A STUDY OF ADVISORY COMMITTEES AT OKLAHOMA

STATE UNIVERSITY SCHOOL OF

TECHNICAL TRAINING

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CHAPTER I

INTRODUCTION

Oklahoma State University School of Technical Training has been
recognized by educators and employers as one of the nation's finest
technical colleges. Known as Oklahoma State Tech (OST), it is the
nation's only residential, post-secondary, public technical education
institution that is also a part of a major university--Oklahoma State
University (Oklahoma State Tech, 1979a). Established in 1946, Oklahoma
State Tech has provided technical training for thousands of students
from all of Oklahoma's 77 counties, 35 other states and an increasing
number of foreign countries. The success of Oklahoma State Tech has
been directly related to its ability to provide technical training
needed by industry, and in developing a good working relationship with
regional business and industry. One way in which Oklahoma State Tech
and industry have maintained a close relationship has been through
advisory committees. These committees represent each major depart-
mental area and convene two or three times each year on the Oklahoma
State Tech campus. The committees are comprised of members from the
front line of industry who possess technical and management expertise.
Meeting with committee members are school representatives such as
department heads, and faculty from their respective departments, Edwin

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Darby, Assistant Director for Academic Affairs, and Richard Tinnell, Coordinator of Instructional Resources.

The mission of the advisory committees, according to the Oklahoma State Tech catalog, is to provide an advisory function involving course of study content, and laboratory/shop design, and development. Another important function is the support and promotion of student recruitment and graduate placement including student financial assistance and scholarship awards. Committee members often serve as the presenters for student and faculty seminars concerning industry trends, technical developments and employer-employee relations (Oklahoma State Tech Catalog, 1981).

There are twelve advisory committees for the eleven departments at Oklahoma State Tech. The departments at Oklahoma State Tech are air conditioning and refrigeration, automotive, building trades, business education, diesel and heavy equipment mechanics, drafting and design, electrical-electronic technology, food services, practical nursing, small business trades, and graphic arts. The Graphic Arts department uses separate advisory committees for commercial art and printing.

While advisory committees have been used at Oklahoma State Tech for many years, there had never been a study of these advisory committees to determine the perceptions of the committee members, department heads and faculty about the functions, strengths and weaknesses of the advisory committees.

Statement of the Problem

In order to strengthen the Advisory Committee System at Oklahoma State Tech, it was important to evaluate and analyze the perceptions of

advisory committee members as to the functions and strengths of advisory committees.

There were no objective data available regarding the perceptions of Advisory Committee members at Oklahoma State Tech.

Purpose of the Study

The purpose of this research was to provide a study of advisory committees at Oklahoma State Tech in order to evaluate the functions and strengths of advisory committees, and to further enhance committee organization and operations.

The study sought to answer the following questions:

1. What were the perceptions of advisory committee members, department heads, and technical instructors as to functions of advisory committees at Oklahoma State Tech?

2. What were the perceptions of advisory committee members, department heads, and technical instructors as to role of advisory committees in technical education?

3. What were the major obstacles to the effective use of advisory committees, as perceived by committee members, department heads, and technical instructors?

4. What were the most successful results of advisory committees efforts at Oklahoma State Tech as perceived by advisory committee members, department heads, and technical instructors?

5. What were the educational and business backgrounds of present advisory committee members at Oklahoma State Tech?

6. How did Oklahoma State Tech recruit, appoint and reward advisory committee members?

Limitations

The study had the following limitations:

1.   The study was limited to those advisory committees which met in the Fall Trimester of 1981.

2.   The population surveyed was limited to those advisory committee members, department heads, and technical instructors present at the Fall Trimester committee meetings on campus at Oklahoma State Tech. No questionnaires were sent to absent committee members.

3.   The results of the survey are specific to Oklahoma State Tech; generalizations about advisory committees at other educational institutions should be made with caution.

Assumptions

The study made the following assumptions:

1.   The individuals utilized for this study would respond honestly to the opinion items.

2.   The perceptions reported corresponded with the reality of events and circumstances of the functioning advisory committees.

3.   The advisory committee members had sufficient experience working with the committee to respond from experience rather than intuition or hearsay.

Definition of Terms

Advisory Committee: Advisory committees have been utilized in education since the 1800's. They are usually formed by school administrators, teachers, or interested citizens in the community, to

aid the school with advice, finance, or other areas of expertise. However, in this study the term industrial advisory committee, when connected with Oklahoma State Tech, will refer to advisory committees.

Industrial Advisory Committees: The Industrial Advisory Committee advises school administrators on instructional programs in specific trades, crafts, or occupations. Each committee represents a particular industrial educational program. These committees do not possess formal authority and the members serve without pay.

Technical Education: A formal program of occupational studies at the associate degree level. The programs are usually two years in length the content of which is derived from technical skills and knowledge requirements of technical occupations. The instruction is laboratory oriented and emphasis is placed on analysis rather than the development of specific procedural techniques or skills.

Trimester: The division of an academic year into three terms, each of which is fifteen weeks.

CHAPTER II

REVIEW OF LITERATURE

The review of literature in this study was subdivided into five

sections:

1.   An overview of Oklahoma State Tech.

2.   The nature and challenge of Technical Education.

3.   Advisory Committees in general.

4.   Concerns over the effective utilization of Advisory

Committees.

5.   Summary.

Oklahoma State Tech

The Oklahoma State University School of Technical Training, known

as Oklahoma State Tech, was established on October 1, 1946, as a branch

campus of Oklahoma State University. The college is located on the

eastern edge of Okmulgee, a community of 17,000 people, approximately

35 miles south of Tulsa, Oklahoma, ideally located to be the nation's

center for technical education (Oklahoma State Tech Information

Circular, 1979b).

Oklahoma State Tech has been recognized by educators and employers

for its dedication and success in providing quality, post-secondary

technical and occupational education programs. A 170 member industry-experienced faculty is committed to the philosophy and purpose of "educating hand and mind."

The curricula contains 48 programs of study ranging from two to six trimesters in length, offering a broad variety of occupational opportunities. Students earn college credit hours, and program completion is recognized by the Associate of Technology degree, diploma, or certificate of completion (Tinnell, 1982).

The 48 programs of study are administered through 11 departmental areas. The departments are:

> Air Conditioning
>
> Automotive
>
> Building Trades
>
> Business Education
>
> Diesel and Heavy Equipment Machines
>
> Drafting and Design
>
> Electrical-Electronics Technology
>
> Food Services
>
> Graphic Arts
>
> General Education
>
> Small Business Trades.

Oklahoma State Tech provides extensive laboratory and shop experiences that are closely coordinated with technical theory and related technical courses. A strong, supportive general education department provides meaningful and relevant courses in the social and physical sciences, communications, business principles, and applied mathematics.

Oklahoma State Tech's programs of study are approved by the Board of Regents for the Oklahoma State University and A & M Colleges, the

Oklahoma State Regents for Higher Education, and the Oklahoma State Accrediting Agency. The institution is accredited by the North Central Association of Colleges and Schools.

Although not required by public law to have advisory committees, Oklahoma State Tech and industry have mutually benefited through an active advisory committee system. Advisory Committees function in each of the departments at Oklahoma State Tech, convening two or three times each year on the Oklahoma State Tech campus. Industrial representatives on the advisory committees provide a broad spectrum of technical and management expertise (Tinnell, 1982).

The principle mission of an advisory committee at Oklahoma State Tech is to advise the faculty and administration about curriculum, laboratory/shop design, and program development. Another important function is the support and promotion of student recruitment and graduate placement. Industrial representatives on the advisory committees also assist the school in obtaining scholarship and loan funds for deserving students. Industry representatives serve as the presenters for student and faculty seminars on industry trends, technical developments and employer-employee relations. In many cases committee members identify appropriate equipment and are often instrumental in obtaining equipment needed to keep the programs abreast with developments in the field (Tinnell, 1982).

A major part of Oklahoma State Tech's reputation for being more effective than most technical institutions can be traced to its emphasis on extensive hands-on laboratory work. Oklahoma State Tech utilizes over 5 million dollars worth of lab equipment allowing students to develop a job skill using a variety of the most up-to-date

equipment. This equipment allows technical students extensive hands-on lab work in order to perfect their skills before entering today's competitive work world (Tinnell, 1982).

<center>The Nature and Challenge of

Technical Education</center>

Even though the term technical education has been widely used in both secondary and post-secondary circles, it is often a misunderstood term. According to Roney (1967) technical education is defined as a formal program of occupational studies at the associate degree level, with the following characteristics:

1. The program is usually two years in length.

2. The content is derived from technical skills and knowledge requirements of technical occupations.

3. The technical specialization is within an occupational field; but is not confined to, or limited by the requirements of any single occupation or industry. The emphasis in instruction is placed on technical skills and knowledge that have a broad application.

4. Instruction is laboratory-oriented, applying the technical principles being studied.

Emphasis is placed on analysis rather than the development of specific procedural techniques or skills. The Oklahoma Technical Society has defined Technical Education as follows:

> Technical Education is a planned sequence of classroom and laboratory experiences, usually at the post-secondary level, designed to prepare men and women for a range of job opportunities in well-identified fields of technology. The program of instruction normally includes study in mathematics, the sciences inherent in a technology, and selected

skills, materials, and processes commonly used in the technology. Complete technical education programs provide intensive training in a field of specialization, and include basic communication skills as well as general education studies. Instruction in technical programs gives major emphasis to principles rather than to specific techniques or skills. Industrial applications of these principles are used whenever possible in the instructional program.

The technical curriculum should prepare the graduate to (1) obtain a job, (2) be a productive employee with a minimum of additional on-the-job training, (3) advance with the developments in the technology, and (4) continue his education through extension or other supplementary training programs.

In terms of a continuum of technological occupations, technical education prepares for the area between the operator or special skill jobs and the established professions such as medicine, engineering, and science.

The technician is frequently employed in industrial activities in direct support of the professional employee, performing such duties as designing, developing, testing, or modifying products and processes; planning production; writing reports; preparing estimates; analyzing, diagnosing, and solving technical problems (Roney, 1967).

Although technical education is not limited to two-year programs of instruction, associate degree programs comprise the largest grouping in Oklahoma and across the nation. The nature of technical education requires a deep commitment to high levels of capital expenditures, continued retraining of faculty, and an understanding of the economics and sociology of change. Among the pressures on technical education in the 1980's are:

1. Accelerating rates of change.

2. Increases in the number of semi-skilled, skilled, and technical job categories.

3. The creation of new, complex jobs.

4. Because of the very favorable economic climate in Oklahoma, increases in the rate of demand for trained workers.

5. Retraining workers whose skills have become obsolete.

The continued success of Oklahoma State Tech depends on its addressing these concerns. Technical education is dependent on its ability to attract students who have the ability to profit from instruction, and to provide technical graduates who can successfully compete in the world of work. One of the mechanisms which can aid Oklahoma State Tech in remaining on the cutting edge of technology is an effective advisory committee system (Tinnell, 1982).

Advisory Committees in General

According to Hamlin (1952), advisory groups in Vocational Education were operating in the early 1900's. The Smith-Hughes Act (1917) was the benchmark legislation leading the way to the formation of advisory committees. However, utilization of advisory committees did not take hold until after World War II.

Hamlin stressed that a national trend for utilization of advisory committees can be seen since World War II. Presently vocational education has been mandated under federal and state law to implement advisory committees. However, studies by McKinney (1970), Toupin (1970), and Oastler (1972) indicated that many advisory committees existed only on paper and were not used effectively.

The National Network of Advisory Committees was established under the Vocational Education Act of 1963, Public Law 88-210. A National Advisory Council was established with the members appointed by the President of the United States. This Act established the State Advisory councils, and specified the qualifications of each member, (Public Law 88-210, 1963).

Advisory Councils were mandated by Public Law 90-576 in 1968. State Advisory Council members are appointed by the Governor, subject to the approval of the United States Secretary of Education. Representing various occupational backgrounds, the State Advisory Council members advise the State Department of Vocational Technical Education, and evaluate the State's vocational education programs. The findings of the State Advisory Council are reported annually to the United States Department of Education and the Oklahoma Department of Education. The Director of Oklahoma State Tech serves on Oklahoma's State Advisory Council, thereby providing a communication link between Oklahoma State Tech and other components of the State's vocational education system (Tinnell, 1982).

In October 1976, Public Law 94-482, Title II, Sections 105-106, was enacted. These amendments to the Vocational Education Acts of 1963 and 1968 mandated the establishment of local occupational advisory committees in vocational education. The duties of the local advisory committee were to advise the local program on current job needs, and the relevance of courses being offered (Public Law 94-482, 1976).

These acts have clearly put the federal government on record in support of advisory committees in vocational education. It is important to note that these acts directly concern Vocational Education at the secondary level. Oklahoma State Tech, without legislative mandate, developed advisory committee systems based on the recognized need for industry support. Oklahoma State Tech has over the past ten years continued to expand its advisory committee systems realizing the valuable contribution they make to any educational institution (Tinnell, 1982).

Procedure of Appointment

According to Hamlin (1952) almost every conceivable way of selecting advisory committee members has been tried. Hamlin stated that,

> Committees have been choosen by individual teachers, administrators and board members; and the combined efforts of teacher, administrators, and board members. Every conceivable way of public participation in the choice of members has been used (p. 78).

The review of literature indicated that everyone has their own "best" method for appointing advisory committee members. Many recommended a nominating process in which capable, qualified candidates are recommended by groups that are most affected by the institution. In technical colleges, for example, nomination for advisory committee members would be sought from industries and businesses hiring technical graduates from the school.

Hamlin recommended a nominating process in which a nominating committee made up of a representative sampling of persons within the institution, select committee members. Hamlin stated that "A committee of this type gave much more time to the choice of members than an administrator could afford" (p. 78).

The next step in the selection process was to secure balanced representation of interested groups on the committee. Knowles (1972) suggested that advisory committee members should be chosen as representative types to include:

1.   The various points of view and interests within the participating membership of the organization itself.

2.   The points of view, interests, geographic location, and types

of experiences in the community at large that were significant in relation to a particular program or institution.

3. Experts with specialized skills or knowledge that were needed in program planning.

Knowles (1972) indicated that advisory committee members were extremely busy people, who took their responsibilities very seriously. They met as a group at least twice a year, sometimes more often. Committee members served on sub-committees which met more frequently to explore specific areas of concern. According to Knowles, advisory committee members:

1. Responded to special requests for assistance and reaction;

2. Helped pinpoint the need for specific new programs or suggest changes in existing programs;

3. Suggested and sometimes conducted studies and surveys to keep programs abreast of change;

4. Contributed to specific curriculum design in an effort to make training as realistic as possible, and offered constructive ideas for student and program evaluation;

5. Sought information about resources to implement the program, and sometimes participated in the class as speakers, panel members, demonstrators, and special consultants;

6. Suggested possible student observation and supervised work experience;

7. Provided a link with the professional societies, related agencies, and supplemented the school's public relation program.

Guidelines for Effective Committee Operations

In addition to having representative types on advisory committees and a clear understanding of the functions of advisory committee, occupational advisory committee members must have effective guidelines for operation. According to Knowles (1972), advisory committees that develop a high sense of group responsibility are likely to be most productive.

Knowles offered several guidelines for the operation of advisory committees. They included:

1. A committee should understand clearly what it is to do and what its powers are. It isn't enough that it be given a written statement, stating its objectives, functions, and authority, but at least once each year, it should review and test the meaning of such a commission in open discussion.

2. The committee should concern itself with real problems. It should not be put in the position of merely giving rubberstamp approval to policies that have already been put into effect.

3. The agenda for each meeting should be based on problems and concerns the committee members consider important. An agenda developed from a problem census of the members of the committee will receive more responsible consideration than one that is prepared in advance by the chairman or staff member.

4. The outcome of the committee's work should be continually interpreted to it. Activity leaders may be invited to committee meetings to describe outstanding achievements, exhibits may be arranged, and reports may be presented. It is important for the committee to have visual evidence of the significance of its work.

5.   Committee members should be given firsthand experiences with the program, by appearing at ceremonial events, inspecting activities, serving as resource people in programs, and otherwise taking an active part.

6.   The administrative work involved in efficient committee operations should be handled smoothly. Notices of meetings should be sent well in advance, materials of value in preparing for discussion should be distributed in time to be read, minutes of meetings should be duplicated and distributed, and appropriate action should be taken and reported on decisions made by the committee (Knowles, 1981).

Evaluating Advisory Committee Recommendations

A school administration must evaluate the decisions made by advisory committees. Advisory committee recommendations may be accepted, modified, or rejected. Knowles recommended the following criteria for school administrators:

1.   Was the committee qualified to address the question;

2.   Did the committee reflect a knowledge of the underlying problems before rendering advice or suggesting a solution; and

3.   Based on the way the committee handled this problem, were there other problems that should be directed to it (Knowles, 1981).

Advisory committee influence should not be judged on the basis of a single meeting. The influence of an active advisory committee may be felt deeply in community, and its contributions not always tangible. Assessing a committee's effectiveness should include a careful review of its accomplishments. This can be determined by studying the minutes of previous meetings, records of activities for students and teachers

arranged by committee members, curricula, and participation of committee members as speakers in classes (Knowles, 1981).

Rewarding the Advisory Committee Members

Being an effective advisory committee member is hard work. Ayers (1974) suggested the following methods for rewarding advisory committee members:

1. Attendance at advisory committee meetings by top administrators and outside educators;

2. Resolution of appreciation from the school board to the members;

3. A letter of appreciation from the administrator or chairperson;

4. A letter to the advisory committee member's supervisor;

5. The publication of annual Advisory Committee Handbook and Directory;

6. Invitations to other school functions;

8. Provide committee members with information concerning education at the local, state, and national level;

9. Inviting the members to attend local, state, and national conventions;

10. Being alert to meetings, special speakers, or other activities relating to the advisory committee's program, and encouraging members to attend (pp. 6-10).

However, Elias and Behymer (1979) concluded that despite the volumes that have been written about activities of advisory committees, there appeared to be little research to indicate the relative importance of such rewards as perceived by committee members.

Concern Over Effective Utilization

of Advisory Committees

There has been a continued concern that advisory committees were not being utilized effectively. As early as 1970, a study conducted by Ohio State Advisory Council for Vocational Education found that "in too many instances, the advisory committees and schools they served seemed to be characterized by indifference and slip-shod practices" (p. 85). In addition, the study went on to say that "there appeared to exist an undesirable level of confusion with regard to membership, functions, operating procedures and other aspects" (p. 85).

McKinney (1970), Toupin (1970), and Oastler (1972) expressed serious concerns about the effective utilization of advisory committees. Among the concerns were that advisory committees have had minor effects on the programs they advise, that there was a great deal of confusion about the role and function of advisory committees, and that committee members often used committee roles to further personal goals.

Rippey (1978) stated that the general consensus of opinion from administrators of community colleges across the country seemed to be, "don't start one (advisory committee), unless you have to," and "keep it ignorant and limit its activities to ceremonial lunches" (p. 83). Rippey stated that many colleges have not utilized advisory committees because "administrators have not known what is expected of the committee, and there has been poor organization of committees, with no specific program plans" (p. 93). Rippey recommended that "to move toward maximum effectiveness, the committee must involve itself in continued self-evaluation" (p. 93).

There is still serious concern in the 1980's about effective use of advisory committees. Kraska (1980) and Clous (1981) have documented the continued failure of advisory committees to understand their mission in the institutions they serve. Kraska lamented that "there are few resource materials readily available which pertain to the practical aspects of local advisory committee organization, operation and evaluation" (p. 458).

Elias and Behymer (1979) expressed concern over what appeared to be a lack of research on the importance of advisory committee activities in meeting the objectives of the educational institution they serve. Elias and Behymer call for further research which would "attempt to identify possible differences in the perceptions of advisory council's members, administrators and vocational teachers as to the relative value of council activities" (p. 298).

Summary

Most writers expressed strong support for the utilization of advisory committees, and defended their usefulness. Federal and state legislatures, industry, labor representatives and school administrators have recognized the benefits of advisory committees at all levels of education.

However, concern over how effectively advisory committees have been utilized still persists. There has been little research done identifying the perception of advisory committee members, administrators and teachers as to the relative value of committee activities. In order to move toward maximum effectiveness, advisory committees should continually be involved in self-evaluation.

It was the purpose of this research to study the Oklahoma State Tech advisory committee operation to determine:

1.   The perceptions of advisory committee members, department heads, and technical instructors of the functions of advisory committees at Oklahoma State Tech;

2.   The perceptions of advisory committee members, department heads, and technical instructors of the role of advisory committees in technical education;

3.   The major obstacles to the effective use of advisory committees as perceived by advisory committee members, department heads, and technical instructors;

4.   The most succussful results of advisory committees at Oklahoma State Tech as perceived by advisory committee members, department heads, and technical instructors;

5.   The educational and business background of the present advisory committee members at Oklahoma State Tech;

6.   How Oklahoma State Tech recruits, appoints, and rewards advisory committee members.

By aiding Oklahoma State Tech in this self-evaluation, it was hoped that this study would further enhance Oklahoma State Tech's already successful advisory committee operation.

CHAPTER III

METHODOLOGY

The primary purpose of this research was to provide a study of the advisory committees at Oklahoma State Tech in order to evaluate the functions and strengths of these committees as perceived by advisory committee members, department heads and technical instructors, in order to further enhance committee organization and operations.

This chapter is devoted to reporting the methods used to accomplish the purpose of the study and is divided into four sections. The sections are:

1. Selection of the subjects.

2. Development of the instrument.

3. Collection of the data.

4. Analysis of the data.

Selection of the Subjects

The population for this study included the 81 advisory committee members, 10 department heads and 31 technical instructors who were involved in advisory committee meetings on the campus of Oklahoma State Tech during the Fall Trimester of 1981-1982.

The appointment procedure for an advisory committee member at Oklahoma State Tech is a cooperative effort between the heads of the various departments and the administration. When an advisory committee vacancy occurs, the department head concerned identifies one or more candidates to fill the position. Normally, departmental faculty, representatives of the administration, and present advisory committee members are consulted in identifying a suitable replacement. The selected candidate is recommended to the Director of Oklahoma State Tech, Wayne Miller. With the Director's concurrence, a letter is sent inviting the candidate to join the advisory committee.

The advisory committee appointment is normally for an indefinate term. However, some committees have found it to be most practical for committee members to serve for a fixed term of one or more years (Tinnell, 1982).

The following advisory committees were surveyed:

1. Air Conditioning and Refrigeration

2. Automotive

3. Building Trades

4. Commercial Art

5. Diesel and Heavy Equipment Machines

6. Technical Drafting and Design

7. Electrical-Electronic Technology

8. Machinist

9. Practical Nursing

10. Printing.

The advisory committees for the departments of business education, food services, and small business trades were not surveyed because there were no scheduled advisory meetings for these departments during the Fall Trimester of 1981-82.

Development of the Instrument

The instrument used for data collection consisted of several sections. In the first section, a four point opinion scale with 10 statements was utilized to obtain the perception of committee members, department heads, and technical instructors as to the importance of committee functions as set forth in the mission statement for advisory committees in the Oklahoma State Tech catalog. Studies by Elias and Behymer (1979) and Rippey (1978) were used as guides in designing the opinion scale.

The second section contained a statement to determine the opinions of the participants as to the role of advisory committees in Technical Education. The third section contained a statement to determine the opinions of the participants as to the major obstacles to the effective use of advisory committees. The fourth section contained a statement to determine the opinions of the participants as to the most successful results of advisory committee efforts at Oklahoma State Tech. The last section asked for demographic data to determine the educational and professional background of advisory committee members, as well as the appointment procedure and the recognition received by advisory committee members for their efforts.

An initial draft of the instrument was developed and submitted for critical review to members of the Vocational Advisory Committee at Jenks Public School, Business/Industrial Training Services Coordinators at the Tulsa County Area Vocational Technical School, and to advisers at Oklahoma State University. Recommendations were taken into consideration and the final copy reflected many of the suggestions made by these reviewers. An example of the final copy of the questionnaire is to be found in the Appendix.

Collection of the Data

The data for the study were gathered during the Fall, 1981-1982, advisory committee meetings held on the campus of Oklahoma State Tech. The questionnaire for the committee members, department heads and technical instructors were delivered to Richard Tinnell. Tinnell introduced, distributed, and collected the questionnaires at each of the selected advisory committee meeting, and returned them to the researcher who was also present. The return response for those attending the committee meeting was 100 percent; however, no attempt was made to mail out questionnaires to absent advisory committee members.

Analysis of the Data

The following description of the analysis procedures is to provide the reader with an overview of the descriptive data provided by this study. In Section I of the opinionnnaire participants rated the importance of various committee functions, utilizing a four point scale with ten statements.

To permit calculating a means for the data, numerical values were assigned to the response categories according to the following pattern:

4 = Extremely important

3 = Considerably important

2 = Of some importance

1 = Being of little importance.

The mean rating was calculated utilizing the following formula:

$$\text{Mean rating} = \frac{4 (N_1) + 3 (N_2) + 2 (N_3) + (N_4)}{N}$$

Where:

N = The total number of participants.

N_1 = The number of participants who marked extremely important.

N_2 = The number of participants who marked considerably importance.

N_3 = The number of participants who marked of some importance.

N_4 = The number of participants who marked of little importance.

In addition, the mode was calculated to determine the most frequent response by the participants.

The Standard Deviation (whole score method) was used to measure variability. The formula was:

$$S = \sqrt{\frac{x^2}{N} - \bar{x}^2}$$

Where:

S =   The standard deviation:

ΣX^2 =   The sum of the squared scores.

$\overline{X}$ =   The mean of the distribution.

N =   The number of observations.

· The standard deviation reflects in a relative fashion, how much the responses in a distribution deviate from the means. If the S is small, there is little variability and the majority of the responses are tightly clustered about the mean. If S is large, the responses are more widely scattered above and below the mean.

In order to calculate a mean for the several groups of questions asked, a weighted mean was utilized. The formula was:

$$\overline{X} = \frac{N_1\overline{X}_1 + N_2\overline{X}_2 + N_3\overline{X}_3 + \ldots}{N_1 + N_2 + N_3 + \ldots}$$

Where:

N_1 =   The number of respondents for question one.

$\overline{X}_1$ =   The means of question one.

N_2 =   The number of respondents for question two.

$\overline{X}_2$ =   The means of question two, and so on.

The second section contained a statement to determine the opinions of the participants as to the role of advisory committees in Technical Education. The third section contained a statement to determine the opinions of the participants as to the major obstacles to the effective use of advisory committees.

The fourth section contained a statement to determine the opinions of the participants as to the most successful results of advisory

committee efforts at Oklahoma State Tech. The last section asked for demographic data to determine the educational and professional background of advisory committee members, as well as the appointment procedure and the recognition received by advisory committee members for their efforts.

A simple frequency count was made of responses that were the same or very similar to each other. These reponses were tabulated and the results ranked. Such a ranking tended to identify areas of opinion expressed by the greatest number of participants in order of concern. In addition, the demographic section's answers were analyzed by the utilization of percentages and reported in narrative form.

CHAPTER IV

PRESENTATION OF DATA

Introduction

The purpose of this research was to provide a study of advisory committees at Oklahoma State Tech in order to evaluate the functions and strengths of the advisory committees, and to further enhance committee organization and operations. The following questions were examined:

1. What were the perceptions of advisory committee members, departments heads, and technical instructors of the functions of advisory committees at Oklahoma State Tech?

2. What were the perceptions of advisory committee members, departments heads, and technical instructors of the role of advisory committees in technical education?

3. What were the major obstacles to the effective use of advisory committees, as perceived by advisory committee members, department heads, and technical instructors?

4. What were the most successful results of advisory committees at Oklahoma State Tech, as perceived by advisory committee members, department heads, and technical instructors?

5. What were the educational and business backgrounds of the present advisory committee members at Oklahoma State Tech?

6. How did Oklahoma State Tech recruit, appoint, and reward advisory committee members?

As described in the previous chapter, the instrument used for the data collection consisted of several sections. In the first section, a four-point opinion scale with ten statements was utilized to obtain the perceptions of committee members, department heads and faculty as to the importance of committee functions as set forth in the mission statement for advisory committees in the Oklahoma State Tech Catalog.

Numerical values were assigned to the response categories in the following manner:

4 = Extremely important

3 = Considerably important

2 = Of some importance

1 = Being of little importance.

In order to identify how committee members, department heads, and technical instructors perceived each function in importance, the mean scores were compared and ranked. In addition, cummulative mean and ranking identify how each group perceived the total committee functions in importance.

Studies by Elias and Behymer (1979) and Rippey (1978) were used as guides in designing the opinion scale. The second section contained a statement to determine the opinions of the participants as to the role of advisory committees in Technical Education. The third section contained a statement to determine the opinions of the participants as to the major obstacles to the effective use of advisory committees.

The fourth section contained a statement to determine the opinions of the participants as to the most successful results of advisory

committee efforts at Oklahoma State Tech. The last section asked for demographic data about the advisory committee members. A simple frequency count was made of responses that were the same or very similar to each other for the data in these sections. These responses were tabulated and the results ranked. Such a ranking tended to identify areas of opinion expressed by the greatest number of participants in order of concern.

Data Presentation

Section One of the questionnaire was designed to obtain the perception of committee members, department heads, and technical instructors as to the importance of advisory committee functions at Oklahoma State Tech. Findings relative to these perceptions are reported in this section.

Table I indicates the rank order mean response, standard deviation, overall ranking and overall mean by department participant groups. The table indicated that in overall ranking the department participant groups viewed developing course content, reviewing and suggesting equipment, student recruitment, initiation and modification of programs, and serving as a communications channel as the top five in priority. Ranking in the next five were: Placement of Oklahoma State Tech graduates, obtaining equipment for the school, staff development, obtaining financial support for Oklahoma State Tech, providing awards and recognition for worthy students. The range of the overall mean response was from a relatively high 3.31 for the function of "development of course content", to a 2.43 mean rating for the function of "award and recognize worthy students" which is ranked last.

TABLE I

SUMMARY OF RANK ORDER, MEAN RESPONSE, STANDARD
DEVIATION, OVERALL RANKING AND OVERALL
MEAN BY DEPARTMENTAL
PARTICIPANT GROUPS

Question	Advisory Committee N=81			Department Heads N=10			Technical Instructors N=31			Overall Ranking	
	Rank	$\overline{X}$	SD	Rank	$\overline{X}$	SD	Rank	$\overline{X}$	SD	Rank	$\overline{X}$
1. Assist in Securing Financial Support	10	2.28	0.86	6	3.00	1.20	7	3.00	1.11	9	2.71
2. To Support and Promote Student Recruitment	7	2.70	1.06	3	3.33	1.46	1	3.37	0.87	3	3.12
3. Assist in the Placement of Graduates	4	3.00	0.99	7	2.80	1.95	5	3.05	1.47	6	2.95
4. Provide Awards and Recognition	9	2.37	0.92	10	2.37	1.42	10	2.59	1.29	10	2.43
5. Serve as a Communication Channel	2	3.18	0.86	9	2.76	1.02	4	3.14	0.95	4	3.02
6. Help Encourage Effective Staff Development	6	2.93	0.95	8	2.72	0.96	9	2.79	0.85	8	2.81
7. Assist in the Development of Course Content	1	3.25	1.04	2	3.40	1.41	2	3.29	1.07	1	3.31
8. Review and Suggest Equipment and Facilities	5	3.04	0.84	1	3.60	0.48	3	3.23	1.46	2	3.29
9. Advise on Initiation, Modification, or Termination of Programs	3	2.98	0.67	4	3.20	1.40	8	2.87	1.87	4	3.02
10. To Help Obtain School Equipment and Supplies	8	2.48	1.00	5	3.00	1.20	6	3.04	1.26	7	2.87

Table II shows how committee members, department heads, and technical instructors ranked the committee function "Assist in securing financial support for the department and/or institution" in importance. The data indicated that advisory committee members gave this function a 2.28 mean rating while both department heads and technical instructors gave it a 3.00 mean rating. However, the cumulative ranking indicated that all three groups ranked this function relatively low when a comparison was made of all ten questions. Advisory committee members ranked it the least important of all ten functions, department heads ranked it sixth, and technical instructors ranked it seventh in importance. The data reveals interesting discrepancies when comparisons were made between the departments. For example, advisory committee members and department heads of the Commercial Arts department ranked this function very low, whereas technical instructors ranked it relatively high.

The same difference of opinion occurred between several other departmental participant groups. For example, advisory committee members and department heads of the air and refrigeration department ranked this function relatively high, whereas technical instructors ranked it relatively low. The same type of differences of opinion occurred within the departmental advisory committee on all of the ten functions. The differences can be seen in Table III through Table XIX.

Further study could be conducted by Oklahoma State Tech to analyze possible differences of opinions within departmental committees. Information provided by this type of study could be utilized by department heads in planning and conducting advisory committee meetings more effectively.

TABLE II

RANKING AND MEAN RESPONSE FOR QUESTION
CONCERNING ASSISTANCE IN SECURING
FINANCIAL SUPPORT BY DEPARTMENTAL
PARTICIPANT GROUPS

Departments	Advisory Committee		Department Heads		Technical Instructors	
	Rank	$\overline{X}$	Rank	$\overline{X}$	Rank	$\overline{X}$
Air and Refrigeration	4	2.38	3	3.00	7	2.67
Automotive	2	2.55	1	4.00	2	3.35
Building Trades	3	2.40	3	3.00	9	2.57
Commercial Art	10	1.25	9	2.00	3	3.33
Diesel and Heavy Equipment	7	2.17	3	3.00	3	3.33
Drafting	6	2.25	3	3.00	8	2.60
Electrical-Electronic Technology	5	2.28	9	2.00	10	2.25
Machinist	8	2.00	3	3.00	1	4.00
Nursing	1	2.60	1	4.00	5	3.00
Printing	8	2.00	3	3.00	6	2.75
	N = 81		N = 10		N = 31	
	$\overline{X}$ = 2.28		$\overline{X}$ = 3.00		$\overline{X}$ = 3.00	
	S = 0.86		S = 1.20		S = 1.11	
	Mode = 2		Mode = 3		Mode = 4	
Cumulative Ranking	10		6		7	

Table III shows how committee members, department heads, and tech-
nical instructors ranked the committee function "To support and promote
student recruitment" in importance. Advisory committee members gave
this functions a 2.70 mean rating, department heads a 3.33 mean rat-
ing, and technical instructors a 3.37 mean rating. In the cumulative
ranking, advisory committee members ranked the function seventh of ten
in importance, while department heads ranked it third, and technical

instructors ranked it as being the most important function of an advisory committee. The data indicated a major difference of opinion between committee members, department heads and technical instructors on the importance of advisory committees supporting and promoting student recruitment.

TABLE III

RANKING AND MEAN RESPONSE FOR QUESTION
CONCERNING STUDENT RECRUITMENT BY
DEPARTMENTAL PARTICIPANT GROUPS

Departments	Advisory Committee		Department Heads		Technical Instructors	
	Rank	$\overline{X}$	Rank	$\overline{X}$	Rank	$\overline{X}$
Air and Refrigeration	7	2.84	8	2.00	6	3.00
Automotive	7	2.44	6	3.00	1	4.00
Building Trades	3	3.20	1	4.00	1	4.00
Commercial Art	9	2.25	8	2.00	10	2.33
Diesel and Heavy Equipment	10	2.16	6	3.00	6	3.00
Drafting	8	2.33	8	2.00	5	3.40
Electrical-Electronic Technology	1	3.40	1	4.00	6	3.00
Machinist	4	3.00	1	4.00	1	4.00
Nursing	1	3.40	1	4.00	1	4.00
Printing	4	3.00	1	4.00	6	3.00
	N = 81		N = 10		N = 31	
	$\overline{X}$ = 2.70		$\overline{X}$ = 3.33		$\overline{X}$ = 3.37	
	S = 1.06		S = 1.46		S = 0.87	
	Mode= 3		Mode= 4		Mode= 4	
Cumulative Ranking	7		3		1	

The information as shown in Table IV indicates how committee members, department heads, and technical instructors ranked the

committee function "Assist in the placement of tech graduates?" in importance. Advisory committee members gave it a 3.00 mean rating, department heads a 2.80 mean rating, and technical instructors a 3.05 mean rating. Advisory committee members ranked it fourth of ten, department heads seventh, and technical instructors fifth.

TABLE IV

RANKING AND MEAN RESPONSE FOR QUESTION
CONCERNING PLACEMENT OF GRADUATES BY
DEPARTMENTAL PARTICIPANT GROUPS

Departments	Advisory Committee		Department Heads		Technical Instructors	
	Rank	$\overline{X}$	Rank	$\overline{X}$	Rank	$\overline{X}$
Air and Refrigeration	5	3.00	5	3.00	9	2.33
Automotive	10	2.16	1	4.00	3	3.50
Building Trades	5	3.00	1	4.00	1	4.00
Commercial Art	2	3.25	5	3.00	6	3.00
Diesel and Heavy Equipment	4	3.16	5	3.00	6	3.00
Drafting	5	3.00	9	2.00	6	3.00
Electrical-Electronic Technology	1	3.57	5	3.00	5	3.25
Machinist	5	3.00	1	4.00	1	4.00
Nursing	9	2.80	10	1.00	10	1.00
Printing	2	3.25	1	4.00	3	3.50
	N	=81	N	=10	N	=31
	$\overline{X}$	= 3.00	$\overline{X}$	= 2.80	$\overline{X}$	= 3.05
	S	= 0.99	S	= 1.95	S	= 1.47
	Mode= 4		Mode= 2,3,4		Mode= 3.4	
Cumulative Ranking	4		7		5	

Table V indicates how committee members, department heads, and technical instructors ranked the committee function "Provide awards and

recognition to worthy students" in importance. Advisory committee members gave this function a 2.37 mean rating, department heads also rated it 2.37, and technical instructors gave it a 2.59 mean rating. The cumulative ranking revealed that all three groups considered this function as one of the least important functions when compared to all ten.

TABLE V

RANKING AND MEAN RESPONSE FOR QUESTION
CONCERNING PROVIDING AWARDS AND
RECOGNITION BY DEPARTMENTAL
PARTICIPANT GROUPS

Departments	Advisory Committee		Department Heads		Technical Instructors	
	Rank	$\overline{X}$	Rank	$\overline{X}$	Rank	$\overline{X}$
Air and Refrigeration	5	2.46	10	1.00	7	2.33
Automotive	8	2.16	6	3.00	6	2.75
Building Trades	2	2.80	6	2.00	8	2.00
Commercial Art	7	2.25	1	4.00	9	2.33
Diesel and Heavy Equipment	10	1.66	6	2.00	1	3.00
Drafting	4	2.66	1	4.00	5	2.80
Electrical-Electronic Technology	9	1.85	3	2.00	10	1.75
Machinist	6	2.42	3	2.00	1	3.00
Nursing	1	3.00	6	3.00	1	3.00
Printing	3	2.75	6	3.00	1	3.00
	N =81		N =10		N =31	
	$\overline{X}$ = 2.37		$\overline{X}$ = 2.37		$\overline{X}$ = 2.59	
	S = 0.92		S = 1.41		S = 1.29	
	Mode= 2		Mode= 2,3		Mode= 3	
Cumulative Ranking	9		10		10	

Table VI shows how committee members, department heads, and technical instructors ranked the function "Serve as a communication channel between Oklahoma State Tech and occupation groups in the state and region" in importance. The mean rating for advisory committee members was 3.18, department heads 2.76, and technical instructors 3.14. The Advisory Committee ranked this function second, technical instructors ranked the item as being fourth, and department heads ranked this function as ninth of the ten items.

TABLE VI

RANKING AND MEAN RESPONSE FOR QUESTION
CONCERNING COMMUNICATION CHANNELS BY
DEPARTMENTAL PARTICIPANT GROUPS

Departments	Advisory Committee		Department Heads		Technical Instructors	
	Rank	$\overline{X}$	Rank	$\overline{X}$	Rank	$\overline{X}$
Air and Refrigeration	6	3.23	7	2.00	5	3.33
Automotive	3	3.00	4	3.00	3	3.50
Building Trades	1	4.00	1	4.00	1	4.00
Commercial Art	10	2.00	9	1.00	3	3.50
Diesel and Heavy Equipment	9	3.16	9	1.00	6	3.00
Drafting	8	3.08	1	4.00	6	3.00
Electrical-Electronic Technology	4	3.42	1	4.00	9	2.50
Machinist	2	3.71	4	3.00	1	4.00
Nursing	5	3.40	7	2.00	10	2.00
Printing	3	3.50	4	3.00	8	2.75
	N =81		N =10		N =31	
	$\overline{X}$ = 3.18		$\overline{X}$ = 2.76		$\overline{X}$ = 3.14	
	S = 0.86		S = 1.02		S = 0.95	
	Mode= 4		Mode= 3,4		Mode= 4	
Cumulative Ranking	2		9		4	

Table VII shows how committee members, department heads and technical instructors ranked the committee function "Help encourage effective staff development" in importance. The three groups were in close agreement on the importance of this item. The means rating for advisory committee members was 2.93, department heads 2.72 and technical instructors 2.79. In addition, both the department heads and technical instructors ranked this item eighth and ninth of ten, advisory committees ranked this item sixth.

TABLE VII

RANKING AND MEAN RESPONSE FOR QUESTION
CONCERNING STAFF DEVELOPMENT BY
DEPARTMENTAL PARTICIPANT GROUPS

Departments	Advisory Committee		Department Heads		Technical Instructors	
	Rank	$\overline{X}$	Rank	$\overline{X}$	Rank	$\overline{X}$
Air and Refrigeration	6	2.69	1	3.00	2	3.33
Automotive	8	2.50	1	3.00	4	3.00
Building Trades	7	2.60	1	3.00	4	3.00
Commercial Art	3	3.25	9	2.00	1	4.00
Diesel and Heavy Equipment	10	2.16	1	3.00	8	2.00
Drafting	3	3.25	9	2.00	6	2.80
Electrical-Electronic Technology	1	3.71	1	3.00	8	2.00
Machinist	4	3.14	1	3.00	2	3.33
Nursing	5	3.00	1	3.00	8	2.00
Printing	2	3.50	1	3.00	7	2.50
	N =81		N =10		N =31	
	$\overline{X}$ = 2.93		$\overline{X}$ = 2.72		$\overline{X}$ = 2.79	
	S = 0.95		S = 0.96		S = 0.85	
	Mode= 4		Mode= 3,4		Mode= 4	
Cumulative Ranking	6		8		9	

The information as shown in Table VIII indicates how committee members, department heads, and technical instructors ranked the committee function "Assist in the development of course content to assure its relevance in meeting the changing skills and knowledge needs" in importance. The data indicated close agreement on the importance of this function. Advisory committee members give this function a 3.25 mean rating, department heads 3.40, and technical instructors 3.29. Committee members ranked it the most important function, with department heads ranking it second, and technical instructors ranking it second in importance. The close means ranking and cumulative ranking indicated that this function was viewed by all three groups as being one of the most important committee functions.

It appears that increased committee effort and time should be spent on this function. However, it is important to note that within several departmental advisory committees there appears to be a difference of opinion on the relative importance of this function. For example, advisory committee members serving on the advisory committee for the Printing department view it as the most important function, whereas department heads and technical instructors rank it a relatively low seventh. The automotive department participants express similar differences of opinion with advisory committee members ranking it a relatively low eighth while both department heads and technical instructors rank it the most important function.

Further study should be conducted to determine the reason for these differences within the departmental participant groups. This would give those working with departmental advisory committees insight into differences of opinions within the advisory committees and possible solutions to these differences.

TABLE VIII

RANKING AND MEAN RESPONSE FOR QUESTION
CONCERNING DEVELOPMENT OF COURSE
CONTENT BY DEPARTMENTAL
PARTICIPANT GROUPS

Departments	Advisory Committee		Department Heads		Technical Instructors	
	Rank	$\overline{X}$	Rank	$\overline{X}$	Rank	$\overline{X}$
Air and Refrigeration	6	3.46	1	4.00	4	3.33
Automotive	8	2.72	1	4.00	1	4.00
Building Trades	4	3.60	1	4.00	1	4.00
Commercial Art	5	3.50	9	2.00	4	3.33
Diesel and Heavy Equipment	10	2.16	1	4.00	10	2.00
Drafting	1	4.00	9	2.00	6	3.20
Electrical-Electronic Technology	7	3.14	1	4.00	7	3.00
Machinist	3	3.75	1	4.00	1	4.00
Nursing	9	2.60	7	3.00	7	3.00
Printing	1	4.00	7	3.00	7	3.00
	N	=81	N	=10	N	=31
	$\overline{X}$	= 3.25	$\overline{X}$	= 3.40	$\overline{X}$	= 3.29
	S	= 1.04	S	= 1.41	S	= 1.07
	Mode= 4		Mode= 4		Mode= 4	
Cumulative Ranking		1		2		2

Table IX shows how committee members, department heads, and technical instructors ranked the committee function "Review and suggest equipment and facilities needed for proper student preparation" in importance. Advisory committee members gave this function a 3.04 mean rating, department heads gave it a relatively high rating of 3.60, and technical instructors gave it a 3.23 mean rating. The cumulative ranking revealed that department heads considered this item as being the most important function of advisory committees. Technical instructors

ranked the item third, while advisory committee members considered it

only worthy of a middle range ranking of five.

TABLE IX

RANKING AND MEAN RESPONSE FOR QUESTION
CONCERNING SUGGESTIONS OF EQUIPMENT
AND FACILITIES BY DEPARTMENTAL
PARTICIPANT GROUPS

Departments	Advisory Committee		Department Heads		Technical Instructors	
	Rank	$\overline{X}$	Rank	$\overline{X}$	Rank	$\overline{X}$
Air and Refrigeration	4	3.00	7	3.00	5	3.33
Automotive	10	2.27	1	4.00	7	2.75
Building Trades	4	3.00	1	4.00	1	4.00
Commercial Art	8	2.75	7	3.00	10	2.00
Diesel and Heavy Equipment	7	2.83	7	3.00	8	2.66
Drafting	2	3.66	1	4.00	6	3.00
Electrical-Electronic Technology	4	3.00	1	4.00	9	2.50
Machinist	1	3.88	1	4.00	1	4.00
Nursing	9	2.40	1	4.00	1	4.00
Printing	3	3.50	7	3.00	1	4.00
	N =81		N =10		N =31	
	$\overline{X}$ = 3.04		$\overline{X}$ = 3.60		$\overline{X}$ = 3.23	
	S = 0.84		S = 0.48		S = 1.46	
	Mode= 3		Mode= 4		Mode= 4	
Cumulative Ranking	5		1		3	

Table X indicates how committee members, department heads, and

technical instructors ranked the committee function "Advise on initia-

tion, modification or termination of programs." Committee members gave

it a mean rating of 2.98. department heads 3.20, and technical

instructors 2.87. In the cumulative ranking, committee members ranked

it third in importance, department heads ranked it fourth, and techni-

cal instructors ranked it eighth of the ten items.

TABLE X

RANKING AND MEAN RESPONSE FOR QUESTION
CONCERNING INITIATION AND MODIFICATION
OF PROGRAMS BY DEPARTMENTAL
PARTICIPANT GROUPS

Departments	Advisory Committee		Department Heads		Technical Instructors	
	Rank	$\overline{X}$	Rank	$\overline{X}$	Rank	$\overline{X}$
Air and Refrigeration	5	3.15	6	3.00	2	3.00
Automotive	10	2.44	1	4.00	2	3.00
Building Trades	6	3.00	1	4.00	1	3.33
Commercial Art	3	3.25	7	2.00	8	2.66
Diesel and Heavy Equipment	4	3.16	1	4.00	8	2.66
Drafting	1	3.66	1	4.00	2	3.00
Electrical-Electronic Technology	6	3.00	6	3.00	2	3.00
Machinist	2	3.28	7	2.00	1	3.33
Nursing	9	2.60	7	2.00	9	2.00
Printing	8	2.75	1	4.00	7	2.75
	N =81		N =10		N =31	
	$\overline{X}$ = 2.98		$\overline{X}$ = 3.20		$\overline{X}$ = 2.87	
	S = 0.67		S = 1.40		S = 1.87	
	Mode= 3		Mode= 4		Mode= 3	
Cumulative Ranking	3		4		8	

Table XI shows how committee members, department heads, and technical instructors ranked the committee function "To help obtain school equipment and supplies on loan, as gifts or at special prices" in importance. Advisory committee members gave it a 2.48 mean rating, department heads a 3.00 mean rating, and technical instructors gave it a 3.04 mean rating. However, when looking at the cumulative ranking, all three groups ranked it in the bottom five in importance. Department heads ranked it a relatively low eighth of ten, department heads ranked it fifth of ten, and technical instructors ranked it sixth of ten.

It is interesting to note that the data concerning departmental opinions on the importance of this function reveal considerable agreement between the departmental participant groups. For example, the department of air and refrigeration advisory committee members ranked this function second, department heads ranked it third, and technical instructors ranked this function fourth. Other departmental participant groups who showed close agreement on the function included building trades, commercial arts, electrical-electronic technology, machinist, and nursing.

The departments who showed differences of opinions within this departmental participant group were printing, drafting, diesel and heavy equipment, and automotives. The department showing the least amount of agreement between advisory committee members on one hand, and department heads and technical instructors on the other hand, was the automotive department. Advisory committee members ranked this function a relatively low eighth while department heads and technical instructors ranked it as being the most important function of all ten.

TABLE XI

RANKING AND MEAN RESPONSE FOR QUESTION
CONCERNING OBTAINING SCHOOL EQUIPMENT
AND SUPPLIES BY DEPARTMENTAL
PARTICIPANT GROUPS

Departments	Advisory Committee		Department Heads		Technical Instructors	
	Rank	$\overline{X}$	Rank	$\overline{X}$	Rank	$\overline{X}$
Air and Refrigeration	2	2.76	3	3.00	4	3.00
Automotive	8	2.38	1	4.00	1	4.00
Building Trades	1	3.20	2	3.00	4	3.00
Commercial Art	6	2.50	9	2.00	8	2.66
Diesel and Heavy Equipment	9	2.33	3	3.00	3	3.33
Drafting	10	2.00	3	3.00	9	2.60
Electrical-Electronic Technology	3	2.71	3	3.00	4	3.00
Machinist	3	2.71	3	3.00	2	3.50
Nursing	5	2.60	9	2.00	10	2.00
Printing	6	2.50	1	4.00	4	3.00
	N =81		N =10		N =31	
	$\overline{X}$ = 2.48		$\overline{X}$ = 3.00		$\overline{X}$ = 3.04	
	S = 1.00		S = 1.20		S = 1.26	
	Mode= 3		Mode= 3		Mode= 3	
Cumulative Ranking	8		5		6	

A major product of this study was the priority ranking of advisory committee functions by advisory committee members, department heads, and technical instructors. The ranking and the mean rating of advisory committee functions at Oklahoma State Tech as reported by advisory committee members, department heads, and technical instructors are shown in Table XII, Table XIII, and Table XIV, respectively.

The information as shown in Table XII indicates the rank order and mean rating of functions of the advisory committee at Oklahoma State

Tech by advisory committee members. The Table indicates that committee members viewed assisting in the development of course content, serving as a communications channel, and initiating, modifying, and terminating programs, placement of graduates, and suggesting equipment and facilities as the top five. The lower five included staff development, student recruitment, obtaining equipment and supplies, awarding and recognizing worthy students, and securing financial assistance for department or institution as the least important. The range of the mean rating is from 3.25 for the function of "assist in the development of course context" which is ranked first, to a 2.28 mean rating for the function of "secure financial assistance for department or institution" which was ranked last.

TABLE XII

RANK ORDER AND MEAN OF OPINIONS OF ADVISORY
COMMITTEE MEMBERS ON THE IMPORTANCE OF
ADVISORY COMMITTEE FUNCTIONS

Rank	$\overline{X}$	Question	Function
1	3.25	7	Assist in development of course content.
2	3.18	5	Serve as communication channel.
3	3.01	9	Initiate, modify, terminate programs.
4	2.99	3	Placement of graduates.
5	2.98	8	Suggest equipment and facilities.
6	2.93	6	Staff development.
7	2.65	2	Student recruitment.
8	2.48	10	Obtain equipment and supplies.
9	2.37	4	Award and recognize worthy students.
10	2.28	1	Secure financial assistance for department or institution.

Table XIII shows the rank order and mean rating of functions of
advisory committees at Oklahoma State Tech by department heads. The
table indicated that department heads viewed suggesting equipment and
facilities needed for proper student preparation, assisting in course
content, and in student recruitment, initiating, modifying, terminating
programs, and obtaining equipment and supplies as the top five in
priority. Ranking in the next five were securing financial assistance
for department or institution, placement of graduates, staff develop-
ment, serving as communication channel and the awarding and recognizing
worthy students. The range of the mean rating was from a relatively
high 3.66 for the function of "suggest equipment and facilities" to a
2.37 mean rating for the function of "award and recognize worthy stu-
dents" which is ranked last.

TABLE XIII

RANK ORDER AND MEAN OF THE OPINIONS OF
DEPARTMENT HEADS ON THE IMPORTANCE
OF ADVISORY COMMITTEE FUNCTIONS

Rank	$\overline{X}$	Question	Function
1	3.66	8	Suggest equipment and facilities.
2	3.40	7	Assist in the development of course content.
3	3.33	2	Student recruitment.
4	3.20	9	Initiate, modify, terminate programs.
5	3.08	10	Obtain equipment and supplies.
6	3.00	1	Secure financial assistance for department or institution.
7	2.80	3	Placement of graduates.
8	2.72	6	Staff development.
9	2.70	5	Serve as communications channel.
10	2.37	4	Award and recognize worthy students.

Table XIV shows the rank order and mean rating for the functions of Advisory Committees at Oklahoma State Tech. The table indicated that technical instructors at Oklahoma State Tech viewed promoting student recruitment, assisting in the development of course content, and suggesting equipment and facilities, serving as a communication channel, and placement of graduates as the top five. Ranking in the next five were obtaining equipment and supplies, securing financial assistance for department and insitution, initiating, modifying, terminating programs, staff development, and awarding and recognizing worthy students.

The range of the mean rating is from 3.37 for the function of "student recruitment" which is ranked first to a 2.56 mean rating for the function of "award and recognize worthy students" which is ranked last. The second section contained a statement to determine the opinions of the participants as to the role of advisory committees in Technical Education. The third section contained a statement to determine the opinions of the participants as to the major obstacles to the effective use of advisory committees. The fourth section contained a question to determine the opinions of the participants as to the most successful results of advisory committee efforts at Oklahoma State Tech. A simple frequency count was made of the responses that were the same or very similar to each other. These results were then ranked in order of importance to determine opinions most frequently expressed by the participants. The responses for these sections were grouped into four or five response catagories. For example, the most successful results of advisory committees as perceived by department heads were grouped into four main responses, which were more easily reported in table form.

TABLE XIV

RANK ORDER AND MEAN OF THE OPINIONS OF
TECHNICAL INSTRUCTORS ON THE
IMPORTANCE OF ADVISORY
COMMITTEE FUNCTIONS

Rank	$\overline{X}$	Question	Function
1	3.37	2	Student recruitment.
2	3.29	7	Assist in development of course content.
3	3.23	8	Suggest equipment and facilities.
4	3.19	5	Serve as communication channel.
5	3.05	3	Placement of graduates.
6	3.04	10	Obtain equipment and supplies.
7	3.00	1	Secure financial assistance for department and institution.
8	2.87	9	Initiate, modify, terminate programs.
9	2.79	6	Staff development.
10	2.56	4	Award and recognize worthy students.

Table XV contains a summary of the responses given by advisory committee members, to the question "What do you think should be the role of advisory committees in technical education?" These responses were grouped into five categories.

The results indicate that advisory committee members view assisting technical educators in keeping up with the rapid changes in industry as the most important role that advisory committees can perform. Assisting with curriculum development was second. Committee involvement with students was third. Promote technical education and fifth, assist technical education financially was fourth. Those responses in which assist technical education in keeping up with the trends and need of industry were listed, usually had several examples of the role which advisory committees could play.

TABLE XV

RANK ORDER OF ADVISORY COMMITTEE MEMBERS'
OPINIONS CONCERNING THE ROLE OF
ADVISORY COMMITTEES IN
TECHNICAL EDUCATION
N=81

Opinion	Rank	Number
Assist Technical Education in keeping up with the trends, changes, and needs of industry	1	25
Assist in curriculum development	2	19
Committee should become increasingly involved with students in recruitment and placement.	3	18
Promote technical education in the Industrial community	4	9
Assist Technical Education financially	5	6
Other responses	6	4

Table XVI contains a summary of the responses given by department heads to the question "What do you think should be the role of advisory committees in technical education?" The results fell into four catagories, which are ranked in Table XVI.

The results indicated that department heads viewed assisting technical education in curriculum development and updating equipment as the most important role that advisory committees can perform. Ranking second was assisting in the recruitment and placement of students, ranking third was keeping technical education posted on changing needs, and fourth, providing a communication channel between technical education and the community.

TABLE XVI

RANK ORDER OF DEPARTMENT HEADS' OPINIONS
CONCERNING THE ROLE OF ADVISORY
COMMITTEES IN TECHNICAL
EDUCATION
N=10

Opinion	Rank	Number
Assist in curriculum development	1	4
Assist in student recruitment and placement	2	3
Assist technical education in keeping up with the trends, changes, and needs of industry	3	2
Provide a communication channel between technical education and the industrial community	4	1

Table XVII contains a summary of responses given by technical instructors to the question, "What do you think should be the role of advisory committees in technical education?" These responses were arranged into five categories.

The results indicated that technical instructors viewed assisting in keeping up with the changes, trends, and needs of industry as the most important role of advisory committees. Ranking second was assisting in curriculum development, third, assisting in obtaining up-to-date equipment. Fourth, assisting in student recruitment and placement, and fifth, serving as a communication channel for technical education to the community. Also listed as some possible roles which advisory committees play in technical education were financial support and staff development.

TABLE XVII

RANK ORDER OF TECHNICAL INSTRUCTORS' OPINIONS
CONCERNING THE ROLE OF THE ADVISORY
COMMITTEES IN TECHNICAL
EDUCATION
N=31

Opinion	Rank	Number
Assist technical education in keeping up with the trends, changes and needs of industry.	1	14
Assist in curriculum development	2	6
Assist in obtaining up-to-date equipment for technical education to work with.	3	4
Assist in student recruitment and placement	4	3
Provide a communication channel between technical education and the industrial community.	5	2
Financial support	6	1
Staff Development	6	1

Table XVIII contains a summary of responses given by committee members on the question "Name two major obstacles to the effective use of advisory committees". The results fell into four categories, which are ranked in Table XVIII.

The results indicated that advisory committee members viewed obstacles associated with time as the major problem area in effective use of advisory committees. Ranking second was obstacles associated with communication and lack of information. The third most frequent response was no response, and fourth, were those obstacles associated with internal membership problems.

TABLE XVIII

RANK ORDER OF ADVISORY COMMITTEE MEMBERS'
OPINIONS ON MAJOR OBSTACLES TO THE
EFFECTIVE USE OF ADVISORY
COMMITTEES
N=81

Opinion	Rank	Number
Obstacles associated with time problems.	1	34
Obstacles associated with communication and lack of information problems.	2	22
No response	3	15
Obstacles associated with internal membership problems.	4	10

The responses for Table XIX indicated department heads felt that lack of time was the major obstacle to effective use of advisory committees. Other responses included limited member perspective, communications and lack of information, committee members do not regard their role as critical to the institution, non-attendance and worthwhile meetings are not planned.

The data revealed close agreement by department heads, advisory committee members, and technical instructors that obstacles associated with lack of time represented a major problem area to the effective use of advisory committees. Studies should be conducted to determine the most effective way of planning and presenting committee activities therefore utilizing the time spent in committee activities more effectively.

TABLE XIX

RANK ORDER OF DEPARTMENT HEADS' OPINIONS ON
MAJOR OBSTACLES TO THE EFFECTIVE USE OF
ADVISORY COMMITTEES
N=10

Opinion	Rank	Number
Obstacles associated with time problems	1	5
Communication and lack of information problems	2	1
Limited member perspective	2	1
Committee members do not regard their role as critical to the institution.	2	1
Non attendance and non functioning members	2	1
Worthwhile programs are not planned	2	1

Table XX contains a summary of responses given by technical instructors to the question "Name two major obstacles to the effective use of advisory committees." These responses can be grouped into three categories. The results indicated that technical instructors viewed membership problems as the number one obstacles to effective use of advisory committees. A second obstacle was associated with time. A third obstacle was associated with communication and information problems. However, also listed as an area of concern by some technical instructors were the problems centered around the committees approving any decision that the adminstration wanted without consideration of additional input from technical instructors.

TABLE XX

RANK ORDER OF TECHNICAL INSTRUCTORS' OPINIONS
ON THE MAJOR OBSTACLES TO THE EFFECTIVE
USE OF ADVISORY COMMITTEES
N=31

Opinion	Rank	Number
Obstacles associated with internal membership problems	1	24
Obstacles associated with time problems	2	21
Obstacles associated with communication and lack of information problems.	3	14
Committees approves just any decisions.	4	2

Table XXI contains a summary of responses given by committee members to the question "Name two of the most successful results of advisory committee efforts at Oklahoma State Tech." The results fell into five categories, which are ranked in Table XXI. The results indicated that many committee members do not know or do not have an opinion as to the value of the results of their efforts. Ranking second were results associated with communicating with students and faculty. Ranking third were responses associated with placement of students. Ranking fourth were results associated with recommending or obtaining equipment for Oklahoma State Tech. Ranking fifth were results associated with keeping curriculum up-to-date with changes in industry. Also listed as a successful result of advisory committees at Oklahoma State Tech was helping develop the school into a leading training center for the young and old.

TABLE XXI

RANK ORDER OF ADVISORY COMMITTEE MEMBERS'
OPINIONS ON THE MOST SUCCESSFUL RESULTS
OF ADVISORY COMMITTEE EFFORTS AT
OKLAHOMA STATE TECH
N=81

Opinion	Rank	Number
Committee member did not respond to the question.	1	19
Results associated with communicating with students and faculty.	2	17
Results associated with placement of students.	3	15
Results associated with recommending or obtaining up-to-date equipment for Oklahoma State Tech.	4	14
Results associated with keeping curriculum up-to-date with changes in industry.	5	11
Has helped develop school into a leading training center for the young and old.	6	1
Awareness of facilities and possibilities of the institution.	6	1
Decision making that represents a broad spectrum of opinion.	6	1
Problem solving	6	1

Table XXII contains a summary of responses given by department heads to the question "Name two of the most successful results of advisory committee efforts at Oklahoma State Tech."

The results indicated that half of the department heads viewed assisting in developing up-to-date equipment as the most successful result of advisory committees at Oklahoma State Tech. Department heads

viewed results associated with placement of Oklahoma State Tech graduates and securing equipment as the second most successful outcome of committee efforts. And fourth, one of the ten department heads listed providing scholarships as the most successful outcome of committee efforts at Oklahoma State Tech.

TABLE XXII

RANK ORDER OF DEPARTMENT HEADS' OPINIONS ON
THE MOST SUCCESSFUL RESULTS OF ADVISORY
COMMITTEE EFFORTS AT OKLAHOMA
STATE TECH
N=10

Opinion	Rank	Number
Results associated with developing up-to-date curriculum.	1	5
Results associated with placement of Oklahoma State Tech graduates.	2	2
Results associated with assisting in securing equipment and training aids.	2	2
Results associated with providing scholarships for worthy students.	4	1

Table XXIII contains a summary of the responses given by technical instructors to the question, "Name two of the most successful results of advisory committee efforts at Oklahoma State Tech?" These responses were grouped into five categories.

The results indicate that technical instructors view the most successful outcomes of committee efforts as those associated with developing up-to-date curriculum and results associated with obtaining equipment and supplies.

Ranked third were the results associated with placement of Oklahoma State Tech graduates; fourth were results associated with providing money for loans and scholarships and fifth were the results associated with committees serving as a communications channel for Oklahoma State Tech.

In addition to these five major responses, technical instructors also listed the following successful committee efforts which included: The support for Oklahoma State Tech in its quest for an Associate Degree program; the assistance in introducing the teaching of fluid-flow processing; the political assistance; and the assistance given to Oklahoma State Tech in obtaining CAD-CAM systems for student training.

A summary of the tables concerning the most successful results of committee efforts at Oklahoma State Tech revealed that most advisory committee members did not respond to this item by naming any specific results of advisory committee efforts at Oklahoma State Tech. Among the department heads and technical instructors, the most common response reported as successful results was developing up-to-date curriculum, placement of Oklahoma State Tech graduates, and obtaining equipment for Oklahoma State Tech.

The last section contained demographic data. Question one "What is the length of your advisory committee term?" and "How many years have you served?" was analyzed by looking at the range, mean, and most frequent response (mode) of the committee members in each department.

TABLE XXIII

RANK ORDER OF TECHNICAL INSTRUCTORS' OPINIONS
ON THE MOST SUCCESSFUL RESULTS OF ADVISORY
COMMITTEE EFFORTS AT OKLAHOMA
STATE TECH
N=31

Opinion	Rank	Number
Results associated with developing up-to-date curriculum.	1	16
Results associated with obtaining equipment and materials.	1	16
Results associated with placement of tech graduates.	3	14
Results associated with money for loans and scholarships.	4	12
Results associated with committees serving as a communication channel for Oklahoma State Tech.	4	10
No response	6	4
Supported tech in its quest for associate degree program.	7	2
Introduce the teaching of fluid-flow processing.	8	1
Political assistance	8	1
Provided contact with ASHRAE	8	1
Pushed CAD-CAM	8	1

Table XXIV summarizes the lengths of advisory committee terms in years at Oklahoma State Tech. The results indicated that the range of the length of committee terms was one to seventeen years, the mean is five years. The most revealing data is the modal response which

indicated that committee members do not know or are uncertain about the length of their term.

TABLE XXIV

SUMMARY OF THE LENGTH OF ADVISORY COMMITTEE
TERMS AT OKLAHOMA STATE TECH
N=81

Department	Range (Years)	Mean (Years)	Mode (Years)
Air and Refrigeration	1-17	11.3	17
Automotive	1-15	5.4	2
Building Trades	N/R	N/R	?
Commercial Art	6-10	8.0	?
Diesel and Heavy Equipment	N/R	N/R	?
Drafting	3-10	7.0	?
Electrical-Electronic Technology	2- 3	2.5	?
Machinist	3- 5	4.6	5
Nursing	1 -3	2.5	?
Printing	1-10	5.5	?
Cumulative Results	1-17	5.5	?

Table XXV summarizes the years served by advisory committee members at Oklahoma State Tech. The results indicated that the ranges of years served by committee members was from one to seventeen years, with a mean of five years, and a modal response of two years. The results indicate that advisory committee members who serve on the various departmental committees tend to be reappointed to serve additional terms.

TABLE XXV

SUMMARY OF THE YEARS SERVED BY ADVISORY
COMMITTEE MEMBERS AT OKLAHOMA
STATE TECH
N=81

Department	Range (Years)	Mean (Years)	Mode (Years)
Air and Refrigeration	1-17	10.70	7
Automotive	1-16	5.40	3
Building Trades	2- 5	3.20	4
Commercial Art	1-10	6.50	6
Diesel and Heavy Equipment	1-14	4.80	1
Drafting	1-15	6.25	1
Electronic-Electrical Technology	1- 4	2.00	2
Machinist	2- 3	2.40	2
Nursing	1- 2	1.75	2
Printing	1-10	7.00	10
Cumulative Results	1-17	5.00	2

Table XXVI contains a summary to the question "Have you served on advisory committees of other schools?" and "If so, what type of school?" The results indicated about half of the advisory committee members served on advisory committees for other educational institutions. The responses indicated that 41 percent served on vocational school committees, 27 percent on other technical school committees, 22 percent on post-secondary committees, and 2 percent on other types of advisory committees. The results indicated that Oklahoma State Tech advisory committee members are will qualified for their advisory committee duties based on a wide range of professional and educational experience.

TABLE XXVI

SUMMARY OF RESPONSES TO THE QUESTION "HAVE YOU
SERVED ON ADVISORY COMMITTEES OF OTHER
SCHOOLS?" AND "IF SO, WHAT
TYPE OF SCHOOL?"
N=81

Question	Number	Percentage
Have you served on advisory committees of other schools?		
Yes	37	45
No	44	54
If so, what type of school?		
Technical	10	27
Vocation	15	41
Secondary	3	8
Post-secondary	8	22
Other	1	2

Table XXVII contains a summary to the question "Do you attend committee meetings on a regular basis?" The results indicate that the majority (eighty percent) of advisory committee members feel that they attend committee meetings on a regular basis. Few (eleven percent) do not attend on a regular basis and an even fewer (nine percent) did not respond. The data indicates that advisory committee members take pride in their attendance record at Oklahoma State Tech advisory committee meetings. This shows their concern for the importance of their duties and responsibilities as advisory committee members at Oklahoma State Tech. Additional studies could be conducted to determine the reasons for the non-attendance of advisory committee members during the study. This might assist in increasing the attendance at these meetings.

TABLE XXVII

SUMMARY OF RESPONSES TO THE QUESTION
"DO YOU ATTEND ADVISORY COMMITTEE
MEETINGS ON A REGULAR
BASIS?"
N=81

Response	Number	Percentage
Yes	65	80
No	9	11
No response	7	9

Table XXVIII contains a summary to the question "In your employ-
ment are you classified as management, supervisor, labor or other?"
The results indicated that the vast majority (84 percent) responded
that they were classified as management. Following far behind were the
supervisor classification with 11 percent, and the labor classification
at one percent. Other areas included two responses of retired classi-
fications with two percent and those not responding represented one
percent. The data indicates that industrial representatives serving on
advisory committees at Oklahoma State Tech are successful people who
have climbed the ladder of success to management positions. However,
the small representation of supervisors and labor could represent a
loss of input that could be valuable to Oklahoma State Tech. Consi-
deration could be given to recruiting more supervisors and labor
representatives to fill this possible void. By increasing supervisors
and labor representatives on the committee, a better view-point could
be achieved of the problems of entry level employees.

TABLE XXVIII

SUMMARY OF RESPONSES TO THE QUESTION "IN YOUR
EMPLOYMENT ARE YOU CLASSIFIED AS MANAGEMENT,
SUPERVISOR, LABOR OR OTHER?"
N=81

Classification	Number	Percentage
Management	68	84
Supervisor	9	11
Labor	1	1
Other	2	2
No response	1	1

Table XXIX contains a summary of responses to the question "What form of recognition have you received for your serve on the Advisory Committee at Oklahoma State Tech?" The results indicate that 25 percent of the advisory committee members did not name any recognition they had received for their efforts, 11 percent did not respond, 20 percent viewed a lapel pin as recognition, followed by certificate at 6 percent. Responses of 2.5 percent indicated that they had received plaques, letters of appreciation, a photograph on display, and a free meal. The results are surprising in that Oklahoma State Tech has a systematic way of rewarding advisory committee members for their efforts. This system includes lapel pins, certificates, special meals, and an extensive "goodie bags" full of bakery items prepared fresh by the Oklahoma State Tech bakery. Several committee members responded that Oklahoma State Tech recognized their efforts but their employers did not recognize their personal contribution.

TABLE XXIX

RANK ORDER OF RESPONSES TO THE QUESTION
"WHAT FORM OF RECOGNITION HAVE YOU
RECEIVED FOR YOUR SERVICE ON
THE ADVISORY COMMITTEE AT
OKLAHOMA STATE TECH?"
N=81

Response	Rank	Number	Percentage
No specific rewards named	1	20	25.5
No response	2	16	21
Lapel pin	3	9	12
Certificate	4	5	6
Personal satisfaction	4	5	6
Recognition through a variety of public relation channels	4	5	6
Plaque	7	2	2.5
Letter of appreciation	7	2	2.5
Photograph on display	7	2	2.5
Free meal	7	2	2.5
None except by Oklahoma State Tech – employer makes no contribution	7	2	2.5
Other responses included:			
By students	12	1	1
Good personal relationship	12	1	1
Nothing special	12	1	1
Oklahoma State Tech publications	12	1	1
Picture taken	12	1	1
Get to go to the head of the cafeteria line	12	1	1
A pleasant welcome	12	1	1
A great amount of appreciation	12	1	1
Didn't need any special recognition	12	1	1
Get to keep up-to-date	12	1	1
Recruit employees	12	1	1

Table XXX contains a summary of responses to the question "Mark the following which applies to you." This question listed the various possible education backgrounds the committee members might have.

The results indicated 31 percent of the advisory committee members are university graduates. Technical graduates represented 25 percent,

high school graduates 12 percent, junior college graduates 10 percent, vocational graduates 9 percent, and those with advanced degress 7 percent. Other educational backgrounds listed included mechanical engineers, registered nurses, diploma nursing school, high school drop-out, and a two-year business course.

The responses to question seven "Who appointed you to serve on the advisory committee at Oklahoma State Tech?" can best be summarized in narrative form. All of those who responded acknowledged that they were formally appointed by the Director of Oklahoma State Tech, Wayne Miller. Moreover, many of those responded that they were nominated by department heads at Oklahoma State Tech or by someone within of their company.

TABLE XXX

A SUMMARY OF EDUCATIONAL BACKGROUNDS
OF ADVISORY COMMITTEE MEMBERS
AT OKLAHOMA STATE TECH
N=81

Background	Number	Percentage
High school graduate	10	12
Technical graduate	20	25
Junior college graduate	8	10
University graduate	25	31
Vocational graduate	7	9
Advance degree	6	7
Other:		
Mechanical engineer, registered nurse, diploma nursing school, high school drop-out, and two-year business course		

Department Heads and Technical Instructors

Question one identified the respondents to this section as either department heads or technical instructors. All ten of the department heads responded and all 31 of the technical instructors who had contact with advisory committees responded.

Table XXXI contains a summary to the question "How long have you been at Oklahoma State Tech?" The results indicated that the average number of years at Oklahoma State Tech for department heads is 16.3 years. The range of years for department heads was 1-32. For technical instructors the average was 11.5 and the range was 1-23.

TABLE XXXI

SUMMARY OF RESPONSES TO THE QUESTION
"HOW LONG HAVE YOU BEEN AT
OKLAHOMA STATE TECH?"

Respondent	Range Years	Average Years
Department heads	1-32	16.3
Technical instructors	1-23	11.5

Table XXXII contains a summary of responses from department heads to the question "What is your educational background?" The results include a variety of educational backgrounds. The responses were evenly distributed at 20 percent each between high school graduates

plus college hours, Bachelors Degree, Masters Degree, Associate Degree,
and specialized training.

TABLE XXXII

SUMMARY OF RESPONSES FROM DEPARTMENT
HEADS TO THE QUESTION "WHAT IS
YOUR EDUCATIONAL BACKGROUND?"
N=10

Response	Number	Percentage
High school plus college hours.	2	20
Bachelors Degree	2	20
Masters Degree	2	20
Associate Degree-Oklahoma State Tech	2	20
Specialized Training		
(Registered Nurse)		
(General Motors)	2	20

Table XXXIII contains a summary of responses from technical
instructors to the question "What is your educational background?" The
results indicate that 43 percent of those responding had Associate
Degrees. Technical schools, Bachelors Degree and specialized training
all received 13 percent. High school plus college hours and Masters
Degree received 9 percent.

The responses to the question "What is your professional,
business, or industrial background?" are listed below.

Department Heads

Three years newspaper publisher and owner

Electrical and air conditioning, five years

Twenty years in construction

Licensed architect

Twenty-three years instructor at Oklahoma State Tech, three years as department head

None

Eighteen years as an auto mechanic, two years as service manager

General Motors, Buick Motor Division

Registered nurse

Diesel mechanic.

The results for department heads indicated a wide variety of business and industrial backgrounds.

Technical Instructors

Printing business

Raised in the printing business

Eighteen years in printing industry

Printer-publisher, advertising sales

Worked in television art department for two years

Sixteen years as staff artist-art director

Instructor, thirteen years

Owner, air conditioning business, twenty-five years

Eighteen years in building construction

Production electrician

Electronic technician

Military (United States Navy)

Line mechanic, auto dealership

Automotive technician, ten years

Fourteen years in commercial art business

Five years as a structural detailer

Draftsman, six years

Draftsman, ten years

Instructor

Machinist, nine years

Line mechanic, six years

Diesel instructor.

The results for technical instructors indicated a wide variety of extensive business and industrial backgrounds.

TABLE XXXIII

SUMMARY OF RESPONSES FROM TECHNICAL
INSTRUCTORS TO THE QUESTION" WHAT
IS YOUR EDUCATIONAL BACKGROUND?"
N=31

Response	Number	Percentage
Associate Degree	13	43
Technical school	4	13
Bachelors Degree	4	13
Specialized training (Registered Nurse, General Motors, Air Force, Engineering)	4	13
Masters Degree	3	9
High school plus college hours	3	9

Table XXXIV contains a summary of responses to the question "Have you served on an advisory committee at other schools?"

The results indicated that in general neither department heads nor technical instructors have had significant experience with advisory committees outside of Oklahoma State Tech. Only one department head had any experience outside of Oklahoma State Tech with committees, and only two out of thirty-one technical instructors had had any experience with advisory committees outside of Oklahoma State Tech.

TABLE XXXIV

SUMMARY OF RESPONSES TO THE QUESTION "HAVE
YOU SERVED ON ADVISORY COMMITTEES
AT OTHER SCHOOLS?"

Response	Number	Percentage
Department Heads		
Yes	1	10
No	9	90
Technical Instructors		
Yes	2	6
No	29	94

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS,

AND RECOMMENDATIONS

Summary

The purpose of this research was to provide a study of advisory committees at Oklahoma State Tech in order to evaluate the functions and strengths of advisory committees, and to further enhance committee organization and operations. While advisory committees have been used at Oklahoma State Tech for many years, there had never been a study of these committees to determine the perceptions of committee members, department heads, and technical instructors about the functions, strengths, and weaknesses of the advisory committees.

This study sought to answer the following questions:

1. What were the perceptions of advisory committee members, department heads, and technical instructors of the functions of advisory committees at Oklahoma State Tech?

2. What were the perceptions of advisory committee members, department heads, and technical instructors of the role of advisory committees in technical education?

3. What were the major obstacles to the effective use of advisory committees, as perceived by committee members, department heads, and technical instructors?

4.   What were the most successful results of advisory committees' efforts at Oklahoma State Tech as perceived by advisory committee members, department heads, and technical instructors?

5.   What were the educational and business backgrounds of present advisory committee members at Oklahoma State Tech?

6.   How did Oklahoma State Tech recruit, appoint and reward advisory committee members?

The instrument used for data collection had several sections. In the first section, a four-point opinion scale with ten statements was utilized to obtain the perception of committee members, department heads, and technical instructors, as to the importance of committee functions as set forth in the mission statement for advisory committees in the Oklahoma State Tech catalog. Studies by Elias and Behymer (1979) and Rippey (1978) were used as guides in designing the opinion scale.

The second section contained a statement to determine the opinions of the participants as to the role of advisory committees in Technical Education. The third section contained a statement to determine the opinions of the participants as to the major obstacles to the effective use of advisory committees. The fourth section contained a statement to determine the opinions of the participants as to the most successful results of advisory committee efforts at Oklahoma State Tech. The last section asked for demographic data about advisory committee members. The population for this study included the 81 advisory committee members, 10 department heads, and 31 technical instructors who were involved in advisory committee meetings on the campus of Oklahoma State Tech during the Fall Trimester of 1981.

Findings of the Study

The purpose of Section One of the instrument was to determine the relative importance of the functions as determined by the following statements.

1. "Assist in securing financial support for the department and/ or institution."

Advisory committee members ranked this function tenth in importance with a mean score 2.28. The department heads ranked this function sixth in importance, with a mean score of 3.00. This statement had an overall ranking of ninth with a mean score of 2.76.

2. "To support and promote student recruitment."

Advisory committee members ranked this function seventh in importance with a mean score of 2.70. The department heads ranked this function third in importance with a mean score of 3.33. Technical instructors ranked this function first in importance with a mean score of 3.37. This statement had an overall ranking of third with a mean score of 3.12.

3. "Assist in the placement of Tech graduates."

Advisory committee members ranked this function fourth in importance with a mean score of 3.00. The department heads ranked this function seventh in importance with a mean score of 2.86. Technical instructors ranked this function fifth in importance with a mean score of 3.05. This statement had an overall ranking of sixth with a mean score of 2.95.

4. "Provide awards and recognition to worthy students."

Advisory committee members ranked this function ninth with a mean score of 2.37. Department heads agreed with advisory committee members ranking this function tenth with a mean score of 2.37. Technical instructors continued the trend ranking it tenth with a mean score of 2.59. This statement had an overall ranking of tenth with a mean score of 2.43.

5. "Serve as a communications channel between Oklahoma State Tech and occupational groups in the State and region."

Advisory committee members ranked this function as second in importance with a mean score of 3.18. However, department heads did not rank this function as high, placing it ninth on the list with a mean score of 2.76. Technical instructors tended to agree somewhat with advisory committee members ranking this function as fourth with a mean score of 3.14. This statement had an overall ranking of fourth, with a mean score of 3.02. The overall all mean score tied this function with the function of "Advise on the initiation, modification or termination of programs" which will be discussed later in this Section.

6. "Help encourage effective staff development."

Advisory committee members ranked this function sixth in importance with a mean score of 2.93. The department heads considered it to be less important ranking it eighth with a mean score of 2.72. Technical instructors ranked it ninth in importance with a mean score of 2.79. This statement had an overall ranking of eighth with a mean score of 2.81.

7. "Assist in the development of course content to assure its relevance in meeting changing skills and knowledge needs."

Advisory committee members ranked this function first in importance with a 3.25 mean score. Department heads ranked this function second in importance with a mean score of 3.40. Technical instructors also ranked this function second in importance with a mean score of 3.29. This statement had an overall ranking of first with a mean score of 3.31.

8. "Review and suggest equipment and facilities needed for proper student preparation."

Advisory committee members ranked this function as fifth in importance with a mean score of 3.04. The department heads ranked it first in importance with a mean score of 3.60. Technical instructors ranked it third in importance with a mean score of 3.23. This statement had an overall ranking of second with a mean score of 3.29.

9. "Advise on initiation, modification or termination of programs."

Advisory committee members ranked this function third in importance with mean score of 2.98. The department heads ranked this function as fourth in importance with a mean score of 3.20. Technical instructors ranked this function eighth in importance with a mean score of 2.87. This statement had an overall ranking of fourth with a mean score of 3.02.

10. "To help obtain school equipment and supplies on loan, as gifts or at special prices."

Advisory committee members ranked this function eighth in importance with a mean score of 2.48. The department heads ranked this function fifth in importance with a mean score of 2.48. Technical instructors ranked this function sixth in importance with a mean score

of 3.04. This statement had an overall ranking of seventh with a mean score of 2.87.

The purpose of Section Two of the instrument was to determine from advisory committee members, department heads, and technical instructors what should be the role of advisory committees in technical education.

There was general agreement among the three groups on the role of advisory committees in technical education. The most common responses by advisory committee members and technical instructors were that advisory committees assisted technical education in keeping up with the trends, changes and needs of industry, and assisting with curriculum development. Department heads listed assisting with curriculum development as most important, with student recruitment and placement second, and keeping technical education posted on changing needs of industry listed as being number three.

The purpose of Section Three of the instrument was to determine from advisory committee members, department heads, and technical instructors what the major obstacles were to the effective use of advisory committees. The major obstacles mentioned by the three groups were time problems, lack of information and communication, and internal membership problems.

The purpose of Section Four of the instrument was to determine from the advisory committee members, department heads, and technical instructors what were the most successful results of advisory committee efforts at Oklahoma State Tech. Most advisory committee members did not respond to this item. It is therefore not possible to draw clear cut conclusions about their opinions. Among the department heads and technical instructors, the most common responses reported as successful

results were developing an up-to-date curriculum, placement of Oklahoma State Tech graduates, and obtaining equipment for Oklahoma State Tech.

The purpose of last section was to determine the educational and professional backgrounds of the respondents, and to determine how Oklahoma State Tech recruits, appoints, and rewards advisory committee members. The questions and determinations are as follows. The responses revealed that 38 percent of the advisory committee members were university graduates, 25 percent were technical school graduates, and 10 percent were junior college graduates. The majority, 84 percent, held management positions, 11 percent were supervisors, and 2 percent were laborers. Advisory committee members at Oklahoma State Tech carry substantial educational and business credentials.

The responses on the appointment and rewarding of advisory committee members revealed that Oklahoma State Tech has an appointment procedure which was recognized by advisory committee members. All of those who responded acknowledged that they were appointed by the Director of Oklahoma State Tech, Wayne Miller. Many stated that they were nominated by department heads at Oklahoma State Tech or by persons within their own companies.

When asked what recognition had been given to advisory committee members. Lapel pins had been received by 21 percent, 6 percent stated they had received certificates of appreciation, 2.5 percent had received plaques, 2.5 percent mentioned receiving letters of appreciation, 2.5 percent had photographs on display at the school, and 2.5 percent mentioned receiving a free meal. However, 37.5 percent did not respond or did not name specific rewards.

Some improvement should be realized in this area in that a substantial number of committee members did not perceive that they

received rewards worthy of listing. There was no clear pattern for rewards to advisory committee members for their efforts as perceived by the advisory committee members themselves.

Conclusions

1. "Assisting in the development of course content to assure its relevance in meeting changing skills and knowledge needs" was the most valuable advisory committee function as reported by advisory committee members, department heads, and technical instructors.

2. To "Provide awards and recognition to worthy students" was the least valuable function as reported by advisory committee members, department heads, and technical instructors.

3. With the exception of the most valuable function and the least valuable function of the advisory committee at Oklahoma State Tech, advisory committee members, department heads, and technical instructors differ in their perception of the relative importance of most advisory committee functions.

4. Keeping up with the trends, changes, and needs of industry and to assist with curriculum development was the major role of advisory committees as reported by advisory committee members, department heads, and technical instructors.

5. The lack of time, lack of information and communication, and internal membership problems represented the major obstacles to the effective use of advisory committees as reported by advisory committee members, department heads, and technical instructors.

6. Advisory committee members reported they are not fully aware of the results of their efforts. This result may be linked to the lack

of information and communication listed as one of the major obstacles to the effective use of advisory committees.

7. Department heads and technical instructors viewed the most successful results of advisory committees at Oklahoma State Tech as being the development of an up-to-date curriculum, placement of graduates, and obtaining equipment for Oklahoma State Tech.

8. Advisory committee members at Oklahoma State Tech were well educated and have been successful in industry.

9. Advisory committee members were generally familiar with the fact that the appointment procedure for committee members is a cooperative effort between the department heads and administration. When an advisory committee vacancy occurs, the department head involved identifies a candidate and recommends him/her to the Director of Oklahoma State Tech, Wayne Miller, and with Director Miller's concurrence, a letter is sent inviting the candidate to join the advisory committee.

10. There appears to be some uncertainty in the area of recognition for advisory committee members. A number of committee members did not list any specific recognition that they had received for their efforts at Oklahoma State Tech.

Recommendations

1. Those functions receiving the highest ranking should be top priority during committee discussions.

2. Oklahoma State Tech may wish to develop a advisory committee handbook listing the functions. This listing could be incorporated along with procedures and objectives of advisory committees at Oklahoma State Tech.

3. Development of a procedure which can be utilized to obtain input from all those involved with advisory committee operations. This input would be utilized in planning the topics to be considered by the advisory committee. It would provide topics, administrative review, findings and recommendations and institutionalize feedback to committee members on the tangible results of their efforts.

4. Develop an annual combination work/pleasure training meeting for advisory committee members of all the departments at Oklahoma State Tech. The location could be Oklahoma State Tech or somewhere else. The objectives of these sessions would be to:

a. Identify the functions and objectives of advisory committees.

b. Explain the role of advisory committees at Oklahoma State Tech.

c. Describe the importance of advisory committees to Oklahoma State Tech.

d. Explain the newly developed advisory committee handbook.

e. Plan an annual program of work for the advisory committees so that committee meetings on campus will be efficiently operated.

f. Provide interaction sessions between administration and committee members that would result in meaningful advice on committee operations.

g. Develop a method to evaluate the effectiveness of advisory committees.

h. Provide interaction sessions on challenges that both Oklahoma State Tech and industry will face in the coming decades.

5. Develop a feedback loop for advisory committee members. Possibilities might include:

a.   Quarterly   publications   discussing   advisory   committee
meetings.   Big news on campus, success stories of graduates, a special
"thanks" section for advisory committee members.

b.   Letters to advisory committee members stating action taken
with regard to committee recommendations.

c.   News releases to advisory committee members' local papers,
in-house company papers regarding the efforts of advisory committee
members.

d.   Develop a departmental "Hall of Fame" of advisory committee
members in recognition of meritorious service.

e.   Special service lapel pins for three, five, seven, and ten
years of service.

f.   Letters to company presidents thanking them for time and
service of committee members.

Recommendation for Further Study

1.   A further study should be conducted using data from this
research to identify problem areas within departmental committees.

2.   A periodic study should be conducted to keep pace with chang-
ing perceptions of advisory committee members, department heads, and
technical   instructors   on   the   importance   of   advisory   committee
functions.

3.   A further study should be conducted to identify what type of
recognition or rewards advisory committee members perceive as being
sufficient for their time and efforts at Oklahoma State Tech.

BIBLIOGRAPHY

American Vocational Association. The Role of Postsecondary Occupational
    Education. Washington, D.C.: American Vocational Association,
    1972.

American Vocational Association. The Advisory Committee Vocational
    Education. Washington, D.C.: American Vocational Association,
    1969. ED 170514.

Ayres, Roy Edwin. "A Study of Advisory Committees Utilization in the
    Program of the Designated Area Vocational Technical Schools of
    Oklahoma." (Unpublished Ed.D. Dissertation, Oklahoma State
    University, 1974).

Bartz, Albert E. Basic Statistical Concepts in Education and the
    Behavioral Sciences. Minneapolis: Burgess Publishing Company,
    1976.

Burt, Samuel M. Industry and Vocation Technical Education. New York:
    McGraw-Hill Book Co., 1967.

Clous, Carl E. "Advisory Committee Operations: Formalizing the
    Fundamentals." Journal of Studies in Technical Careers, Vol. III,
    No. 1 (Winter, 1981), pp. 62-66.

Elias, John E., and Jo Behymer. "Vocational Advisory Councils: A
    Ranking of Their Activities." Journal of Studies in Technical
    Careers, Vol I, No. 4 (Fall, 1979), pp. 455-461.

Fisher, Allen. "Advisory Committees--Does Anybody Want Their Advice?"
    Educational Leadership, Vol. 37, No. 6 (December, 1979), pp.
    254-260. EJ 212360

Hamlin, Herbert M. Citizens Committee in the Public Schools.
    Danville, Illinois: Interstate Printers, 1952.

Kerlinger, Fred N. Foundations of Behavioral Research. 2nd Ed. New
    York: Holt, Rinehart and Winston, Inc., 1973.

Knowles, Malcom S. The Modern Practice of Adult Education. Chicago:
    Follett Publishing Company, 1970.

Knowles, Malcom S. Personal Interview. Tulsa, Oklahoma,
    March 22, 1981.

Kraska, Marie F. "Vocational and Technical Education: The Citizen-Employer Link." Journal of Studies in Technical Careers, Vol. II, No. 1 (Winter, 1980), pp. 455-461.

McKinney, Floyd L. "The Perceptions and Professional Educators Expectations Regarding the Citizens Advisory Committee." (Published Ph.D. Dissertation, Michigan State University, 1970.) ED 041142.

Nerdin, Joseph T. "Advisory Committees in Vocational Education: A Powerful Incentive for Program Improvement" American Vocational Journal, Vol. 52 (January, 1977), pp. 27-36. EJ 153190.

Oastler, John Buffering Action of Advisory Committees in Technical Programs. Glen Ellyn, ILL.: Eric Publication, 1972.

Ohio State Advisory Council for Vocational Education. Local Advisory Committees for Vocational Education in Ohio Public Schools. Columbus, Ohio: Research Associates, 1970.

Oklahoma State Tech. Oklahoma State Tech. Okmulgee, Oklahoma, 1979a.

Oklahoma State Tech. Oklahoma State Tech Information Circular. Okmulgee, Oklahoma, 1979b.

Oklahoma State Tech Catalog 1979-1981. Okmulgee, Oklahoma: Oklahoma State Tech. 1981.

Public Law 88-210, 88 Congress H.R. 4955, December 18, 1963.

Public Law 94-482, 96 Congress, Title II Sections 105-106, October 12, 1976.

Popham, James W., and Kenneth A. Sirotnik. Education Statistics Use and Interpretation. 2nd Ed. New York: Harper and Row, 1973.

Pratt, Arden L. "Technical Education Looks Outward." American Vocational Journal, Vol. 48, No. 8 (November, 1973), pp. 40-45.

Riendeau, Albert. The Role of the Advisory Committee in Occupational Education. Washington, D.C.: American Association of Junior Colleges, 1967.

Rippey, Donald T. "Advisory Committees, Dr. Jekyll or Mr. Hyde." Journal of Studies in Technical Careers, Vol. 11, No. 1 (Fall, 1979), pp. 83-96.

Roney, Maurice W. Occupational Education Beyond the High School. Norman, Oklahoma: Center for Economic Development-State of Oklahoma, 1967.

Ryan, Charles W. "Career Development: Cooperation is Catching On." American Vocational Journal, Vol. 48, No. 8 (November, 1973), pp. 36-38.

Tinnell, Richard Personal Interview. Okmulgee, Oklahoma,
    January 14, 1982.

Toupin, Harold O. "Certificate Program for Adults: They Call it
    Career Education." American Vocational Journal, Vol. 48, No. 5
    (May, 1973), pp. 61-67. EJ 080209.

Woolard, Gilm. "Taking Advantages of Strong Tailwinds." American
    Vocational Journal, Vol. 53 (March, 1977), pp. 32-39. EJ 156685.

APPENDIX

QUESTIONNAIRE

We would like to ask your opinion on the following points concerning Advisory Committees at Oklahoma State University School of Technical Training

QUESTIONNAIRE

Considering your relation to the advisory committees at Oklahoma State Tech, rate the following committee functions in importance, with one being of little importance, two of some importance, three considerable importance and four being extremely important. Please circle your selection.

1. Assist in securing financial support for the department and/or institution?   1   2   3   4

2. To support and promote student recruitment?   1   2   3   4

3. Assist in the placement of tech graduates?   1   2   3   4

4. Provide awards and recognition to worthy students?   1   2   3   4

5. Serve as a communication channel between Oklahoma State Tech and occupation groups in the state and region?   1   2   3   4

6. Help encourage effective staff development?   1   2   3   4

7. Assist in the development of course content to assure its relevance in meeting changing skills and knowledge needs?   1   2   3   4

8. Review and suggest equipment and facilities needed for proper student preparation?   1   2   3   4

9. Advise on initiation, modification or termination of programs?   1   2   3   4

10. To help obtain school equipment and supplies on loan, as gifts or at special prices?   1   2   3   4

Below are three questions we would like for you to answer based on the kind of factors mentioned above.

1. Considering the kind of factors mentioned above, what do you think should be the role of advisory committees in technical education?

2. Name two major obstacles to the effective use of advisory committees.

3. Name two of the most successful results of advisory committee efforts at Oklahoma State Tech.

DEMOGRAPHIC DATA

1. What is the length of your advisory committee term? (in years) _____ _____

    How many years have you served? _____

2. Have you served on the advisory committee of other schools?

    yes _____   no _____

    If yes, was the school

    _____ technical   _____ vocational   _____ secondary

    _____ post-secondary   _____ other, please specify? _____

3. Do you attend committee meetings on a regular basis?

    yes _____   no _____

4. In your employment, are you classified as,

    _____ management   _____ supervisor   _____ labor

    _____ other, specify? _____

5. What form of recongition have you received for your service on the Advisory Committee at Oklahoma State Tech?

6. Mark the following which applies to you:

    _____ high school graduate

    _____ technical graduate

    _____ junior college graduate

    _____ university graduate

    _____ vocational graduate

    _____ advance degree

    _____ other, please list

8. Who appointed you to serve on the Advisory Committee at Oklahoma State Tech?

Thank you for your consideration and cooperation in completing this questionaire.

Demographic Data

1. In what capacity do you serve at OST?

    Department Head _____   Instructor _____

    Administrative _____   Other _____

2. How long have you been at OST? (In years) _____

3. What is your educational background?

4. What is your profession, business or industrial background?

5. Have you served on advisory committees at other schools?

    Yes _____   No _____

    If yes, was the school:

    _____ Technical   _____ Vocational   _____ Secondary

    _____ Post-secondary   _____ other, please specify

VITA

Jimmy Wayne Baker

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Doctor of Education

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