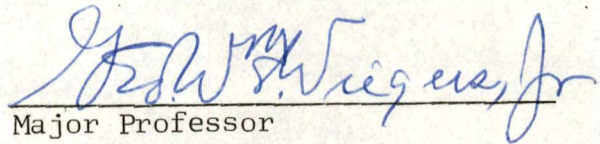


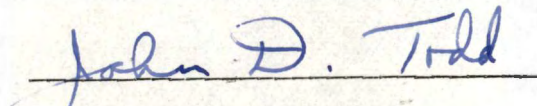
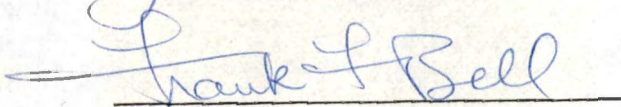
March 4, 1968

To the Graduate Council:

I am submitting herewith a thesis written by Jefferson E. Taylor entitled "The Occupational Needs of Hawkins County, Tennessee." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Agricultural Education.


Major Professor

We have read this thesis and
recommend its acceptance:

Accepted for the Council:


Vice President for
Graduate Studies and Research

THE OCCUPATIONAL NEEDS OF HAWKINS COUNTY, TENNESSEE

A Thesis

Presented to

the Graduate Council of
The University of Tennessee

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by

Jefferson E. Taylor

June 1968

ACKNOWLEDGMENTS

The writer wishes to acknowledge Dr. George W. Wieggers, Jr., Professor and Head of the Department of Agricultural Education, The University of Tennessee, for directing this study.

The writer also appreciates the guidance and assistance of John Todd, Assistant Professor of Agricultural Education, The University of Tennessee.

The writer is especially grateful for the assistance and encouragement given to him by his wife, June, and daughter, Catherine.

J.E.T.

ABSTRACT

Purpose

The purpose of the study was to determine the occupational needs of Hawkins County, Tennessee

Method

A survey form was developed by the investigator and the information was secured by personal interview.

Summary

1. Occupations other than farming exist in Hawkins County for approximately 4,788 males and 767 females.
2. The annual turnover in occupations other than farming in the county is approximately 178 males and 94 females.
3. The additional employees needed in occupations other than farming next year due to growth is estimated to be 281 males and 58 females.
4. The total additional employees needed in occupations other than farming for the next five years due to turnover and growth is expected to be 1,645 males and 654 females.
5. There is a shortage of trained personnel to fill the needs in occupations other than farming in the county.
6. Vocational classes in high school to meet the county vocational needs were recommended by 83 percent of the employers in sales and office work, 81 percent in mechanical skilled trades and 21 percent in service skilled trades.

7. A need exists in the county for expanded high school vocational programs to meet the needs of the county occupational community.



TABLE OF CONTENTS

CHAPTER	PAGE
I. THE PROBLEM AND ITS DEFINITION	1
Purpose	1
Limitations of the Study	1
Definition of Terms	2
Need for Study	5
Procedure	9
Related Studies	11
II. PRESENTATION OF DATA	16
III. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	57
Summary	57
Conclusions	59
Recommendations	60
BIBLIOGRAPHY	62
APPENDIXES	66
APPENDIX A	67
APPENDIX B	72
VITA	75

LIST OF TABLES

TABLE	PAGE
I. Number of Males and Females Employed in Hawkins County, Tennessee	17
II. Number of Males and Females Employed in Each Category in Hawkins County, Tennessee	18
III. Number of Males and Females Employed in Sales and Office Work in Hawkins County, Tennessee .	20
IV. Number of Persons Employed in Each Job Title in Sales and Office Work in Hawkins County, Tennessee	21
V. Employment Opportunities in Sales and Office Work in Hawkins County, Tennessee	22
VI. Amount of on the Job Training Provided by Establishments in Sales and Office Work in Hawkins County, Tennessee	23
VII. Amount of on the Job Training Provided by the Establishments for the Different Job Titles in Sales and Office Work in Hawkins County, Tennessee	24
VIII. Number of Employers Recommending Training in High School for Jobs in Sales and Office Work	26

TABLE

PAGE

IX.	Number of Employers Recommending High School Training for Each Job Title in Sales and Office Work	27
X.	Number of Males and Females Employed in Mechanical Skilled Trades in Hawkins County, Tennessee	28
XI.	Number of Persons Employed in Each Job Title in Mechanical Skilled Trades in Hawkins County, Tennessee	30
XII.	Employment Opportunities in Mechanical Skilled Trades in Hawkins County, Tennessee	31
XIII.	Amount of on the Job Training Provided by Establishments in Mechanical Skilled Trades in Hawkins County, Tennessee	32
XIV.	Amount of on the Job Training Provided by Establishments for the Different Job Titles in Mechanical Skilled Trades in Hawkins County, Tennessee	33
XV.	Number of Employers Recommending Training in High School for Jobs in Mechanical Skilled Trades	35
XVI.	Number of Employers Recommending High School Training for Each Job Title in Mechanical Skilled Trades	36

TABLE	PAGE
XVII. Number of Males and Females Employed in Building Skilled Trades, Hawkins County, Tennessee . . .	37
XVIII. Number of Persons Employed in Each Job Title in Building Skilled Trades, Hawkins County, Tennessee	39
XIX. Employment Opportunities in Building Skilled Trades in Hawkins County, Tennessee	40
XX. Amount of on the Job Training Provided by Establishments in Building Skilled Trades in Hawkins County, Tennessee	41
XXI. Amount of on the Job Training Provided by Establishments for the Different Job Titles in Building Skilled Trades in Hawkins County, Tennessee	43
XXII. Number of Employers Recommending Training in High School for Jobs in Building Skilled Trades in Hawkins County, Tennessee	44
XXIII. Number of Employers Recommending Training in High School For Each Job Title in Building Skilled Trades in Hawkins County, Tennessee . .	45
XXIV. Number of Males and Females Employed in Services Skilled Trades in Hawkins County, Tennessee . .	46
XXV. Number of Persons Employed in Each Job Title in Services Skilled Trades in Hawkins County, Tennessee	47

TABLE

PAGE

XXVI.	Employment Opportunities in Services Skilled Trades in Hawkins County, Tennessee	49
XXVII.	Amount of on the Job Training Provided by Establishments in Services Skilled Trades in Hawkins County, Tennessee	50
XXVIII.	Amount of Training Provided by Establishments for the Different Job Titles in Services Skilled Trades in Hawkins County, Tennessee	51
XXIX.	Number of Employers Recommending Training in High School for Jobs in Services Skilled Trades in Hawkins County, Tennessee	53
XXX.	Number of Employers Recommending Training in High School for Each Job Title in Services Skilled Trades in Hawkins County, Tennessee	54
XXXI.	Employment Opportunities in Occupations Other Than Farming in Hawkins County, Tennessee	55

CHAPTER I

THE PROBLEM AND ITS DEFINITION

I. PURPOSE

The purpose of the study was to determine the occupational needs of the residents in Hawkins County, Tennessee.

The aim of the study was to provide the Hawkins County school administrators with information related to the occupations in the county which could aid them in planning instructional and guidance programs that could better prepare students to fill occupational needs in the county. This was accomplished by: (1) determining the occupations in Hawkins County other than farming, (2) determining the replacement and growth needs in these occupations, (3) determining the amount of on-the-job training provided, and (4) determining the value of special courses in high school designed to aid in training employees for these occupations.

II. LIMITATIONS OF THE STUDY

The study was limited to information that could be used in program planning and included only the occupations other than farming in the county. Since the information gained from this study will be used primarily for students going on jobs immediately after leaving high school, professional positions have

been excluded. Since no program planning is anticipated for the unskilled jobs, this classification has also been excluded from the study.

The study was restricted to the county because it was felt that a more thorough investigation could be made, and that the results would be sufficient. It was felt that these limitations would provide opportunities for more meaningful interviews with a greater number of people.

III. DEFINITION OF TERMS

Additional employees. This term refers to people who are not presently working for the establishment, but who will be needed to fill jobs at a future date.

Amount of training provided by your establishment. This phrase refers to the special training provided by the establishment. It is usually specialized and designed to train the employee in techniques and skills necessary to complete products or processes particular to the establishment.

Building skilled trades. These trades include all the activities necessary in the actual construction of homes, office buildings, factories or other structures made for use by man. They are concerned with converting the structural materials such as bricks, steel, lumber, and electrical wire into the stationary structures that add a degree of permanence to man's place of existence.

Employers. This term refers to the person or persons who furnished the information needed on the survey form. For this study it was generally the owner of the business. However, in the plants or factories, it was the personnel manager, superintendent, or public relations director who gave the information. In a very few cases, a responsible employee gave the information and is referred to as the employer in the study.

Growth or expansion. This is a term which refers to the adjustments necessary in plant and personnel due to increased demand for the establishment's product. It generally means an increase in the number of people working at the present job titles with the possible addition of other positions necessary to keep operations at desired levels.

Job titles. This expression refers to the names given to occupational specialties. Some job titles, as carpenter, or electrician require the holder to master a number of complex skills; while others, as laborer or night watchman, require the holder to master little or no technical skill.

Mechanical skilled trades. These trades are understood to be those involving skills which are decidedly mechanical in nature and dealing with the use of tools or machines to accomplish their objectives.

Occupational needs of Hawkins County. This phrase refers to the number and kind of jobs in the county and the training associated with them.

Occupations other than farming. This expression refers to all jobs in the county that are not actually done on the farms whether agriculturally related or not.

Professional positions. This term refers to those positions that need people who have extensive academic backgrounds and who are required to exercise a high degree of mental activity in relation to their positions.

Replacement needs. This term is used to designate people who are hired to fill vacancies left by death, retirement, promotion, transfers or other reasons not related to growth or expansion.

Sales and office jobs. Sales jobs refer to those positions that require a representative of the establishment to have a face to face relationship with a prospective customer for the purpose of exchanging values. Office jobs are those jobs that require the employee to spend the major part of his time at work in an office.

Services skilled trades. This term refers to those jobs that require some degree of training in mastering a skill that is neither mechanical nor clerical but offer services that are to some degree personal in nature.

Training in high school for this job. This phrase refers to the special vocational courses given in high school which would give the training necessary to provide the skills needed in the performance of the job.

Turnover. This term refers to the normal change in personnel made necessary by people quitting, retiring, dying, or being promoted or transferred to other jobs.

IV. NEED FOR STUDY

The traditional high school instructional program is planned to provide students with the basic educational background required for college entrance. However, general knowledge and observations on the part of the writer point to the fact that most of the students who enter high school never reach college or any other post high school training institution. In a non-credit study conducted by James Oakes, Hawkins County, Tennessee Attendance Supervisor, during August of 1967, it was disclosed that a total of 1,776 students had graduated from the high schools in the county the past four years and that only 597 of that number had enrolled for college or any other post high school training program (16). It was necessary for one reason or another that the remaining 1,179 graduates, plus the great number never completing high school during that period, find their place in the occupational community without any preparation to meet job requirements.

During the past five years, four new industries have moved into the county. The total labor force needed by these industries for normal operation is approximately 1,490 employees. Added to the normal operational needs of the businesses

and industries already in the county, this represents a sizeable proportion of the population. Norris indicated in his study that people were available to fill jobs in Claiborne County, Tennessee, but were not properly trained to meet employer's needs (17). Findings by this writer show the same to be true in Hawkins County, Tennessee.

Businessmen and industrial managers interviewed by the writer indicated that the schools in the county were not doing what they could do to prepare their students for the jobs available for them. Better counseling of students was needed in order to direct them into vocations that would better suit their needs and the needs of the vocations in the county.

The manager of the Natural Gas Utility District of Hawkins County stated that all high schools in this area have fallen far behind in supplying basic instructions for all skilled trades. He stated that training toward college entrance had caused the high school to neglect the need for instruction in all skilled trades (22). In an interview with the personnel manager of Alladin Plastics of Tennessee, the writer was informed that the schools could do a lot toward training employees in proper attitudes toward their jobs in industry. This manager further stated that training with any machine during high school would have good transferability to specialized machines used in production at the plant (2).

The owner of Ralph's Plumbing and Heating in Rogersville, Tennessee, indicated that he would hire two plumbers immediately if they had been properly trained. He stated that he believed this kind of training in high school would be very valuable to employers and prospective employees alike (7).

An unidentified salesman at Terry Motor Company in Rogersville related to the interviewer that his company needed a properly trained body repairman and a motor mechanic. Other businessmen in the county expressed needs for properly trained personnel.

The manager of the Employment Security Office in Kingsport, Tennessee, said that he believed a study of occupational needs in Hawkins County would be very valuable, and that it was doubtful if anyone knows the scope and classification of many of the jobs in Hawkins County (8). He had no information on Hawkins County other than that furnished by the United States Census.

Baer and Rober emphasized that as our society becomes more complex, individuals increasingly find themselves confused and in need of assistance toward realizing their talents and opportunities to the fullest. It was further emphasized that this need includes adequate occupational information presented by counselors who have an understanding of specific aspects of the individual and of the nature of the requirements of the jobs (3, p. 1).

In citing the President's Panel of Consultant's Report, "Education for a Changing World of Work," Long reported that twenty-six million young workers will start to work from 1960 to 1970. Eight out of ten will not complete college (12, p. 1). Preparing these young people for the world of work will be a tremendous undertaking.

Kiston pointed out that occupations have become specialized, placing a requirement that each person specialize in a particular service which will become his vocation. A student must be directed toward this end. It is the responsibility of the public schools to supply this training and direction. Most of it must be done while the young workers are still in school and before they reach the acceptable age for employment. It follows that schools should furnish them every type of information needed in evaluating their environmental opportunities (11, pp. 3-5).

Rober and others stated that the need for adequate information concerning the many facets of pupils environmental opportunities is well known. Further, the school should provide the most accurate information possible, and the information should be readily accessible to the pupils when they need it. Furthermore, the school should strive to meet the needs of all the students, whatever their plans may be, during and after leaving elementary schools (17, p. 16).

Tolbert advised counselors to gather information about the occupations in the local community and to file it in such a way that it can be readily selected and used (19, p. 211).

McDaniel believed that students seriously need vocational guidance and that this is demonstrated by the evidence that far too many choose professions for which they lack ability, select fields that are already overcrowded or enter vocations for which their school training is inadequate (13, pp. 320-323). A student must know his abilities and limitations before he can direct his energies toward a satisfying vocation.

Finally, counselors and administrators must know what occupations are available in order to direct the students' selection of information which will enable him to make an intelligent occupational choice.

V. PROCEDURE

In developing this study, an extended examination of related literature was made by the writer. Literature related to guidance and counseling in occupational selection, supporting a broad view of curriculum planning, and presented in other studies related to non-farm occupations was reviewed.

A form for gathering data was developed by the writer. Forms used by other writers were used in developing the one for this study. This survey form was presented to employers and

explained in detail. Information was usually obtained during the interview with some assistance from the writer. In a few cases the use of the form was impractical. In these cases an interview was conducted by the writer, using only the questions which pertained to the establishment furnishing the data. In some cases the writer was asked to leave the forms for study. These forms were later completed and returned by mail.

Percentages of different job titles were taken at the Holston Ordnance Ammunition Plant and later converted into appropriate figures because the officials declined to give exact numbers for any of the categories in the questionnaire. These figures lost their identity when added to those used in the remainder of the study.

Random samples were taken of small filling stations, grocery stores, eating establishments, beauty parlors, and other establishments using a total operating force of three persons or less. Three out of every five, or sixty percent, of these concerns were sampled.

Information from the survey forms and interviews was compiled according to jobs or skills. No effort was made to maintain identity of specialties within a category if placing them into a broad grouping served to make the study more meaningful or useful. For example, almost all bank employees and postal employers could be classified as general office workers

without detracting from the value of the study. Finally, the information was tabulated, presented and discussed in Chapter II. In Chapter III, the writer summarizes the information resulting from the study and makes recommendations for changes in the county high school programs.

VI. RELATED STUDIES

A review of related literature indicated that several occupational studies have been conducted across the nation recently, but that only a few were closely enough related to the author's study to be of any value.

Norris studied Claiborne County, Tennessee, in 1955. While his study was primarily concerned with the agricultural manpower needs of Claiborne County, he presented some interesting facts related to agricultural occupations other than farming. He cited work by Cushman and Brice which indicated that the number of persons employed in off-farm agricultural occupations was increasing. In this work, estimates were cited which indicated a growth rate of 19 percent for full-time workers between 1964 and 1969. In that study, the number of off-farm agricultural occupations was substantial. They were found in businesses and services with diverse functions (15, pp. 15-16).

In a study in Delaware, Barwick discovered that approximately 20 percent of the total number of employees in that state are employed in businesses and services other than farming. It was

believed that the employees would find a knowledge of agriculture useful or necessary in their occupations. His findings showed that for each seven farmers in Delaware, there were five workers in off-farm occupations needing agricultural competencies (5, p. 6).

A study by the Agricultural Education Department at Montana State University found that a shift in agriculture has been to a build-up in off-farm businesses and occupations and professions (20, p. 1).

In his study of vocational opportunities in a community in Washington, Long found that 51 percent of the concerns were in-service functions, that 31.4 percent were in retailing, 4.2 percent were in manufacturing, that 28 percent were in wholesaling, and that 1.4 percent were in processing (12, p. 10).

Hoover, McClay and Stevens conducted a study in Pennsylvania of six occupational levels and discovered that salesmanship, human relations, and business management are competencies of varying degrees needed by all employees (9, p. 36).

Long concluded that preparations of vocational training curriculum should be based upon a survey of the community's occupational needs and indicated that training programs should be prepared and attempted (12, p. 63).

In the study conducted by the Agricultural Education Department at Montana State University, it was recommended that policies and procedures be developed to insure that classroom

facilities and instructional materials are adequate to meet the needs of a program in vocational education to meet occupational needs (20, p. 63).

Mondart and Curtis concluded that the rural high school must anticipate change if it is to remain functional in the lives of people. It must periodically adjust to needed changes. It is recommended that these be made by adjusting old programs and instituting new programs based upon factors and forces which will affect the future of youth. It was indicated that training take place to take advantage of the emerging new jobs, and the increasing competency required of existing ones. The more advanced the skill, the more training the school must provide. This coincides with the interest of youth. The main problem now is to develop programs broad enough and to assemble sufficient resources to make it functional in the lives of youth (14, pp. 60-61).

Judge studied 378 firms in Massachusetts and concluded:

1. There are far more employment opportunities available in off-farm agricultural occupations in Massachusetts than there are adequately trained workers.
2. Employers want better trained workers in off-farm agricultural occupations and want many of their present employees to undergo further training.
3. Employers are willing to cooperate with schools in occupational training programs.
4. High number of employers indicated that they preferred on-the-job training for employees.

5. High level jobs tend to require many and diverse competencies in their performance.
6. Most employers of off-farm agricultural workers prefer that their workers have a minimum educational level of graduation from high school.
7. There were no preferences for on-farm or urban background for most of the employers.

Judge also found that employers do not think that adequate training programs are available for training workers of the kind they employ in their businesses. They indicated that they consider training programs completely adequate for less than 10 percent of their employees (10, pp. 29-35).

In a study at Wytheville, Virginia, it was discovered that employers had some degree of difficulty filling more than one-third of the available jobs. This indicated a need for career workers (1, p. 33).

Clark discovered a need for continuing study in science, mathematics, and English as a contribution to success in any occupation. Ten to fifteen percent of the managers in his study expressed that they and their workers needed skills in typewriting, accounting, public relations, salesmanship, and customer relations (6, pp. 14-15).

Mondart and Curtis found that there was a common practice of paying employees in relation to their education and responsibilities which began with low level pay for the unskilled and progressed toward the top level pay for persons who were well prepared to do the work required of them. They concluded

further that the pay scale between entrance and maximum pay was negligible for the unskilled, but was significant for the skilled and semi-skilled workers (14, pp. 32-33).

Baker concluded that in general, employers expressed a higher degree of annual turnover for employees of semi-skilled occupations. There was little if any increase for employment in occupations at semi-skilled levels (14, p. 84).

In a study in Illinois, Warmbrod found that employees needed in business for growth and turnover the next twelve months in jobs requiring only high school graduation is more than three times the number of workers needed in these jobs the next five years for business growth alone. When job titles requiring some types of post high school education are compared, the data indicate the number of workers needed the next five years to meet the needs of business growth is more than twice the number of workers needed during the next twelve months due to business growth and employee turnover. These data support the hypothesis that the employee turnover rate is higher in the job titles requiring the least amount of formal education (21, p. 15).

Stevenson found that the age at which employees enter into an occupation can be lowered if our training institutions could develop the desired characteristics within the students (18, p. 58).



CHAPTER II

PRESENTATION OF DATA

To simplify the collection of data, the occupations in Hawkins County were divided into four large categories. The categories were sales and office work, mechanical skilled trades, building skilled trades and service skilled trades. Sufficient job titles were then selected under each category to include all the skills which were logically related enough to belong to the general grouping. This enabled the author to produce a survey form small enough to be practical, yet of sufficient magnitude to gather the information needed for the study. Information collected from 369 businesses and services was used in the study.

The information presented in Table I shows the number of males and females presently filling the occupations in the 369 establishments in the county. Over 83 percent are males.

The information presented in Table II, page 18, shows the number of males and females employed in each of the four categories used in the study.

The mechanical skilled trades make up 66 percent of the total, largely because of the great number of production machine operators in the large factories in the county. Sales and office work was next in size because it is related in some way to almost

TABLE I
NUMBER OF MALES AND FEMALES EMPLOYED IN
HAWKINS COUNTY, TENNESSEE

	Number	Percentage
Males	4,788	83.18
Females	967	16.82
Totals	5,755	100.00

CRANES CREST

TABLE II

NUMBER OF MALES AND FEMALES EMPLOYED IN EACH CATEGORY
IN HAWKINS COUNTY, TENNESSEE

Category	Total	Males	Females
1. Sales and office work	1,299	689	610
2. Skilled trades, mechanical	3,789	3,680	109
3. Skilled trades, building	294	294	0
4. Skilled trades, services	373	125	248
Totals	5,755	4,788	967

all of the concerns in the county. Category three is smaller than four because of its limited functions.

Table III shows the number of males and females engaged in sales and office work. It shows that 52.04 percent of these jobs are held by males.

The information given in Table IV, page 21, shows the number of males and females employed in each of the job titles under sales and office work. This table shows that office clerks and the sales clerks make up the larger part of the category. There are more females than male in bookkeeping, office clerks, typists, and receptionist titles.

The annual turnover and future growth for sales and office work are indicated in Table V, page 22. This table shows an increase of 99 males and 80 females next year due to growth and turnover. Growth and turnover was expected to be fairly constant during the next five years.

The employers were asked to rate the amount of training given by their firms by checking the form for "no training," "some training" and "sufficient training." This information is presented in Table VI, page 23, and shows that 86.09 percent gave some training, 10.06 percent felt that they gave enough training and 3.85 percent said they gave no training.

Table VII, page 24, gives the information which indicates the employers' response when asked to rate the amount of training

TABLE III
NUMBER OF MALES AND FEMALES EMPLOYED IN SALES AND
OFFICE WORK IN HAWKINS COUNTY, TENNESSEE

	Number	Percentage
Males	689	53.04
Females	610	46.96
Totals	1,299	100.00

CRANES & CREST

TABLE IV

NUMBER OF PERSONS EMPLOYED IN EACH JOB TITLE IN SALES
AND OFFICE WORK IN HAWKINS COUNTY, TENNESSEE

Jobs	Males	Females	Totals
Bookkeepers	38	76	114
Office clerks	240	315	555
Typists	0	35	35
Non-professional supervisors	140	7	147
Sales clerks	200	148	348
Supply clerks	10	4	14
Receptionists	0	24	24
Salesmen	61	1	62
Totals	689	610	1,299

TABLE V
EMPLOYMENT OPPORTUNITIES IN SALES AND OFFICE WORK IN
HAWKINS COUNTY, TENNESSEE

Jobs	Annual Turnover		Number to be Employed			
			Additions Next Year Due to Growth		Additions Next Five Years Due to Growth	
	Male	Female	Male	Female	Male	Female
Bookkeepers	2	9	2	9	9	23
Office clerks	12	24	5	12	11	37
Typists	0	3	0	1	0	5
Non-professional supervisors	6	1	3	0	12	1
Sales clerks	37	16	13	7	22	21
Supply clerks	1	0	2	0	3	0
Receptionists	0	1	1	1	1	3
Salesmen	4	0	17	0	12	0
Total	62	54	43	30	70	90
					423	390

TABLE VI

AMOUNT OF ON THE JOB TRAINING PROVIDED BY ESTABLISHMENTS
IN SALES AND OFFICE WORK IN HAWKINS COUNTY, TENNESSEE

Amount of Training	Number Reporting	Percentage
No training	13	3.85
Some training	291	86.09
Sufficient training	34	10.06
Total responding to question	338	100.00

TABLE VII

AMOUNT OF ON THE JOB TRAINING PROVIDED BY THE ESTABLISHMENTS
FOR THE DIFFERENT JOB TITLES IN SALES AND OFFICE
WORK IN HAWKINS COUNTY, TENNESSEE

Jobs	Number Reporting	No Training	Some Training	Sufficient Training
Bookkeepers	110	10	99	1
Office clerks	56	1	40	15
Typists	9	0	8	1
Non-professional supervisors	4	0	1	3
Sales clerks	112	1	107	4
Supply clerks	6	0	3	3
Receptionists	19	0	17	2
Salesmen	22	1	16	5
Totals	338	13	291	34

given by their establishments for each job title under sales and office work.

The employers were asked to answer yes or no to the question which asked if they recommended training in high school for job titles listed under sales and office work. Table VIII shows that 83.36 percent did recommend high school training for this category. The number responding is greater than the number of establishments in the county because some employers responded to more than one job title.

Table IX, page 27, gives the employers' response in relation to the amount of training given by their establishments when asked to rate each job title under sales and office work. All of the employers responding to the question indicated that they recommended high school training for typists and receptionists. Only one of the five responding recommended training in high school for non-professional supervisors. Most of the employers did recommend high school training for the rest of the job titles in this category.

Seven tables are used to present the information gathered under mechanical skilled trades. Table X, page 28, shows the number of males and number of females engaged in the occupational skills listed under mechanical skilled trades. It is indicated that 97.12 percent of these jobs are held by males. The 3,680 males employed in this category make up the largest

TABLE VIII

NUMBER OF EMPLOYERS RECOMMENDING TRAINING IN HIGH SCHOOL
FOR JOBS IN SALES AND OFFICE WORK

	Number	Percentage
Yes	353	83.36
No	68	16.64
Total	421	100.00

CRANES  CREST

TABLE IX
 NUMBER OF EMPLOYERS RECOMMENDING HIGH SCHOOL
 TRAINING FOR EACH JOB TITLE IN
 SALES AND OFFICE WORK

Jobs	Total Responding	Number Answering	
		Yes	No
Bookkeepers	150	141	9
Office clerks	61	47	14
Typists	11	11	0
Non-professional supervisors	5	1	4
Sales clerks	143	111	32
Supply clerks	7	5	2
Receptionists	20	20	0
Salesmen	24	17	7
Total	421	353	68

TABLE X
NUMBER OF MALES AND FEMALES EMPLOYED IN
MECHANICAL SKILLED TRADES IN
HAWKINS COUNTY, TENNESSEE

	Number	Percentage
Males	3,680	97.12
Females	109	2.88
Total	3,789	100.00

single group in the county. Most of the male workers in the occupations other than farming are found in this group. The information given in Table XI shows the number of males and the number of females engaged in each of the job titles listed under mechanical skilled trades. This table indicates that production machine operators make up the largest part of the category. This is due to the large number of this job title needed by the factories in the county. The 107 females used in this category were also largely production machine operators.

The annual turnover and future growth for mechanical skilled trades are indicated in Table XII, page 31. This table shows an increase of 169 males and 17 females for the next five years. Increase due to growth and turnover was expected to be at a constant rate.

As in sales and office work, the employers were asked to rate the amount of training given by their firms. They were directed to check "no training," "some training" or "sufficient training," whichever was applicable. This information is presented in Table XIII, page 32, and shows that 37.08 percent indicated that they gave no training, 38.2 percent gave some training and 24.72 said their firms gave sufficient training.

Table XIV, page 33, gives the employers' response relative to the amount of training given by their firms when asked to rate each job title under mechanical skilled trades. The

TABLE XI

NUMBER OF PERSONS EMPLOYED IN EACH JOB TITLE IN
MECHANICAL SKILLED TRADES IN
HAWKINS COUNTY, TENNESSEE

Jobs	Males	Females	Total
Mechanics	111	0	111
Service electricians	142	0	142
Pipe and steam fitters	13	0	13
Production assembly and packers	8	12	20
TV and radio repair men	3	0	3
Welders	20	0	20
Platers and strippers	39	19	58
Printers	45	0	45
Maintenance service men	611	0	611
Production machine operators	2,639	78	2,717
Chemical and mechanical lab technicians	49	0	49
Totals	3,680	109	3,789

TABLE XII

EMPLOYMENT OPPORTUNITIES IN MECHANICAL SKILLED TRADES IN HAWKINS COUNTY, TENNESSEE

Jobs	Annual Turnover		Number to be Employed						Total Additions Needed in Next Five Years	
			Additions Next Year Due to Growth		Additions Next Five Years Due to Growth					
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Mechanics	15	0	30	1	29	0	134	1		
Service electricians	8	0	16	0	20	0	76	0		
Pipe and steam fitters	1	0	1	0	1	0	7	0		
Production assembly and packers	0	0	0	0	0	0	0	0		
TV and radio repair men	0	0	5	0	6	0	11	0		
Welders	1	0	5	0	4	0	14	0		
Platers and strippers	5	3	3	4	6	8	34	27		
Printers	8	4	31	1	62	1	133	22		
Maintenance service men	10	0	14	0	25	0	89	0		
Production machine operators	12	3	4	1	10	0	74	16		
Chemical and mechanical laboratory technicians	0	0	0	0	0	0	0	0		
Total	60	10	109	7	163	9	572	66		

TABLE XIII

AMOUNT OF ON THE JOB TRAINING PROVIDED BY ESTABLISHMENTS
IN MECHANICAL SKILLED TRADES IN
HAWKINS COUNTY, TENNESSEE

<u>Amount of Training</u>	<u>Number Reporting</u>	<u>Percentage</u>
No training	33	37.08
Some training	34	38.20
Sufficient training	22	24.72
Total	89	100.00

TABLE XIV

AMOUNT OF ON THE JOB TRAINING PROVIDED BY ESTABLISHMENTS
FOR THE DIFFERENT JOB TITLES IN MECHANICAL SKILLED
TRADES IN HAWKINS COUNTY, TENNESSEE

Jobs	Number Responding	None	Some	Sufficient
Mechanics	39	22	15	2
Service electricians	12	2	8	2
Pipe and steam fitters	1		1	
Production assembly and packers	1			1
TV and radio repair men	2	1	1	
Welders	10	8	1	1
Platers and strippers	2			2
Printers	3			3
Maintenance service men	14		7	7
Production machine operators	5		1	4
Chemical and mechanical laboratory technicians	0			
Totals	89	33	34	22

total number of employers responding to this question was seemingly low because of the very large number of employees engaged in plant work that fit into this category. Most of the 3,250 employees at the Holston Ordnance Works fit into the category and are represented in the preceding two tables by one response.

The employers were asked to answer yes or no to the question which asked if they recommended training in high school for job titles listed under mechanical skilled trades. Table XV shows that 80.61 percent recommended high school training for job titles in this category. Table XVI, page 36, shows the employers' response to this question when asked to answer yes or no for each job title under mechanical skilled trades. Employers responding to the questions did not recommend high school training for television and radio repair men or platers and strippers used in the printing trades. High school training was recommended by 100 percent of those responding for service electricians, pipe and steam fitters, production assembly and packers, and welders. Two out of the three responding did not recommend high school training for printers. Most of the employers did recommend high school training for the remaining job titles as indicated in Table XVI.

Table XVII, page 37, indicates that the 294 workers in the building skilled trades were all males.

TABLE XV

NUMBER OF EMPLOYERS RECOMMENDING TRAINING IN HIGH SCHOOL
FOR JOBS IN MECHANICAL SKILLED TRADES

	Number	Percentage
Yes	79	80.61
No	19	19.39
Total	98	100.00

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TABLE XVI

NUMBER OF EMPLOYERS RECOMMENDING HIGH SCHOOL TRAINING FOR
EACH JOB TITLE IN MECHANICAL SKILLED TRADES

Jobs	Total Responding	Number Answering Yes	Number Answering No
Mechanics	39	35	4
Service electricians	13	13	0
Pipe and steam fitters	1	1	0
Production assembly and packers	1	1	0
TV and radio repair men	6	0	6
Welders	11	11	0
Platers and strippers	2	0	2
Printers	3	1	2
Maintenance service men	14	11	3
Production machine operators	5	4	1
Chemical and mechanical laboratory technicians	3	2	1
Total	98	79	19

TABLE XVII

NUMBER OF MALES AND FEMALES EMPLOYED IN BUILDING SKILLED
TRADES, HAWKINS COUNTY, TENNESSEE

	<u>Number</u>	<u>Percentage</u>
Males	294	100.00
Females	0	0.00
Total	294	100.00

It is well to note here that all secretaries and office personnel in building skilled trades were included in the information presented under sales and office work. Some of those were females.

The information given in Table XVIII indicates the number of employees working in each job title under building skilled trades.

This table indicates that carpenters, heavy equipment operators, plumbers, painters, engineering aids, and masons make up the largest part of this category. The large number of heavy equipment operators and engineering aids is due to present road construction in the county. The small numbers for cabinet makers and concrete workers are due to the fact that carpenters and masons do some of these jobs.

Table XIX, page 40, indicates the annual turnover and expected growth for this category. This table shows an increase of 154 employees next year due to turnover and growth. For the next five years, increase due to turnover and growth was expected to be at a fairly constant rate.

The information given in Table XX, page 41, indicates the employers' response when asked to rate the amount of training given to the employees by their establishments. Of the 161 employers responding to the question, 6.21 percent indicated that their firms gave no training, 89.45 percent said that

TABLE XVIII

NUMBER OF PERSONS EMPLOYED IN EACH JOB TITLE IN BUILDING
SKILLED TRADES, HAWKINS COUNTY, TENNESSEE

Jobs	Male	Female	Total
Carpenters	62	0	62
Cabinet makers	6	0	6
Concrete workers	6	0	6
Masons	24	0	24
Painters	29	0	29
Electricians	15	0	15
Roofers	13	0	13
Plumbers	45	0	45
Heating and ventilating repair men	12	0	12
Air conditioning repair men	8	0	8
Heavy equipment operators	49	0	49
Engineer aids	25	0	25
Total	294	0	294

TABLE XIX

EMPLOYMENT OPPORTUNITIES IN BUILDING SKILLED TRADES IN HAWKINS COUNTY, TENNESSEE

Jobs	Annual Turnover	Number to be Employed		
		Additions Next Year Due to Growth	Additions Next Five Years Due to Growth	Total Additions Needed Next Five Years
Carpenters	30	54	127	331
Cabinet makers	1	7	2	14
Concrete workers	1	12	6	23
Masons	2	7	8	25
Painters	1	2	5	12
Electricians	1	3	4	12
Roofers	0	1	2	3
Plumbers	2	16	16	42
Heating and ventilating repair men	0	3	4	7
Air conditioning repair men	0	1	3	4
Heavy equipment operators	3	3	2	20
Engineer aids	4	0	0	20
Totals	45	109	179	513

TABLE XX

AMOUNT OF ON THE JOB TRAINING PROVIDED BY ESTABLISHMENTS
IN BUILDING SKILLED TRADES IN
HAWKINS COUNTY, TENNESSEE

Amount of Training	Number Reporting	Percentage
No training	10	6.21
Some training	144	89.45
Sufficient training	7	4.34
Total	161	100.00

their firms gave some training, and 4.34 percent felt that their firms gave sufficient training.

Table XXI presents the information which shows the employers' response relative to the amount of training given by their firms when asked to rate each job title under building skilled trades. The table indicates that no training was provided for painters, roofers, heating and ventilating, or air conditioning repair men. As indicated in the table, an insignificant number believed that their firms gave sufficient training in any of the job titles.

According to the information presented in Table XXII, page 44, 61.45 percent of the employers recommended training in high school for building skilled trades. Table XXIII, page 45, shows that all the employers responding recommended training in high school for plumbers and concrete workers, but few recommended high school training for air conditioning repair men, roofers, heavy equipment operators and engineering aids.

Table XXIV, page 46, shows the number of males and females engaged in services skilled trades. It is indicated that 66.49 percent of these jobs are held by females.

The information given in Table XXV, page 47, shows the number of males and females employed in each of the job titles under services skilled trades. The information indicates that there were no female barbers, police or commercial photographers

TABLE XXI

AMOUNT OF ON THE JOB TRAINING PROVIDED BY ESTABLISHMENTS
FOR THE DIFFERENT JOB TITLES IN BUILDING SKILLED
TRADES IN HAWKINS COUNTY, TENNESSEE

Jobs	Number Reporting	None	Some	Sufficient
Carpenters	20	1	18	1
Cabinet makers	13	1	12	0
Concrete workers	13	1	12	0
Masons	13	1	12	0
Painters	15	0	14	1
Electricians	14	1	12	1
Roofers	12	0	12	0
Plumbers	19	3	13	3
Heating and ventilating repair men	13	0	13	0
Air conditioning repair men	14	0	13	1
Heavy equipment operators	14	1	13	0
Engineer aids	1	1	0	0
Total	161	10	144	7

TABLE XXII

NUMBER OF EMPLOYERS RECOMMENDING TRAINING IN HIGH SCHOOL
FOR JOBS IN BUILDING SKILLED TRADES IN
HAWKINS COUNTY, TENNESSEE

	Number	Percentage
Yes	102	61.45
No	64	38.55
Total	166	100.00

TABLE XXIII

NUMBER OF EMPLOYERS RECOMMENDING TRAINING IN HIGH SCHOOL
FOR EACH JOB TITLE IN BUILDING SKILLED TRADES
IN HAWKINS COUNTY, TENNESSEE

Jobs	Number Responding	Yes	No
Carpenters	21	15	6
Cabinet makers	14	6	8
Concrete workers	13	13	0
Masons	14	9	5
Painters	15	14	1
Electricians	14	10	4
Roofers	13	4	9
Plumbers	19	19	0
Heating and ventilating repair men	13	9	4
Air conditioning repair men	14	1	13
Heavy equipment operators	15	2	13
Engineer aids	1	0	1
Total	166	102	64

TABLE XXIV

NUMBER OF MALES AND FEMALES EMPLOYED IN SERVICES SKILLED
TRADES IN HAWKINS COUNTY, TENNESSEE

	Number	Percentage
Males	125	33.51
Females	248	66.49
Total	373	100.00

TABLE XXV

NUMBER OF PERSONS EMPLOYED IN EACH JOB TITLE IN SERVICES
SKILLED TRADES IN HAWKINS COUNTY, TENNESSEE

<u>Jobs</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Chefs or cooks	15	94	109
Beauticians	2	27	29
Cash register operators	4	48	52
Waiters	2	43	45
Truck drivers	64	0	64
Practical nurses	0	14	14
Barbers	20	0	20
Laundry and dry cleaners	5	9	14
Dental and health aids	5	13	18
Police	6	0	6
Photographers	2	0	2
Total	125	248	373

reported. The sixty-four truck drivers reported made up the large group of males, while cooks or chefs comprised the large group of females. Cash register operators and waiters made up the next groups in size and according to the table were chiefly females. Police and professional photographers made up the smallest group in this category.

The annual turnover and future growth for services skilled trades are indicated in Table XXVI. This table shows an increase next year of thirty-seven males and fifty-one females due to growth and turnover. The information shows a slight anticipated decline in the rate of growth during the next five years.

The information given in Table XXVII, page 50, indicates the amount of training which was given to employees by the firms in this category. Of the 139 firms reporting, 49.64 percent said that they gave no training, 32.37 percent indicated that they gave some training, and 17.99 percent felt that they gave sufficient training.

Table XXVIII, page 51, gives the employers' response relative to the amount of training given by their firms when asked to rate each job title in services skilled trades. The information indicates that out of eleven job titles in this category, only police and cash register operators were considered to get sufficient training from their firms. The information indicates that little or no training was given for

TABLE XXVI

EMPLOYMENT OPPORTUNITIES IN SERVICES SKILLED TRADES IN
HAWKINS COUNTY, TENNESSEE

Jobs	Annual Turnover		Number to be Employed					
			Additions Next Year Due to Growth		Additions Next Five Years Due to Growth		Total Additions Needed Next Five Years	
	Male	Female	Male	Female	Male	Female	Male	Female
Chefs or cooks	1	9	1	8	0	5	6	58
Beauticians	0	4	4	4	0	6	4	30
Cash register operators	0	4	0	2	2	4	2	26
Waiters	0	11	0	4	0	11	0	70
Truck drivers	14	0	11	0	17	0	98	0
Practical nurses	0	2	0	3	0	3	0	16
Barbers	2	0	2	0	8	0	20	0
Laundry and dry cleaners	0	0	2	0	0	2	2	2
Dental and health aids	0	0	0	0	1	2	1	2
Police	0	0	0	0	2	0	2	0
Photographers	0	0	0	0	2	0	2	0
Total	17	30	20	21	32	33	137	204

TABLE XXVII

AMOUNT OF ON THE JOB TRAINING PROVIDED BY ESTABLISHMENTS
IN SERVICES SKILLED TRADES IN
HAWKINS COUNTY, TENNESSEE

<u>Amount of Training</u>	<u>Number Reporting</u>	<u>Percentage</u>
No training	69	49.64
Some training	45	32.37
Sufficient training	25	17.99
Total	139	100.00

TABLE XXVIII

AMOUNT OF TRAINING PROVIDED BY ESTABLISHMENTS FOR THE
DIFFERENT JOB TITLES IN SERVICES SKILLED TRADES
IN HAWKINS COUNTY, TENNESSEE

Jobs	Number Responding	None	Some	Sufficient
Chefs or cooks	28	24	4	0
Beauticians	17	14	3	0
Cash register operators	24	0	2	22
Waiters	22	0	22	0
Truck drivers	16	15	0	1
Practical nurses	2	0	2	0
Barbers	16	16	0	0
Laundry and dry cleaners	4	0	4	0
Dental and health aids	6	0	6	0
Police	2	0	0	2
Photographers	2	0	2	0
Total	139	69	45	25

chefs or cooks, bakers, truck drivers or beauticians. The rest of the job titles received some training by their firms as indicated in the table.

Table XXIX indicates the employers' response when asked to answer yes or no if they recommended high school training for job titles listed under service skilled trades. The table shows that only 21.17 percent of the 137 responses to the question recommended high school training for job titles listed under services skilled trades.

Table XXX, page 54, indicates the employers' response to the above question when asked to answer yes or no for each job title listed under services skilled trades. The information indicates that "waiters" was the only job title that received any significant recommendation for training in high school.

The present and future estimated needs for employees in occupations other than farming are indicated in Table XXXI, page 55. This table shows for each of the categories used in the study, the annual turnover, expected additions due to growth for one year, expected additions due to growth for five years, and total additions expected the next five years. The information indicates that the total annual turnover in the county is 178 males and 94 females, or a total of 272 employees. Total expected additions next year due to growth are indicated to be 281 males and 58 females, or a total of 339. The

TABLE XXIX

NUMBER OF EMPLOYERS RECOMMENDING TRAINING IN HIGH SCHOOL
FOR JOBS IN SERVICES SKILLED TRADES
IN HAWKINS COUNTY, TENNESSEE

	Number	Percentage
Yes	29	21.17
No	108	78.83
Total	137	100.00

TABLE XXX

NUMBER OF EMPLOYERS RECOMMENDING TRAINING IN HIGH
SCHOOL FOR EACH JOB TITLE IN SERVICES SKILLED
TRADES IN HAWKINS COUNTY, TENNESSEE

Jobs	Number Responding	Yes	No
Chefs or cooks	24	2	22
Beauticians	17	0	17
Cash register operators	24	2	22
Waiters	22	22	0
Truck drivers	17	1	16
Practical nurses	2	1	1
Barbers	14	0	14
Laundry and dry cleaners	4	0	4
Dental and health aids	7	1	6
Police	4	0	4
Photographers	2	0	2
Total	137	29	108

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TABLE XXXI
EMPLOYMENT OPPORTUNITIES IN OCCUPATIONS OTHER THAN FARMING
IN HAWKINS COUNTY, TENNESSEE

Jobs	Annual Turnover		Number to be Employed					
			Additions Next Year Due to Growth		Additions Next Five Years Due to Growth		Total Additions Needed Next Five Years	
	Male	Female	Male	Female	Male	Female	Male	Female
Sales and office work	56	54	43	30	70	90	423	390
Mechanical skilled trades	60	10	109	7	163	9	572	60
Building skilled trades	45	0	109	0	177	0	513	0
Services skilled trades	17	30	20	21	32	33	137	204
Total	178	94	281	58	442	132	1,645	654

information indicates that the total additions in five years due to turnover and growth is expected to be 1,645 males and 654 females, or a total additional labor force of 2,299. These estimates for employment opportunities were made for the 369 establishments now in existence in the county and made no allowances for any additions of new establishments that might be made in the future.



CHAPTER III

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

This study was conducted because the writer desired specific information relative to the occupations other than farming in Hawkins County which could be used to aid in planning instructional and guidance programs that could better prepare students to fill occupational needs in the county. Because of the large number of school drop-outs and the large number of high school graduates in Hawkins County who do not take any kind of post high school training, the writer felt that programs could be developed to more nearly meet the needs of these people if the needs were known.

By studying the data from the survey, it was found that there is a wide range of occupations in the county that can be classified as skilled jobs that require special training. These jobs are for both male and female.

Three hundred sixty-nine businesses were surveyed. This included practically all of the businesses in the county. They were asked to give numbers of employees known and expected growth rate. Moreover, employers were asked to rate the amount of on-the-job training given by these firms for each job title

and to recommend whether or not a job title should be a part of the high school training program. All of the occupations, excluding the limitations, were classified under office and sales work, mechanical skilled trades, building skilled trades or services skilled trades.

Of the 5,755 people working in Hawkins County occupations, 1,299 were in sales and office work. Most of these were sales clerks and office clerks. This category had an annual turnover of fifty-six males and fifty-four females. The total additions for the next five years were estimated to be 423 males and 390 females. Eighty-six percent of the employers responding indicated that their firms gave some on-the-job training, and 83.36 percent recommended training in high school for job titles in this category.

It was indicated that mechanical skilled trades had 3,789 employees. This category had an annual turnover of sixty males and ten females. The total additions for the next five years were estimated to be 592 males and 66 females. Only 38.2 percent indicated that their establishments gave some on-the-job training, but 80.61 percent recommended training in high school for skills in this category.

It was found that 294 persons worked in building skilled trades. The information indicated that this category had an annual turnover of forty-five males. The estimated total additions for the next five years were 513 males. The

findings were that 89.45 percent of the firms gave some on-the-job training and that 61.45 percent recommended courses in high school for job titles in this category.

The information indicated that only 125 males and 248 females were engaged in services skilled trades. This category had an annual turnover of seventeen males and thirty females and a five-year expected total increase of 137 males and 204 females. The information indicated that only 32.31 percent said their establishments gave some on-the-job training. However, 17.99 percent believed that their firms gave enough training. Only 21.17 percent recommended high school training for job skills in this category.

II. CONCLUSIONS

The conclusions reached from the study were as follows:

1. Occupations other than farming exist in Hawkins County for approximately 4,788 males and 767 females.
2. The annual turnover of occupations other than farming in the county is approximately 178 males and 94 females.
3. The additional employees needed in occupations other than farming next year due to growth is estimated to be 281 males and 58 females.
4. The total additional employees needed in occupations other than farming for the next five years due to turnover and growth is expected to be 1,645 males and 654 females.

5. There is a shortage of trained personnel to fill the needs in occupations other than farming in the county.

6. Vocational classes in high school to meet the county vocational needs were recommended by 83 percent of the employers in sales and office work, 81 percent in mechanical skilled trades, and 21 percent in services skilled trades.

7. A need exists in the county for expanded high school vocational programs and post secondary vocational-technical programs to meet the needs of the county occupational community.

III. RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made for the Hawkins County school system:

1. A committee should be instituted by the school board to study county occupational information and to help plan expanded vocationally oriented programs to meet the needs.

2. A vocational program should be planned to meet the needs for more training in mechanical and building skilled trades.

3. An expanded shop and instructional program for vocational agriculture should be planned to aid in supplying the county needs.

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4. An expanded program in occupational home economics and business education should be planned to help meet the needs in services, sales, and office work.

5. Special vocational programs should be planned for those skills that cannot be included in courses now being taught in high school.

6. A program of guidance activities should be planned that will help each student make an intelligent choice for his vocation.

7. A building program should be planned to provide a place for improved vocational training.





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APPENDIXES

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APPENDIX A

HAWKINS COUNTY SCHOOLS
ROGERSVILLE, TENNESSEE

July 28, 1967

TO THE BUSINESS PEOPLE OF HAWKINS COUNTY:

Mr. Jefferson E. Taylor, Principal of Surgoinsville High School is doing an Occupational Survey of Hawkins County under the direction of Dr. George W. Wieggers, Head, Agricultural Education Department, University of Tennessee. The purpose of this survey is to gather information about the occupations in the county to determine the need for training and how an educational program can be planned to best suit this need.

It is my opinion that this is a valuable study and will produce information needed by county educational personnel for program planning and guidance. Any cooperation given him is needed and will be appreciated.

Sincerely yours,

J. O. Harville
Superintendent
Hawkins County Schools

JOH: lrm

I. SALES AND OFFICE JOBS

Please check (✓) each statement under the jobs used in your establishment. If an employee does more than one job, check only the one most important to your establishments. M is used for male, and F is used for female.

Statements	Bookkeeper	Office Clerk General	Typists	Business Machine Operator	Sales Clerk	Supply Clerk	Receptionist	Salesmen	Others (Name)
<u>Number of employees on each job now used in your establishment.</u>									
Number of employees needed each year due to turnover (quitting, retirement, death, etc.).	M								
Additional employees needed one year from now due to growth or expansion.	F								
Additional employees needed five years from now due to growth or expansion	M								
Amount of training provided by your establishment for this job.	F								
Do you recommend training in high school for this job?	yes								
	no								

II. SKILLED TRADES - MECHANICAL

Statements	Jobs							Others (Name)	
	Auto Mechanic	Electrician	Cabinet Maker	Diesel Mechanic	Television, Radio Repair Men	Welders	Sheet Metal		Printers
Number of employees on each job now used in your business.	M								
	F								
Number of employees needed each year due to turnover (quitting, retirement, death, etc.).	M								
	F								
Additional employees needed one year from now due to growth or expansion	M								
	F								
Additional employees needed five years from now due to growth or expansion	M								
	F								
Amount of training provided by your business for this job.	none								
	some								
	sufficient								
Do you recommend training in high school for this job?	yes								
	no								

III. SKILLED TRADES - BUILDING

Statements	Jobs											
	Carpenters	Cabinet Makers	Concrete Worker	Masons	Painters	Electricians	Roofers	Plumbers	Heating and Ventilating	Air Conditioning	Earth Moving	Others (Name)
Number of employees on each job now used in your business	M											
Number of employees needed each year due to turnover (quitting, retirement, death, etc.).	F											
Additional employees needed one year from now due to growth or expansion.	M											
Additional employees needed five years from now due to growth or expansion.	F											
Amount of training provided by your business for this job.												
	none											
	some											
	sufficient											
Do you recommend training in high school for this job?												
	yes											
	no											

IV. SKILLED TRADES - SERVICES

Statements	Jobs										
	Bakers	Chefs or Cooks	Beauticians	Cash Register Operators	Waiters	Truck Drivers	Movers	Practical Nursing	Laundry and Dry Cleaners	Unskilled	Others (Name)
Number of employees on each job now used in your business.	M										
	F										
Number of employees needed each year due to turnover (quitting, retirement, death, etc.).	M										
	F										
Additional employees needed <u>one</u> year from now due to growth or expansion	M										
	F										
Additional employees needed <u>five</u> years from now due to growth or expansion	M										
	F										
Amount of training provided by your business for this job.											
	none										
	some										
	sufficient										
Do you recommend training in high school for this job?											
	yes										
	no										

APPENDIX B

LIST OF MAJOR ESTABLISHMENTS PARTICIPATING IN THE STUDY

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| 1. Alladin Plastics of Tennessee | 20. Colboch-Price Funeral Home |
| 2. Allen's Motel | 21. Collier's Cleaners |
| 3. Alley Motor Company | 22. Cope's School and Office Supplies |
| 4. American-St. Gobain Glass Plant | 23. Corner Drug Store |
| 5. Armstrong Fabric Shop | 24. Corner Store |
| 6. Bailey's Upholstery | 25. Couch Insurance |
| 7. Bellamy Garage | 26. Cross Flower Shops |
| 8. Bellamy Hardward Company | 27. Cut Rate Food Market |
| 9. Bob's Auto Parts | 28. Davis Tractor Company |
| 10. Bowen's Home Improvement Company | 29. Dean's Beauty Shop |
| 11. Boyd-Lawson Company | 30. Delph's Coal and Trucking Company |
| 12. Burton's Gulf Station | 31. Dobyys-Taylor Hardward and Furniture |
| 13. Channel 2 Television | 32. Dodson Electric and Motor Shop |
| 14. Church Hill Florist | 33. Dollar General Store |
| 15. Citizen's Supply Cooperative | 34. Don's Pharmacy |
| 16. Citizen's Union Bank | 35. Draper and Darwin Store |
| 17. City Drug Company | 36. Drennion Coal Yard |
| 18. City News and Record Shop | 37. East End Drive-In |
| 19. City of Rogersville | |

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|---|--|
| 38. First National Bank | 58. Holston Ordnance Works |
| 39. Flora Concrete Company | 59. Home Service Company |
| 40. Free Service Tire Store | 60. Horton's Feed and Seed Store |
| 41. Greyhound Bus Station | 61. International Playing Card and Label Company |
| 42. Guthrie's Market | 62. Jayma Florist and Gift Shop |
| 43. Hale Springs Hotel | 63. Jimmie's Beauty Shop |
| 44. Harmon Florist | 64. Johnson and Johnson General Merchandise |
| 45. Harper and Ladd Super Market | 65. Johnson and Richardson Insurance and Real Estate Company |
| 46. Harrison Department Store | 66. Kenner Motor Company |
| 47. Hawkins County Farmers Cooperative | 67. Kingsport Press, Inc. |
| 48. Hawkins County Gasoline and Oil Companies | 68. Lance Motel and Restaurant |
| 49. Hawkins County Governmental Offices | 69. Lay's Five and Ten Cent Store |
| 50. Hawkins County Health Services | 70. Marion and Riley Real Estate |
| 51. Hawkins County Insurance Agencies | 71. Mason-Dixon Lines, Inc. |
| 52. Hawkins County Memorial Hospital | 72. Medical Center Pharmacy |
| 53. Hecks Ready to Wear | 73. McDonald and Sons Feeds and Milling |
| 54. Henard Lumber and Building Supplies | 74. Moles Lumber Company |
| 55. Holliston Mills, Inc. | 75. Monroe's Garage |
| 56. Holston Auto Supply Company | 76. Natural Gas Utility District of Hawkins County |
| 57. Holston Electric Cooperative | 77. Otis Home Center |

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|---|---|
| 78. Paint Shop | 100. Steadman Construction Company |
| 79. Parks-Belk Company | 101. Stenson Drugs |
| 80. Penley Brothers | 102. Sterchi Brothers Stores, Inc. |
| 81. Price's Kitchen Center | 103. Stewart Funeral Home |
| 82. Publix Super Market | 104. Stroup-Price Insurance |
| 83. Raley-Vaughn Motor Company | 105. Super Dollar Markets |
| 84. Ralph's Plumbing and Heating | 106. Surgoinsville Drug Company |
| 85. Robert's Tire and Recapping | 107. Taylor Construction Company |
| 86. Rogers Hardware | 108. Terry Motor Company |
| 87. Rogan Pontiac Company | 109. Testerman Motor Company |
| 88. Rogersville Motor Company | 110. Trent Electric Company |
| 89. Rogersville Radiator and Generator Service | 111. U. S. Government Offices in Hawkins County |
| 90. Rogersville Review | 112. U.S. T.V.A. John Sevier Steam Plant |
| 91. Rod Armstrong and Company | 113. Vulcan Materials Company |
| 92. Romoco Farm Store | 114. Western Auto Store |
| 93. Ross Implement Company | 115. White Stores, Inc. |
| 94. Rowan Studios | 116. White Way No. 106 |
| 95. Sandidge Welding Company | 117. John K. Williams Store |
| 96. Service Cab Company | 118. Wilson Construction and Paving Company |
| 97. Smith Brothers Coal Company | 119. WRGS Radio Station |
| 98. Southern Bell Telephone and Telegraph Company | |
| 99. Stapleton Food Market | |

VITA

The author was born in Lake City, Tennessee, October 4, 1920. He is the son of Mrs. James Tuttle of Lake City. He entered the University of Tennessee under the G. I. Bill of Rights on January 2, 1946, and received his B.S. degree in Agricultural Education on March 18, 1949. While attending the university, he was a member of Phi Delta Kappa and the University of Tennessee Agriculture Club.

He taught Vocational Agriculture at Clinch High School from July 1, 1949 until June 30, 1951, and at Surgoinsville High School from July 1, 1951 until June 30, 1964. During August 1964 he was elected principal of the high school at Surgoinsville and has continued in that capacity until the present.

He is married to the former June McDavid of Lake City, Tennessee, and has five children.