

A STUDY OF SELECTED CHARACTERISTICS OF
FIRST-YEAR TECHNICIAN STUDENTS IN
THE OKLAHOMA STATE UNIVERSITY
SCHOOL OF TECHNOLOGY

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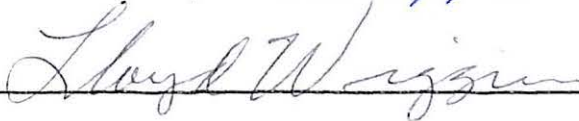
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CHAPTER I

INTRODUCTION

A number of significant changes in occupational education have taken place recently in many technical institutes. One of these changes has been the development of four-year baccalaureate programs in engineering technology.

The purpose of this study was to identify differences and similarities among students entering two-plus-two technological programs where the students have a choice of working toward a two-year associate degree in a given program or continuing on beyond their two-year associate degree to a four-year baccalaureate degree. One advantage of this system is the coordination of the courses so the students do not lose credits if they decide to transfer to the four-year program in the same area of interest. The results of the investigation are reported in this study.

An examination of the factors influencing changes revealed that a number of social forces appeared to be influencing changes in the nature of engineering technology education. The trend toward expanding technological programs is the result of reduced flow of baccalaureate engineering graduates into industry.

This flow is being reduced by two factors: first, the absolute number of baccalaureate degrees in engineering has been essentially static for ten years and now seems more likely to decrease than increase; and second; a growing percentage of baccalaureate engineers continue their studies to acquire the master's degree before accepting industrial employment. (1)

This trend has created the need for a semiprofessional individual to fill the widening gap between technology and engineering.

Need for the Study

The problems of planning an effective system of technician education and of providing accurate information for use by students, parents, and counselors appeared to justify the need for a study of characteristics of students enrolling in technician education programs at Oklahoma State University School of Technology.

It was expected that the information provided would be useful to school administrators, students, parents, and counselors. It was expected that this study would provide information which would be useful in the design of additional research in this area.

Statement of the Problem

Development of an expanding technology on the post high school level has been impaired due to the lack of information concerning aspects of students entering the wide range of technical institutions. One of the many types of institutions providing the rapidly growing technician education is the school of technology, which is very rapidly becoming the advanced educational institution for the technician and technologist.

The need for technically competent workers creates a need to know more about preparing or educating people for the wide range of the work force. Not only do we need to identify the similarities and differences in the populations being served by the institutional settings, but we

need to know the characteristics of students for purposes of recruitment, counseling, and selection.

Simply stated, the problem with which this study was concerned was the recent lack of descriptive information relative to students served by the Oklahoma State University School of Technology.

Definition of Terms

Technician Education is a planned sequence of classroom and laboratory experience at the post secondary level designed to prepare persons for a cluster of job opportunities in a specialized field of technology. The program in instruction normally includes the study of the underlying sciences and supporting mathematics inherent in a technology; and of the methods, skills, materials, and processes commonly used and the services performed in the technology. A planned sequence of study and extensive knowledge in a field of specialization is required in technical education, including competency in the basic communication skills and related general education. Technical education prepares for the occupational area between the skilled craftsman and the professional person.

School of Technology for the purpose of this study refers to the two-plus-two technological school where the students have a choice of working toward a two-year associate degree in a given technical program or continuing on beyond their two-year associate degree to a four-year baccalaureate degree.

Students Entering Technician Education for the purpose of this study refers to students who are earning their first year's credit in the School of Technology.

Geographic Area for the purpose of this study refers to the geographic information represented by entering technician students prior to their entry into the School of Technology.

Two types of backgrounds were considered: (1) state (i.e., from Oklahoma or from out-of-state) and (2) urban or rural. Whether the background of the respondents was urban or rural was determined by the size of their high school graduation class. The respondents who were members of a high school graduating class of 100 or more would tend to represent an urban rather than a rural background.

Questions to Be Answered

It was felt that the following questions would obtain information of significance to instructors and counselors in high school and college programs.

1. What are the personal and socioeconomic backgrounds of students at the School of Technology?
2. What are the different levels of educational background for students at the time of entering the School of Technology?
3. What are the different socioeconomic background factors of students at the School of Technology?

CHAPTER II

REVIEW OF THE LITERATURE

America has had technical education for some time, although it has not been nationally popular for very many years. The increase in the number and complexity of occupations at all levels has elevated the needs of industry and business for semiprofessional manpower resulting in a shortage of both professional and semiprofessional personnel.

Socioeconomic Background

In a study of freshmen students at a southwestern college and at an eastern college, Washburn (2) found that up to a point the more urban the residence background of the student the better his academic performance is likely to be. This point was determined to be the 500,000 population mark.

An investigation by Medsker and Trent (3) showed relationships between the occupational level of the father and the type of college attended and between the educational attainment of the parent and the type of college attended. In general, students who attended junior colleges came from homes where the father's occupation was classified in the lower levels and where the educational attainment of parents was high school graduation or less. Students whose father's occupations were classified in the upper levels and whose parents had attended college tended to go to four-year colleges and universities.

Hood (4) reached the conclusion that the occupational levels of parents of students attending the university's college of liberal arts resembled those of parents of institute of technology students, while fathers of students in the college of liberal arts had reached slightly higher levels of education than fathers of students in engineering. He also concluded that the differences among students in different colleges in the level of the mothers' education were smaller than the differences in the fathers' education.

Personal Characteristics

Some students have heavy responsibilities and few resources, while others are in a favorable financial position. Financial need and accessibility are major factors in determining whether individuals are able to obtain an education beyond high school.

In a discussion on technical students, Graney (5) stated, "there are surprisingly few factual data which define the kinds of individuals such students are." He also stated that there is much speculation about technical students in that "the speculation deals less with the subject of what technical students are than with what they ought to be."

In studying 36 freshmen students at Roosevelt University, Rezler (6) found that high achievers differed significantly from low achievers with respect to certain personal values. The low achievement group was found to believe that:

Of primary importance in getting a college degree is to achieve social prestige and high income without strenuous work.

One should conform to group standards.

One owes it to one's parents to attend college as an expression of gratitude.

The high achievement group was found to believe that:

. . .work should provide opportunity for self-expression, independence, and advancement, not just in terms of money but in terms of having a more challenging and independent position.

A 1965 report of the Coordinating Council for Higher Education (7) relative to the California junior colleges includes the topic of family background of students. The report stated:

The relationship of family background to factors relevant to success in college are well established. Several of these factors are of considerable importance to Junior College education.

1. A majority of California Junior College students have parents with only high school educations.
2. Family encouragement and support is low for many Junior College students since education is not highly valued by the family. On the other hand, the upward social mobility of some working class families may result in unrealistic aspirations on the part of many students.
3. The majority of Junior College students find it necessary to work in order to support themselves in college. Often this means reduced course loads or such stress that achievement is impaired.
4. The relative lack of cultural and civic interests in homes from which a majority of Junior College students come may have profound effects on student motivation and achievement. . .and on the general student environment of the colleges.

A conclusion reached by Schoenfeldt (8) was somewhat different regarding the relative affects of socioeconomic background and intelligence on college attendance. The relationship among socioeconomic environment, general academic ability, and post high school education were investigated using the data from Project Talent. It was found that students from the higher socioeconomic levels attending technical schools tend to come from the lower ability groups while technical school students from lower socioeconomic levels are more evenly distributed

among the ability levels. Even though the data from this study show that both ability and socioeconomic background affect college attendance, ability has more influence than does socioeconomic background.

In a study by Miller (9) technician students and engineering students were compared. Using the father's education, occupation, and family income to measure social class background, Miller found that technical institute students come from significantly lower socioeconomic backgrounds than engineering students. It was found that social class background was not related to success for either group of students and also that the engineering group was more theoretically oriented with a significantly higher need for dominance and motivation for achievement than the technical institute group.

Technical Students

Miller (10) described the technician education student as a person with average or above average intelligence, whose high school transcript may not reflect his true potential as a technician as a result of improper motivation during high school. This student may express a disinterest in mathematics and science. . .at least the kind to which he may have been exposed in high school. The technician education student must have an intense interest in the specialized field of technology he wishes to pursue. The necessity for his interest lies in the structure of the curriculum.

Henninger (11) in 1959 reported that at entrance the average age of the technician student was 20 years and the range was from 18 to 27 years according to data from 93 post high school institutions. In the late 50's Medsker (12) found California community college students to be

older and to have a wider age range. Data on 13,304 community college students in California revealed that 53 percent were between 16 and 22 and 16 percent were over 30. In the North Carolina community colleges and technical institutes, 74 percent of the students were between 16 and 22 years of age with 13 percent over 30. (13)

In a study by Phillips (14) in 1968, it was found that the junior college and the vocational-technical school students were similar. The entering technical students at the city technical institute and the on-campus technical institute were also similar.

Phillips found that:

1. Technician education students do not make choices among the available technician education programs in the state. Twelve post-high school institutions in the state had technician education programs, yet only a small percentage of students included in this study indicated that they knew of other schools in the state which offered a technical program the same as the one in which they were enrolled. An even smaller percentage of the students could name any institution in the state which offered a technical program the same as the one in which they were enrolled.
2. Technician education students tend to express unrealistic education expectations. All students included in this study were enrolled in programs which are designed with employment objectives rather than college transfer objections. Yet, a majority of the junior college and technical institute students and approximately one-fifth of the vocational technical school students indicated that they expected to complete a baccalaureate degree. One out of every five students also chose "four-year technology" as the field in which they planned to study for the baccalaureate degree. At the time of this study, "four-year technology" programs were not available in the state.
3. In general, the state's high school guidance systems do not effectively serve prospective technical education students. A majority of the students included in this study indicated that while in high school they had considered attending a technical program. Approximately 45 per cent indicated that the decision to attend the post-high school technician education program was made while still in high school, yet less than one-third of

the students had visited with a high school counselor about attending the program. Approximately one-fourth of the students had attended high schools which did not have guidance counselors.

4. Reading skills of technical education students tend to be lower than norms for grade 13 students. The mean scores for all groups on the Nelson-Denny Reading Test were lower than the mean for grade 13 students. In addition, significant differences were found between the groups when reading test scores were analyzed.

In a statewide study in North Carolina (15), the following description of the "typical technical student" was found. According to this study:

The typical technical student in the North Carolina community college or technical institute is a male, white, single, and between 18 and 22 years of age. He attends class more than 18 hours per week, during the day and is probably classified as a returning freshman.

The student attends an institution in his home county, lives with his parents, and travels less than 10 miles to class. He is employed, at least part-time. His parents had an income of more than \$5,000 during the last twelve months, even though they do not have a twelfth grade education.

After graduation the typical technical student plans to work in North Carolina, but does not plan to work toward a four-year degree, although more than one-fourth of his classmates do. He would have continued his education at another institution this year if the one where he is now enrolled had not existed. The institution he is attending is located in his home county.

In high school, the typical student was enrolled in the general curriculum and he was referred to the community college or technical institute he is now attending by the high school counselor or by another student.

Summary

Very recently a new stream of technological education has emerged as the four-year baccalaureate programs in engineering technology. While two-year associate degree technology programs have a history extending over half a century, being associated with both technical

institutes and community colleges, the concept of a four-year curriculum is a contemporary development.

A number of forces appear to have encouraged the development of baccalaureate technology curricula. The two-year technology programs at technical institutes are bulging from within as more and more subject matter is added to the curricula; and, at the same time, there appears to be an upward push due to industrial demand for higher level technicians.

While many varied problems of entering technician students have been studied, most of the studies seem to indicate a common element. This common element appears to be the diversity of characteristics among the college student bodies.

From a review of several studies, it was apparent that technician education students have different characteristics than students in other fields. The different characteristics of technician education students justify the specialized curricula and institutions which are utilized by these students. Differences between the technician students and other types of students can be found; no study was found which examined the characteristics of entering technician education students enrolled in a school of technology.

CHAPTER III

PROCEDURES AND ANALYSIS OF DATA

Procedures

The major purpose of this study was to identify differences and similarities among technician education students served by the School of Technology. Little is known about the students' personal, educational, and occupational background revealing information concerning characteristics of students served by the School of Technology. The problem with which this study was concerned was the lack of descriptive information about students served by technician education programs at the School of Technology.

The population for this study consisted of all first-year students in the School of Technology on the Oklahoma State University campus. All students enrolled in the School of Technology as freshmen or first-year students for the Fall 1971 and Spring 1972 semesters were included in the study.

Data used in considering the research questions were collected from 110 students at the School of Technology. The students were in the technician education program for the first time in the 1971 fall semester; and they were enrolled as full-time, day-time students.

All data were collected in group settings with the assistance of teachers at the institution. Data from the survey were hand tabulated and compiled.

The Instrument

Since the graduates were already going to the institution, a student survey was deemed to be the most practical instrument for obtaining the relevant data.

After considering the purposes and the need of the study, a student survey (See Appendix) was constructed which permitted many of the responses to be made by checks or single words.

An instrument will reveal only what individuals composing the population are willing and able to communicate. It is recognized that the population represents diverse personalities, occupational and educational experiences, ages, backgrounds, and philosophies; however, no attempt was made to control or analyze the data on the basis of these extraneous variables which could have an effect upon this study.

Each table and figure is presented and interpreted in this chapter. The data were processed by tabulating the responses and presenting them on a basis of percentage or average only. Not all the items in all the surveys were responded to; therefore, on computing the percentage for any one item, only those surveys which included a response for that one item were utilized.

Personal Data

In this study data were obtained from a total of 110 first-year students in the School of Technology. Each of the 110 students completed the student survey from which data concerning personal and socio-economic data were obtained. In a number of cases, when individual items were examined, the total number of respondents was less than 110. This was primarily a result of the respondents either omitting the item

or selecting more than one response to the particular items on the survey.

Age, Sex, and Marital Status of Entering Students

The 19-21-year old group of students is the largest group of students. The percentage of students 18 years old and under was 24 percent, those 19-21 years old comprised 49 percent, and those 22 years old and over comprised 27 percent with the average age of the group being 20.4 years of age.

The distribution of sex and marital status of entering technician education students is given in Table I. The majority (98 percent) of the students included in this study were males. A majority (100 percent) of the two females included in this study were enrolled in Radiation and Nuclear Technology.

TABLE I
SEX AND MARITAL STATUS OF ENTERING STUDENTS

Status	Number Responding	Percent
Male	108	98
Female	2	2
Married	20	18
Single	90	82

Previous Military Experience of Entering Male Students

The percentage of male students included in the study who were veterans was 16 percent. These data indicate that a majority (84 percent) of the students enter the School without previous military experience.

Year Students Left High School

Students were asked on the student survey to indicate the year they left or finished high school. The distribution of these responses is given in Table II. These data indicate that more of the entering technician education students enter the School of Technology directly after completing high school.

TABLE II

PERCENTAGE AND NUMBER OF STUDENTS WHO LEFT OR
FINISHED HIGH SCHOOL IN SPECIFIED YEARS

Year Left or Finished High School	Number Responding	Percent
1971	58	53
1970	15	14
1969	5	5
1968	7	6
Prior to 1968	25	22

Size of High School Graduating Class

Students were asked on the student survey to indicate the size of their high school graduating class. The distribution of these responses is given in Table III.

TABLE III
PERCENTAGE AND NUMBER OF STUDENTS FROM HIGH SCHOOL
GRADUATING CLASSES OF SPECIFIED SIZE

Size of High School Graduating Class	Number Responding	Percent
Fewer than 50	16	15
50 to 99	27	25
100 or more	65	60

In-State Residency

The majority (83 percent) of the respondents were residents of the State of Oklahoma.

Sibling Data

The majority (71 percent) have sisters in their family, 66 percent have brothers in the family, 44 percent have both brothers and sisters, and 6 percent have neither brothers nor sisters. Of the students

responding, the average number of brothers and sisters was found to be 3.5 per family.

Father's Approximate Monthly Income

Table IV summarizes the father's approximate monthly income. From the data it appeared that the largest group had earnings between \$500 and \$1,000 per month.

TABLE IV
FATHER'S APPROXIMATE MONTHLY INCOME

Approximate Monthly Income	Number Responding	Percent
Less than \$500	14	16
\$500 to \$999	37	43
\$1,000 or more	36	41

Educational Attainment of Fathers

Table V summarizes the educational attainment of the students' fathers. From the data it appears that the largest group of fathers has completed high school.

TABLE V
STUDENTS WHOSE FATHERS HAD ATTAINED
SPECIFIC EDUCATIONAL LEVELS

Years of School Completed	Number Responding	Percent
9 or Less	12	12
10-11	11	11
12	30	30
13-15	25	25
16	18	18
More than 16	4	4

Educational Attainment of Mothers

Table VI shows the educational attainment of the mothers of the respondents. From the data it appears that the largest percentage of mothers has completed high school.

Employment of Mothers

It was felt necessary for the purpose of the analysis to code the mothers' occupations as "housewife" or "employed outside the home." The percentage of students whose mothers were employed outside the home was 53 percent.

TABLE VI
STUDENTS WHOSE MOTHERS HAD ATTAINED
SPECIFIC EDUCATIONAL LEVELS

Years of School Completed	Number Responding	Percent
9 or Less	9	9
10-11	4	4
12	49	47
13-15	24	23
16	18	17
More than 16	0	0

Approximate Monthly Income of Mothers Employed Outside the Home

The distribution of the mothers' approximate monthly income is shown in Table VII. The data indicated the largest percentage to be less than \$500 per month.

Educational Data

Three factors relative to educational background were examined in this study. These factors were educational attainment of students, high school vocational educational enrollment, and size of town in which the students last attended high school. Analysis of these three factors is reported in this section.

TABLE VII
 APPROXIMATE MONTHLY INCOME OF MOTHERS
 EMPLOYED OUTSIDE THE HOME

Approximate Monthly Income	Number Responding	Percent
Less than \$500	21	55
\$500 to \$999	16	42
\$1,000 or More	1	3

Educational Attainment of Students

The educational attainment of the students is shown in Table VIII. A majority (98 percent) of the entering students have finished high school prior to enrolling in the technician program with 2 percent not graduating from high school. Approximately 4 percent attended non-public high schools.

Approximately 23.5 percent of all respondents had attended college prior to enrolling in technician education programs. The 26 students responding in this category had completed 1,596 semester credit hours. Table IX shows the range and average number of semester hours completed by years.

High School Vocational Education Enrollments of Entering Students

The number of technician education students who had been enrolled in a high school vocational program was 36 or 33 percent of the

respondents with an average number of 2.45 years in the programs. The distribution of the enrollments in vocational programs by type of program is given in Table X.

TABLE VIII
PERCENTAGE OF STUDENTS ATTAINING
SPECIFIED EDUCATIONAL LEVELS

Educational Attainment	Number Responding	Percent
Less than High School Graduate	2	2.0
High School Graduate	82	98.0*
Some College Credit	26	23.5

*includes graduates with some college credit

Size of Town in Which Students Last Attended High School

Data concerning the size of town in which the respondents last attended high school are presented in Table XI. The largest percentage attended high schools located in towns of 10,000 to 100,000 population. The smallest percentage (5 percent) of students in this category was found to be in a location less than 1,000.

TABLE IX
COLLEGE CREDIT COMPLETED BY ENTERING STUDENTS
PRIOR TO ENROLLING IN A TECHNICAL PROGRAM

Years of College	Number Responding	Range	Average
1	5	29-36	32.0
2	11	29-70	60.6
3	2	109, 120	114.5
4	2	128, 148	138.0

TABLE X
ENTERING STUDENTS WHO HAD HIGH SCHOOL VOCATIONAL
EDUCATION BY TYPE OF PROGRAM

Type of Program	Number Responding	Percent
Vocational Agriculture	13	42
Distributive Education	3	10
Trade and Industrial Education	9	29
Technical Education	6	19
Other	0	0

TABLE XI
 PERCENT OF STUDENTS WHO LAST ATTENDED
 HIGH SCHOOLS BY SIZE OF TOWN

Size of Town	Number Responding	Percent
Less than 1,000	5	5
1,000 to 10,000	36	36
10,000 to 100,000	38	38
Over 100,000	21	21

Occupational Data

Three factors relative to occupational background were examined. These factors were: if the student had a part-time or full-time paid job while going to high school, if the student had a full-time paid job other than a summer job just before coming to this school, and relation of full-time job to the training now pursued. Analysis of these three factors is reported in this section.

Employment While going to High School

Students were asked on the student survey to indicate a part-time or full-time paid job while going to high school. The responses indicated that a majority (70 percent) had held a paid job of part time or full time while attending high school.

Full-Time Employment

Students were asked on the student survey to indicate if they held a full-time paid job other than a summer job just before coming to this school (within one month). These data indicated that fewer (32 percent) of the technician education students had a full-time paid job just before coming to this school. The average accumulated time of full-time employment was approximately 2.7 years on the job.

Job Relation to Training

Students were requested on the student survey to indicate if the students had a full-time paid job just before coming to this school (other than a summer job), how closely related it was to the occupation for which they are now training. These data indicated that the majority (41 percent) of the students having a full-time paid job entered training unrelated (an entirely different occupation) to the previous occupation of the student. The distribution of these responses is given in Table XII.

TABLE XII
PERCENT OF STUDENTS IN PROGRAM
RELATED TO PREVIOUS OCCUPATION

Relation of Occupation	Percent
Very Close	9
Close	29
Somewhat Related	21
Unrelated	41

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The problem with which this study was concerned was the lack of descriptive information relative to students served by technician education programs at a school of technology. Design of effective technician education programs has been hampered by the lack of up-to-date information concerning the students served by the programs. It has also been noted that proper counseling of students has been impeded by the lack of recent information regarding student characteristics. This chapter includes a summary of the study, conclusions, and recommendations.

Summary

The purpose of this study was to identify differences and similarities among entering technician education students at the School of Technology. Characteristics important to education planning and student guidance were examined in the study.

Three research questions were considered in the study:

1. What are the personal and socioeconomic backgrounds of students at the School of Technology?
2. What are the different levels of educational background for students at the time of entering the School of Technology?

3. What are the different socioeconomic background factors of students at the School of Technology?

Data used in considering the research questions were collected from 110 students at the School of Technology. Subjects utilized in this study were selected from the School of Technology using the following criteria: (1) they were enrolled in the technician education program for the first time in the 1971 fall semester and (2) they were enrolled as full-time, day-time students.

The School of Technology selected for the study is a public-supported school located on a state university campus. The institution was selected primarily because of its diverse characteristics and because it had established technician education programs. All of the programs at the School of Technology were selected for the study.

A student survey was used to obtain data for the study. The survey was used to gather data relative to a number of personal and social characteristics. All data were collected in group settings with the assistance of teachers at the institution. Data from the survey were hand tabulated and compiled.

A majority (98 percent) of the students included in this study were males. The female students in this study were all enrolled in Radiation and Nuclear Technology.

The programs at the institution serve primarily single students with the married students comprising 18 percent of the student body. A majority (84 percent) of the male technician education students had not served in the military.

A substantial majority (98 percent) of the technician education students were high school graduates. Approximately 23 percent of the

students had attended college prior to enrolling in the technician education programs. The average number of semester hours completed by those students who had previously attended college was approximately two years of college work. The percentage of students who had a high school vocational education background was 33 percent of the students in the study. The majority (42 percent) of the students with a vocational education background had been enrolled in vocational agriculture.

The majority (60 percent) of the students graduating from high school graduated in a class of 100 or more. The majority (38 percent) of the students attended high school in a town of 10,000 to 100,000 people.

The largest group (30 percent) of students' fathers had completed high school and 25 percent of the fathers had completed one to three years of college. The largest percentage of mothers having the highest educational attainment was 47 percent of the group responding and 23 percent of the mothers had completed one to three years of college. The percentage of students whose mothers were employed "outside the home" was 53 percent of the group studied.

The majority (70 percent) of the students had held a part-time or full-time paid job while going to high school. Of the students studied, 32 percent had a full-time job within one month of entering the School of Technology. The majority (41 percent) of the students having a full-time paid job indicated that their training was unrelated to the previous occupation of the student.

Findings Related to the Research Questions

Answers to three research questions were sought in this study. In an attempt to provide at least a partial answer to the three questions, data were collected and analyzed from 110 technician education students in the School of Technology. Conclusions regarding the questions are reported in this section.

Research Question 1

What are the personal and socioeconomic backgrounds of students at the School of Technology? Nine variables relative to this question were examined. One each of the nine variables, the respondents were found to differ; however, considerable differences within the group were found on three of the nine variables.

Research Question 2

What are the different levels of educational background for students at the time of entering the School of Technology? On each of the three factors, the respondents were found to differ. In terms of the variables examined, the vocational school students made up over one-third of the students at the School of Technology.

Research Question 3

What are the different socioeconomic background factors of students at the School of Technology? Based on findings of this study, it is concluded that technician education students entering different programs differ on a number of socioeconomic background characteristics. Five

variables relative to this question were examined. On each of the five variables, considerable differences within the group were found.

Conclusions

As a result of this study, several conclusions may be stated as follows:

1. Technician education students do have similar personal background characteristics. With 98 percent of the technician students being males, this indicates that the technology programs tend to appeal more to the male population than to the female population. Eighty-two percent of the male population were single and 16 percent had previous military experience.
2. The majority (94 percent) of the technician education students were found to come from families with more than one child. This indicates that although there is more than one child in a family the students have the financial means at hand to attend a school of technology.
3. The occupational backgrounds of technician education students were varied. The students holding a full-time paid job before attending the School of Technology were approximately one-third of the respondents with an average full-time employment of approximately 2.7 years on the job and a range of employment from one year to six years. An even larger percentage (41 percent) of the students felt that their previous occupations were unrelated to the technician education program in which

- they had enrolled. This indicates that students are not limited to choosing a program related to their previous employment experiences.
4. Technician education students' educational backgrounds tend to have considerable differences. Thirty-three percent of the respondents had a vocational background in high school with 42 percent being enrolled in vocational agriculture. Although no program at the School of Technology was considered an agriculture program as such, the programs can be agricultural related. A large percentage of students indicated that their educational background included having finished high school, and approximately 23 percent of the respondents had earned college credit prior to entering technician education. This indicated that the School of Technology appeals to persons who have previous college credit as well as to persons not having college credit.
 5. Technician education students' parents tend to have vastly different levels of education. A majority (77 percent) of the students' fathers and a majority (87 percent) of the students' mothers had at least a high school education. Approximately 47 percent of the fathers and 40 percent of the mothers had gone on to earn some college credit. The data indicated that the level of education completed by the parents could influence the children to pursue further education.

Recommendations

The following recommendations are suggested based on the information obtained by this study:

1. Technician education programs at institutions serve students with different characteristics. It is recommended that a follow-up study be conducted on technician education students to reveal changes in the characteristics of future entering technician students in order to better meet their needs.
2. Further studies should be conducted to determine the educational success of students entering the School of Technology.

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APPENDIX
STUDENT SURVEY

1. Sex
 a. Male
 b. Female
2. Marital Status
 a. Married
 Number of Children:

 b. Single
3. Are you a veteran?
 a. Yes
 b. No
4. Are you an Oklahoma resident?
 a. Yes
 b. No
5. How many brothers and sisters do you have?
 _____ Brothers
 _____ Sisters
6. Was the high school you last attended a public school?
 a. Yes
 b. No
7. What year did you leave or finish high school?
 19 _____
8. How old are you now?

9. What is the name of the training program in which you are enrolled?
 Associate Degree Technology Programs
 a. Aeronautical
 b. Construction
 c. Electronics
 d. Fire Protection
 e. Mechanical Design
 f. Mechanical Power
 g. Petroleum
 h. Radiation and Nuclear
10. A. How much education did you have before entering this program?
 (circle the number which represents the highest grade you have completed)
 7 8 9 10 11 12

 Jr. & Sr. High School
 1 2 3 4

 College

 Other (Specify)
- B. If you have completed some college work, how many semester hours have you completed prior to Fall, 1971?

11. Where did you rank in your high school graduating class?
 a. I am not a high school graduate
 b. Top quarter
 c. Second quarter
 d. Third quarter
 e. Bottom quarter
 f. I do not know my rank in my graduating class
12. About how many students were in your high school graduating class?
 a. I did not graduate from high school
 b. Less than 50
 c. At least 50 but less than 100
 d. At least 100 but less than 300
 e. At least 300 but less than 500
 f. At least 500

13. Circle the number which represents the highest school grade completed by your father.
- | | | | | | | |
|-----------------------|----------|----------|-----------|-----------|-----------|--|
| <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | |
| Grade School | | | | | | |
| <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> | <u>11</u> | <u>12</u> | |
| Jr. & Sr. High School | | | | | | |
| <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | | | |
| College | | | | | | |
| _____ | | | | | | |
| More | | | | | | |
14. What is (or was) your father's occupation?
- _____
- _____
15. What is (or was) your father's approximate monthly income?
- a. _____ \$200 to \$299 per mo.
- b. _____ \$300 to \$399 per mo.
- c. _____ \$400 to \$499 per mo.
- d. _____ \$500 to \$599 per mo.
- e. _____ \$600 to \$699 per mo.
- f. _____ \$700 to \$799 per mo.
- g. _____ \$800 to \$899 per mo.
- h. _____ \$900 to \$999 per mo.
- i. _____ \$1,000 to \$1,099 per mo.
- j. _____ \$1,100 to \$1,199 per mo.
- k. _____ \$1,200 or more per mo.
16. Circle the number which represents the highest school grade completed by your mother.
- | | | | | | | |
|-----------------------|----------|----------|-----------|-----------|-----------|--|
| <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | |
| Grade School | | | | | | |
| <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> | <u>11</u> | <u>12</u> | |
| Jr. & Sr. High School | | | | | | |
| <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | | | |
| College | | | | | | |
| _____ | | | | | | |
| More | | | | | | |
17. What is (or was) your mother's occupation, if any?
- _____
- _____
18. If your answer to No. 17 indicates that your mother is (or was) employed, what is (or was) your mother's approximate monthly income?
- a. _____ \$200 to \$299 per mo.
- b. _____ \$300 to \$399 per mo.
- c. _____ \$400 to \$499 per mo.
- d. _____ \$500 to \$599 per mo.
- e. _____ \$600 to \$699 per mo.
- f. _____ \$700 to \$799 per mo.
- g. _____ \$800 to \$899 per mo.
- h. _____ \$900 to \$999 per mo.
- i. _____ \$1,000 to \$1,099 per mo.
- j. _____ \$1,100 to \$1,199 per mo.
- k. _____ \$1,200 or more per mo.
19. Were you enrolled in a vocational course in high school?
- a. _____ Yes
- (1) _____ 1 year
- (2) _____ 2 years
- (3) _____ 3 years
- (4) _____ 4 years
- b. _____ No
20. If your answer to No. 19 is "Yes," in which vocational program(s) were you enrolled?
- a. _____ Vocational Agriculture
- b. _____ Distributive Education
- c. _____ Trade & Industrial Education _____
- Name of
- _____
- Program

20. (continued)
- d. _____ Technical _____
Name of
_____ Program
- e. _____ Other _____
Name of
_____ Program
21. How close to a city of 30,000 people or more did you live while attending high school?
- a. _____ In the city
- b. _____ 10 miles away
- c. _____ 25 miles away
- d. _____ 50 miles away
- e. _____ 75 miles away
- f. _____ 100 miles away
- g. _____ 150 miles away
- h. _____ 200 miles away
- i. _____ More than 200 miles away
22. What is the size of the town in which you last attended high school?
- a. _____ Less than 1,000 people
- b. _____ At least 1,000 but less than 5,000
- c. _____ At least 5,000 but less than 10,000
- d. _____ At least 10,000 but less than 20,000
- e. _____ At least 20,000 but less than 50,000
- f. _____ At least 50,000 but less than 100,000
- g. _____ At least 100,000 people
23. How far is the town in which you last attended high school from this town?
- a. _____ It is this town
- b. _____ Less than 25 miles
- c. _____ At least 25 but less than 50 miles
- d. _____ At least 50 but less than 100 miles
- e. _____ At least 100 but less than 200 miles
- f. _____ At least 200 miles
24. Did you have a part-time paid job while going to high school?
- a. _____ Yes
- b. _____ No
25. Did you have a full-time paid job other than a summer job just before coming to this school? (within one month)
- a. _____ Yes
- b. _____ No
26. A. If you had a full-time paid job just before coming to this school (other than a summer job), what was this job? _____

- B. How long did you have this job? _____
27. If you had a full-time paid job just before coming to this school (other than a summer job), about how much money did you make a week?
- a. _____ Less than \$50 a week
- b. _____ At least \$50 but less than \$75 a week
- c. _____ At least \$75 but less than \$100 a week
- d. _____ At least \$100 but less than \$150 a week
- e. _____ At least \$150 but less than \$200 a week
- f. _____ At least \$200 a week

28. If you had a full-time paid job just before coming to this school (other than a summer job), how closely related was it to the occupation for which you are now training?
- a. _____ Very close--When I finish my training I may go back to it.
 - b. _____ Close--The biggest difference is this training will let me work at a higher level.
 - c. _____ Somewhat related--There were some things similar to the occupation for which I am now training.
 - d. _____ Unrelated--It was an entirely different occupation.

VITA

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