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## A Survey of Industrial Arts Students Enrolled at Fort Hays State College

Rex Nelson  
*Fort Hays Kansas State College*

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A SURVEY OF INDUSTRIAL ARTS STUDENTS ENROLLED AT  
FORT HAYS KANSAS STATE COLLEGE - 1958

being

A Master Report presented to the Graduate Faculty  
of Fort Hays Kansas State College in  
partial fulfillment of the requirements for  
the Degree of Master of Science

The writer wishes to express his sincere appreciation  
to Dr. C. R. Cain, who has reviewed and directed the  
preparation of this Master's Report.

by

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Fort Hays Kansas State College

Date 7-11-58

Approved

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CHAIRMAN GRADUATE COUNCIL

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### SEARCH OF DATA

The questionnaire technique was utilized to secure the data for the investigation. The data for the investigation were derived from the answers the students gave concerning the items included in a questionnaire. The type of information desired was a determining factor in deciding upon the use of the questionnaire technique. The questionnaire, presented in Appendix A of this report, was developed after this decision was reached.<sup>1</sup>

The data for the report were obtained by submitting

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<sup>1</sup>See Appendix A, p. 50.



## CHAPTER I

### INTRODUCTION

This report is a survey of industrial arts students enrolled at Fort Hays Kansas State College. These students were enrolled in industrial arts courses during the spring semester of 1958.

A review of literature pertinent to this study was obtained from literature available in the Forsyth library.

It was hoped that a better understanding of the students' background would make for a better relationship between the students and the instructional staff of the industrial arts department.

### SOURCE OF DATA

The questionnaire technique was utilized to secure the data for the investigation. The data for the investigation were derived from the answers the students gave concerning the items included in a questionnaire. The type of information desired was a determining factor in deciding upon the use of the questionnaire technique. The questionnaire, presented in Appendix A of this report, was developed after this decision was reached.<sup>1</sup>

The data for the report were obtained by submitting

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<sup>1</sup>See Appendix A, p. 50.

the questionnaire to the individual students during the spring semester of 1958. The items on the questionnaire were answered by 243 students enrolled in industrial arts courses and the information obtained by these 243 completed questionnaires provided the data for this report.

#### STATEMENT OF THE PROBLEM

The investigator entered into this study with the hope of benefiting the instructional staff of the industrial arts department and the students enrolled in industrial arts courses.

The problem in general was to survey the students enrolled in the industrial arts department of Fort Hays to determine the students' family background, general background and educational goals. The type of instrument employed to obtain the data and the compiling and analysis of the data obtained were all a part of the problem.

#### DELIMITATIONS

The study is limited to the total number of persons enrolled in the industrial arts courses at Fort Hays Kansas State College as of January 25, 1958.

#### SIGNIFICANCE OF THE STUDY

Fort Hays Kansas State College is located in Hays, (Ellis County) Kansas, a city of over 10,000 population as

reported by the 1958 census. Fort Hays is a Liberal Arts college. The industrial arts department of the college is engaged in the preparation of industrial arts teachers for the schools of the State of Kansas.

It would seem feasible that the instructors of the industrial arts department should know as much as possible about the students' background in order to aid students in acquiring an education. The investigator hoped that the information of this report would facilitate the advisory activities of the industrial arts department.

It was felt that information in regard to the students' family background, general background and educational goals might be of assistance to the instructors in their general understanding of the students enrolled in courses of the industrial arts department.

Terminology common to a discussion of students enrolled in a particular area has been subject to various interpretations. Definitions of this terminology are included for clarification.

#### DEFINITIONS OF TERMS USED

The words or phrases used in this report are defined from Good's Dictionary of Education:

Advisor: (1) one with whom a person may consult with in regard to his scholastic or vocational problems, generally on the basis of a reciprocal exchange of ideas; (2) such a consultant available to the members of a particular class.

Area: (1) (Ind. Arts) a section of a shop or laboratory set aside for a particular kind of work; (2) a group of activities, a section of a curriculum, or a part of a program.

Course: organized subject matter in which instruction is offered within a given period of time, and for which credit toward graduation or certification is usually given.

Department: an administrative subdivision of a school or college giving instruction in a branch of study.

Field of Interest: the subject or group of related subjects that a pupil or student chooses of his own accord.

Field of Study, Major: a principal subject of study in one department or field of learning, in which a student is required or elects to take a specified number of courses and hours and for which he will receive a diploma or degree.

Field of Study, Minor: a subject of study in one department or field of learning, in which the student is required or elects to take a specified number of courses or hours, fewer than required for a major field; implies less intensive concentration than in the major field.<sup>2</sup>

#### REVIEW OF RELATED LITERATURE

An interest in better meeting the needs of students in education is also shared by other institutions. This interest is exemplified in a study, "Student Personnel Research in the Southern Region, 1948-1951," by Scott.

The replies from 83 institutions in the Southern Regions and 23 institutions outside the Southern Region indicate a keen interest in and awareness of the value of research in the area of student personnel in higher education. Many of the responses to the questionnaire revealed that careful, though not

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<sup>2</sup>Carter V. Good (ed.), Dictionary of Education (New York: McGraw-Hill Book Company, Inc., 1945), pp. 495.

elaborate, instruments and techniques of research were being employed. There was evidence that research was not being done solely for the sake of research but to solve local problems, with the aim of better meeting the needs of the students.<sup>3</sup>

McNeely placed 84.9 per cent of the students in his survey on "College Entrance Ages" as being twenty years or younger.<sup>4</sup> The fact that this report was published in 1937 prior to both World War II and the Korean conflict might have some bearing on this data if compared to the present time.

Edwin Davis, retired head of the industrial arts department at Fort Hays Kansas State College, also encouraged women to enter the industrial arts field. This is signified by an article in the Hays Daily News, "4 Women Studying Practical Manual Arts Under Ed Davis." In this article Davis was quoted as saying that:

Women have a flair for this sort of thing and once they get the hang of it I just let them work as they please and when they want to. They have a meticulous feeling for detail and turn out fine jobs.<sup>5</sup>

The location of students in relation to the college which they attend is portrayed by a report by McNeely,

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<sup>3</sup>Warren B. Scott, "Student Personnel Research in the Southern Region, 1948-1951," School and Society, 77:247-9, April 18, 1953.

<sup>4</sup>J. H. McNeely, "College Entrance Ages," School Life, 23:44, October, 1937.

<sup>5</sup>Feature Article in the Hays Daily News, (Hays, Kansas) April 26, 1953.

"Distances Students Live From College." McNeely used 15,424 students as subjects for his study. The part of his study pertaining to men students indicates that 28.6 per cent of the students lived within the county of university location, 9.6 per cent lived in adjoining counties, 48.6 per cent live in other parts of the state, and 13.2 per cent reside in other states.<sup>6</sup>

The location of students in relation to the college is further denoted by Strang, Behavior and Background of Students in College and Secondary Schools.

Approximately one fourth of the college and university students of the United States attend college outside the state in which they reside, while three fourths remain in their home state for a college education.<sup>7</sup>

The occupation of the students' fathers holds a significance in relation to their socioeconomic standards. Relative to this is an article in the Encyclopedia of Educational Research, "Socioeconomic Status of College Students." This article states that, "The most frequently recognized item of socioeconomic background information is the occupation of the father."<sup>8</sup>

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<sup>6</sup>J. H. McNeely, "Distances Students Live From College," School Life, 23:135, January 6, 1938.

<sup>7</sup>Ruth Strang, Behavior and Background of Students in College and Secondary School (New York: Harper and Brothers Publishing Company, 1937), p. 290.

<sup>8</sup>Daniel D. Feder, "Student Personnel Work," Encyclopedia of Educational Research (New York: The Macmillian Company, 1952), p. 1295.

The importance of the socioeconomic background of students is further substantiated by Mulligan of DePauw University. Mulligan states in his article, "Socio-Economic Background and College Enrollment," that:

There is considerable agreement among social scientists that if only one item relating to socioeconomic status could be recorded, occupations of father would probably be selected as the most significant.<sup>9</sup>

The article "Socioeconomic Status of College Students" goes on to state that:

Fathers of three fourths of the students in 55 junior colleges, liberal arts colleges and universities were engaged in four major occupations: proprietors, agriculture, professional and managerial service. The students whose fathers are engaged in manual labor rarely exceed five per cent of the total enrollment.<sup>10</sup>

The occupations of fathers are placed in three groups by Mulligan. These groups are: "(1) Farmers (owners and tenants); (2) White collared workers (professional, business, and clerical); and (3) Blue collar workers (skilled, semi-skilled, and unskilled)."<sup>11</sup>

Mulligan also states:

. . . that the white collar group sends 54.7 per cent of the students to the university, the blue collar group contributes 30.5 per cent of the

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<sup>9</sup>Raymond A. Mulligan, "Socio-Economic Background and College Enrollment," American Sociological Review, 16:189, April, 1951.

<sup>10</sup>Feder, op. cit.

<sup>11</sup>Mulligan, op. cit., p. 190.

students, and the farmers contribute 9.4 per cent of the students.<sup>12</sup>

Negligible significance can be placed on student intelligence and scholastic achievement in comparison to their father's occupations. This statement is substantiated by an extraction from Strang's book, Behavior and Background of Students in Colleges and Secondary Schools.

In this book Strang states:

Students from the occupational groups high on the scale for rating occupations tend, on the average, to have a higher intelligence and, to a less extent, higher scholastic achievement than do those lower on the scale. This tendency is more marked in the elementary school than in the high school, and is negligible in college. However, so great is the overlapping among occupational groups in respect to any of these factors that it is impossible with any degree of accuracy to predict a student's intelligence or achievement from knowledge of his father's occupation.<sup>13</sup>

Other findings on family background of students were published in the Journal of Experimental Education, "Comparative Study of Students Preparing for Five Selected Professions Including Teaching," by Blum. Blum found that of 125 subjects, 37 came from families of three or more children, 69 came from families of less than three children, and 19 gave no response.<sup>14</sup>

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<sup>12</sup>Ibid.

<sup>13</sup>Strang, op. cit., p. 292.

<sup>14</sup>Lawrence P. Blum, "Comparative Study of Students Preparing for Five Selected Professions Including Teaching," Journal of Experimental Education, 16:31-65, September, 1947.



Family background and self-support have both been the object of considerable research. Sharpe, chairman of a committee publishing an article titled, "Financial Assistance for College Students," makes a rather definite statement on self-support.

On the whole, recipients of financial aid (including those who engage in part-time work) attain higher scholastic standing and receive a smaller proportion of failures and a larger portion of academic honors than their classmates.<sup>15</sup>

Lins also found information on self-support, however, he does not take as definite a stand as did Sharpe and his committee. Lins' summary of report SPS # 53-5 on "Self-Support - Its Effect Upon Grade-Point Average" lists three points:

1. The percentages of expenses earned the second semester of the freshman year do not seem to be associated with grade-point averages or the American Council Psychological Examination percentile ranks.
2. Mean grade-point average of men working and men not working generally increase with increase in the number of credits earned; there is positive correlation between the number of credits carried and grade-point average, American Council Psychological examination percentile, and high school rank.
3. It does not seem generally that the mean grade-point average of men working is lower than the mean grade-point average of men not working and carrying the same number of credits; however,

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<sup>15</sup>R. T. Sharpe, (Chrm.) "Financial Assistance For College Students," Encyclopedia of Educational Research (New York: The Macmillian Company, 1952), p. 1353.

the groups were not equated on intelligence.<sup>16</sup>

Further information on self-support was reported in the Encyclopedia of Educational Research. Here it was reported that:

Investigators of effects of self-support on the student have reached different conclusions: Thorpe discovered no relationship between the amount of manual work carried and classroom achievement as measured by school marks, and Umstadd found that working students were admitted to the college hospital more frequently than nonworking students. Baker found that mental efficiency is a more important factor than work load in influencing marks.<sup>17</sup>

These findings of investigators are displayed in a different way by a bulletin, "Working Your Way Through College," published by the U. S. Office of Education.

The optimistic note expressed by many students point out that they accept the necessity for working their way as a challenge, and feel that by successfully meeting the situation, the experience gained is a valuable by product of higher education.<sup>18</sup>

The need of students for vocational orientation is expressed in the Encyclopedia of Educational Research.

The student with specific and appropriate vocational orientation frequently does better work on the basis of tests, whereas the undecided student

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<sup>16</sup>L. J. Lins, "Pre-University Background and Effect of Various Factors Upon University Success," Personnel and Guidance Journal, 33:157-8, November, 1954.

<sup>17</sup>Sharpe, op. cit., p. 1351.

<sup>18</sup>United States Office of Education, Vocational Division. Working Your Way Through College, Occupational Information and Guidance Series Number 4, Bulletin Number 4. Washington: Government Printing Office, 1941.

frequently does not achieve up to his potential level.<sup>19</sup>

Further information is advanced by the mortality of students in different areas of the United States. In Bulletin 1937, Number 11, of the U. S. Government Printing Office, McNeely makes a comparison of mortality in different sections of the United States. His findings were that the North Central States had the second highest mortality rate, 48.9 per cent. This rate was exceeded only by the Southern States with 50.1 per cent mortality.<sup>20</sup>

The inability of students to predict with a reasonable degree of accuracy their future occupations is depicted by Sisson, "Predictive Value of College Students." Sisson states that:

... only slightly over one third of Wesleyan men actually enter careers for which they indicated preference as matriculants.

... ultimate employment cannot be predicted with any accuracy on the basis of vocational choices made at the time of admission.<sup>21</sup>

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<sup>19</sup>Walter S. Monroe (ed.) Encyclopedia of Educational Research (New York: The Macmillian Company, 1952), p. 1295.

<sup>20</sup>J. H. McNeely, College Student Mortality, United States Office of Education, Bulletin 1937, Number 11 (Washington, D.C.: United States Government Printing Office, 1938), p. 112.

<sup>21</sup>E. Donald Sisson, "Predictive Value of College Students," School and Society, 47:646-8, May 14, 1938.

## SUMMARY

The purpose of this investigation was to gain information of possible benefit to the instructional staff of the industrial arts department of Fort Hays and the students enrolled in the industrial arts department, compiling of the information obtained by the survey, and the tabulation of this data for subsequent analysis.

The survey was limited to those persons enrolled in the industrial arts department during the spring semester of 1958. It was hoped that the information obtained might assist the instructors of the industrial arts department in their advisory activities with the students enrolled in industrial arts courses.

A questionnaire was developed to gather information concerning these students and the data were organized into tables for subsequent analysis.

The ages and sexes of the students are revealed in Table I.

## CHAPTER II

### DISTRIBUTION BY AGE AND SEX OF RESPONDENTS ENROLLED IN INTRODUCTORY ARTS COURSES AT KANSAS STATE COLLEGE FINDINGS

The data related to individual students were kept strictly confidential by the investigator as agreed to in the introductory statement of the questionnaire. The data presented in this chapter provides specific information concerning the age and sex of the respondents, their family background, general background, and educational goals.

The names of the students surveyed by the means of the questionnaire has no pertinent value to this report. The names were requested on the questionnaire so that future reference could be made to the questionnaire in case additional information was required. The names also served the purpose of a tabulations key until code numbers were assigned to the individual questionnaire for future reference. The information in Table I indicates the names of the students surveyed.

The ages and sexes of the students are revealed in Table I.

TABLE I

DISTRIBUTION BY AGE AND SEX OF STUDENTS ENROLLED IN INDUSTRIAL ARTS COURSES AT FORT HAYS KANSAS STATE COLLEGE

Age	Male	-	Female	Per Cent
17-20	120	-	0	49.7
21-25	70	-	0	28.5
26-30	50	-	0	20.6
31-54	3	-	0	1.2
	243	-	0	100.0

From the data contained in Table I it may be seen that 100 per cent of the students were male. It may also be observed from the data that the students' ages ranged from 17 to 54 years.

#### Family Background

The information in Table II indicates the place of birth of the students surveyed.

TABLE II

 LOCATION OF BIRTH PLACE OF STUDENTS ENROLLED IN  
 INDUSTRIAL ARTS COURSES BY COUNTIES AND STATE

County	State	Number of Students	Per Cent
Atchison	Kansas	2	0.8
Arthur	Nebraska	1	.4
Barber	Kansas	1	.4
Barton	"	16	7
Bent	Colorado	1	.4
Brown	Kansas	2	.8
Buchanan	Missouri	1	.4
Butler	Nebraska	1	.4
Cheyenne	Kansas	2	.8
Clark	"	1	.4
Cleburne	Arkansas	1	.4
Comanche	Kansas	4	1.6
Dickenson	"	2	.8
Edwards	"	1	.4
Elk	"	1	.4
Ellis	"	35	14.4
Ellsworth	"	7	3
Erath	Texas	1	.4
Finney	Kansas	1	.4
Ford	"	3	1.2
Geary	"	1	.4
Gove	"	5	2.1
Graham	"	7	3
Grant	"	1	.4
Gray	"	2	.8
Gray	Texas	1	.4
Gray Harbor	Washington	1	.4
Greely	Kansas	2	.8
Greenwood	"	2	.8
Gunnison	Colorado	1	.4
Hamilton	Kansas	2	.8
Harper	"	1	.4
Harper	Oklahoma	1	.4
Jackson	Missouri	1	.4
Jewell	Kansas	4	1.6

TABLE II (continued)

Kingfisher	Oklahoma	1	0.4
Kiowa	Kansas	4	1.6
Lane	"	3	1.2
Lincoln	"	2	.8
Logan	"	2	.8
Lyon	"	2	.8
McPherson	"	2	.8
Madison	Indiana	1	.4
Meade	Kansas	1	.4
Mitchell	"	5	2.1
Ness	"	6	2.5
Norton	"	3	1.2
Orange	Colorado	1	.4
Osborne	Kansas	3	1.2
Ottawa	"	4	1.6
Phillips	"	7	3
Pottawatomie	Oklahoma	1	.4
Pratt	Kansas	2	.8
Rawlins	"	3	1.2
Reno	"	7	3
Republic	"	2	.8
Rice	"	4	1.6
Rooks	"	7	3
Rush	"	4	1.6
Russell	"	5	2.1
Saline	"	6	2.5
Scott	"	1	.4
Sedgewick	"	5	2.1
Seward	"	2	.8
Sherdian	"	6	2.5
Sherman	"	2	.8
Skamania	Oregon	1	.4
Smith	Kansas	3	1.2
Stafford	"	6	2.5
Stephens	Oklahoma	1	.4
Stevens	Washington	1	.4
Thomas	Kansas	3	1.2
Trego	"	3	1.2
Tripp	South Dakota	1	.4
Vernon	Missouri	1	0.4



TABLE II (continued)

Wallace	Kansas	1	0.4
Well	Colorado	2	.8
		243	100.0

It may be seen from the data in Table II that 91.2 per cent of the students were born in counties of the State of Kansas. A map of counties of Kansas is presented in Appendix B of this report to further clarify the location of the place of birth of these students.<sup>22</sup>

The information in the table further shows that 35 of the 243 students were born in the county (Ellis) where Fort Hays is located. The data also reveals that 51 or 21.6 per cent of the students were born in one of the eight counties (Osborne, Russell, Barton, Rush, Ness, Trego, Graham, and Rooks) of Kansas surrounding the county where the institution is located.

Table III presents data regarding the place of residence of the students.

<sup>22</sup>See Appendix B, p. 52.

TABLE III

LOCATION OF RESIDENCE, BY COUNTIES AND STATES, OF THE 243 STUDENTS ENROLLED IN THE INDUSTRIAL ARTS DEPARTMENT

County	State	Number of Students	Per Cent
Apache	Arizona	1	0.4
Atchison	Kansas	1	.4
Barton	"	19	7.7
Brown	"	2	.8
Cheyenne	"	4	1.6
Clark	"	1	.4
Cloud	"	1	.4
Comanche	"	5	2.1
Decatur	"	2	.8
Dickenson	"	3	1.2
Edwards	"	2	.8
Ellis	"	38	16.6
Ellsworth	"	2	.8
Ford	"	2	.8
Gove	"	10	4.1
Graham	"	8	3.3
Grant	"	1	.4
Gray	"	4	1.6
Greely	"	3	1.2
Hamilton	"	1	.4
Jewell	"	2	.8
Kearny	"	1	.4
Kiowa	"	3	1.2
Labette	"	1	.4
Lane	"	1	.4
Larmie	Colorado	3	1.2
Lincoln	Kansas	1	.4
Logan	"	3	1.2
McPherson	"	1	.4
Mitchell	"	6	2.5
Natrona	Wyoming	1	.4
Ness	Kansas	8	3.3
Neosho	"	1	.4
Norton	"	5	2.1
Nuckolls	Nebraska	1	0.4

TABLE III (continued)

Osborne	Kansas	3	1.2
Ottawa	"	4	1.6
Pawnee	"	5	2.1
Phillips	"	4	1.6
Pratt	"	2	.8
Rawlins	"	2	.8
Reno	"	3	1.2
Republic	"	2	.8
Rice	"	2	.8
Rooks	"	9	3.7
Rush	"	8	3.3
Russell	"	11	4.5
Saline	"	3	1.2
Scott	"	2	.8
Seward	"	3	1.2
Sherdian	"	4	1.6
Sherman	"	1	.4
Smith	"	4	1.6
Stafford	"	5	2.1
Stanton	"	1	.4
Stevens	"	1	.4
Thomas	"	4	1.6
Trego	"	10	4.1
Wallace	"	2	.8
		243	99.9

The information in Table III indicates that 237 or 97.5 per cent of the students resided in the State of Kansas. A map of counties of Kansas is presented in Appendix C of this report to further indicate the residence of these students.<sup>23</sup>

The data in Table III also reveals that 38 or 16.6

<sup>23</sup>See Appendix C, p. 53.

per cent of the students resided in the county (Ellis) where the college is located. It is further indicated by the information included in the table that 76 of the 243 students resided in one of the eight counties (Osborne, Russell, Barton, Rush, Ness, Trego, Graham, and Rooks) of Kansas surrounding the county in which Fort Hays is located.

Information concerning the occupations of the students' fathers is provided in the data contained in Table IV.

TABLE IV  
PRESENT SOURCE OF INCOME OF THE FATHERS OF STUDENTS  
ENROLLED IN INDUSTRIAL ARTS COURSES

Source of Income	Number of Students	Per Cent
Agriculture . . . . .	127	52.3
Labor . . . . .	47	19.3
Business . . . . .	28	11.6
Profession . . . . .	9	3.7
Retired . . . . .	10	4.1
Deceased . . . . .	22	9
	243	100.0

It may be seen from the information contained in Table IV that 52.3 per cent of the students' fathers had incomes which were derived from agricultural activities.

It is further shown by the data in Table IV that labor constituted the source of income for 19.3 per cent of the students' fathers. It may be further observed that approximately one third as many persons derived their

incomes from labor as compared to agricultural pursuits. The data also points out that the students' fathers with professions as a source of income constitute only nine or 3.7 per cent of the total occupations reported.

The data in Table V provide evidence regarding the occupations of the students' mothers.

TABLE V

PRESENT OCCUPATIONAL ACTIVITIES OF THE MOTHERS OF STUDENTS  
ENROLLED IN COURSES OF THE INDUSTRIAL ARTS DEPARTMENT

Present Occupation	Number of Students	Per Cent
Housewife . . . . .	206	84.7
Labor . . . . .	19	7.7
Profession . . . . .	7	3
Business . . . . .	4	1.6
Deceased . . . . .	7	3
	243	100.0

An inspection of Table V reveals that 84.7 per cent of the students' mothers were listed as having the occupation of housewife. It is further shown in Table V that 12.3 per cent of the students' mothers engage in business, professional, and labor occupations.

The data concerning the national origin of the students' parents are presented in Table VI.

TABLE VI

NATIONAL ORIGIN OF THE PARENTS OF THE 243 STUDENTS  
ENROLLED IN INDUSTRIAL ARTS COURSES

National Origin	Number of Students	Per Cent
Indiscriminate . . . . .	133	55.3
Germany . . . . .	77	31.2
England . . . . .	17	6.9
Ireland . . . . .	9	3.7
France . . . . .	5	2.1
Sweden . . . . .	1	.4
Bohemia . . . . .	1	.4
	243	100.0

From Table VI it may be observed that 133 of the 243 students had parents of indiscriminate origin. Further observation of the information in the table reveals that 31.2 per cent of the students were of German origin, whereas, England, France, Sweden, and Bohemia were the country of national origin of only 13.5 per cent of the students' parents.

The data contained in Table VII gives detailed information regarding the languages spoken in the homes of the students enrolled in industrial arts courses.

TABLE VII

LANGUAGES, OTHER THAN ENGLISH, SPOKEN IN THE HOMES  
OF STUDENTS ENROLLED IN INDUSTRIAL ARTS COURSES

Languages	Number of Students	Per Cent
None Other Than English . .	190	78.2
German . . . . .	45	18.5
French . . . . .	5	2.1
Bohemian . . . . .	1	.4
Swedish . . . . .	1	.4
Spanish . . . . .	1	.4
	243	100.0

From the data presented in Table VII it may be seen that German was the language, other than English, most frequently spoken in the homes of students enrolled in industrial arts courses. It may also be seen from the data that a language other than English was spoken in the homes of 53 or 21.8 per cent of the students.

The population of the families of which the students were members is presented by the data in Table VIII.

Families ranged from two to fifteen.

#### General Background

Table IX reveals information regarding the extent that students support themselves while attending college.

TABLE VIII

POPULATION OF THE FAMILIES OF WHICH THE 243  
INDUSTRIAL ARTS STUDENTS WERE MEMBERS

Population	Number of Cases	Total Population	Per Cent of Cases
2	2	4	0.8
3	19	57	7.7
4	55	220	22.7
5	38	190	15.6
6	35	210	14.4
7	31	217	12.8
8	24	192	10
9	21	189	8.6
10	7	70	3
11	1	11	.4
12	4	48	1.6
13	4	52	1.6
14	1	14	.4
15	1	15	.4
	243	1,489	100.0

From the information contained in Table VIII it may be observed that the average population of the students' families was 6.1, however, the number of members in the families ranged from two to fifteen.

## General Background

Table IX reveals information regarding the extent that students support themselves while attending college.



TABLE IX

EXTENT OF SELF-SUPPORT OF STUDENTS ATTENDING COLLEGE  
IN THE FORT HAYS INDUSTRIAL ARTS DEPARTMENT

Per Cent of Self-Support	Number of Students	Per Cent
0	25	10.4
10	6	2.5
20	9	3.7
30	12	5
40	9	3.7
50	22	9
60	5	2.1
70	13	5.4
80	20	8.2
90	15	6
100	107	44
	243	100.0

The data in Table IX reveal that 10.4 per cent of the students in the industrial arts department did not support themselves while attending college. Information is also given which indicates that 89.6 per cent of the students support themselves to some extent and that 107 students were totally self-supported.

The data in Table X provide information concerning the sources of income for the students enrolled in the industrial arts department.

TABLE X

## SOURCE OF INCOME FOR STUDENTS WHO SUPPORT THEMSELVES TO SOME EXTENT WHILE ENROLLED IN INDUSTRIAL ARTS COURSES

Source of Income	Number of Students	Per Cent
Part-Time Summer Employment . . . . .	93	38.2
G.I. Bill . . . . .	67	27.4
Agriculture . . . . .	40	16.5
Family Support . . . . .	25	10.4
College Employee . . . . .	13	5.4
Business . . . . .	5	2.1
	243	100.0

The information in Table X points out that 93 of the 243 students support themselves to some extent through part-time summer employment. The data further indicate that 27.4 per cent of the students reported the G.I. Bill as a source of income while 58 or 24 per cent of the students derived their income from either agriculture, college employment or business. The data also reveal that 10.4 per cent of the students are supported by their families.

## Educational Goals

The reasons given by 243 students for attending Fort Hays are revealed in Table XI.

TABLE XI  
REASONS WHY THE STUDENTS ENROLLED IN THE INDUSTRIAL  
ARTS DEPARTMENT ATTENDED FORT HAYS

Reason for Attending	Number of Students	Per Cent
Low Living Expenses . . . . .	72	30
Industrial Arts Facilities . . . . .	68	28
Friends Attend . . . . .	24	10
Close to Place of Residence . . . . .	19	7.7
High School Teacher's Suggestion . . . . .	18	7.4
Living Facilities . . . . .	16	6.4
Parents' Suggestion . . . . .	15	6
College Facilities . . . . .	8	3.3
No Specific Reason . . . . .	3	1.2
	243	100.0

An examination of the data in Table XI reveals that 30 per cent of the students gave low living expenses as their reason for attending Fort Hays. It is further disclosed that 68 of the 243 students listed industrial arts facilities as their reason for attending this college. The information also indicates that 13.4 per cent of the students were encouraged to attend Fort Hays by their parents or high school teachers and only three or 1.2 per cent did not have a specific reason for attending the institution.

Information concerning the number of semesters that the students participated in industrial arts courses at the

high school level is presented by Table XII.

TABLE XII  
NUMBER OF SEMESTERS THE STUDENTS ENROLLED IN INDUSTRIAL ARTS COURSES PARTICIPATED IN HIGH SCHOOL INDUSTRIAL ARTS

Number of Semesters	Number of Students	Per Cent
0	42	17.3
1	8	3.3
2	41	16.8
3	18	7.4
4	50	20.6
5	7	3
6	42	17.3
7	2	.8
8	33	13.5
	243	100.0

An inspection of the data in Table XII reveals that 13.5 per cent of the students participated in industrial arts courses for four years duration in the high school. Forty two or 17.3 per cent of the group had not participated in industrial arts at the high school level.

Data in Table XIII concern the per cent of students planning to major or minor in the industrial arts field.

Freshman	37	38.2
Sophomore	67	27.6
Junior	53	21.8
Senior	29	12
Graduate	2	.8
	244	100.0

TABLE XIII

NUMBER AND PERCENTAGE OF THE 243 STUDENTS PLANNING TO  
MAJOR OR MINOR IN THE INDUSTRIAL ARTS FIELD

Industrial Arts	Number of Students	Per Cent
Major . . . . .	124	51.1
Minor . . . . .	45	18.5
Undecided . . . . .	74	30.4
	243	100.0

The data in Table XIII indicate that 169 or 69.6 per cent of those persons presently enrolled in industrial arts courses intend to major or minor in that department. It is further shown that 74 or 30.4 per cent of the group were undecided as to the choice of this field for specialization.

Information regarding the college classification of the 243 students is provided in Table XIV.

TABLE XIV

COLLEGE CLASSIFICATION OF STUDENTS ENROLLED  
IN INDUSTRIAL ARTS COURSES AT FORT HAYS

College Classification	Number of Students	Per Cent
Freshman . . . . .	93	38.2
Sophomore . . . . .	67	27.4
Junior . . . . .	52	21.6
Senior . . . . .	29	12
Graduate . . . . .	2	.8
	243	100.0

The information in Table XIV indicates that freshmen comprised the largest group participating in industrial arts courses. It is further shown that sophomores comprised 27.4 per cent, juniors 21.6 per cent, seniors 12 per cent, and graduates 0.8 per cent of the enrollment in the department.

The number and per cent of the 243 students planning to graduate from Fort Hays are given in Table XV.

TABLE XV  
NUMBER AND PERCENTAGE OF INDUSTRIAL ARTS STUDENTS  
PLANNING TO GRADUATE FROM FORT HAYS

Planning to Graduate	Number of Students	Per Cent
Yes . . . . .	184	75.8
No . . . . .	59	24.2
	243	100.0

From the information contained in Table XV it may be seen that 24.2 per cent of those students enrolled in the industrial arts department do not plan to graduate from the college.

The data also indicate that more than three-fourths of the students in the industrial arts department plan to graduate from this institution.

Table XVI gives data pertaining to the number of years the 243 students plan to attend Fort Hays.

TABLE XVI

NUMBER OF YEARS THAT STUDENTS ENROLLED IN  
INDUSTRIAL ARTS PLAN TO ATTEND FORT HAYS

Number of Years	Number of Students	Per Cent
1	9	3.7
2	43	17.5
3	7	3
4	184	75.8
	243	100.0

An examination of the information in Table XVI reveals that 184 of the 243 students plan to graduate from Fort Hays. The data also indicate that 17.5 per cent of the students plan to attend Fort Hays for only two years and that 3.7 per cent of the students plan to attend for only one year.

The reasons given by the students for enrolling in industrial arts courses are presented in Table XVII. 2.1 per cent of the students enrolled in industrial arts courses to meet an emergency requirement, whereas, 17.5 per cent enrolled in courses because they are needed for a minor.

It may be further observed that 18.5 per cent of the respondents took industrial arts courses to complete previous work taken in the department. It may also be observed that 2.1 per cent of the students enrolled in industrial arts courses because they like industrial arts work and

TABLE XVII

REASONS STUDENTS IN THE INDUSTRIAL ARTS DEPARTMENT  
ENROLLED IN INDUSTRIAL ARTS COURSES

Reason for Enrollment	Number of Students	Per Cent
Required for Major . . . . .	83	34
Complete Previous Work . . . . .	69	28.2
Needed for Minor . . . . .	31	12.8
Prerequisite . . . . .	28	11.6
For Content of the Course . . . . .	9	3.7
No Specific Reason . . . . .	7	3
Engineer Requirement . . . . .	5	2.1
Like Industrial Arts Work . . . . .	5	2.1
Related to Agriculture . . . . .	5	2.1
Exploration . . . . .	1	.4
	243	100.0

The data in Table XVII reveal that 83 of the 243 respondents enrolled in industrial arts courses to meet the requirements of their major field of study. Five or 2.1 per cent of the students enrolled in industrial arts courses to meet an engineer requirement, whereas, 12.8 per cent enrolled in courses because they are needed for a minor.

It may be further observed that 28.2 per cent of the respondents took industrial arts courses to complete previous work taken in the department. It may also be observed that 2.1 per cent of the students enrolled in industrial arts courses because they like industrial arts work and



that a corresponding percentage took industrial arts courses because of its relationship to agriculture.

Information concerning the students' professional or occupational objectives are indicated in the data presented in Table XVIII.

TABLE XVIII

PROFESSIONAL OR OCCUPATIONAL OBJECTIVE OF THE STUDENTS  
ATTENDING FORT HAYS IN THE INDUSTRIAL ARTS DEPARTMENT

Objective	Number of Students	Per Cent
Professional . . . . .	144	59.3
Agriculture . . . . .	50	20.6
Business . . . . .	31	12.8
Engineering . . . . .	17	6.9
Pilot . . . . .	1	.4
	243	100.0

Information contained in Table XVIII indicates that 144 or 59.3 per cent of the students list the professions as their occupational objective. It may also be observed that 20.6 per cent of the group listed agriculture and 12.8 per cent listed business as their occupational goal.

Only one or 0.4 per cent of the respondents listed an occupational objective other than professional, business, agricultural or engineering.

Information contained in Table XIX reveals the scope of courses and number of semester hours of participation

of the 243 students enrolled in the different areas of the industrial arts department.

TABLE XIX

SCOPE OF COURSES AND NUMBER OF SEMESTER HOURS  
THE 243 STUDENTS HAVE PARTICIPATED IN  
INDUSTRIAL ARTS AREAS, BY PERCENTAGES

Hours	Drawing	Wood	Auto- motive	Metal	Profess- ional Courses	Elec- tricity	Uphol- stering
0	17.9	47.3	74.9	38.6	90.2	65.6	96.3
2	7.4		.4	7.4	6.9	34.4	3.7
3	23.6	15.6	15.6	10.8			
4	5.8				2.1		
5	34.7	14.8	2.1	31.2			
6	.4	.4	5	.4	.8		
7	1.2		.8	5.8			
8	7.4	11.1	.8				
10	.4		.4	5.8			
11	1.2	5					
14		3.3					
17		2.5					
	100.0	100.0	100.0	100.0	100.0	100.0	100.0

It may be observed from the data in Table XIX that more than one-half of the students had participated in the areas of drawing, wood, and metal. The data also indicate that only 9.8 per cent of the students had participated in professional courses, and only 3.7 per cent of the students had participated in upholstery courses.

The information also reveals that 25.1 per cent of the students had participated in the automotive area.

Table XX provides information concerning the state in

which these 243 students would prefer to be employed.

TABLE XX  
STATES WHERE STUDENTS ENROLLED IN INDUSTRIAL ARTS  
COURSES WOULD PREFER EMPLOYMENT

State	Number of Students	Per Cent
No Preference of State . . . . .	20	8.2
Arizona . . . . .	7	3
California . . . . .	26	10.8
Colorado . . . . .	26	10.8
Florida . . . . .	8	3.3
Georgia . . . . .	1	.4
Idaho . . . . .	4	1.6
Illinois . . . . .	1	.4
Kansas . . . . .	123	50.5
Kentucky . . . . .	1	.4
Michigan . . . . .	4	1.6
Nevada . . . . .	1	.4
New Mexico . . . . .	1	.4
Oregon . . . . .	5	2.1
South Dakota . . . . .	1	.4
Texas . . . . .	4	1.6
Virginia . . . . .	3	1.2
Washington . . . . .	5	2.1
Wyoming . . . . .	2	.8
	243	100.0

The information presented in Table XX indicates that 50.5 per cent of the total group preferred employment in Kansas, whereas, 41.3 per cent of the entire group preferred employment outside the State of Kansas.

## Summary

The findings of the study represent an attempt to present data concerning the students enrolled in industrial arts courses. Information concerning their family background, general background, and educational goals are presented as the findings of this study.

The 243 students who are represented in the data were enrolled in industrial arts courses at Fort Hays Kansas State College as of January 25, 1958. The information compiled into findings for this report were provided by these students through a questionnaire devised by the investigator. The specific inferences from these findings are presented in Chapter III.

The data indicate that 52.3 per cent of the students' fathers were engaged in agricultural occupations. The remaining 47.6 per cent of the students' fathers had occupations of either business, professional, or labor, however, only 12.3 per cent of the students' mothers were employed outside the home.

Parents of indeterminate national origin were listed by 55.3 per cent of the students, however, 77 of the 243 students had parents of German origin.

Of the 243 students surveyed only 53 indicated that a language other than English was spoken in their homes.

The families, of which the students were members, were comprised of from two to fifteen members, however, the average was 5.1 members per family.

## CHAPTER III

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

In Chapter III an attempt will be made to summarize the findings of the information provided by the tables and presented in the analysis of the tables.

#### Findings

One hundred per cent of the students were male and their ages ranged from 17 to 54 years. Kansas was the birth place of 91.2 per cent of these students and 97.5 per cent of the group were residing in the State of Kansas.

The data indicate that 52.3 per cent of the students' fathers were engaged in agricultural occupations. The remaining 34.6 per cent of the students' fathers had occupations of either business, professional, or labor, however, only 12.3 per cent of the students' mothers were employed outside the home.

Parents of indeterminate national origin were listed by 55.3 per cent of the students, however, 77 of the 243 students had parents of German origin.

Of the 243 students surveyed only 53 indicated that a language other than English was spoken in their homes.

The families, of which the students were members, were comprised of from two to fifteen members, however, the average was 6.1 members per family.

Forty four per cent of the respondents were self-supporting while attending college. The support for 10.4 per cent of the students was derived from their families.

Thirty per cent of the cases surveyed indicated that the low cost of living was their primary reason for attending Fort Hays, whereas, 28 per cent specified that the facilities of the industrial arts department were the determining factor for their attending the institution. Thirty three or 13.4 per cent of the respondents were encouraged to attend Fort Hays by their parents or high school teachers.

Students who had participated in high school industrial arts courses comprised 82.7 per cent of the group. Thirty three of the 243 students surveyed had participated in high school industrial arts for four years.

The number of respondents planning to major in the industrial arts field constituted 51.1 per cent of the group, however, 30.4 per cent of the group were undecided as to their major or minor field of specialization.

The data indicate that 38.2 per cent of the group were freshmen, whereas, 27.4 per cent were sophomores, 21.6 per cent were juniors, 12 per cent were seniors, and only 0.8 per cent were graduates.

Nine or 3.7 per cent of the students plan to attend Fort Hays for only one year and 43 or 17.5 per cent plan to attend this institution for only two years.

The information indicated that 119 of the 243 students enrolled in industrial arts courses to reach an educational goal, however, 28.2 per cent of the respondents enrolled to complete previous work taken in the department.

The data also indicate that the professions attract 59.3 per cent of the students enrolled in the industrial arts department.

A review of the respondents participation in industrial arts courses indicated that 82.1 per cent of the respondents participated in drawing courses, 52.7 per cent had worked in woodworking courses, and 61.4 per cent had participated in metalworking courses. The information further indicates that 25.1 per cent participated in automotive courses, 34.4 per cent participated in electrical work, 9.8 per cent participated in professional courses, and only 3.7 per cent had participated in upholstering courses.

It was found that 41.3 per cent of the students preferred to be employed in some state other than Kansas, however, 50.5 per cent of the respondents preferred to find employment in the State of Kansas.

#### Conclusions

Since 100 per cent of the students enrolled in industrial arts courses were male it would appear that women are not encouraged to enter the industrial arts field.

The fact that over one-half of the students' fathers had agricultural occupations and that only 12.3 per cent of the students' mothers were employed outside the home would appearingly indicate that agricultural pursuits supply the major part of the incomes of the students' families.

Since approximately one-third of the respondents' parents were of German origin it would seem to be indicated that parents of German origin constituted the largest distinct ethnic group in the area, however, German was spoken in only 18.5 per cent of the students' homes, further indicating that only English is spoken in the majority of the homes of students enrolled in industrial arts courses.

The data indicated that the average population per family of the respondents was 6.1. The Statistical Abstract of the United States -- 1957 gives the average population per family in Kansas as 3.14.<sup>24</sup> This seemingly indicates that the average population of the respondents' families was approximately twice as large as the family population indicated in the Statistical Abstract of the United States -- 1957.

The fact that only 10.4 per cent of the students derived 100 per cent of their support from their families

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<sup>24</sup> U.S. Bureau of the Census, Statistical Abstract of the United States: (Seventy-eighth edition.) Washington, D.C., 1957, p. 48.



indicated that the majority of the students have another source of income.

Of the 243 students surveyed 30 per cent listed low cost of living and another 28 per cent of the students indicated the industrial arts facilities as their reasons for attending the institution. These combined percentages constitute 58 per cent of the group surveyed and would seem to indicate that the low cost of living and the industrial arts facilities were the primary reason for the majority of these students to attend Fort Hays.

The fact that 82.7 per cent of the students had participated in high school industrial arts courses would seemingly indicate that industrial arts constituted a part of the high school education for a major per cent of the group.

The number of respondents planning to major in the industrial arts field consisted of 51.1 per cent of the group. This apparently indicates that other reasons than to major in the industrial arts field attracted almost 50 per cent of the students to enroll in industrial arts courses.

The data show that 38.2 per cent of the group were freshmen, 27.4 per cent were sophomores, 21.6 per cent were juniors, 12 per cent were seniors, and only 0.8 per cent were graduates. This indicates that 65.6 per cent of the group complete work as underclassmen.

The fact that 75.8 per cent of the 243 students were

planning to graduate from this institution would apparently indicate that the majority of the students enrolled in industrial arts courses plan to complete their work in the department.

Forty three of the respondents plan to attend Fort Hays for only two years and nine plan to attend for only one year. This apparently indicates that these students considered one or two years to be a form of terminal education in this institution.

The reason 119 of the 243 students enrolled in industrial arts courses was to meet the requirements for engineering, an industrial arts major, or an industrial arts minor. This apparently indicates that 51.1 per cent of the students considered their industrial arts training as some form of terminal education.

Of the 243 students 59.3 per cent had a professional objective, this apparently reveals that the professions attract a major percentage of the students enrolled in industrial arts courses.

The fact that only 9.8 per cent of the students had participated in industrial arts professional courses would seemingly indicate that the students did not balance their shop practice courses and professional courses.

The fact that 41.3 per cent of the respondents preferred employment in some state other than Kansas apparently indicates that employment in the State of Kansas was

considered desirable by only one-half of the potential number of students enrolled in industrial arts courses. Department in Kansas was attractive to the students.

#### Recommendations

Women enrolled at Fort Hays Kansas State College should be encouraged to participate in industrial arts areas.

The administration of the college should be encouraged to maintain at a minimum the cost of living for the students enrolled in the institution.

The advisory staff of the college should encourage students to take industrial arts courses to broaden their general education.

The industrial arts instructional staff should become better acquainted with the students enrolled in industrial arts courses to assist them in deciding upon their field of specialization.

The industrial arts department should be encouraged to provide courses to meet the need of those students enrolled in industrial arts courses who do not plan to enter a professional occupation.

Students enrolled in the industrial arts department who plan to enter teaching should be encouraged to balance shop practice courses with professional courses in the industrial arts field.

Persons interested in the employment of students

educated in Kansas should be encouraged to improve the working conditions and facilities in order to make employment in Kansas more attractive to the students.

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The Industrial Arts Department at Fort Hays is interested in your opinion regarding the methods of teaching you are using in your shop class. We are doing a study on how well students are learning and we need your help. If you can do this, I will need to contact you by phone or mail. The following questionnaire is designed to help us in our study. The information you give will be regarded as strictly confidential and will not be used where you do not wish it to be.

(NOTE) If you have already filled out one of these questionnaires, please do not fill out a second one.

1. Name \_\_\_\_\_  
 Last First Middle Initial  
 2. Age \_\_\_\_\_  
 3. Sex M \_\_\_\_\_ F \_\_\_\_\_  
 4. Place of Birth \_\_\_\_\_  
 City State  
 5. Home address \_\_\_\_\_  
 6. Father's occupation \_\_\_\_\_  
 7. Mother's occupation \_\_\_\_\_

APPENDIXES

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A. Industrial Arts Questionnaire . . . . . 50

B. Location of Birth Place, by Number and County, of the 91.2 Per Cent of the 243 Students Who were Born in Kansas . . . . . 52

C. Location, by Number and County, of the 97.5 Per Cent of the 243 Students Who were Residing in Kansas . . . . . 53

8. Source of income if self-supporting \_\_\_\_\_

9. Reason for selecting FEEDC (give one main reason)

A. Friend's friend \_\_\_\_\_ B. Low living expenses \_\_\_\_\_ C. Living facilities \_\_\_\_\_

D. High school teacher's suggestion \_\_\_\_\_ E. Parents' suggestion \_\_\_\_\_

F. Industrial Arts facilities \_\_\_\_\_ G. Others \_\_\_\_\_

10. Number of high school semesters in Industrial Arts \_\_\_\_\_

11. Industrial arts major \_\_\_\_\_; minor \_\_\_\_\_

12. College classification: Fr. \_\_\_\_\_ So. \_\_\_\_\_ Jr. \_\_\_\_\_ Sr. \_\_\_\_\_

13. Do you plan to graduate from Fort Hays? Yes \_\_\_\_\_ No \_\_\_\_\_

14. If not, how many years do you plan to be at Fort Hays? 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_

The Industrial Arts department of FHKSC is continuously trying to find better methods of serving you as Industrial Arts students. In order to find better methods, I am doing a study on how well Industrial Arts courses now serve your needs. Before I can do this, I will need to collect fairly accurate information about you. The following questionnaire is designed for this purpose. The information you give will be regarded as strictly confidential and will not affect your grade in any way.

(NOTE): If you have already filled out one of these questionnaires, please do not fill out a second one.

1. Name \_\_\_\_\_  

Last	First	Middle Initial
------	-------	----------------
2. Age \_\_\_\_\_
3. Sex M \_\_\_\_\_ F \_\_\_\_\_
4. Place of birth \_\_\_\_\_  

City	county	State
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5. Home address \_\_\_\_\_
6. Father's occupation \_\_\_\_\_
7. Mother's occupation \_\_\_\_\_
8. National origin of father \_\_\_\_\_
9. National origin of mother \_\_\_\_\_ ) If you are Indian, these  
) will be American
10. Number of brothers \_\_\_\_\_
11. Number of sisters \_\_\_\_\_
12. What languages are spoken in home other than English? \_\_\_\_\_
13. To what extent are you supporting yourself during college? None \_\_\_\_\_; 10% \_\_\_\_\_; 20% \_\_\_\_\_  
30% \_\_\_\_\_; 40% \_\_\_\_\_; 50% \_\_\_\_\_; 60% \_\_\_\_\_; 70% \_\_\_\_\_; 80% \_\_\_\_\_; 90% \_\_\_\_\_; 100% \_\_\_\_\_.
14. Source of income if self-supporting \_\_\_\_\_
15. Reason for selecting FHKSC (give one main reason)  
A. Friends attend \_\_\_\_\_ B. low living expenses \_\_\_\_\_ C. living facilities \_\_\_\_\_  
D. high school teacher's suggestion \_\_\_\_\_ E. parents' suggestion \_\_\_\_\_  
F. Industrial Arts facilities \_\_\_\_\_ G. Others \_\_\_\_\_
16. Number of high school semesters in Industrial Arts \_\_\_\_\_
17. Industrial arts major \_\_\_\_\_; minor \_\_\_\_\_.
18. College classification: Fr. \_\_\_\_\_; So. \_\_\_\_\_; Jr. \_\_\_\_\_; Sr. \_\_\_\_\_.
19. Do you plan to graduate from Fort Hays? Yes \_\_\_\_\_ No \_\_\_\_\_
20. If not, how many years do you plan to be at Fort Hays? 1 \_\_\_\_\_; 2 \_\_\_\_\_; 3 \_\_\_\_\_; 4 \_\_\_\_\_; \_\_\_\_\_

In what state of the United States would you prefer to work if you had your choice?

(State) \_\_\_\_\_

Occupational or Professional objective.

A. Professional \_\_\_\_\_; B. Agriculture \_\_\_\_\_; C. Business \_\_\_\_\_; D. Others \_\_\_\_\_

Check courses taken in Industrial Arts, including present enrollment.

\_\_\_\_\_ (3) Mechanical Drawing 1 \_\_\_\_\_ (2) Occupational Analysis 180

\_\_\_\_\_ (2) Mechanical Drawing 1a

\_\_\_\_\_ (2) Mechanical Drawing 2

\_\_\_\_\_ (3) Cabinet Making 3

\_\_\_\_\_ (2) Cabinet Making 4

\_\_\_\_\_ (2) General Metals

\_\_\_\_\_ ( 3) Welding & Heat Treating 21

\_\_\_\_\_ (3) Furniture and Cabinet Design 27

\_\_\_\_\_ (3) Architectural Drawing 28

\_\_\_\_\_ (2) Practical Electricity 30

\_\_\_\_\_ (3) General Wood Shop 45

\_\_\_\_\_ (3) Carpentry 51

\_\_\_\_\_ (2) Upholstering 52

\_\_\_\_\_ (3) Wood Finishing 53

\_\_\_\_\_ (3) Wood Turning 54

\_\_\_\_\_ (3) Cabinet Making 55

\_\_\_\_\_ (2) Machine Shop 63

\_\_\_\_\_ (3) Machine Shop 64

\_\_\_\_\_ (3) Auto Mechanics 65

\_\_\_\_\_ (2) Carburetion 170

\_\_\_\_\_ (3) Auto Electrical Systems 171

\_\_\_\_\_ (2) Auto Mech. Tech. and Prob. 172

\_\_\_\_\_ (2) Maintenance and Repair 174

\_\_\_\_\_ (2) Industrial Arts Education 176



