEY

Written Comments of Area Vocational-Technical School Administrators:

Q1   (circled resource) I really do not know what is meant; specific programs
Q4   5*
Q6   Tied to state curriculum materials!
     5*
Q8   5*
Q9   (underlined guide?)
Q11 and ASE etc (Marked a 7)
     updated rather than outdated
Q13 If current
Q14 Up-to-date competency tests
     If current
Q13 & 14 Some of the existing duty/task lists are terrible - including outdated skills -
         update, please!
Q17 ?
Q21 personnel graduates or teachers
Q22 ?
Q25 5* (2 responses)
Q26-34Summer Conference Possibilities
Q35 inserted word vocational before administrative 5*
Q42 Don't understand. What is this?
Q47 ?
Q48 (rated a 7)
     Big item (circled entire rating scale and placed **)
Q49 Need more information on emphasis.
Q53 (4-year graduation plans attending vo-techs)
     ?
Q55 5*
Q67 and urban populations
Q70 5*
Q71 5*
Q73 4*
Q74 Develop national contests horticulture
     5*
Q77 Change to 3-5 year followups
Q79 (circled addendum)
Q81 5*

Additional:
Inservice on tying state curriculum to duty task list and competency tests
Program teachers' input into test questions on competency tests
Better reporting procedure for competency tests
Curriculum is the most critical
Tests that are consistent with updated competencies

APPENDIX K

WRITTEN COMMENTS OF COMPREHENSIVE

HIGH SCHOOL ADMINISTRATORS

IN RESPONSE TO SURVEY

Written Comments of Comprehensive High School Administrators:

Q10 5 If you have the service
Q11 5+++
     Critical!
Q18 5+++
Q23 very much so
Q39 yes!!
Q48 yes!
Q52 yes!
Q55 *!!
Q60 yes!
Q72 yes!
Q78 yes!

Additional:
More on-site technical (computer) assistance to local schools
All forms/reports to SDVTE coordinated with State Department of Education - no duplication
Less paper = more progress
If you want information from a local school, come to the site
Workshops for administrators and secretaries to work CARL
Pretest/posttest program is a waste of the instructors' time. This time could be spent with students.
Applied academics - materials and workshops!
ODVTE - Availability by phone (more 1-800 lines)
Streamline paperwork - not more paperwork - streamline it
State-level promotion of high school programs for student recruitment and public relations
Provide full funding for your courses

APPENDIX L

WRITTEN COMMENTS OF AREA VOCATIONAL-

TECHNICAL SCHOOL INSTRUCTORS

IN RESPONSE TO SURVEY

Written Comments of Area Vo-Tech School Instructors:

Q1   (*circled up-to-date*) (BE)
        Impossible (BE)
Q2   (*circled up-to-date*) (BE)
Q4   ?? (T&I)
Q6   Have (BE)
Q9   If updated without so much waiting (HEc)
        Have (BE)
Q10   Yes (HEc)
        Very (T&I)
Q11   5* (T&I)
        Of course! (HEc)
        Vice versa: Alignment of State Department of Education testing/evaluation process with vocational curriculum (BE)
        Have (BE)
Q12   Hearing impaired (BE)
Q13   Have (BE)
        N/A; too many business areas (BE)
Q14   Only if curriculum follows SAME duty/task list (HOE)
        Have (BE)
Q15   If updated (HEc)
Q18   (circled *duty/task lists*) and duty task to curriculum need to be unified in CARL (HEc)
        Have (BE)
Q19   Possibly identifying reading levels etc. of modification (HEc)
        Especially hearing impaired (BE)
Q20   Interprogram or over a vocation? (T&I)
        Child Care specific; General Home Ec not as helpful (HEc)
Q22   Example; illustration ? (T&I)
        ??? (T&I) (3 responses)
        ?? (unknown)
        ? (BE)
Q23   We already do this. (HEc)
Q24   All students have abilities and disabilities (HOE)
Q30   Part of teacher education
Q36   Don't have a computer (HEc)
Q36-Q44 N/A (T&I)
Q37   5+ (T&I)
Q39   5+ (T&I)
Q40   5+ (T&I)
        ? What! (T&I)
        ? (HOE)
Q41   5+ (T&I)
        Available at most AVTSs (HOE)
Q45   This should be district not State Department (HEc)
Q46   District (HEc)

Q47   ? (T&I)
       ? (HOE)
       ? (HEc)
Q48   5+ (T&I)
Q50   ?? (T&I)
Q51   ? (HOE)
Q52   ? (HOE)
Q53   ? (HOE)
Q54   ? (HOE)
Q55   ? (HOE)
Q56   ? (HOE)
Q57   ?? (T&I)
       ? (HOE)
Q58   5+ (T&I)
       ?? (T&I)
       ? (HOE)
Q59   (deleted *with disabilities*) (T&I)
Q62   5+++ (T&I)
Q64   Required? Does this mean if a parent can't or won't attend, the student loses? (HOE)
Q67   (circled *rural*) (HOE)
Q68   5++++++ (T&I)
Q71   5+ (T&I)
       5* (HEc)
Q72   ?? (T&I)
       ? (BE)
Q73   ? (HOE)
Q74   5+ (T&I)
       Great, if $ available (HEc)
       ?????? (BE)
Q75   5+ (T&I)
Q76   ? (T&I)
Q77   5+ (T&I)
Q78   "techies" at every level, staff/administration (BE)
Q79   ? (T&I)
Q81   5* (HEc)

Additional:
Dump state occupational testing for national occupational certification. (T&I)
Dump state occupational testing for state occupational certification. (T&I)
Identify existing occupational certification by private sector. (T&I)
State-mandated written tests should be "proofed" by "competent" auto mechanics instructor "before" administered. (T&I)
Have "voice" in selecting a "competent" liaison officer. (T&I)
More needs to be done to get students ready to get a job (T&I)
More money made specific for updating equipment (T&I)
Students and special population (SAME) (T&I)

Funding for assistants in Marketing programs (Mktg)

Fund equipment and instructor training. (T&I)

Lessen the bureaucracy and paperwork that wastes time and money. (T&I)

Convince the population AND higher education that vo-tech solves economic problems. (T&I)

Instructor materials which Match the Department of Labor materials (T&I)

The State Department of Vo-Tech is doing an excellent job, please keep up the good work. (T&I)

Less state funds and resources spent at state level. Oklahoma vo-tech's strong point has been "localization" not state-mandated curriculum (T&I)

Workshop - working with adult/high school students together (T&I)

Funding for teaching assistants (T&I)

Reduction of class size (T&I)

More tech updates!!!! (T&I)

Teacher assistants to help with clerical duties (HEc)

Counselors for student problems (HEc)

How about adult education workshop? It is not a requirement for vocational teachers. (BE)

APPENDIX M

WRITTEN COMMENTS OF COMPREHENSIVE HIGH

SCHOOL INSTRUCTORS IN RESPONSE

TO SURVEY

Written comments of Comprehensive High School Instructors:

Q3   This would be nice if you have a computer. (unknown)

Q5   This would be nice if you have a computer. (unknown)

Q10   ? (Ag)
       NA (HEc)

Q11   Very critical (Ag)

Q15   ? (T&I)
       NA (HEc)

Q16   Don't know (T&I)

Q17   NA (HEc)
       This would be nice. If you have a computer. (unknown)

Q21   Very important! (unknown)

Q22   Unclear (HEc)
       Don't know (T&I)
       Not clear what you specify here. (unknown)

Q23   Need More!!!

Q25   ? (BE)
       Why? You must be experienced first, a teacher second. (unknown)

Q35   NA (HEc)
       Vo-Tech schools dictating (Ag)

Q36   Send computers with software (unknown)

Q40   ? (2 responses) (Ag)

Q44   Very important (unknown)

Q43   Toll free (BE)

Q45   Need More!! (HEc)

Q46   in community not vo-tech (unknown)
       Local (Ag)

Q51   (was rated a 3 but *and teachers* was written in and rated a 5) (BE)

Q57   This is very important (unknown)

Q58   ? (BE)
       You must first decide what a Youth Apprenticeship Program is! When you do, this will be critical. (unknown)

Q59   I question that a vocational teacher is also a social worker. (unknown)

Q60   Very important (Ag)

Q61   Need funding

Q63   This would be good. Use the vo-tech model. (unknown)

Q64   ?

Q66   This is important so we can modify the program to meet overall needs. (unknown)

Q68   6
       5* (Mktg)
       Computers and special industrial equipment (unknown)

Q69   Much of what is taught by book can be done with interactive computer programs. (unknown)

Q71   (word *coaches* underlined twice and circled) (Ag)

Q72   Not clear what these are. N/A (unknown)

Q74   No (Ag)
Q76   ? (BE)
Q78   I like this a lot. (unknown)

Additional:
Answered all I felt I knew enough about to answer (T&I)
Matching money for comprehensive Home Economics programs (HEc)
Update core curriculum more often (Ag)
Interscholastics (speech and contests) in area vo-tech schools (Ag)
Advice, visits, and help by vo-tech people such as Don Roberts (Ag)
Pretests/posttests for Home Economics Areas (HEc)
State level promotion of comprehensive schools' vocational programs (BE)
Business and industry partnerships with comprehensive schools (BE)
Assistance in department remodeling both in suggestions and funding -- helping comprehensive schools point out what funding we generate in order to allow some monies to be spent on our programs. (HEc)
More interest in the vocational programs at the comprehensive high schools! (HEc)
More help and funding of programs at comprehensive high schools (Ag)
Rework reports that are required by ODVTE to cut down on time spent completing them (eliminate some) (Ag)
Increase school administrators' awareness of vocational programs importance to high schools and importance of youth organizations (Ag)
Place state reports on computer disk (HEc)
Continue professional meetings such as Mid-Winter and PI meetings (HEc)
More funding for comprehensive high school programs for equipment (Ag)
Individual learning packets for instructional units (curriculum) (HEc)
Additional funds to comprehensive vocational teachers for 10th month (Mktg)
Standardized supplies for equipment and materials for vo-tech programs. Each program could/should have the same quality of equipment. I believe the State could get a major break on cost in bulk and mass scale purchases. You should have routine equipment inspection and standardized maintenance and a scheduled equipment replacement schedule. (unknown)

VITA

Sheila Dobbin Stone

Candidate for the Degree of

Doctor of Education

Thesis: PRODUCTS AND SERVICES WHICH SHOULD BE PROVIDED BY THE OKLAHOMA DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION AS PERCEIVED BY VOCATIONAL INSTRUCTORS AND ADMINISTRATORS

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