A STUDY OF SCHOOL PLACEMENT PRACTICES

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FOR GRADUATING TECHNICIANS

IN OKLAHOMA

By

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1963

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Dean of the Graduate College

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CHAPTER I

THE PROBLEM

Introduction

The phenomenal growth in vocational and technician education has brought about an increased need for guidance and assistance in locating job opportunities for graduates at these levels. There exists a striking contrast between placement efforts on the professional levels and what is being done in the programs of less than a baccalaureate or professional degree level. Colleges and universities make an attempt to place graduates in appropriate positions.

Statement of the Problem

A lack of sufficient data pertaining to the placement practices of Oklahoma institutions graduating technicians was evident in reviewing recent literature. Placement of students is generally accepted as part of the responsibility of educational institutions but very little research is available on what has been done in this area.

Purpose of the Study

The primary purpose of this study was to investigate school placement practices for graduating engineering and physical science related technicians in Oklahoma.

Assisting in the placement of students on jobs is becoming increasingly more important to educators. It is possible that education is now entering a new age, the age of accountability. The accountability may be justifiably based upon the placement of recent graduate's success on the job, and the rate of advancement. Adequate placement practices and resources materially affect the quality and quantity of job opportunities for technician graduates.

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There is presently a need to investigate what has been done in Oklahoma technician education institutions pertaining to school placement practices for graduating technicians.

Questions Investigated

In order to determine the school placement practices of institutions graduating technicians the following questions were investigated:

- 1. Who was primarily responsible for placement of technician education graduates?
- 2. What method was most often used in the disseminating of information concerning students to prospective employers?
- 3. What method was used most frequently in dissemination job opportunity information to students?
- 4. What method was most successful in helping to place technician education graduates?
- 5. What percent of the institutions have a graduate followup program?
- 6. How was the total enrollment of an educational institution associated with the school's placement practices of its graduating technicians?

- 7. How was the type of educational institution associated with the school's placement practices of its graduating technicians?
- 8. How was the geographic location associated with the school's placement practices of graduating technicians?

Scope of the Study

This study included Oklahoma educational institutions that offered less than a baccalaureate degree in engineering and physical science related technician education programs and which were funded by the State Department of Vocational and Technical Education. The institutions included in this study offer two-year associate degree technician programs.

Types and numbers of educational institutions included in the study were: eight junior colleges, two technical institutes, one college, one trade-technical school, and one university. All of the institutions included in this study gave college credit for class work with the exception of the trade-technical school.

The placement practices for the 1971-1972 school year were studied. The reason for choosing this time period was to make the study as upto-date as possible and include the normally larger graduation that occurs at the end of the spring semester.

Definition of Terms

Engineering Technician.--An engineering technician is one who has the education and experience that will enable him to work in direct support of the professional engineering employees. The engineering

technician is capable of solving a wide range of technical problems by applying his background in science, mathematics and communicative and citizenship skills. (1, p. 47)

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<u>Physical Science Technician</u>.--Physical science technicians are generally specialized in some branch of chemistry, physics, or mathematics. Their job assignment involves working directly with engineers and physical scientist in theoretical, and applied research. (2, p. 16)

Follow-up Study.--A study of the placement employment experiences or status of former pupils. (3, p. 671)

<u>Graduate</u>.--A graduate for this study refers to any person who majored in an engineering or a physical science related technical area, and who has received an associate degree, or completion certificate, from a school included in this study.

Junior College.--An institution of higher education which offers the first two years of college education, normally granting an associate degree. The credits obtained at the accredited schools are transferable and/or terminal in nature depending upon the program the student is pursuing. It is an independent organization which may be part of the public school system or an independently organized system of junior colleges. (3, pp. 12-13)

<u>Placement Practices.--Placement practices are those procedures</u> that an educational institution follows in order to help students to obtain employment, either part-time or full-time, in their specialized area. These practices materially affect the type and quantity of job opportunities for students. (3, p. 14)

<u>Standard Metropolitan Statistical Area</u>.--A county or group of counties that have at least one city or "twin cities" with a combined

population of 50,000 or more. This area may include contiguous counties if they are metropolitan in character and are socially and economically integrated with the central city. (5, p. 11)

<u>Technical Institute</u>.--Technical institutes offer specialized programs to educate highly skilled technicians. These programs are generally designed to develope a broadly based competencies in specific fields of applied science, of sufficient depth that the graduate may be employed in one of a cluster of jobs. The associate degree is generally awarded upon completion of the program. (6, p. 7)

<u>Trade-Technical School</u>.--A trade-technical school is an educational institute that offers programs at both trade and technical levels. This type of institution is post-secondary, but does not award associate degrees or college credit. Its primary objective is the preparation of students for employment. (6, p. 7)

CHAPTER II

REVIEW OF LITERATURE

The purpose of this study was to investigate the placement practices of Oklahoma educational institutions graduating two-year posthigh school engineering and physical science technicians.

A study dealing with a specific level of education, such as technician education, merits a clarification of the objectives of the program so that the reader may have a better understanding of the problems which exist in this level of education. This study does not include the history and internal functioning of technician education, but identifies a technician and what the placement practices may involve.

The Technician

The Technician Identified

In reviewing the literature it was noted that there was no universally accepted definition for a technician although many of the authors indicated the same thought. Most writers agree that the technician occupations lie between the skilled occupations and the professions.

Technician education, according to the U.S. Office of Education in its publication, <u>Standard Terminology for Instruction in Local and</u> <u>State School Systems</u>, (3, p. 573) is defined as being a planned

sequence of school experiences normally at the post-secondary level designed to prepare persons for a cluster of jobs in a specialized field of technology. The technician's education is designed to prepare a person for the occupational area between the skilled and professional occupations. The technician's education is not only concerned with the area of specialization but includes a major interest in the fields of mathematics and science. The curriculum of technician education is designed to prepare the graduate to: (1) enter a job, (2) advance with the developments in technology, and (3) continue his education.

A definition of technical education was submitted in the study <u>Occupational Education Beyond the High School in Oklahoma</u> (7, p. 11). In the study Roney and Braden pointed out that when the term technical education is used in describing a formal program of occupational programs at the associate degree level, there are five specifics that can be identified. The specifics described are as follows:

- 1. The program is usually two years in length.
- 2. The content is derived from technical skills and knowledge requirements of technical occupations.
- 3. Mathematics and the physical and biological sciences are integral parts of the program: technical study is mathematics and science-based at all levels of the program.
- 4. 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 broad applications.
- 5. Instruction is laboratory-oriented and makes use of many applications of the technical principles being studied. The emphasis is placed on analytical, rational thought processes rather than on the development of specific procedural techniques or skills.

Roney and Braden also pointed out, that while the two-year associate degree programs are the most common and consist of the greatest grouping, three and four-year programs do exist. As certain technologies get more sophisticated, there is little doubt that a longer study period than two years will be required.

In the United States Office of Education publication, <u>Metallurgical</u> <u>Technology: A Suggested Two-Year Post High School Curriculum</u> (8, p. 19) it was stated a program to prepare technicians should be designed to meet the following objectives:

- 1. It should be complete and comprehensive to prepare the graduate for entry into his chosen field and for productivity with a minimum of "in-plant" instruction.
- 2. It should be of sufficient depth, breadth, and comprehensiveness to provide the graduate with the technical competence and background to permit his advancement to positions of increasing responsibility.
- 3. It should stimulate student's interest and encourage them to continue study in the technical field.

start here

Placement Practices

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The literature refers to two studies of placement practices in junior colleges, one study of placement practices of high school vocational (trade and industry) graduates and <u>one unpublished Ed.D. disser-</u> tation which dealt with the placement of technician graduates.]

The literature reviewed revealed that there is general agreement in the area of school placement responsibility. The two main areas of agreement were; that the placement of graduates is a vital school function, and this responsibility is too important to be consigned to another agency or to a part-time faculty or administrative assignment. Just of this nature it is appropriate that the need for technician placement as well as its identification and function be discussed. The following discussion will give the reader a brief history and the legal basis of school placement as well as providing a basis for the identification, function, and need of school placement.

One of the earliest placement offices was located at Yale University in 1919 in order to help alumni returning from World War I to locate jobs. Soon after that more placement offices were opened up in order to help their returning veterans locate positions and to aid them in returning to civilian life. The early offices were simple and companies did not send representatives to the university, but the directors contacted the employers. There was little information available pertaining to the qualifications of the prospective employee. At this stage of development there was very little coordination between placement offices of the different institutions or a controlling association of any sort. Ethics involved in the activities of the placement offices depended upon the personnel concerned, the placement officers, and company representatives.

There was little done concerning the development of ethics in the placement offices until 1956-1957 when various regional placement associations developed the code of ethics which is followed today. This code and the banding together of the various regional placement associations has formed a national placement association. (9, p. 27)

In reviewing the literature there was only one mention of the legal aspect of placement or personnel work, Clarence J. Bakken in <u>The Legal Basis for College Student Personnel Work</u> (10, p. 1) stated the following:

Only one state, California, provides by statute for placement offices in colleges and universities. This statute states that a placement service may be maintained at any state college for the placement of students and former students of the college. A placement service fee in the amount fixed by the director of education may be charged former students using such services. Placement services maintained elsewhere are maintained by virtue of the broad powers given governing boards.

The first of many questions that should logically be asked: "Is the placement of students the responsibility of educational institutions?" The literature shows a general agreement that placement is a vital function of the educational institutes. In spite of this general agreement the "National Advisory Council on Vocational Education" in their third report found it necessary to note the following comments:

(11, pp. 2-3)

Much attention has been given to the effect of education on employment. Not enough has been paid to the opposite proposition: that employment, as an integral part of education, is essential to the learning experience of many youths.

Schools which provide vocational education without also providing a job do not have a complete program. Such schools should not have full vocational funding.

Venn also emphasized the function and responsibility of vocational

placement when he stated in "Man, Education, and Work" (12, p. 149) that:

The contrast between guidance and placement efforts on the professional and graduate levels and what is being done on all lower levels is striking. Colleges and universities attempt to place their graduates, especially those on the graduate level, in appropriate positions anywhere in the nation, or even in the world.

Their credentials are kept on file and updated for future use. But nothing like this occurs between high school or junior colleges and its students even though guidance and placement at these levels are more complex than at the professional level. It is possible, even probable, that education is now entering a new age, the age of judgment by achievement. The achievement may very well be based upon our products, the student after graduation, his success in his job, and the degree and rate of advancement. An active placement office would be indispensable in helping to properly place the graduate in an appropriate job and having the follow-up record of successes and failures.

Thinking along this same line Felix Robb in the <u>Journal of College</u> <u>Placement</u> made the following statement: (13, pp. 33-34)

To warrant greater financial support, higher institutions in the future will need to obtain evidence of the quality of career performance, of citizen responsibility, and the ultimate contribution to society of their graduates.

Career guidance and placement of individuals is a joint responsibility of professors, administrators, and qualified specialist in vocational counseling and placement.

A career development center would not only subsume the responsibility of a traditional placement office, but would employ modern technology and systems approaches in becoming a useful learning resource for student, faculty, and alumni. It would provide career orientation information for individuals and groups.

Literature reveals a general agreement that placement is considered too important to be consigned to another agency. This was pointed out by Mohs in "<u>Service Through Placement</u>," (14, p. 10) when he listed the following advantages of a school centered placement office.

- 1. Colleges have responsibility for all facets of student placement. The vocational guidance aspect of placement for young workers requires disproportionate attention compared to the needs for this service among older workers. This can best be accomplished by people who are trained professionals in education and guidance.
- 2. An employee of the college who has status in the school by reason of being a member of the faculty would have an immense advantage over an outsider. He would have access to any and all personnel records, his relation-

ship with his peers is already partly established, he is college and student-oriented.

- 3. Placement facilities should be located on the campus and easily accessible to students.
- 4. Most employers who are looking for trainees want some information regarding college success of the applicant, opinions about his personality, stability, his attendance record, etc.

The most obvious function of a placement office is the placement of the student in a job or aid with the establishment of further education. What may not be so obvious is the importance of the placement of the graduate in a position which is best fitted to him according to his goals and ability. When this happens, it should be the results of careful research by both the employee and employer, not by mere chance. Results of successful placements would be a constant source of employment, alumni who would be more likely to refer prospective students to the institution, a much improved working relationship communications between education and industry.

One of the greatest needs of today's students is to match the right person up with the right position in a company where he can work and grow according to his capabilities. Unless or until this happens a degree of disillusionment can be expected on the part of employers and alumni alike.

A placement officer has many duties, but perhaps none more important to the student than that of counseling. This was brought out in <u>The Fundamentals of College Placement</u> (9, p. 148) when the following statement was made.

The placement officer plays many roles, but perhaps none more important to the student's future than that of counselor. While his chief responsibility lies in the area relating to employment, he cannot ignore the need for attention to any problem which affects job selection. Therefore, none of the services he performs for the student, the faculty and administration, or employer is more awesome or more difficult for the placement officer to perform than that of counseling.

This same area was discussed by William W. Stevenson in <u>Evaluating</u> <u>Career Guidance and Placement State Level</u> (15, p. 2). Stevenson went so far as to group guidance, counseling and placement altogether and inseparable into one area in his study.

A placement office can be of great help to the institution as well as to the student. In the role of serving the student the college placement officer finds that he is in an excellent position to serve the institution. In <u>The Fundamentals of College Placement</u> (9, pp. 6-7) Teal and Herrick state that the institution can be served by the placement officer in the following ways:

- 1. By establishing himself as a source of accurate and timely information on economic and industrial market trends;
- 2. By having an intimate knowledge of campus personnel and services for obtaining and distributing important and helpful information;
- 3. By encouraging and expanding contracts that contribute to the advancement or enlightenment of the staff;
- 4. By making certain that the employers are acquainted with all of the several areas of academic specialization;
- 5. By keeping alert to any additional areas of service that might be helpful to the school; and
- 6. By participating actively in on- or off-campus activities that will further the recognition of the service.

There is general agreement among educators that more communication is necessary between education and industry. The placement office or director is uniquely qualified to fulfil this need. By necessity he is in constant touch with industry and school staff alike. Placement offices are in a unique position for obtaining information for updating program and curriculum planning. This is clearly stated by Norman C. Harris in <u>Technical Education in Michigan Community Colleges</u> (16, p. 69) when he concluded the following:

Continuous feedback of information from industry and business is essential to on-going curriculum planning. One of the best sources of feedback information is the group of employees who were former students at the college. And the best way to keep in touch with them and obtain their suggestions for improving curriculum is through organized follow-up procedures, preferably closely associated with guidance and placement functions.

One of the major concerns of today's post-secondary institutions is the responsibility of providing a relevant curriculum to its students. As technological change occurs, demands in any particular area change, even to the point of eliminating the need for workers in some fields.

Harris (16, p. 69) in his study of the placement office procedures stated that several points should be the keystone to success in the placement office. Harris noted these following points:

The placement function should be dignified by an office of its own. Physical facilities for placement activities are uniformly inadequate.

Full-time placement directors, with capable secretarial assistance, and attractive and spacious offices should be provided. The director should know that his major responsibility is placement, and that his total performance will be judged on the basis of the success of the placement office. He would publicize and "promote" his office and its services to students and potential employers alike. The first thought in any employer's mind when a job needs to be filled should be, "I'll call the placement office at the community college."

Education and training youth for jobs is only a part of the community college function. Placing them in jobs for which they are suited, and assisting them to grow in those jobs to positions of increasing responsibility--this is the other part of the college's function. Placement is much too important to be trusted to another agency, or to a part-time faculty assignment, or to the haphazard job-hunting efforts of students themselves.

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In looking at studies conducted concerning the placement practices of technician education institutions in Oklahoma there was only one study found pertaining to the area of this study. Cecil W. Dugger in <u>An Analysis of Oklahoma School-Industry Practices in the Placement and Employment of Technician Graduates</u> (18, p. 56) interviewed either the chief administrative official or a school representative whom the chief administrator felt best Qualified to answer Questions regarding the school's placement practices of its 1967 graduating engineering and physical science technicians. Dugger summarized his study (18, pp. 137-138) concerning placement practices as follows:

> Oklahoma educational institutions graduating technicians in 1967 that considered technician placement a primary function of the school's total guidance program were the schools indicating adequate placement resources, a person responsible for placement above the instructor level, using a greater number of methods to disseminate placement/ employment information to students and employers, and having the greatest number of communication contacts with Oklahoma employers. Schools indicating inadequate technician placement resources were the ones that considered placement the responsibility of the student and/or other organizations, utilizing few methods to disseminate placement/employment information to students and employers, and involved in a small number of employer communication contacts. Although the eleven schools did not use the methods most frequently, the school representatives considered the most important source of information in determining technician manpower needs and employment opportunities was "school representatives visiting with employers" and the most important method of communicating placement/ employment information to technician students was "representatives of organizations employing technicians needs and opportunitites with students in group sessions on campus."

The primary purpose of Dugger's study was to investigate Oklahoma school-industry placement and employment practices with emphasis on those practices which may be associated with out-of-state migration of recently graduated two-year post-high school engineering and physical science related technicians.

CHAPTER III

DESIGN AND METHODOLOGY

The purpose of this chapter is to describe the design of the study, the method of selecting the population, the instrument used in the collection of data and how the data was analyzed. A mailed questionnaire was used as the instrument with which to gather information. The decision to use the mailed questionnaire was based upon the recommendation of professional educators who have obtained positions, for the most part, of dean, department head, or instructor.

Design

An ex-post-facto design was used in this study. The independent variables, or placement practices, had already occurred and could not be manipulated. This design involves research by observation and follow-up.

Follow-up studies can be divided into two classifications: explanatory and descriptive. Some studies stay with only one classification while others may combine both.

Descriptive studies are used to describe main characteristics of groups, individuals, or institutions by drawing conclusions from data primarily with an informative purpose.

The design of this study is of the ex-post-facto design and of descriptive nature based upon data received from a mailed questionnaire of the closed type.

Methodology

Selection of Population

The population for this study consisted of all Oklahoma educational institutions that offered technician education and the technician education programs were funded by the State Department of Vocational and Technical Education, and had engineering and physical science related technician graduates during the 1971-1972 school year. The institutions surveyed included eight junior colleges, two technical institutes, one trade-technical school, one college, and one university that met all of these requirements. The institutions were the following: (1) Connors State College, (2) Eastern Oklahoma State College, (3) Murray State College, (4) Northern Oklahoma College, (5) Oscar Rose Junior College, (6) Tulsa Junior College, (7) Northeastern Oklahoma A & M College, (8) Sayre Junior College, (9) Oklahoma State Tech, Okmulgee, (10) Oklahoma State University Technical Institute, Oklahoma City, (11) Oklahoma State University Technical Institute, Stillwater, (12) Cameron State College, and (13) Langston University. Claremore Junior College and Altus Junior College were not included in this study since these schools did not graduate engineering and physical science related technicians in the 1971-1972 school year.

Instrument and Data Collection

<u>Instrument</u>.--Research of the follow-up procedure is usually carried out by personal interview, or by using group or self-administered mailed questionnaire. The self-administered mailed questionnaire was used in this study.

The name of individuals at each of the institutions, who were familiar with the placement practices at their own institution, were obtained from the Oklahoma State Department of Vocational and Technical Education. Job titles and addresses were obtained from the "Personnel Directory" of the Department of Vocational and Technical Education.

After considering the purpose and need of the study, a preliminary questionnaire was constructed which permitted the responses to be made by checks or if the response was not covered, each question had a comment space after the question for additional clarification or additional information. The preliminary questionnaire was pre-tested with the cooperation of two administrators and a member of the faculty of the Technical Education Department of Oklahoma State University. Revisions were made and a final draft was constructed. A copy of the questionnaire is included in Appendix A.

A letter of transmittal was formulated which explained the purpose of the study and each person in the population was mailed a copy. The letters were individually addressed to the respondent and typed separately. No letterheads were used. While a letterhead might have promoted maximum response by indicating legitimate authority, this might have caused the respondents to reply in a manner which might have protected their self-interest. The letter, questionnaire, and a stamped,

self-addressed envelope were mailed to each person in the population. References were made in the letter to the stamped envelope to enhance the factors of convenience and commitment of the respondent. A copy of the transmittal letter is included in Appendix B.

A follow-up letter was formulated, individually addressed, and typed, mailed with an additional questionnaire and a stamped, selfaddressed envelope to those who had not responded to the original questionnaire within three weeks. A copy of the follow-up letter can be found in Appendix C. All of the population had responded within a week after the follow-up letter was mailed.

The responses of the questionnaire along with the personal comments offered by the respondents in the space provided at the end of the questionnaire made it clear that the problem being studied was of interest and concern to the school officials answering the questionnaire.

Data Analysis

The fact that this study involved a complete population made it practical to use the frequency and percentage methods of analysis. Frequency and percentage analysis lends itself best to the comparison of placement practices with regard to school enrollments, types, and locations.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

The purpose of this chapter is to report an analysis of the technician placement practices of thirteen Oklahoma educational institutions that graduated engineering and physical science related technicians during the 1971-1972 school year.

Background Information

Placement information for this study was obtained from a questionnaire which was completed by representatives of thirteen Oklahoma education institutions graduating engineering and physical science related technicians during the 1971-1972 school year. The engineering technician programs of these schools were funded by the State Department of Vocational and Technical Education.

Types of educational institutions included in this study were: eight junior colleges, two technical institutes, one college, one trade-technical school, and one university. The location of each of the thirteen schools is shown in Figure 1. Enrollments of the schools varied from a junior college enrollment of 308 to a university (main campus) enrollment of 18,476. Table I gives the enrollment of the thirteen Oklahoma schools.

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Figure 1. Location of Thirteen Oklahoma Schools That Graduated Engineering and Physical Science Technicians During the 1971-1972 School Year

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TABLE I

Institution	Head-Count Enrollment
Cameron State College	3,726
Connors State College	919
Eastern Oklahoma State College	1,536
Langston University	1,236
Murray State College	869
Northeastern Oklahoma A & M College	2,316
Northern Oklahoma College	1,453
Oklahoma State Tech (Okmulgee)	2,771
Oklahoma State Unive rsity Technical Institute (Oklahoma City)	1,362
Oklahoma State University Technical Institute (Stillwater)	18,476
Oscar Rose Junior College	1,767
Sayre Junior College	308
Tulsa Junior College	3,923

ENROLLMENT OF THIRTEEN OKLAHOMA SCHOOLS FALL, 1971^a

^aExcludes enrollment in off-campus centers, and those in adult education or correspondence courses.

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Source: Oklahoma State Regents for Higher Education. <u>Sixteenth Biennial Report</u> - <u>Part II</u>. Oklahoma City: Oklahoma State Regents for Higher Education, 1972. Placement data was analyzed by grouping the schools in three different ways: total school enrollment, types of educational institutions, and by geographic location.

Testing of Research Questions

<u>Question 1</u>.--How was the total enrollment of an educational institution associated with the placement practices of its graduating technicians?

The thirteen schools graduating engineering and physical science related technicians were grouped as follows: 1-1,000; 1,001-2,000; and 2,000 and over.

Data received from respondents representing the thirteen schools showed that as the enrollment increased the schools were more likely to have adequate technician placement resources. Table II shows that 60 percent of the representatives of schools with enrollments of 1,001 and over perceived their placement resources as adequate. This contrasted with the representatives of schools with an enrollment of 1,000 and under whose representatives indicated that 33.3 percent of their schools have adequate placement resources.

The person most likely to be primarily responsible for placement of technician graduates was found to be the department head of a technology program. Data in Table III shows that the department head was responsible for placement 38.5 percent of the time. This percent increased to 60 percent in schools having an enrollment of 2,001 and over.

The director of all technologies was the only person listed on the questionnaire who was not given as having the primary responsibility

TABLE II

Perception of	Total Enrollment of Schools					
Placement Resources	1-1,000	1,001-2,000	2,001 and over			
Adequate	l	3	3			
Inadequate	2	2	2			
Total	3	5	5			

TECHNICIAN PLACEMENT RESOURCES IN THIRTEEN OKLAHOMA SCHOOLS BY TOTAL ENROLLMENT

for the placement of technician graduates. Data in Table III shows that there were only two schools that indicated no one was responsible for the placement of the technician graduates at their institutions. One of the schools indicated that students were primarily responsible, while the other school named other organizations as having the primary responsibility for placement.

In response to the question concerning the dissemination of placement information to prospective employers, the data indicated that as the enrollment increased, so did the number of methods used to disseminate information. Multiple responses to the various methods used to disseminate information to prospective employers concerning graduating technicians are recorded in Table IV.

Respondents of the thirteen schools reported "on-campus interviews" as the most successful placement method. This was followed in frequency by "instructors referring students to possible employment."

TABLE III

RESPONSIBILITY OF PLACEMENT PRACTICES OF THIRTEEN OKLAHOMA SCHOOLS BY TOTAL ENROLLMENT

Primary Responsibility	Total Enrollment of Schools					
for Placement	1-1,000	1,001-2,000	2,001 and over			
Over-all guidance program	0	2	0			
Director of all technologies	0	0	0			
Department head	l	1	3			
Instructors in technology programs	1	2	1			
Students	0 1	0	l			
Other organizations	l	0	0			
Total	3	5	5			

Data presented in Table VI shows that "advisory committee referrals" was perceived as the least successful method of placement.

<u>Question 2.--How was the type of educational institution associ-</u> ated with the placement practices of its graduating technicians?

There were five different types of institutions included in this study. The five types of institutions were: trade-technical, technical institute, university, junior college, and college.

Respondents of the thirteen Oklahoma schools indicated, as shown in Table VII, that placement resources in the trade-technical school, the technical institutes, and 50 percent of the junior colleges were observed to be adequate. All others were shown to be inadequate.

TABLE IV

A PERCENTAGE ANALYSIS OF METHODS USED TO DISSEMINATE INFORMATION TO PROSPECTIVE EMPLOYERS CONCERNING GRADUATING TECHNICIANS IN THIRTEEN OKLAHOMA SCHOOLS BY TOTAL ENROLLMENT

Methods Used to Disseminate	Total Enrollment of Schools						
Information to	the second se	.000		1-2,000		and over	
Prospective Employers	No.	Pct.	NO.	Pct.	No.	Pet.	
Sent school representatives to prospective employers	2	33.3	2	14.3	3	15.0	
Contacted prospective employers by telephone	0	0.0	0	0.0	2	16.0	
On-campus interviews	0	0.0	3	21.4	4	20.0	
Sent information to prospective employers about programs	2	33.3	4	28.6	5	25.0	
Sent information to prospective employers about graduates	2	33. 3	3	21.6	4	20.0	
Other	0	. 0.0	2	14.3	2	10.0	
Total	6	99•9	14	100.0	20	100.0	

The findings, as shown in Table VII, indicate a total of 46.2 percent of the school representatives in the study reported their respective institutions as having inadequate placement resources.

Data presented in Table VIII indicate that the primary responsibility for placement in junior colleges was department heads 50 percent of the time, instructors 25 percent, and students or other organizations 25 percent. The remaining types of institutions indicated a relative balance between the choices given in the questionnaire.

TABLE V

A PERCENTAGE ANALYSIS OF METHODS USED TO DISSEMINATE INFORMATION TO TECHNICIAN EDUCATION STUDENTS IN THIRTEEN OKLAHOMA SCHOOLS BY TOTAL ENROLLMENT

Methods Used to Disseminate	Total Enrollment of Schools					
Information to Technician Students		Pct.		<u>-2,000</u> Pct.	<u>2,001</u> a	Pct.
Current list of prospective employers currently desiring to hire technicians	3	42.8	5	38.5	4	28.6
Unit in the curriculum designed to familiarize student with procedures concerning possible employers	2	28.6	2	15.4	1	7 . 1
School-initiated class trips to employing organizations	0	0.0	3	⁶ 23.1	3	21.5
Industry-initiated class trips to employing organizations	0	0.0	0	0.0	l	7 . 1
Representatives of technician employing organizations discussing needs and opportunities with						
students on campus	2	23.6	3	23.1	4	28.6
Other	0.,	ò∎o	0	0.0	1	7.1
Total	7	100.0	13	100.0	14	99.9

TABLE VI

TECHNICIAN PLACEMENT METHODS OF THIRTEEN OKLAHOMA SCHOOLS BY TOTAL ENROLLMENT

Perception of the most	Total Enrollment of Schools					
successful placement methods	1-1,000	1,001-2,000	2,001 and over			
On-campus interviews	0	3	2			
Instructors referring students to possible employers	2	1	1			
Current list of possible employers	1,	1	1			
Advisory committee referrals	0	0	0			
Student initiated application for employment	0	0	1			
Other	0	0	0			
Total	3	5	5			

TABLE VII

TECHNICIAN PLACEMENT RESOURCES IN THIRTEEN OKLAHOMA SCHOOLS BY TYPE OF INSTITUTION

Perception of	Type of Institution							
Placement Resources	Trade- Technical Technical Institute University		Junior College	College				
Adequate	l	2	0	4	0			
Inadequate	0	· 0	1	4	1.			
Total	1.	2	1.	. 8	1			

The primary responsibility was most frequently given to the department head. This was true in 46.2 percent of the schools included in this study.

TABLE VIII

RESPONSIBILITY OF PLACEMENT PRACTICES OF THIRTEEN OKLAHOMA SCHOOLS BY TYPE OF INSTITUTION

Primary	Type of Institution						
Responsibility for Placement	Trade- Technical	Technical Institute	University	Junior College	College		
Over-all guidance program	0	l	1	0	0		
Director of all technologies	· 0	0	0	0	0		
Department head	1	1	0	4	0		
Instructors in technology							
programs	0	0	0	2	1		
Students	0	0	0	1	0		
Other organizations	0	0	0	1	0		
Total	1	2	1	8	1		

Data given in Table IX shows the various methods used to disseminate information to prospective employers concerning graduating technicians. The method most often used in the dissemination of information was "sent information to prospective employers about programs." This method was used in 84.6 percent of the schools.

TABLE IX

A PERCENTAGE ANALYSIS OF METHODS USED TO DISSEMINATE INFORMATION TO PROSPECTIVE EMPLOYERS CONCERNING GRADUATING TECHNICIANS IN THIRTEEN OKLAHOMA SCHOOLS BY TYPE OF INSTITUTION

Methods Used to	Type of Institution										
Disseminate Information to		rade- hnical		Technical		University		Junior College		College	
Prospective Employers	No.					Pct.	No.			Pct.	
Sent school repre- sentative to prospective employers	0	0.0	0	0.0	0	0.0	5	21.7	l	20.0	
Contacted prospec- tive employers by telephone	1	25.0	0	0.0	0	0.0	1	4.4	l	20,0	
On-campus interviews	1	25.0	2	40.0	1	33.3	2	8.8	1	20.0	
Sent information to prospective employers about programs	1	25.0	1	20.0	l	33.3	7	30.4	l	20.0	
Sent information to prospective employers about graduates	1	25.0	1	20.0	0	0.0	6	26.1	1	20.0	
Other	0	0.0	1	20.0	1	33.3	2	8.8	0	0.0	
Total	4	100.0	5	100.0	3	99.9	23	100.0	5	100.0	

The "on-campus interview" method of disseminating information to prospective employers was used by each school with the exception of 75 percent of the junior colleges. Only 25 percent of the junior colleges indicated that their school had on-campus interviews. Multiple responses to the methods used to disseminate information to students by type of institution are recorded in Table X. This data indicated that the "current list of prospective employers currently desiring to hire technicians" was used in each institution except one junior college.

Data presented in Table X, shows that each trade-technical, technical institute, university, and college used school-initiated class trips to employing organizations as a method of disseminating information to students. This contrasts with only one junior college using this method.

Data shown in Table XI is a response to the question "what method was perceived as the most successful in the placement of technician graduates at your institution?" The trade-technical school, the technical institutes, and the university indicated that on-campus interviews were thought to be the most successful, while only one of the junior colleges and the college thought this to be the case at their school.

<u>Auestion 3</u>.-- How was the geographic location of an educational institution associated with the placement practices of its graduating technicians?

Schools were grouped according to distances they are located from the geographical center of the nearest Standard Metropolitan Statistical Area (SMSA). Schools were grouped so approximately the same number were represented in each of the three equal distance groupings. When using a 50 mile difference for grouping the schools, five schools fell within the 0-50 mile group, five schools within the 51-100 mile group, and three schools fell within the 101-150 mile group.

TABLE X

A PERCENTAGE ANALYSIS OF METHODS USED TO DISSEMINATE INFORMATION TO TECHNICIAN EDUCATION STUDENTS IN THIRTEEN OKLAHOMA SCHOOLS BY TYPE OF INSTITUTION

Methods Used to	Type of Institution									
Disseminate		Trade- Technical				Junior				
Information to		nical		<u>titute</u>					College	
Technician Students	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Current list of pro- spective employers currently desiring to hire technicians	1	33•3	2	25.0	l	33•3	7	46.6	l	20.0
Unit in the curricu- lum designed to familiarize student with procedures concerning possible employers		0,0	1	12.5	0	0.0	3	20.0	1	20.0
School-initiated class trips to employing organizations	1	33•3	2	25.0	1	33.3	1	6.6	1	20.0
Industry-initiated class trips to employing organizations	0	0.0	0	0.0	0	0.0	0	0.0	1	20.0
Representatives of technician employ- ing organizations discussing needs and opportunities with students on										
campus	1	33.3	2	25.0	1	33•3	4	26.7	1	20.0
Other	0	0.0	1	12.5	0	0.0	0	0.0	0	0.0
Total	3	99•9	8	100.0	3	99•9	15	99•9	5	100.0

TABLE XI

TECHNICIAN PLACEMENT METHODS OF THIRTEEN OKLAHOMA SCHOOLS BY TYPE OF INSTITUTION

Perception of the Most	Type of Institution							
Successful Placement Methods	Trade- Technical	Technical Institute	University	Junior College	College			
On-campus interviews	1	2	l	l	0			
Instructors referring students to possible employers	0	0	0	3	1			
Current list of possible employers	0	0	0	3	0			
Advisory committee referrals	0	0	0	0	0			
Student initiated application for employment	0	0	0	1	0			
Other	0	0	0	0	0			
Total	1	2	1	8	1			

The geographic locations of schools included in this study in relation to the Oklahoma City and Tulsa Standard Metropolitan Statistical Areas are shown in Figure 2.

The data presented in Table XII reveal that schools located a distance greater than 50 miles from the nearest SMSA had a greater tendency to send information to prospective employers about graduating technicians than the schools located in the less than 51 mile group.

Responses presented in Table XIII show that 50 percent of the schools located within 100 miles of the nearest SMSA used "school-

TABLE XII

A PERCENTAGE ANALYSIS OF METHODS USED TO DISSEMINATE INFORMATION TO PROSPECTIVE EMPLOYERS CONCERNING GRADUATING TECHNICIANS IN THIRTEEN OKLAHOMA SCHOOLS BY GEOGRAPHIC LOCATION

Methods Used to Disseminate Information		nce in M		<u>Center</u> -100	of Nearest SMSA 101-150		
to Prospective Employers	No.	Pct.	No.	Pct.	No.	Pct.	
Sent school representa- tives to prospective employers	l	8.3	5	22.7	l	16.7	
Contacted prospective employers by telephone	l	8.3	2	9.1	0	0.0	
On-campus interviews	3	25.0	3	13.6	l	16.7	
Sent information to prospective employers about programs	4	33.3	5	22.7	2	33.3	
Sent information to prospective employers about graduates	2	16.7	5	22.7	2	33.3	
Other	1	8.3	2	9.1	0	0.0	
Total	12	99.9	22	99•9	6	100.0	

initiated class trips to employing organizations" as a method of disseminating information to students. None of the schools located a distance greater than 100 miles used this method.

It is shown in Table XIII that distances schools are located from the nearest SMSA had very little effect on the representatives of technician-employing organizations discussing needs and opportunities with students on campus.

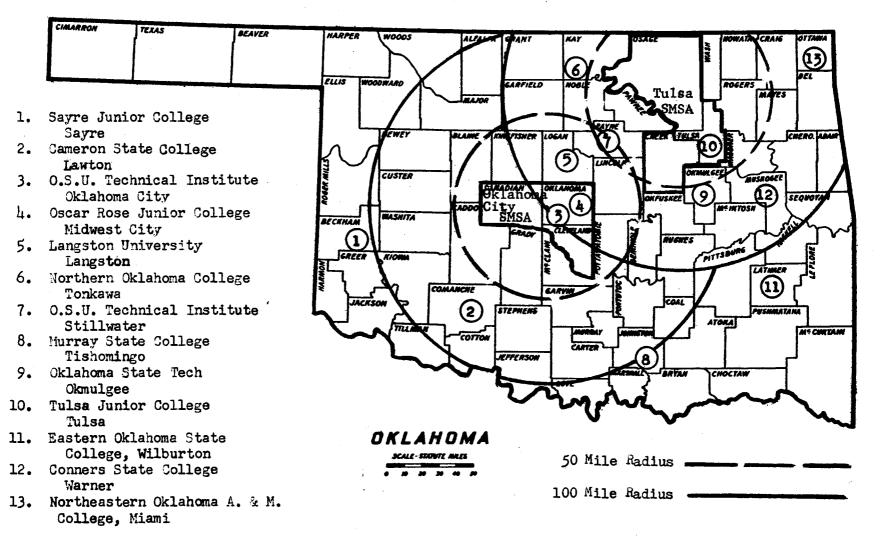


Figure 2. Location of Thirteen Oklahoma Schools in Relation to the Tulsa and Oklahoma City Standard Metropolitan Statistical Areas

Data shown in Table XIV indicates that "on-campus interviews" were perceived to be the most successful placement method by the respondents in the 0-50 mile group. Those schools located more than 50 miles from the nearest SMSA indicated that the most successful placement practice was instructors referring students to possible employers.

TABLE XIII

A PERCENTAGE ANALYSIS OF METHODS USED TO DISSEMINATE INFORMATION TO TECHNICIAN EDUCATION STUDENTS IN THIRTEEN OKLAHOMA SCHOOLS BY GEOGRAPHIC LOCATION

Methods Used to					of Nearest SMSA		
Disseminate Information		-50		-100		1-150	
to Technician Students	No.	Pct.	No.	Pct.	No.	Pct.	
Current list of prospec- tive employers currently desiring to hire technicians	4	33.3	5	33.3	3	50.0	
Unit in the curriculum designed to familiarize student with procedures concerning possible employers	1	8.3	3	20.0	1	16.7	
School-initiated class trips to employing organizations	3	25.0	3	20.0	0	0.0	
Industry-initiated class trips to employing organizations	0	0.0	1	6.6	0	0.0	
Representatives of tech- nician employing organizations discuss- ing needs and opportun- ities with students on							
campus	3	25.0	3	20.0	2	33.4	
Other	l	8.3	0	0.0	0	0.0	
Total	12	99.9	15	99.9	6	100.0	

TABLE XIV

TECHNICIAN PLACEMENT METHODS OF THIRTEEN OKLAHOMA SCHOOLS BY GEOGRAPHIC LOCATION

Perception of the most	Distance in Miles to Center of Nearest SMSA						
successful placement methods	0-50	51 - 100	101-150				
On-campus interviews	3	l	l				
Instructors referring students to possible employers	0	3	2				
Current list of pos- sible employers	1	1	l				
Advisory committee referrals	0	0	0				
Student initiated application for employment	1	0	0				
Other	0	0	0				
Total	5	5	3				

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The problem with which this study was concerned was the lack of information available regarding the placement efforts and procedures of Oklahoma educational institutes in regard to the placement of their graduating engineering and physical science related technicians.

Summary

The purpose of this study was to investigate placement practices of Oklahoma schools graduating engineering and physical science related technicians. This study included all Oklahoma educational institutions that graduated engineering and physical science related technicians during the 1971-1972 school year. All schools included in this study were funded by the State Department of Vocational and Technical Education.

The basic design of this study was ex-post-facto and of a descriptive nature. The information was obtained through the use of a mailed self-administered questionnaire. The questionnaire was developed for multiple check responses. The questionnaire was mailed and collected during the spring of 1973.

There were thirteen educational institutions included in this study. The number and type of institutions were: eight junior col-

leges, two technical institutes, one college, one trade-technical school, and one university.

Limitations

In an ex-post-facto study there are certain limitations that need to be taken into consideration when interpreting the results of such a study. In this study of ex-post-facto design there were no independent variables to manipulate or experimentation available with which to check the results. The analysis may help to describe specific conditions and practices that existed, spot trends and detect weaknesses or attitudes, but the analysis is only as accurate as the investigator can draw conclusions from the data.

Information was obtained from the total population, but the findings in this study may not apply to any other school, now, in the past, or in the future.

It is assumed the respondents gave thoughtful consideration to the questionnaire and completed the form truthfully. There is no assurance that the respondents interpreted the questions in the manner intended by the designer of the questionnaire. The reader must accept the assumption that the investigator did not select the respondents, nor make use of, or omit any data that would intentionally bias the results of this study. The major weakness of the data lies in the interpretation of what each respondent perceived as adequate placement resources. Although this may have influenced the data it was unavoidable in a study of this nature.

Conclusions

Answers to eight research questions were sought in this study. This section states each question and states a conclusion based upon the data collected.

First Research Question: Who was primarily responsible for placement of technician education graduates?

<u>Summary and Conclusion</u>: The respondents indicated that responsibility for placement varied. Those listed as responsible were; overall guidance program, department head, instructors, students and organizations not associated with the institution. The data indicated as total enrollment of the institutions increased the less frequently the instructors were considered to have the primary responsibility for placement. The responsibility for placement most frequently listed was the department head while students and other organizations were listed only once each. It was concluded that department heads were most likely to be responsible for placement of technician education graduates.

<u>Second Research Question</u>: What method was most often used in the dissemination of information concerning students to prospective employers?

<u>Summary and Conclusion</u>: The data indicated that as the enrollment of an institution increased, so did the number of different methods used to disseminate information concerning students to prospective employers. Those schools with enrollments of 1,001 and over indicated that they used more than 80 percent of the six methods given on the questionnaire. The data indicated the method most often used to dis-

seminate information concerning students to prospective employers was that they sent information to prospective employers about their programs. It was concluded that the method most often used in the disseminating of information concerning students to prospective employers was the sending of information to prospective employers about their programs.

<u>Third Research Question</u>: What method was most often used in the dissemination of possible job opportunities to students?

<u>Summary and Conclusion</u>: It was indicated by the data that as enrollment of the institutions increased so did the number of methods used to disseminate information to students regarding job opportunities. A current list of prospective employers currently desiring to hire technicians was a method used in 90 percent of the schools in the study. <u>It was concluded that the method that was most often used in the dis-</u> <u>semination of possible job opportunities to students was a current list</u> <u>of prospective employers currently desiring to hire technicians</u>.

Fourth Research Question: What method was most successful in helping to place technician education graduates?

<u>Summary and Conclusion</u>: The findings of the analysis indicated the most successful method of helping to place technician education graduates varied depending upon the type of school, enrollment, and location. As enrollment increased, on-campus interviews became the most successful method, and this method was thought to be most successful in all trade-technical, technical institutes and the university. The data indicated also that as schools were located a greater distance from the nearest Standard Metropolitan Statistical Area (SMSA) instructor referrals were thought to be more successful. <u>It was con-</u>

cluded that the method that was most successful in helping to place technician education graduates was on-campus interviews.

<u>Fifth Research Question</u>: What percent of the schools in the study had a follow-up program in their placement program?

<u>Summary and Conclusion</u>: All of the respondents in this study indicated that their school had a follow-up program in their placement program. <u>Thus the investigator concludes that 100 percent of the</u> <u>schools in this study have a follow-up program in their placement</u> <u>program</u>.

<u>Sixth Research Question</u>: How was the total enrollment of an educational institution associated with the school's placement practices of its graduating technicians?

<u>Summary and Conclusions</u>: The data indicates that instructors were less likely to have the placement responsibility and department heads or overall guidance program were more likely, as the enrollment increased. As enrollments increased there was a greater tendency for the respondents to perceive their school as having adequate placement resources. The data indicates that as enrollments increased so did the number of methods used to disseminate information to students and employers. It was concluded that as the total enrollment of a school increases more attention was paid to the responsibility of placement practices of technician graduates.

<u>Seventh Research Question</u>: How was the type of educational institution associated with the school placement practices of its graduating technicians?

<u>Summary and Conclusions</u>: The data indicates that respondents perceived that placement resources in trade-technical, technical insti-

tutes and 50 percent of the junior colleges were adequate. It should be pointed out that one junior college respondent, or 16.5 percent, who perceived adequate placement resources also indicated that the primary responsibility for placement was the students. It was concluded that placement resources, primary responsibility for placement, most successful method of placement, and the total effort in the dissemination of information seems to be related to the type of educational institution.

<u>Eighth Research Question</u>: How was the geographic location of an educational institution associated with the school's placement practices of its graduating technicians?

<u>Summary and Conclusions</u>: The data indicated that schools located a distance greater than 50 miles from the Standard Metropolitan Statistical Area (SMSA) were more likely to send information to prospective employers than those schools within 50 miles of the nearest SMSA. The data also shows that 50 percent of the schools located within 100 miles of the nearest SMSA used school-initiated class trips to employing organizations, in disseminating information, while none of the schools located over 100 miles used this method. Schools within 50 miles of the nearest SMSA perceived on-campus interviews as the most successful placement method while schools located greater than 50 miles perceived instructors referring students to possible employers as the most successful. It was concluded that the methods of disseminating information and the most successful placement methods were related to the geographic location of an educational institution.

The Oklahoma educational institutions that graduated technicians and received state funds in the 1971-1972 school year varied greatly in their placement practices. Those institutions that designated the primary responsibility for placement to persons above the instructor level used the greatest number of methods to disseminate information to employers and students, perceived on-campus interviews as the most successful placement method, and were more likely to have adequate placement resources. The institutions indicating the student or other organizations as having the primary responsibility for placement, used fewer methods in the dissemination of information, perceived that a current list of prospective employers was the best method of placing graduates, and were unlikely to have on-campus interviews or class trips. The respondents indicated that they perceived the most appropriate means of disseminating information to prospective employers.

Recommendations

After careful consideration of the data presented, summary statements, conclusions, and the additional comments given by the respondents at the end of the questionnaire, the following recommendations are offered:

1. Not all educational institutions offering technician education provide a unit within the curriculum designed to familiarize students with procedures concerning job placement. It is recommended that school administrators give serious consideration to the addition of such a unit.

2. It is recommended that a person be selected as a placement officer and be given the primary responsibility for placement. That

person should be above the instructor level with the primary responsibility of student placement, and if possible, a full-time placement officer.

3. It is recommended that the placement officer be involved in obtaining part-time employment as well as career employment of students.

4. It is recommended that the placement office be given adequate resources and that the office be easily accessible for the technician students.

5. There seems to be little communication between Oklahoma schools and industry. It is recommended that administrators give careful consideration to providing school representatives with sufficient time and finances to visit with employers.

6. Research is needed to obtain more information concerning the feasibility, design, and development of a centralized placement office.

7. It is recommended that a placement seminar be scheduled and the person responsible for placement at each institution be invited to attend.

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APPENDIX A

QUESTIONNAIRE

PLACEMENT PRACTICES

QUESTIONNAIRE

Educational Institution

Representative's Title

Representative's Name

Telephone Number and Extension

A. GENERAL POLICIES

- 1. Which of the following statements best describes your institution's placement practices for graduating technicians during the 1971-1972 school year? (Please check <u>one</u>, or if none apply, state so under comments.)
 - a. () Placement is considered the responsibility of the overall guidance program of the institution.
 - b. () Placement is considered the primary responsibility of the director of the technical department of the institution.
 - c. () Placement is considered the primary responsibility of each department head within the technical division.
 - d. () Placement is considered the primary responsibility of instructors in each of the technical areas.
 - e. () Placement is considered the primary responsibility of the student.
 - f. () Placement is considered the primary responsibility of other organizations.

Comments

- Ê.

2. In the preceding question, which approach do you consider to be appropriate?

(a-b-c-d-e-f) Circle one

B. DISSEMINATION OF INFORMATION TO PROSPECTIVE EMPLOYERS

- 1. Which of the methods stated below were used to disseminate information concerning the 1971-1972 teohnician graduates of your institution? (Please check as many as apply.)
 - a. () Sent school representatives to prospective employers.
 - b. () Contacted prospective employers by telephone.
 - c. () On-campus interviews.
 - d. () Sent school information to prospective employers about technician education programs.
 - e. () Sent school information to prospective employers about technician education graduates.
 - f. () Other methods used to inform potential employers were: (Please specify)
- 2. Which of the above do you consider the most appropriate means of disseminating information.

(a-b-c-d-e-f) Circle one

C. DISSEMINATION OF INFORMATION TO STUDENTS

- 1. Which of the methods stated below were used to disseminate information to technician education students? (Please check as many as apply.)
 - a. () A current list of potential employers presently seeking to employ technicians.
 - b. () A unit included in the curriculum designed to familiarize students with procedures concerning various types of possible employers such as county, state, federal, and industrial employment.
 - c. () School-initiated technician class trips where students could obtain employment information.
 - d. () Technician class trips initiated by someone outside of the school in which students may obtain employment information.

- e. () Representatives of technician employing organizations discussing needs and opportunities with students on campus.
- f. () Other methods were used to disseminate information to students. (Please specify)
- 2. Which of the methods stated above was the most successful in your institution?

(a-b-c-d-e-f) Circle one

D. STUDENT PLACEMENT METHODS

- 1. Which of the methods listed below is the most successful in helping to place technician graduates? (Please check one)
 - a. () On-campus interviews.
 - b. () Instructors referring students to possible employers.
 - c. () Current list of possible employers.
 - d. () Advisory committee referrals.
 - e. () Student initiated application for employment.
 - f. () Others (Please specify)

E. OVER-ALL PLACEMENT EFFORT

- 1. In your opinion, is the overall placement effort at your school adequate or inadequate? (Please check one)
 - a. () Adequate
 - b. () Inadequate

Comments or suggestions for improving existing placement efforts:

- 2. Does your school have a follow-up program of technician graduates?
 - a. () Yes
 - b. () No
- 3. Does your school involve in curriculum decisions, the person or persons responsible for placement? (Please check <u>one</u>)
 - a. () Always
 - b. () Sometimes
 - c. () Never
 - d. () Unable to say
- 4. Comments or additional information about over-all placement effort:

The information you have provided is greatly appreciated. Without your assistance this study would not have been possible. Thank you for your time and information.

APPENDIX B

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TRANSMITTAL LEFTER

P. O. Box 362 Harrah, Oklahoma February 1, 1973

Name Title Educational Institution Town or City

Dear Dr. or Mr.

One of the most important aspects of our schools is the placement of our technician graduates. A study is being made to determine the placement practices of schools in Oklahoma graduating two-year posthigh school engineering and physical science related technicians. In order to get an accurate survey it will be necessary to obtain the following information concerning your school's placement practices during the 1971-1972 school year.

Information provided by you and others, in response to the following questions will not be referred to by individuals or organizations in any published materials.

A summary of the results of this survey will be mailed to you upon completion of the study.

For your convenience a self-addressed, stamped envelope has been enclosed to aid you in returning the form as soon as possible.

Sincerely,

Richard E. Todd

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Enclosure

APPENDIX C

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FOLLOW UP LEFTER

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P. O. Box 362 Harrah, Oklahoma February 21, 1973

Name Title Educational Institution Town or City

Dear Dr. or Mr.

A few weeks ago you received a questionnaire concerning your school's placement practices of graduating technicians. If your completed questionnaire is already in the mail, we appreciate it. If you have misplaced it, or if it never reached you, won't you take a few minutes to fill out this second copy.

The response has been very good, but there is only fourteen schools involved, so your information is very important.

Please take a few minutes to complete and return this vital information. The study will not be complete without your information.

Sincerely,

Richard E. Todd

Enclosures--questionnaire stamped envelope

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S.,

VITA

Richard Eugene Todd

Candidate for the Degree of

Master of Science

Thesis: A STUDY OF SCHOOL PLACEMENT PRACTICES FOR GRADUATING TECHNICIANS IN OKLAHOMA

Major Field: Technical Education

Biographical:

- Personal Data: Born in Pawnee, Oklahoma, January 13, 1940, the son of Richard Aaron and Mildred Todd.
- Education: Graduated from Pawnee High School, Pawnee, Oklahoma, in 1958; received an Associate Degree from the Oklahoma State University Technical Institute with a major in Drafting and Design Technology in May, 1961; received the Bachelor of Science degree from Oklahoma State University with a major in Industrial Arts Education in May, 1963; attended the University of Oklahoma and Central State University; completed requirements for the Master of Science degree in Technical Education at Oklahoma State University in May, 1973.
- Professional Organizations: Oklahoma Education Association, Oklahoma County Education Association, Association of Class Room Teachers, Oklahoma Industrial Arts Association, Red Red Rose, and Oklahoma County School Masters Association.
- Professional Experience: Mathematics teacher, Crescent High School, Crescent, Oklahoma, 1963-1964; Mathematics teacher, Moore Junior High School, Moore, Oklahoma, 1964-1965; Structural Steel Detailer for W. & W. Steel Company, Oklahoma City, Oklahoma, 1965-1967; Designer Draftsman, Collins Radio Company, Dallas, Texas, 1967-1968; Chief Draftsman, H. K. & S. Iron Company, Oklahoma City, Oklahoma, 1968-1970; Drafting and Mathematics teacher, Harrah High School, Harrah, Oklahoma, 1970-1973.