

A SURVEY OF SELECTED BUSINESS OCCUPATIONS
IN CHANDLER, OKLAHOMA

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By

LEANN RECTOR WESTFALL

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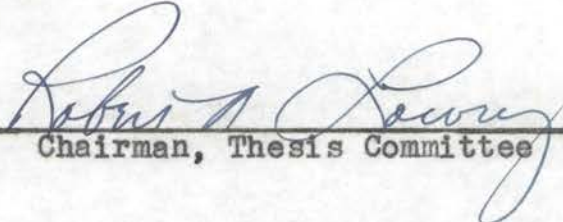
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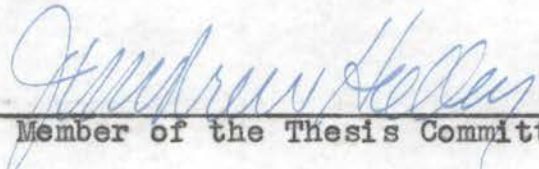
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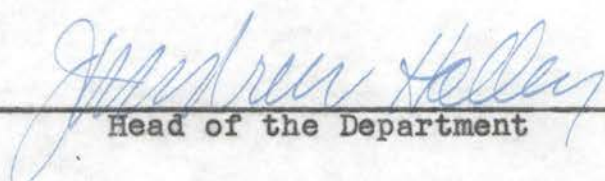
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Dean of Graduate School

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CHAPTER I

INTRODUCTION

Chandler, Oklahoma, With a population of 2,738, is the county seat of Lincoln County. Chandler is located on a hill and is served by two major highways, United States Highway 66 and State Highway 18. As Chandler is located on one of the most traveled highways in the United States, there are many cafes, hotels, and service stations located in and near it. The town's main source of income, however, is from the rural people in the agricultural community which it serves. Most of the land in Chandler's vicinity is devoted to farming, but more and more of it is being used for dairying purposes. Most of the land is also ideal for pecan trees, and in the fall almost every farmer sells from a few hundred to several thousand pounds of pecans, thus giving Chandler the claim of being the pecan capital of the world. There are several producing oil wells close to Chandler, but their benefit to the town is small, if any.

Twenty-four teachers are employed by the Chandler school, 12 elementary teachers and 12 high school teachers. Over 300 students are enrolled in high school. Many of these students are rural children transported by bus to the school.

At the present the school is offering one year of bookkeeping, one year of shorthand, and two years of typewriting. While the business education faculty and the administrators of the school desire to make the business curriculum more practical in view of community needs, to fit the training more closely to the actual job the student will perform when employed, it has been difficult

for the school to set up practical objectives for business education because of the lack of occupational information.

Answers to the following questions are needed:

1. What kind of job can the student expect to get?
2. Can the information now taught be used on the job?
3. At what age can the student expect to find initial employment?
4. What duties are performed on the job?

Need for the Study

The need for this study arose from the need of the educators in charge of curriculum revision to have information upon which to evaluate the course offerings in business education. Frances Perkins, while Secretary of Labor in President Roosevelt's cabinet, stated that the future adult should receive an education which "will enable him to discover those occupations which will yield him the joy and satisfaction of successful effort, and will assure him of the skill which will make him a well-paid worker. In other words, the city, the town, the county, or other local unit must set up, if it is fully conscious of its government responsibility, adequate systems of vocational guidance and vocational education."¹

Haynes and Graham have recognized the need for educational and occupational surveys:

"Community and occupational surveys are the means used for gaining a better understanding of the business world for which young people are training--the kind of jobs which may

¹ Francis Perkins, "Whose Responsibility?", Occupations, Vol. XII, No. 2, pp. 5-10, October, 1933.

be filled by boys and girls just out of school, the standards demanded by business, and the training prerequisite to the satisfactory filling of each job."²

One purpose of occupational surveys is to secure data for use in improving school programs. Many persons who have made occupational surveys have done so with the idea of discovering what jobs are to be found in the community. In every normal community about 90 per cent of all occupational activities are represented to a limited extent.³ The school may, therefore, train for opportunities within the community, yet not limit the students' chances for employment in other communities. Results of occupational surveys may also be used in vocational guidance and in placement of graduates.

Statement of Problem

The problem of this study is to determine the educational background and the occupational history and status of 55 employees engaged in four occupational fields.

More specifically, the study seeks to answer the following questions:

1. What educational background have the workers?
2. Was their training received at the local high school?
3. What business education subject matter has been of vocational value to the workers?
4. At what age was the worker first employed?
5. What type of work is done on the present job?

² Benjamin R. Haynes and Jessie Graham, Research in Business Education, p. 94.

³ F. L. Tibbitts, An Industrial and Occupational Survey of Yuba and Sutter Counties, California, Report from Yuba County Junior College, p. 11.

6. What specific tasks are performed on the present job?
7. Does the worker feel a need for additional business training?

This study is made to aid the local administrators in setting up an appropriate training course in business education in the light of findings on these seven questions.

Scope and Limitations

This study includes the educational background and the occupational background and status of 55 employees who are engaged in specified business occupations. The study is limited to full-time workers in the following four fields: Managerial, Record-Keeping, Secretarial-Clerical, and Selling and Store Service. Workers interviewed are from 18 to 40 years of age. Manual labor, professions, and positions held by publicly elected workers are excluded for the purposes of this study. The territory covered during the interviewing is within the corporate limits of the town of Chandler, Oklahoma.

As this study includes a selected group, the number of cases was found to be necessarily small.

Assumptions

It is assumed (1) that the interview technique is adequate for making a business occupational survey, and (2) that the data thus obtained are reasonably accurate and reliable, and can be validated.

Definition of Terms

The terminology used in this study will be interpreted according to the following definitions:

1. An occupational field is a family of related jobs.

For example, the managerial field in this study includes general managers and operators, and office managers.

2. A business occupation is any phase of employment included in any of the four specified occupational fields.

3. A regular job is any full-time job in which the worker is now employed or any job that he has held continuously for three months or more.

4. A full-time job is a job in which the worker is employed 30 or more hours per week for pay.

5. A job title is the name applied to the worker in a given field.

6. Workers are the 55 individuals interviewed. They are between the ages of 16 and 40, inclusive, and each is engaged in one of the four occupational fields specified.

Source of Data

The primary data used in this study include certain information which was obtained through personal interviews with 55 business occupational workers in the town of Chandler.

Procedure

In order to make a study of this kind, it was necessary to set up questions that would shed some light upon the need expressed in the Introduction. Literature in the field concerning questionnaire forms was read, and occupational survey studies conducted in other communities were reviewed. A study by Hebel⁴ for a town of similar size in New Mexico and three

⁴ Orlena J. Hebel, A Business Occupational Survey of Taos, New Mexico. Master's thesis, Oklahoma Agricultural and Mechanical College, 1942.

studies made of Stillwater⁵ in 1941 were of great help in the preparation of the original interview schedule. This schedule was presented to a seminar class of graduate students in business education during the Summer of 1948. The schedule was revised and presented to the Chairman of the Thesis Committee. His criticisms and suggestions led to further revisions. Finally the interview sheet was considered ready for trial. The finished form was designed to yield answers to the questions listed in the statement of the problem on page three.

Tryout was the next step in the procedure. Ten workers were interviewed and their replies were tabulated. As the results were considered satisfactory for the purpose, interviewing was continued. An attempt was made to interview every employee in the corporate limits of Chandler who met the requirements of the study. All interviewing was personally conducted by the investigator during a period of three months.

The manager of the business was approached first and permission was obtained to interview him and his employees who were eligible under the limitations of the study. Permission was asked to conduct the interviews either during working hours or at the close of the working hours. All of the workers were interviewed on the job.

⁵ Jo Morgan, Business Occupational Survey of Stillwater. Master's Thesis, Oklahoma Agricultural and Mechanical College, 1941.

Kleimen L. Holcomb, Business Occupational Survey of Stillwater. Master's Thesis, Oklahoma Agricultural and Mechanical College, 1941.

Esbey McGill, Business Occupational Survey of Stillwater. Master's Thesis, Oklahoma Agricultural and Mechanical College, 1941.

In cases in which the interviewer was not known by the manager, the approach followed this pattern:

I am (name) from the Carney High School; I am conducting a study of the businesses in Chandler to find out the duties of the workers and whether the type of business training offered in the local high school is practical. Would you mind if I asked you a few questions, either now or when it is more convenient for you?

Following the interviewing, the schedules were separated into the four occupational fields. The workers were placed in an occupational field on the basis of their present job titles as shown in Table XVIII and substantiated by major duties performed on their present jobs as shown in Table XXII.

When classification was finished, the schedules were coded to facilitate handling for tabulation. Census type tables were used to show the majority of the data.

CHAPTER II

PERSONAL AND EDUCATIONAL BACKGROUND OF WORKERS

Personal Background

The personal background of the workers was studied briefly to find any relationships that exist between the choice of occupational field and the marital status, age, and sex of the workers studied.

Occupational field, marital status, and sex. The first basis of classification gave the occupational field, marital status, and sex of the 55 workers. Table I shows there were 25 men and 30 women. The ratio of the married and unmarried men was approximately one to one; there were 13 married and 12 unmarried men. The ratio of the married and unmarried women was two to one; there were 20 married and 10 unmarried women.

The total number of married workers was 33, sixty per cent of the 55 workers.

Eight married men managers and eight married women salespersons comprised the largest numerical divisions within the occupational fields.

The distribution of the 55 workers by occupational fields showed a total of 15 managers, approximately 27 per cent, 11 men and 4 women. Of the total selling field personnel, twenty, there were 10 men and 10 women, comprising 36 per cent of the entire group interviewed. The recordkeeping section of 4 men and 7 women, a total of 11, formed 20 per cent of the whole number interviewed. The stenographic-clerical interviewees totaled 9, 16 per cent, all women. The absence of men in this field indicates that

TABLE I

MARITAL STATUS AND SEX OF 55 WORKERS, SHOWN BY OCCUPATIONAL FIELD

Occupational Field	Men					Women						
	Married	Per Cent	Single	Per Cent	Total	Per Cent	Married	Per Cent	Single	Per Cent	Total	Per Cent
Managers	8	14.55	3	5.45	11	20.00	2	3.64	2	3.64	4	7.28
Salespersons	3	5.45	7	12.73	10	18.18	8	14.55	2	3.64	10	18.18
Recordkeepers	2	3.64	2	3.64	4	7.27	4	7.27	3	5.45	7	12.73
Steno.-Clerks							6	10.91	3	5.45	9	16.36
Total	13		12		25		20		10		30	
Per Cent of 55		23.64		21.82		45.45		36.37		18.18		54.55

This table should be read as follows: Eight of the men managers, comprising 14.55 per cent of the 55 workers, were married.

Note: All percentages in this table are based on the total of 55 workers.

this is a woman's occupation in Chandler.

Age of the workers. Age, occupation, and sex of the workers are presented in Table II. It is shown that the largest group of the managers were between 31 and 35 years of age. Seven of the 15 managers were in this classification, 5 men and 2 women. The ages for the salespeople dropped to the two lowest brackets, 16-20 and 21-25. Seven men and 6 women, or 65 per cent of the total of 20 salespersons, were between 16 and 25 years of age.

The recordkeepers were scattered fairly evenly in the age groups with the largest group, 4, being in the 36-40 age group. Of the 9 stenographic-clerks, 4 were in the 21-25 age bracket and four were in the 26-30 age bracket. Thus 8, or 90 per cent, of the workers in this classification were between 21 and 30 years of age.

The grand totals in the 16-20 age group were 6 men and 6 women, or 22 per cent of the interviewees. In the 21-25 division there were 6 men and 8 women, comprising 25 per cent of the 55 workers. In the third division, 26-30, there were 5 men and 6 women, constituting 16 per cent of the total group of workers. Eight of the men and 6 of the women, 25 per cent of the complete group, were 31 to 35 years of age. The highest age bracket, 36-40, contained the smallest number of workers, 2 men and 4 women, or only 11 per cent of the group.

Educational Background

The educational background is given in tabular form so that the level at which workers left school may be seen. Also, the locale of high school education; the amount of business

TABLE II

AGE OF 55 WORKERS, SHOWN BY OCCUPATIONAL FIELD AND SEX

Occupational Field	Age of Workers										Total	Per Cent of 55	
	16-20		21-25		26-30		31-35		36-40				
	M	W	M	W	M	W	M	W	M	W			
Managers	1		3		2	1	5	2		1	15	27.28	
Salespersons	4	4	3	2		1	2	3		1	20	36.36	
Recordkeepers	1	2		2	1		1			1	3	11	20.00
Steno.-Clerks				4		4		1				9	16.36
Total	6	6	6	8	3	6	8	6	2	4	55	100.00	
Per Cent of 55	10.91	10.91	10.91	14.55	5.45	10.91	14.55	10.91	3.64	7.27	100.00		

This table should be read as follows: One man manager was between sixteen and twenty years of age at the time the survey was made.

training received in high school, college, and business college; and the workers' opinions regarding the vocational value of their business training are given.

Scholastic attainment. The scholastic attainment of the workers is examined in Table III. The range of workers leaving school is from 1 in grades 1 to 8 to 29 at the high school graduate level. The extremes in numbers leaving school at the various levels were 17 women high school graduates to no women in grades 1 to 8. Next to these were 12 men high school graduates to 1 man in grades 1 to 8.

One of the 55 workers left school in grades 1 to 8, 13 left school in grades 9 to 11 and 29 of the workers graduated from high school. Only 12, or 21.8 per cent, of the 55 workers received any formal education above the high school level. In other words 42, or 76.3 per cent, of the 55 workers either left school while attending high school or upon graduation from high school. On the basis of these facts, it appears that terminal courses should be planned in high school to care for this group.

In studying the grand totals to get the complete picture of the workers leaving school in the entire group of 55 workers, it is found that there was 1 leaving school in grades 1 to 8, 13 leaving school in grades 9 to 11, and 29 leaving school at high school graduation. Of the remaining 12, 9 attended college but dropped out before graduation and the other 3 attended a business college. Of the entire group of 55 workers, none graduated from either junior or senior college.

Age workers left high school. As shown in Table IV, the largest number of workers left high school at 18 years of age. Twenty-

TABLE III

EDUCATIONAL LEVELS AT WHICH MALE AND FEMALE WORKERS IN VARIOUS
OCCUPATIONAL FIELDS LEFT SCHOOL

Occupational Field	Educational Level												Total
	Grades 1-8		Grades 9-11		High School graduate		College under-graduate		College graduate		Business Colloge		
	M	F	M	F	M	F	M	F	M	F	M	F	
Managers			3	3	5	1	3						15
Recordkeepers			1		1	4	2	1			2		11
Salespersons	1		3	3	6	6		1					20
Steno.-Clerks						6		2			1		9
Total	1		7	6	12	17	5	4			3		55
Per Cent of 55	1.8		12.7	10.9	21.8	30.9	9.1	7.3			5.5		100.

This table should be read as follows: Three men managers left school between the 9th and 11th grades.

one, or 39 per cent, of the 54 workers who attended high school left at this age. The next largest group is 13 in the 17-year age group. The table shows that the lowest age at which a worker dropped out of high school is 14, at which age 1 dropped out, and the highest age is 20, at which age 4 dropped out.

Locale of workers' high school training. Table V answers the question asked in the Introduction: "Was the workers' training received in the local high school?" Of the 55 workers interviewed, 54 attended high school. Twenty-nine of these 54, or 54 per cent, finished their high school work at Chandler. Thirteen of the remaining 25 finished their high school work at high schools within the same county, with 6 coming from Davenport, located only 7 miles from Chandler. Of the remaining 12 workers, 3 came from out of the state and 9 from varied places in Oklahoma. The largest numerical division within the occupational fields was 7 men salespersons who finished their high school work at Chandler.

Business subjects studied in high school. As shown by Table VI, 46 of the 54 workers with some high school training had studied one or more business subjects while in high school. The subjects studied, in order of frequency of listing, are Typewriting I, Typewriting II, Bookkeeping I, General Business, Shorthand I, and Business Mathematics. Other subjects listed were: Bookkeeping II, Shorthand II, Business English, and Commercial Geography. Thirteen of the 15 managers who left school at or before high school graduation had had some kind of business training, chiefly in typewriting and bookkeeping. Three-fourths, or 12, of the salespeople had had training in business subjects, chiefly general business and typewriting. All of the stenographic-clerks

TABLE IV

AGE AT WHICH WORKERS LEFT HIGH SCHOOL,
BY OCCUPATIONAL FIELD AND SEX

Age (in years)	Occupational Fields										Total Number	Per Cent
	Managers		Recordkeepers		Salespersons		Steno.-Clerks					
	M	W	M	W	M	W	M	W				
14		1									1	1.85
15				1			1				2	3.70
16	1	2	1	1		1	1	1			8	14.55
17	3	1	1	1		3	1	3			13	23.64
18	2		2	4		4	3	6			21	39.61
19	2					1	2				5	9.25
20	3							1			4	7.40
Total	11	4	4	7		9	8	11			54*	100.00
Per Cent of 54*	20.37	7.41	7.41	12.96		16.67	14.82	20.36			100.00	100.00

This table should be read as follows: One woman manager left high school at the age of 14.

*As shown in Table III, one of the 55 workers did not attend high school.

TABLE V

HIGH SCHOOL LAST ATTENDED SHOWN BY OCCUPATIONAL FIELD
AND SEX OF 54 WORKERS WHO ATTENDED HIGH SCHOOL

High School attended		Occupational Field										
Town	State	Managers		Recordkeepers		Salespersons		Steno. Clerks		Total		Total
		M	W	M	W	M	W	M	W	M	W	
Chandler	Oklahoma	6	1	2	5	7	2		6	15	14	29
Davenport	Oklahoma	1			1		2		2	1	6	6
Wellston	Oklahoma			1	1	1				2	1	3
Carney	Oklahoma	1					1			1	1	2
Tryon	Oklahoma						2				2	2
Beatty	Texas		1								1	1
Bowlegs	Oklahoma		1								1	1
Boynton	Oklahoma						1				1	1
Hanna	Oklahoma						1				1	1
Hobart	Oklahoma	1								1		1
Idabel	Oklahoma					1				1		1
Meeker	Oklahoma			1						1		1
Pelican	Louisiana	1								1		1
Pocahontas	Arkansas		1								1	1
Ripley	Oklahoma						1				1	1
Seminole	Oklahoma	1								1		1
Stroud	Oklahoma								1		1	1
Total		11	4	4	7	9	10		9	24	30	54

This table should be read as follows: Six men managers last attended high school at Chandler, Oklahoma.

TABLE VI

BUSINESS SUBJECTS STUDIED BY 46 WORKERS WHO TOOK ONE OR MORE BUSINESS COURSES
IN HIGH SCHOOL

Business Subjects Reported and Number of Years in Each	Occupational Field											
	Managers		Salespersons		Recordkeepers		Steno.-Clerks		Total			
	M	W	M	W	M	W	M	W	M	W	T	
Typewriting	1 year only	6	1		1		2		2	6	6	12
	2 years	4		6	6	1	3		7	11	16	27
Bookkeeping	1 year only	8	1		2	2	4		7	10	14	24
	2 years					1				1		1
Shorthand	1 year only	1			3		4		6	1	13	14
	2 years				1		1				2	2
Gen. Business		5		6	5	2	1		4	13	10	23
Bus. Math.		1		1	1	2	1		3	4	5	9
Bus. English					1	3	2		1	3	3	6
Com. Geog.						1	1			1	1	2
Persons Reporting Other Business Subjects		2				3	3			5	3	8
Total Persons Reporting One or More Business Subjects		11	1	7	8	4	6		9	23	24	46

This table should be read as follows: Six men managers took one year of typewriting, while 4 other men managers took 2 years of typewriting.

TABLE VII

BUSINESS SUBJECTS STUDIED IN COLLEGE BY 6 WORKERS WHO TOOK ONE OR MORE
BUSINESS SUBJECTS IN COLLEGE

Subjects	Occupational Field										
	Managers		Salespersons		Recordkeepers		Steno.-Clerks		Total		
	M	W	M	W	M	W	M	W	M	W	Total
Bookkeeping					1		2	2	3	2	5
Business Math				1	1			1	1	2	3
Business Economics					1		1		2		2
Shorthand				1						1	1
General Business					1				1		1
Number Reporting One or More Business Subjects				1	1		2	2	3	3	6

This table should be read as follows: One man recordkeeper studied bookkeeping in college.

had had some business training, chiefly typewriting, shorthand, and bookkeeping.

Business subjects studied in college. Of the 9 workers who had college credits, Table VII shows that 6 had studied one or more business subjects while in college. Five had studied bookkeeping and 3 had studied business mathematics. Of the 9 workers who had attended college, only 3 had received no college training in business subjects and all 3 of these were managers.

Only 3 of the 55 workers had attended a business college. Two were women stenographer-clerks and one was a woman record-keeper. All 3 studied typewriting, shorthand, and bookkeeping.

Opinions of workers concerning direct value on present job of business subjects studied in high school. Tables VIII, IX, X, and XI show the opinions of the workers in the different occupational fields who had had one or more units in business education in high school regarding the direct value of each subject in their present job.

In interpreting the data presented in Tables VIII, IX, X, and XI, it must be kept in mind that the evaluation is limited to subjects studied in high school. The importance of this point is evident in the case of the stenographer-clerks in Table XI. It will be shown in the following chapter that the occupational job title for four of the workers in this classification is "stenographer," and this, of course, implies that they make use of shorthand in their jobs, although it will also be shown that only one regards the taking of dictation and transcribing as a major duty in her present job. While Table XI shows that only two workers in the stenographer-clerk classification indicated shorthand

TABLE VIII

OPINIONS OF 13 MANAGERS WHO STUDIED ONE OR MORE BUSINESS SUBJECTS IN HIGH SCHOOL CONCERNING DIRECT VALUE OF THESE SUBJECTS IN THEIR PRESENT JOB

Subject Taken in High School	Direct Value in Present Job					
	Men			Women		
	Major	Minor	None	Major	Minor	None
Typewriting	2	5	3		1	
Shorthand			1			
Bookkeeping	5	2	1			
Business Math	1	1				
Business Economics	1					
General Business	1	4	1			
Commercial Geography			3			
Total	10	8	9		1	

This table should be read as follows: Two men managers who had studied typewriting while in high school reported it to be of major direct value in their present job.

studied in high school to be of any direct value in their present job, it must be remembered that some of the workers in this classification received their shorthand training in college or business college. It is suggested that this fact may explain what would otherwise appear to be an inconsistency in the data presented in this study.

According to the opinions of the managers, most of the business subjects studied in high school were of some help in their present job. Eleven of the managers had had typewriting in high school. Two said it was of major value in their present job and 6 reported it to be of minor value, while 3 said it was of no value in their present work. The one manager who had studied shorthand reported it to be of no value in his present work. Of the 8 managers who had studied bookkeeping in high school, 5 reported it to be of major value in their present job, 2 reported it to be of minor value, while 1 said it was of no value. One manager reported business mathematics to be of major value in his present work while one reported it to be of minor value. One manager reported business economics to be of major value in his present work. General Business was reported to be of major value by one manager, minor value by 4, and of no direct value by one. All 3 managers who had had commercial geography reported it to be of no value in their present work.

Fifteen salespersons had studied one or more business subjects in high school. Of thirteen who had taken typewriting, only one reported it to be of any value, while 12 said it was of no value in their present work. Shorthand was reported of no value by the 4 salespersons who had had it. Three salespersons

TABLE IX

OPINIONS OF 15 SALESPERSONS WHO STUDIED ONE OR MORE BUSINESS SUBJECTS IN HIGH SCHOOL CONCERNING DIRECT VALUE OF THESE SUBJECTS IN THEIR PRESENT JOB

Subject Taken in High School	Direct Value in Present Job					
	Men			Women		
	Major	Minor	None	Major	Minor	None
Typewriting			6		1	6
Shorthand						4
Bookkeeping			1			2
Bus. Math		1		1		
Bus. English					1	
Gen. Bus.		5	1		5	
Com. Geog.			2			2
Total		6	10	1	7	14

This table should be read as follows: Six men salespersons who had studied typewriting while in high school reported it to be of no direct value in their present job.

TABLE X

OPINIONS OF 10 RECORDKEEPERS WHO STUDIED ONE OR MORE BUSINESS SUBJECTS IN HIGH SCHOOL CONCERNING DIRECT VALUE OF THESE SUBJECTS IN THEIR PRESENT JOB

Subject Taken in High School	Direct Value in Present Job					
	Men			Women		
	Major	Minor	None	Major	Minor	None
Typewriting	1			3	1	1
Shorthand					1	3
Bookkeeping	2	1		6		
Bus. Math	1	1		1		
Bus. English	1	1		1	2	
Bus. Econ.	1					
Gen. Bus.		2		1		
Com. Geog.						2
Persons Reporting Other Business Subjects	1					1
Total	7	5		12	4	7

This table should be read as follows: One man recordkeeper who had studied typewriting while in high school reported it to be of major direct value in his present job.

TABLE XI

OPINIONS OF 9 WOMEN STENOGRAPHER-CLERKS WHO STUDIED ONE OR MORE BUSINESS SUBJECTS IN HIGH SCHOOL CONCERNING DIRECT VALUE OF THESE SUBJECTS IN THEIR PRESENT JOB

Subject Taken in High School	Direct Value in Present Job		
	Major Value	Minor Value	No Value
Typewriting	8		1
Shorthand	1	1	3
Bookkeeping	1	4	1
Bus. Math	1		2
Gen. Bus.		3	1
Com. Geog.			2
Total	11	8	10

This table should be read as follows: Eight women stenographer-clerks who had studied typewriting in high school reported it to be of major direct value in their present job.

reported bookkeeping of no value in their present work. One reported major value while one reported minor value for business mathematica. Only one salesperson had studied business English in high school, and he reported it to be of minor value. Eleven had studied general business, with 10 reporting it of minor value and one reporting it of no value in their present work. All 4 salespersons who had studied commercial geography said it was of no value in their present work.

Ten recordkeepers had studied one or more business subjects in high school. Six had studied typewriting, with 4 reporting it of major value in their present work. Shorthand was studied in high school by 4 recordkeepers and was reported to be of no value by 3 and of minor value by one. Of the 9 who had studied bookkeeping, 8 reported it to be of major value in their present work, and one reported it to be of minor value. Business mathematics, business English, business economics, and general business were reported to be of major or minor value by the recordkeepers who had studied these courses. The two recordkeepers who had studied commercial geography reported it to be of no value in their present work.

Nine stenographer-clerks had studied business subjects in high school. Eight reported typewriting to be of major value in their present jobs, with only one reporting it to be of no value. Five had taken shorthand, with 3 reporting no value, 1 minor value, and 1 major value in their present job. Bookkeeping was taken by 6 of the stenographer-clerks. Four reported minor value, 1 major value, and 1 no value in their present job. Three stenographer-clerks reported minor value and one reported no value for general

business. Commercial geography was reported of no value by the 2 stenographer-clerks who had studied it.

Summary and Conclusions

It has been the purpose of this chapter to present the data necessary to answer the first 3 of the 7 questions stated in the "Statement of Problem" in Chapter I. Summary and conclusions concerning each of the 3 questions follows.

1. What educational background have the workers? Only 12 of the entire body of workers remained in school beyond the high school level. Eighty per cent of the managers, 55 per cent of the recordkeepers, 67 per cent of the stenographer-clerks, and 95 per cent of the salespersons stopped school at or below high school graduation. None of the workers graduated from college. If the work of the high school must be terminal, then the courses need to be planned to that end.

Twenty, or 36 per cent, of the 55 workers were salespersons. With that percentage of salespersons, the indication is that there should be some preparation for retail selling.

A study of scholastic attainment of the workers shows the managers had an average of 11.6 years, recordkeepers had an average of 12.6 years, clerical workers had an average of 12.6 years, and salespersons had an average of 11.1 years in school. The average for all workers was 11.8 years in school. This indicates that recordkeepers and clerical workers, on the average, received more formal schooling than the managers and salespersons.

Of the 54 workers who had some high school training, 46 had studied one or more business subjects. Thirty-nine persons had studied typewriting, 25 had studied bookkeeping, 23 had studied

general business, and 16 had studied shorthand in high school.

2. Was the workers' training received in the local high school? Twenty-nine, or 53 per cent of the workers did their most recent high school work in Chandler High School. An examination of the questionnaires showed that an even larger percentage of the more recent graduates were from Chandler High School. This indicates the need for great care in setting up the subject matter in the business education department of the local high school.

3. What business education subject matter has been of vocational value to the workers? Typewriting was considered of some direct value in their present job by the majority of the managers, recordkeepers, and stenographer-clerks who had studied it in high school. Most of the salespeople said it was of no value to them on their present job. Only 3 of the 16 workers who had studied shorthand in high school reported it to be of any direct value in their present job. Two of these were in the stenographer-clerk classification and one was a salesperson. Of the 25 workers who had studied bookkeeping, only 4 workers reported it of no value in their present work. Three of these were salespeople and one was a clerical worker. General business was reported to be of some value by a majority of the workers in each occupational field who had taken the course in high school.

CHAPTER III

OCCUPATIONAL STATUS OF WORKERS

Administrators of schools that offer commercial training need to know the educational background and the occupational background and status of workers now in certain occupations, in order to plan the most effective training program. Potential workers need to know the possibilities for initial employment and for advancement in certain jobs.

The topics investigated in this chapter are an attempt toward filling, in part, the need expressed in the foregoing paragraph.

First Regular Job

Type of work performed on first regular job. The first regular jobs held by the 54 workers who had high school training are shown in Table XII. Twenty-one different jobs were reported by the 54 workers. The largest group, 9 women, reported waitress as their first regular job. Salesclerks ranked second, 3 men and 4 women reporting that occupation on their first regular job.

Within the occupational fields there were no points at which a great number of cases centered. The largest numbers were 3 cases of men managers reporting army private, 3 cases of women salespersons reporting waitress and 3 cases of men salespersons reporting sales clerk as their first regular jobs.

Waiting period between high school and first regular job. No waiting period between high school and their first regular job was experienced by 11, or 25 per cent, of the 54 workers who had had some high school education. The waiting period range was

TABLE XII

FIRST REGULAR JOBS HELD BY 54 WORKERS AFTER LEAVING HIGH SCHOOL, SHOWN BY OCCUPATIONAL FIELD

Type of Work	Occupational Field										
	Managers		Salespersons		Recordkeepers		Steno.-Clerk		Total		
	M	W	M	W	M	W	M	W	M	W	
Waitress		2		3		1		3		9	9
Salespersons	2			2	1	1		1	3	4	7
Farmer	2		3						5		5
Service Station Attendant	2		3						5		5
Bookkeeper					1	1		2	1	3	4
Stenographer		1		1				2		4	4
Army Private	3								3		3
Aircraft Worker				2						2	2
Stock Clerk					1	1			1	1	2
Telephone Operator		1				1				2	2
Bakery Worker				1						1	1
Clerk-Typist						1				1	1
Creamery Manager					1				1		1
Delivering Groceries			1						1		1
Delivering Ice	1								1		1
Laborer in Lumber Yard			1						1		1
Nursing Receptionist				1						1	1
Postal Clerk						1				1	1
School Teacher								1		1	1
Service Station Manager	1								1		1
Truck Driver			1						1		1
Total	11	4	9	10	4	7		9	24	50	54

This table should be read as follows: Two women who are now managers reported their first regular job after leaving high school to be waitress.

TABLE XIII

WAITING PERIOD BETWEEN HIGH SCHOOL AND FIRST REGULAR JOB FOR 54 WORKERS WHO RECEIVED SOME HIGH SCHOOL EDUCATION, SHOWN BY OCCUPATIONAL FIELD

Occupational Field	Waiting Period in Months													
	None		One to Six Months		Seven to Twelve Months		Thirteen to Eighteen Months		Nineteen to Twenty-four Months		Over Twenty-four Months		Total	
	M	W	M	W	M	W	M	W	M	W	M	W	M	W
Managers	2	1	3		2	1	3				1	2	11	4
Salespersons	5		2	5		2		1	1		1	2	9	10
Recordkeepers	1	2		3	1			1	1		1	1	4	7
Steno.-Clerks				5		1				1		2		9
Total	8	3	5	13	3	4	3	2	2	1	3	7	24	30

This table should be read as follows: Two men who are now managers secured their first regular job immediately after leaving high school.

from none to over 24 months. The largest group, 5 men and 13 women, reported their first regular job was obtained from 1 to 6 months after leaving high school. The smallest group was 3, 2 men and 1 woman, who reported a waiting period of from 19 to 24 months. A waiting period of over 24 months was reported by 3 men and 7 women. Some of those reporting a longer waiting period may have gone to college or a business college, and the time they spent in further formal schooling would have been reported as waiting period between high school and the first regular job.

The largest numbers reported by occupational field were 5 men salespersons who reported immediate employment, 5 women salespersons who reported a waiting period of 1 to 6 months and 5 women stenographer-clerks who reported a waiting period of from 1 to 6 months.

Age at initial employment on first regular job. The ages of workers at the time of receiving their first regular jobs are shown in Table XIV. The range of ages was from 15 to over 25 years. The range for women was from 15 to over 25 years of age, while the range for men was from 16 to 22 years of age. The largest group was 19, 8 men and 11 women, reported in the 18-year age bracket. The remaining 36 workers are found in decreasing numbers as the age at initial employment goes up or down in years. Thirty-six, or 65 per cent, of the workers were from 17 to 19 years of age when they began work in their first regular job. The average age in years for all 55 workers was 19.0 years; for the 25 men, 18.4 years; for the 30 women, 19.5 years.

Within the occupational fields there were no large groups in any age classification. The largest group was 5 women ste-

TABLE XIV

AGE OF 55 WORKERS AT TIME OF INITIAL EMPLOYMENT ON FIRST REGULAR JOB,
SHOWN BY PRESENT OCCUPATIONAL FIELD

Occupational Field		Age at Initial Employment											Total	
		15	16	17	18	19	20	21	22	23	24	25		Over 25
Managers	M		1	2	3		2	1	2					11
	W		1		1				1				1	4
Salespersons	M		1	3	4	2								10
	W			2	3	3				1			1	10
Recordkeepers	M			1	1		2							4
	W	1	1		2	2							1	7
Steno.-Clerks	M													
	W			2	5			1	1					9
Total	M		2	6	8	2	4	1	2					25
	W	1	2	4	11	5		1	2	1			3	30
Total	All	1	4	10	19	7	4	2	4	1			3	55

This table should be read as follows: One man manager was 16 years of age at initial employment on his first regular job.

Average age: All, 19.0; men, 18.4; women, 19.5.

nographer-clerks who were 13 years of age when they began work. The second largest group was 4 men salespersons who were in the 18-year classification.

Specific training in business used by workers on first regular job. Seven of the 9 stenographer-clerks, 7 of the 11 recordkeepers, 11 of the 20 salespersons, and 5 of the 15 managers reported use of one or more business subjects each on their first regular job. Thirty of the 55 workers reported use of their business training on their first regular job.

Of the workers who reported the use of one or more business subjects on their first regular job, recordkeepers reported a greater average use per person of business subjects than any other occupational field with 7 recordkeepers reporting the use of 18 subjects. Clerical workers rank next, with salespersons reporting an average of the least number of subjects used per person.

General business training was used more times than any other business training, 18, with typewriting second, 14. Commercial geography and shorthand were the least used business subjects.

By occupations, 5 women stenographers who used typewriting and 5 men salespersons who used general business represent the largest groups.

In interpreting the data in Table XV it must be kept in mind that a worker could use only the training that he had actually received and that varying numbers of the workers had studied each of the subjects listed.

Workers whose first regular job is the same as their present job. Table XVI shows that for 9 workers the first regular job is

TABLE XV

SPECIFIC TRAINING IN BUSINESS USED BY WORKERS ON THEIR FIRST REGULAR JOB,
SHOWN BY PRESENT OCCUPATIONAL FIELD

Business Subject Used on First Regular Job	Occupational Field										
	Managers		Salespersons		Recordkeepers		Steno.-Clerks		Total		
	M	W	M	W	M	W	M	W	M	W	T
General Business	4		5	4	2			3	11	7	18
Typewriting	2			4	1	2		5	3	11	14
Bookkeeping	1	1		1	3	3		2	4	7	11
Business Mathematics	1				3			2	4	2	6
Business English					1	2		1	1	3	4
Shorthand				2				1		3	3
Commercial Geography							1			1	1
Total	8	1	5	11	10	8		14	23	34	57
Number Reporting Use of Business Subjects on First Regular Job	4	1	5	6	4	3		7	13	17	30

This table should be read as follows: Four men who are now managers used general business on their first regular job.

TABLE XVI

WORKERS WHOSE FIRST REGULAR JOB IS THE SAME AS
THEIR PRESENT JOB, SHOWN BY OCCUPATIONAL FIELD

Occupational Field	Sex		Total
	Men	Women	
Managers	2	1	3
Salespersons	1	4	5
Recordkeepers			
Steno.-Clerks		1	1
Total	3	6	9

This table should be read as follows: For two men who are now managers, the first regular job and the present job are the same.

the same as their present job. Five salespersons, 1 man and 4 women, represent the largest group in this category. No record-keepers are working at their first regular job. For one woman stenographer-clerk and for 3 managers, the first regular job and the present job are the same.

Considered by sex, 6 women and 3 men are now working on their first regular job.

Length of time workers have held present job. Twenty of the 55 workers interviewed have held their present job for over 2 years; 15, from 1 to 6 months; and the remaining 20 fall between 7 and 24 months. Nine salespersons have held their job from 1 to 6 months; 8 managers, for over 2 years. The remaining workers are distributed fairly evenly over the one to 24 months' period.

Present job titles of workers. The present job title of every worker in the study is shown in Table XVIII. Four of the managers, 3 men and 1 woman, were called assistant managers, with the remaining 11 designated as full managers. The salespersons came under 4 job titles: delivery man, meat salesman, station attendant, and sales clerk. The 4 job titles of the recordkeepers were: bookkeeper, deputy assessor, deputy treasurer, and stock clerk. The stenographer-clerks were called stenographer, receptionist, extension clerk, assistant county superintendent, and typist. Sales clerks comprised the largest single group. There were 10 women sales clerks and 3 men sales clerks.

Types of businesses in which workers are employed. The 16 different types of businesses in which the workers are employed are shown in Table XIX. The largest number in any one business

TABLE XVII

LENGTH OF TIME 55 WORKERS HAVE HELD THEIR PRESENT JOB, SHOWN BY OCCUPATIONAL FIELD

Occupational Field	Months Worker Has Held Present Job												
	One to Six Months		Seven to Twelve Months		Thirteen to Eighteen Months		Nineteen to Twenty-four Months		Over Twenty-four Months		Total		
	M	W	M	W	M	W	M	W	M	W	M	W	
Managers		1		1		2		2	1	7	1	11	4
Salespersons	3	6				1		4		3	3	10	10
Recordkeepers		4	1			1		1		2	2	4	7
Steno.-Clerks		1		3		3					2		9
Total	3	12	1	4	2	5	7	1	12	8	25	30	

This table should be read as follows: One woman manager has held her present job from one to six months.

TABLE XVIII

PRESENT JOB TITLES OF 55 WORKERS, SHOWN BY OCCUPATIONAL FIELD

Present Job Title	Occupational Field										
	Managers		Salespersons		Recordkeepers		Steno.-Clerks		Total		
	M	W	M	W	M	W	M	W	M	W	T
Manager	8	3							8	3	11
Assistant Manager	3	1							3	1	4
Delivery Man			1						1		1
Meat Salesman			2						2		2
Station Attendant			4						4		4
Sales Clerk			3	10					3	10	13
Bookkeeper					1	7			1	7	8
Deputy Assesor					1				1		1
Deputy Treasurer					1				1		1
Stock Clerk					1				1		1
Stenographer								4		4	4
Receptionist								1		1	1
Extension Clerk								1		1	1
Assistant County Supt.								1		1	1
Typist								2		2	2
Total	11	4	10	10	4	7		9	25	30	55

This table should be read as follows: For 8 men managers the present job title is manager.

was 9. Nine workers, 2 men and 7 women, reported that they were working in a government office. The same number, 4 men and 5 women, reported they were working in a department store. The other largest groups numerically were in grocery stores, service stations, and garages.

Six women clerical workers working in government offices comprised the largest occupational group.

Business machines operated on present job. Table XX reveals the fact that only 2 of the 55 workers, 1 man manager and 1 woman recordkeeper, did not use a business machine. The cash register was used by the largest number of workers, 37. Thirty-two workers used the adding machine and 28 used the typewriter. Other business machines used by much smaller numbers of workers were: mimeograph, calculator, check writer, comptometer, and addressing machine.

The cash register was the only business machine used by a significant number of salespersons. In only one instance do all workers in an occupational field use the same type of machine. All of the stenographer-clerks use the typewriter.

The cash register was used by the largest number of managers and salespersons. The adding machine was used by the largest number of recordkeepers and the typewriter was used by the largest number of clerical workers.

Major duties performed on present job. Nine major duties were listed by one or more of the 55 workers. All of the managers performed managerial duties and applied a knowledge of book-keeping principles and practices. Fourteen sold goods; 13 filed;

TABLE XIX

TYPES OF BUSINESSES IN WHICH 55 WORKERS ARE EMPLOYED

Type of Business	Occupational Field										
	Managers		Salespersons		Recordkeepers		Steno.-Clerks		Total		
	M	W	M	W	M	W	M	W	M	W	T
Department Store	3		1	4		1			4	5	9
Government Office					2	1		6	2	7	9
Grocery Store			4	3					4	3	7
Hardware	1		1	2	1	1			3	3	6
Garage and Parts	3		1			1			4	1	5
Service Station	2		3						5		5
Furniture Store				1		2				3	3
Cafe		2								2	2
Law Office								2		2	2
Doctor's Office								1		1	1
Express Company	1								1		1
Jewelry Shop						1				1	1
Produce and Feed	1								1		1
Service Company					1				1		1
Telegraph Company		1								1	1
Telephone Company		1								1	1
Total	11	4	10	10	4	7		9	25	30	55

This table should be read as follows: Three men managers are employed in department stores

TABLE XX

BUSINESS MACHINES OPERATED BY 55 WORKERS

Business Machines Operated on Job	Occupational Field										
	Managers		Salespersons		Recordkeepers		Steno.-Clerks		Total		
	M	W	M	W	M	W	M	W	M	W	T
Cash Register	10	3	3	10		6			18	19	37
Adding Machine	9	3	3	2	3	6		6	15	17	32
Typewriter	9	3		2	1	4		9	10	18	28
Calculator					3			4	3	4	7
Check Writer	1				2	4			3	4	7
Mimeograph	1				1			4	2	4	6
Addressing Machine								1		1	1
Comptometer					1				1		1
None Reported	1					1			1	1	2

This table should be read as follows: Ten men managers operate a cash register on their present job.

TABLE XXI

MAJOR DUTIES PERFORMED ON PRESENT JOB BY 55 WORKERS

Major Duties Performed on Present Job	Occupational Field										Total	
	Managers		Salespersons		Recordkeepers		Steno.-Clerks					
	M	W	M	W	M	W	M	W	M	W		
Sell	11	3	10	10		4				21	17	38
File	11	2	1	2	3	7			6	15	17	32
Compose Business Letters	9	2		2	3	6			9	12	19	31
Apply Knowledge of Bookkeeping Principles and Practices	11	4			4	7				15	11	26
Perform Managerial Duties	11	4								11	4	15
Take Dictation and Transcribe				1		1			1		3	3
Act as Receptionist						1					1	1
Order and Display Meat			1							1		1
Record and File Deeds						1					1	1

This table should be read as follows: Eleven men managers sell as one of their major duties on their present job.

TABLE XXII

ADDITIONAL BUSINESS EDUCATION DESIRED BY 21 WORKERS

Desired Training in Business Education and Reason	Occupational Field										Total
	Managers		Salespersons		Recordkeepers		Steno.-Clerks		Total		
	M	W	M	W	M	W	M	W	M	W	
Bookkeeping for Advancement		1	2	1	1	2			3	4	7
Accounting for Greater Efficiency	1								1		1
Accounting to Get a Better Job				1						1	1
Auditing for Better Job					1				1		1
Shorthand for Advancement		1		1	1	1		2	1	5	6
Shorthand for Greater Efficiency								3		3	3
Merchandising for Advancement	2								2		2
Business English for Advancement						1				1	1
Business Mathematics for Accuracy						1				1	1
Meet Display for Larger Sales			1						1		1
Management for Advancement	1								1		1
Personnel Adm. for Office Efficiency	1								1		1
Typewriting for Advancement				1				1		2	2
Window Decorating for Advancement					1				1		1
None Desired	6	3	7	8	1	5		4	14	20	34
Total	11	5	10	12	5	10		10	26	57	63

This table should be read as follows: One woman manager desired a course in bookkeeping for advancement.

and 11 composed business letters. No other major duties were mentioned by the managers.

All of the 20 salespersons sold goods; 3 filed; 2 composed business letters; 1 took dictation and transcribed; and 1 ordered and displayed meat.

All of the recordkeepers applied a knowledge of bookkeeping principles and practices; 10 filed; 9 composed business letters; and 4 sold goods.

All of the 9 stenographer-clerks composed business letters; 6 filed; and 1 took dictation and transcribed.

Thirty-eight of the 55 workers checked selling as one of their major duties; 32 checked filing; and 31 indicated they composed business letters.

Additional Business education desired and reason. Twenty-one of the 55 workers desired additional business education. Table XXII shows the training they desired and the reason they desired that training. Twelve subjects, with reasons, were checked a total of 63 times by 21 workers. Bookkeeping for advancement was desired by the largest number of workers, 7. Six checked shorthand for advancement. No other course and reason was checked by over 3 workers.

By occupational field, 6 managers desired additional business training, 5 salespersons, 5 recordkeepers, and 5 clerical workers.

It appears that some of the workers may need additional education without being aware of their need. Business English provides an illustration. In Table XXI it was shown that 31, or 56.4 per cent, of the 55 workers regard the composing of business

letters as a major duty in their present job. Only 6 of the workers studied business English in high school, and none studied the subject in college or business college. Yet, as Table XXII shows, only one of the 55 workers listed business English as additional business education desired.

Summary and Conclusions

The summary and conclusions for this chapter will be made in connection with the last 4 of the 7 questions stated in the "Statement of the Problem" in Chapter I.

4. At what age was the worker first employed? The average age in years for the entire group of workers was 19.0 years; for the 25 men, 18.4 years; for the 30 women, 19.5 years.

5. What type of work is done on the present job? Of the 55 workers, 15 were managers with managerial duties, 11 were record-keepers, 20 were salespersons, and 9 were clerical workers. As these 4 occupational groups were grouped according to major duties and job titles, the type of work being performed by the 55 workers is synonymous with their occupational field.

6. What tasks are performed on the present job? Nine major duties were listed by the 55 workers. In order of number of workers performing each duty they are: selling, filing, composing business letters, applying a knowledge of bookkeeping principles and practices, performing managerial duties, ordering and displaying meat, recording and filing deeds, and acting as receptionist. The first 3 of these duties were named by a majority of the workers.

7. Does the worker feel a need for additional business training? Twenty-one of the 55 workers said they desired addi-

tional business training. Twelve different courses were listed by these 21 workers. Shorthand and bookkeeping were checked with greater frequency than other business subjects.

CHAPTER IV

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The personal and educational background of the workers as presented in Chapter II and occupational history as presented in Chapter III give information which appears to justify the following statements and conclusions.

Summary of Findings and Conclusions

Personal. Of the 55 workers interviewed, 25, or 45 per cent, were men and 30, or 55 per cent, were women.

In the occupational fields, 15, or 27 per cent, were managers; 20, or 36 per cent, were salespersons; 11, or 20 per cent, were recordkeepers; and 9, or 16 per cent, were stenographer-clerks. As 36 per cent of the workers are salespeople, the indication is that there should be organized preparation for that type of work.

The number of married workers was 33, sixty per cent of the 55 workers, while the number of single workers was 22, or 40 per cent of the entire group.

Taken by ages, 12, or 22 per cent, were 16 to 20 years of age; 14, or 25 per cent, were 21 to 25 years of age; 9, or 16 per cent, were 26 to 30 years of age; 14, or 25 per cent, were 31 to 35 years of age; and 6, or 11 per cent, were 36 to 40 years of age.

Educational. Of the 55 workers interviewed, 1 had left school in grades 1 to 8, 13 had left school in grades 9 to 11, and 29 had left school at high school graduation. Of the remaining 12, 9 attended college but did not graduate and 3 at-

tended a business college. None of the workers had attended a junior college.

Twenty-one, or 39 per cent, of the 54 workers who attended high school left high school at 18 years of age. Thirteen, or 24 per cent, left high school at 17 years of age. The remaining 20 workers left school in varying numbers at from 14 to 20 years of age.

Twenty-nine of the 54 workers who attended high school did their most recent high school work at Chandler. Thirteen of the remaining 25 did their most recent high school work at high schools within the same county. Of the remaining 12 workers, 3 came from high schools out of state and 9 from widely separated high schools in Oklahoma. Considering the number who do not go beyond high school and the number who attend the local high school, it may be concluded that the work of that institution is largely terminal.

Forty-six of the 54 workers with some high school training had studied one or more business subjects. Thirty-nine workers had studied typewriting, 25 had studied bookkeeping, and 23 had studied general business. Other business subjects were checked a number of times.

Of the 9 workers who had attended college, 6 had studied one or more business subjects in college. Five of these had studied bookkeeping and 3 had studied business mathematics.

A majority of the 11 managers, 6 recordkeepers, and 9 clerical workers who had studied typewriting in high school considered this skill of direct value in their present job. Twenty-one of the 25 workers who had studied bookkeeping reported it of

direct value in their present job. The majority of the 23 workers who had studied general business in high school reported it of direct value in their present job. It appears that typewriting, bookkeeping, and general business have greater vocational value than any other business subjects that have been studied by the workers.

Occupational. Twenty-one different kinds of first regular jobs were reported by the 54 workers who had received some high school training. Nine reported "waitress" and 7 reported "sales clerk" as their first regular job. There were no other jobs at which a large number of cases centered.

Twenty-nine of the workers reported a waiting period of 6 months or less between high school and their first regular job.

The average age in years at initial employment on the first regular job for all 55 workers was 19.0 years; for the 25 men, 19.4 years; for the 30 women, 19.5 years.

Thirty of the 46 workers who had studied one or more business subjects in high school reported use of their business training on their first regular job. General business and typewriting were the most used subjects, with commercial geography and shorthand the least used.

Nine workers reported their first regular job and their present job to be the same. An examination of the questionnaires revealed that most of these 9 have been working on their first regular job for only a short time.

Twenty of the 55 workers interviewed have held their present job for over 2 years; 15, from 1 to 6 months; and the remaining 20, from 7 to 24 months.

The 55 workers reported employment on their present job in 16 different types of business. The largest numbers are working in government offices, department stores, grocery stores, service stations, and garages.

Only 2 of the 55 workers did not use some kind of business machine. The cash register was used by the largest number of workers, 37. Thirty-two workers used the adding machine and 28 used the typewriter.

Thirty-eight of the 55 workers checked selling as one of their major duties; 32 checked filing; and 31 indicated that they composed business letters.

Twenty-one of the 55 workers desired additional business education training. Twelve courses were mentioned, with bookkeeping and shorthand desired by the largest numbers.

Recommendations

Prospective workers in business occupations should attempt to decide while in school what general field they wish to enter, and plan school work accordingly. Advisers should help the student to choose and prepare for a vocation which is suited to his ability. Such planning would eliminate some of the waste of time and effort which results from unwise choices of vocations or from no choice. The findings of this study will be valuable to the student and to his adviser in determining what course the student should follow in school; it will indicate something of what the worker may find when he actually starts to work in business. Another type of study which should contribute to the organization of practical business education programs is a continuous follow-up

program. It is recommended that both types of studies be made a part of the business education program for the local school.

As typewriting, bookkeeping, and general business have shown their vocational value, it is recommended that no less emphasis be put on them, but that organized preparation be made available for students who wish to go into selling positions. It is further recommended that provision be made for development of a broad field of knowledge in business education.

BIBLIOGRAPHY

- Halcomb, Kleimen L.,** Business Occupational Survey of Stillwater. Master's Thesis, Oklahoma Agricultural and Mechanical College, 1941.
- Haynes, Benjamin R. and Graham, Jessie, Research in Business Education, p. 94.
- Hebel, Orlena J.,** A Business Occupational Survey of Taos, New Mexico. Master's Thesis, Oklahoma Agricultural and Mechanical College, 1942.
- McGill, Esbey,** Business Occupational Survey of Stillwater. Master's Thesis, Oklahoma Agricultural and Mechanical College, 1941.
- Morgan, Jo,** Business Occupational Survey of Stillwater. Master's Thesis, Oklahoma Agricultural and Mechanical College, 1941.
- Perkins, Francis,** "Whose Responsibility?", Occupations, Vol. XII, No. 2, pp. 5-10, October, 1933.
- Tibbitts, F. L.,** An Industrial and Occupational Survey of Yuba and Sutter Counties, California, Report from Yuba County Junior College, p. 11.

STRATHMORE PARCEMENT

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APPENDIX

STRATH

MENT

BUSINESS OCCUPATIONAL SURVEY INTERVIEW SCHEDULE FOR CHANDLER,
OKLAHOMA

PERSONAL HISTORY:

Sex: Male _____ Female _____ Race _____

Marital Status: Married _____ Single _____

If married, give date _____
(month) (year)

Age: 16-20 _____, 21-25 _____, 26-30 _____, 31-35 _____, 36-40 _____.

EDUCATIONAL HISTORY:

1. Circle the highest grade that you completed in high school: 8, 8½, 9, 9½, 10, 10½, 11, 11½, 12. Did you graduate? Yes ___ No ___
2. Date you left high school _____
(month) (year)
3. Age at time you left high school _____
4. High school you last attended _____
5. Specific training received in business subjects:

Subjects:	No. of years*	High School			College		Business College No. of weeks subject studied
		Direct value in present job			Semesters	Quarters	
		Major	Minor	None			
Typewriting							
Shorthand							
Bus. Math.							
Bookkeeping							
Bus. English							
Bus. Econ.							
Gen. Bus.							
Com. Geog.							
Others							

*Use "½" for one semester.

6. If you attended college, for how many months did you attend? _____
Did you graduate from college? Yes ___ No ___
7. Have you received additional training outside high school or college? If so, please list:

By correspondence	_____	_____
	(course studied)	(dates)
On the job:	_____	_____
	(course studied)	(dates)
In school:	_____	_____
	(course studied)	(dates)
Others:	_____	_____
	(course studied)	(dates)

OCCUPATIONAL HISTORY:

First Regular Job?*

1. What was your first regular job after you left high school? _____
2. How long was it after you left high school until you obtained your first regular job? ___ months.
3. At what age did you obtain your first regular job? ___ years.
4. What specific business training, if any, did you use on your first regular job? Subjects: _____

Present Job:

1. Is your present job the same as your first regular job mentioned above? Yes ___ No ___
2. In what type of business are you now employed? (Hardware, law office, etc.) _____
3. How long have you worked for your present employer? ___ months.
4. What is your present job title? (Store salesman, typist, etc.) _____
5. Check the duties you perform in your present job:

Operate:

- Typewriter
 Adding machine
 Mimeograph
 Liquid process duplicator
 Dictaphone or Ediphone
 Calculator
 Comptometer
 Cash register
 Check writer
 Addressing machine

Other business machines: _____

Other duties:

- File
 Take dictation and transcribe
 Sell
 Perform managerial duties
 Compose business letters
 Apply knowledge of bookkeeping principles and practices

Others: _____

6. In your present job do you feel a need for additional business training? Yes ___ No ___

If your answer is "yes", mention type of training needed and reason: _____

*First full-time job (30 hours or more per week) held for three months or more, excluding temporary jobs held while attending high school or college.

Typist: Leah Rector Westfall