

A SURVEY OF BRENHAM OFFICE WORKERS
AND MACHINES

by

Eugene C. Janner

A THESIS

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A SURVEY OF BRENHAM OFFICE WORKERS
AND MACHINES

A THESIS

Presented to the Faculty of
Sam Houston State Teachers College
in Partial Fulfillment of the Requirements

for the Degree

MASTER OF ARTS

by

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Huntsville, Texas

August, 1962

142096

ACKNOWLEDGMENT

The writer would like to express his sincere appreciation to Dr. Jean D. Neal, Dr. Loyce Adams, and Dr. J. Stewart Allen for their patience, guidance, and constructive criticisms in the development of the study.

The writer would also like to express his gratitude to the Brenham office employees and their employers for the wonderful cooperation and friendliness shown while making the survey.

Janner, Eugene C., A Survey of Brenham Office Workers and Machines. Master of Arts (Business Administration) August, 1962, Sam Houston State Teachers College, Huntsville, Texas, 91 pp.

Purpose

The purpose of this study was to obtain occupational information concerning office workers and machines in Brenham, Texas, and to present it in order to determine whether or not changes should be made in the business curriculum in Brenham High School. A secondary purpose of the study was to provide a limited amount of guidance information for the business teachers. In making the study special attention was given to: (1) job opportunities available for prospective office workers, (2) salaries offered, (3) duties performed by the office workers, (4) educational background of present employees, (5) educational weaknesses of present employees, (6) types of office machines used, and (7) educational standards required or preferred by the employers of their office workers.

Methods

The survey method was used in collecting the data for this study. Questionnaires were constructed and distributed to the office employees and employers. Along with the questionnaire, the personal interview and observation method were used to some extent. This was possible because the person doing the study presented the questionnaires in person.

Findings

After the gathering and analysis of the data collected for this study, the following conclusions appear to be in order.

1. Most of the training received by local office workers on office machines has been on-the-job training. A large number of employers have indicated that the ability to use office machines is a scholastic weakness of present employees. Other important scholastic weaknesses are in English grammar, spelling, and the ability to compose letters.

2. The local high school is doing very little to help its graduates obtain jobs in the local offices.

3. The majority of the employers only require a high school education for applicants seeking office positions, and approximately fifty per cent require previous experience.

4. There is a need for more cooperation between the school authorities and local businessmen in giving students the opportunity to visit in the local business firms and in having local businessmen come into the business classes as guest speakers.

5. Accuracy, courtesy, loyalty, ability to follow instructions, neatness in work, promptness, and initiative are considered by the employers as the most important vocational traits for employees in Brenham offices to possess.

6. The average salary of Brenham office workers is \$225 per month. The majority of the workers make less

than \$250 per month. The average length of employment is 6.05 years.

7. Job opportunities in the city of Brenham are limited by the small number of jobs available, the slow turnover of personnel, and the competition from married women.

8. Typewriting, handling money in the office, and preparing statements are the duties performed by a majority of the Brenham office workers.

9. The most popular business courses taken in high school were typewriting, bookkeeping, and shorthand.

10. The most desired training of Brenham office workers is in correspondence, accounting, and office machines.

11. The most popular business machines in Brenham offices are: Royal typewriters, Burroughs adding machines, Monroe and Remington calculators, Burroughs bookkeeping machines, and A. B. Dick duplicating machines.

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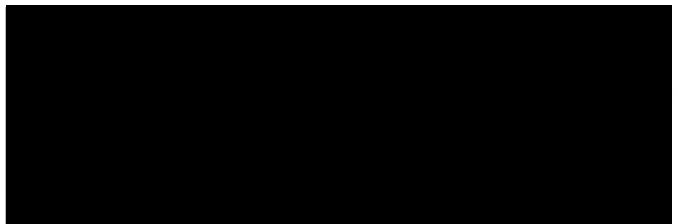


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CHAPTER I

INTRODUCTION

The primary objective in business education is to aid students in developing to the maximum extent their potential traits, skills, and knowledges that allow them to seek their places in the world.

Educators often fail in aiding their students to develop these potentials because of the instructors' lack of knowledge of what is to be expected of the students in their local communities. In order that students may have the opportunities to choose the careers best suited to their potential skills and knowledges, many types of occupational information are made available to them through many different sources. These include: schools, civic organizations, governmental agencies, industries, and private agencies. However, in most cases very little information is available regarding individual local communities.

As society becomes more complex and as institutions grow and change in their nature and structure, students and educators alike find themselves confused and in need of assistance toward utilizing to the fullest their talents and opportunities. This need includes occupational information about the local community. Therefore, a study should be made of each community and a business curriculum set up to

fit its own wants and needs.

Statement of the Problem

The problem facing the local school authorities of Brenham High School is that of determining what additional courses should be added to the present curriculum offerings. This problem has been produced by increasing the requirements for graduation. As a result, the business department must decide whether or not additional business courses should be offered.

The business department is faced with the problem of determining whether or not the business courses currently offered are sufficient to satisfy the needs of the local community. In order to arrive at a solution to the problem, Strong¹ points out that a thorough understanding of local businesses, the types of equipment used, and the various jobs that must be filled should all be carefully studied and made available to the business teachers in the community. He also states that, "One of the most effective means for determining local needs is to conduct a job-opportunity survey."²

There has been no survey of this type made in Brenham, Texas; therefore, a need for this study is evident.

¹Earl P. Strong, The Organization, Administration, and Supervision of Business Education, p. 237.

²Ibid., p. 238.

Purpose of the Study

This study was undertaken to provide occupational information to help determine whether or not the business courses offered in Brenham High School are sufficient in preparing students for employment in local offices, or if any modifications should be made in those courses currently offered, or if new courses should be added to the curriculum. A secondary purpose of the study is to provide a limited amount of guidance information.

In making the study, special attention was given to: (1) job opportunities available for prospective office workers, (2) salaries offered, (3) duties performed by the office workers, (4) educational background of present employees, (5) educational weaknesses of present employees, (6) types of office machines used, and (7) educational standards required or preferred by the employers of their office workers.

Limitations of the Study

The research for this study was limited to the city of Brenham, Texas, which is located in Washington County. The study was concerned with the full-time office workers, their employers, and the machines they use. Part-time workers were taken into consideration only to determine the number employed in the offices where full-time workers are

employed.

The study was limited to employees whose main duties were associated with clerical work, such as: secretaries, bookkeepers, accountants, receptionists, typists, clerks, and stenographers.

Those excluded were postal clerks, telephone operators, bank cashiers, and other office workers, such as draftsmen, office managers, and supervisors.

Definition of Terms

Full-time Office Worker. This term applies to all personnel working in an office and performing regular office duties for approximately forty hours a week or more. This does not include anyone occupying office space but having a different line of work.

Part-time Office Worker. A part-time office worker is anyone working in an office less than forty hours each week or anyone that is called in during certain times of the month or year.

School Authorities. This term includes all personnel connected with the functions of the school, including: board members, administrators, counselors, and teachers.

Methods of Investigation

The information gathered for this study was obtained

by the following methods: (1) questionnaire interview, (2) personal interview, (3) literature survey, and (4) observation.

The list of offices included in the survey was compiled from a list obtained from the Brenham office of the Texas Employment Commission and checked against those listed in the city telephone directory in order to make the sample as complete as possible.

The questionnaire interview method was used primarily in obtaining the information for the study; however, observation and personal interview were used to some extent. This was possible since the person doing the research personally contacted each office.

Related Studies

In the years prior to 1914 few surveys were made. In that year a survey was made by the Boston Chamber of Commerce which showed the opinions of Boston employees regarding the business subject most needed. In 1915 the Rochester, New York, Chamber of Commerce made a study of business employees. This study gave local educational authorities a better understanding of the requirements of local business. It will be noticed that these two early surveys were made by Chambers of Commerce. Most of the later surveys have been made by

school authorities in the interest of business education.³

A recent local survey of office machines was made in Cincinnati, Ohio, by the Cincinnati Office Practice Teachers to determine their local needs concerning the teaching of Office Practice in their local schools. This survey was made during the summer vacation period from June 15, 1961, to September 1, 1961.⁴

Other surveys of a local nature were made by William G. Burden of Willacy County, Texas, in which he made a study of job opportunities in Willacy County in 1956.⁵ James E. Gilmore made a study of the Huntsville office workers in Huntsville, Texas, in 1957;⁶ Thelma Bounds did a similar study in Bryan and College Station, Texas, in 1961.⁷

³R. G. Walters and C. A. Nolan, Principles and Problems of Business Education, p. 309.

⁴John Roman, "Office Machines Survey," The Balance Sheet, Vol. XXXXIII, No. 3, November, 1961, pp. 122-123.

⁵William G. Burden, "A Survey of Job Opportunities in Willacy County with Implications for Curriculum Revision," unpublished Master's thesis, Sam Houston State Teachers College, Huntsville, Texas, 1956.

⁶James E. Gilmore, "A Survey of Huntsville Office Workers," unpublished Master's thesis, Sam Houston State Teachers College, Huntsville, Texas, 1957.

⁷Thelma Bounds, "A Survey of Office Workers in Bryan and College Station," unpublished Master's thesis, Sam Houston State Teachers College, Huntsville, Texas, 1960.

Constructing the Questionnaires

The major purpose of this study was to obtain occupational information for the Brenham area. Because published data on job opportunities in the Brenham area is practically non-existent, the main problem was to secure as much first hand information as possible.

In order to obtain the information desired, questionnaires were constructed and presented to the office employers and employees.

In constructing the questionnaires the questions were kept brief, clear, and as few as possible. They were selected to secure complete and accurate responses by keeping each question simple to answer. Most of the questions were constructed so that they could be answered with a cross or check mark, or in as few words as possible. Because the length of the questionnaire undoubtedly influences the number of answers obtained, only those items which made the best contribution to the study were used, and the entire questionnaire was designed to be relatively easy to fill out. The questions were designed to obtain factual information.

For purposes of comparison and accurateness, two questionnaires were used, one to be answered by the office employees and the other by the office employers.

The Brenham Office Employees' Questionnaire. This questionnaire was constructed to obtain first hand information

regarding occupational information from the office employees in Brenham. Since the questionnaire was the principle means used in getting this data the questions were planned as an integrated series, but were kept brief and simple to answer.

A copy of the questionnaire used in obtaining information from the office employees in Brenham, Texas, is shown in Appendix A.

The Brenham Office Employers' Questionnaire. The employers' questionnaire was prepared to verify the data received on the employees' questionnaires, to seek information about office machines, and to determine the preferences of employers regarding educational standards desired.

A copy of the questionnaire presented to the office employers is shown in Appendix B.

The Response

The response to the questionnaires was gratifying in that all persons contacted showed a great deal of interest in the questions asked and filled in most questions with care. A large number of the employers asked to see a copy of the study after it has been completed.

Questionnaires were distributed to 56 business offices. Fifty-four of the employers' questionnaires were completed and returned, a percentage return of 94.64 per cent. In the 56 business offices 139 employee questionnaires were distributed with 135 being completed and returned. The percentage

of returns on the employee questionnaires was 97.12 per cent.

In order to obtain a relatively high percentage of returns the researcher distributed the questionnaires and either waited for them to be completed or picked them up at a later time. In most cases, due to someone being out of the office or working on something important at the time, an appointment was made for a return visit and the questionnaires were picked up at the appointed time.

Background Information on Brenham High School

Brenham High School is located in the city of Brenham, Texas, which has a population of approximately eight thousand. It also serves approximately three-fourths of the rural area of Washington County.

The expected enrollment for the next school year is approximately 600 students in the upper four grades. The school employs one principal, one counselor, one nurse, and twenty-nine teachers.

The graduation requirements at the present time are: English, 2 years; Social Science, $2\frac{1}{2}$ years; Laboratory Science, 2 years; Mathematics, 2 years; Physical Education, 2 years; and enough elective units to make eighteen credits.

The number of elective units is being increased by one credit a year and will continue until the final requirements for graduation will be twenty credits.

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Summary

One of the major problems of business education is that of determining what business courses are to be offered in the local high school. In order to arrive at a solution to the problem, specific job information on the local community should be made available to the local school authorities. In most local communities this information is not readily available. However, detailed job information can be obtained through an analysis of job specifications and through interviews and discussions with employers and employees in the local community. By making a survey of this type, decisions can be made in determining the wants and needs of the community and a sequence of courses can be set up to meet these wants and needs.

It was the purpose of this study to determine the wants and needs of the business offices in the Brenham area by obtaining occupational information from its office workers and their employers.

The study was limited to the city of Brenham and was concerned with obtaining occupational information covering the full-time office workers, their employers, and the machines they use.

Questionnaires were constructed for both the employers and the employees and distributed to 56 business offices

employing 139 office workers. Fifty-three employers completed and returned their questionnaires and 135 of the employees completed and returned theirs. In distributing the questionnaires the researcher either waited for them to be completed or picked them up at an appointed time in order to get a relatively high percentage of returns.

CHAPTER II

A SURVEY OF OFFICE WORKERS IN BRENHAM, TEXAS

In making the study of the Brenham office workers a questionnaire was presented to the full-time workers only. The questionnaire was designed to be brief, to be easily filled out, and to obtain occupational information with regard to office work in this area.

Before the questionnaires were distributed to the office workers, the researcher explained the purpose of the survey to each employer except in a few instances when he was not in the office. In most cases the questionnaires were presented to each employee personally. In three of the larger business offices, however, the employers felt it would be more convenient if they did the distributing and a return call was made by the researcher. After the questionnaires were distributed, questions were answered concerning the questions asked and some of the problems of working in a business office were discussed.

The cooperation of the employees was very good, with most of them showing a great deal of interest and concern about giving the correct responses. Only two of them seemed to feel that it was a waste of time and were a little rude. Both worked in the same office. A large number of the office workers included in the survey were friends and a few were

former students.

The information asked for on the questionnaire was: the name of the respondent, the name of the business office in which employed, sex and marital status, job title, length of present employment, and the method used in obtaining the present position. Other information sought was whether or not they were required to write a letter of application, salaries received, what advancements had been made in the present employment, duties performed, office machines used by the employee, and the type of training acquired for each machine used. Information asked for concerning their educational background was: the names of the schools attended, the number of years attended in each school, educational level at which they had taken popular business courses, and business courses that had not been taken, but that the employee believed would be beneficial in the present job. Information concerning vocational traits was also sought by having the employee rank twelve of the more important traits in the order of their importance in each particular job. The last question on the questionnaire sought general information by having the respondent comment on the office workers and machines in Brenham. Most of the respondents seemed a little reluctant to write any comments but readily discussed any topic introduced. The majority of the comments made were concerned with salaries, duties performed, and the

condition of the office machines used. It seems to be the general opinion of the office workers that salaries in Brenham are below average in comparison to those of other towns of the same size. They also expressed the opinion that the duties performed and the skills needed in the local offices must be better than those needed in other towns of the same size, and that the machines used were old and out of date.

The Number, Marital Status, and Sex
of Brenham Office Employees

Included in the survey were 139 office workers that were classified as full-time workers. Part-time workers and those that do office work for a limited amount of time each day were not included. This included personnel that work as sales clerks and insurance salesmen that have a desk but whose main duties are to sell and are in the office for a short time each day. Also excluded were employers, bank cashiers, managers, engineers, and other personnel occupying office space but having a different line of work.

It was surprising to the writer to find that a large number of the retail firms in the downtown section had most of their bookkeeping done by someone not located in the store, such as an accounting firm or an individual on a part-time basis with a minimum amount of record keeping being done by

the employer or one of the clerks in the store.

Out of the 139 employees surveyed, 135 or 97.12 per cent completed and returned the questionnaires. Of these 74.82 per cent were married, 23.70 per cent were single, and 1.48 per cent were widowed. The married personnel numbered 101, single 32, and widowed 2. Of the 32 single workers it was found that 5 are young men and 27 are women. Only 6 of the single women have been in the present employment over 2 years, indicating that most of these were young and could be expected to get married in the near future. This indicates that within a short time there may be a few job openings for a few female workers. However, the number of job opportunities for male prospects will be very small.

Thirty-six or 26.67 per cent of the employees were males and were represented under job classifications as follows: 16 general clerks, 14 bookkeepers, 4 IBM operators, and 2 accountants. Ninety-nine or 73.33 per cent were females and were represented under the following job classifications: 24 secretaries, 30 general clerks, 18 bookkeepers, 7 stenographers, 3 IBM operators, 3 clerk typists, 6 accountants, and 8 receptionists.

In comparing these figures with the findings of surveys made in Huntsville, Texas, by Gilmore¹ and in Bryan and

¹James E. Gilmore, "A Survey of Huntsville Office Workers," unpublished Master's thesis, Sam Houston State Teachers College, Huntsville, Texas, 1957, p. 17.

College Station, Texas, by Bounds² where the percentage of males was 5.3 per cent and 7.09 per cent, respectively, Brenham has a high percentage of males working as office workers.

It can readily be seen that job opportunities are few in number and that married women account for a large portion of the competition for these jobs.

Methods Used by Employees in Obtaining
Their Present Jobs

Table I shows that seventy-six or 56.30 per cent of the present employees obtained their jobs by personal application and thirty or 22.22 per cent secured their jobs through the aid of a friend or relative. However, it is the opinion of the writer that a portion of the workers who have checked personal application did receive aid from a friend or relative in obtaining information about the job and were asked to make a personal application. This opinion is based on discussions with employers concerning methods of securing office workers. Twenty-one or 15.56 per cent obtained jobs through the employment agency, three or 2.22 per cent were recommended by a school, and two or 1.48

²Thelma Bounds, "A Survey of Office Workers in Bryan and College Station," unpublished Master's thesis, Sam Houston State Teachers College, Huntsville, Texas, 1960, p. 89.

TABLE I
METHODS USED BY BRENHAM OFFICE EMPLOYEES
IN OBTAINING PRESENT JOBS

Method	Number	Per Cent
Personal Application	76	56.30
Aid of a Friend or Relative	30	22.22
Employment Agency	21	15.56
Recommendation of a School	3	2.22
Contacted by Employer	2	1.48
Aid of a Former Employer	1	.74
Merit System Exam	1	.74
Answered Ad in Paper	1	.74
Totals	135	100.00

per cent were contacted by their employer. Merit System, aid of a former employer, and answered an advertisement in the paper were listed by one employee in each case.

From the evidence shown here the local high school is doing very little, if anything, in helping its graduates secure office jobs in this area. This definitely shows a need for aiding students in obtaining jobs after they have completed their high school training.

Although some of the office workers checked another means of obtaining the present jobs, it was pointed out in discussions that some of them had worked at other jobs and had advanced to office jobs in the same employment and the method checked was the one used in obtaining initial employment under the same employer.

Table I reveals that the best means of getting a job in Brenham is by applying in person, with aid of a friend or relative as the second best means, and use of the employment agency, third. These three methods were used by 127 employees which represents 94.08 per cent of the total surveyed. This is similar to the distribution found by Bounds³ in Bryan and College Station.

The number of employees required to write a letter of application was twenty-eight or 20.74 per cent of the total

³Ibid., p. 101.

workers; 105 or 77.78 per cent were not required and two or 1.48 per cent gave no reply. Of the twenty-eight required to write a letter of application: 11 were general clerks, 9 were bookkeepers, 3 were IBM operators, 2 were secretaries, 1 was an accountant, 1 was a receptionist, and 1 was a clerk typist. The majority of the employees required to write a letter of application were employed by three of the larger offices.

The Number, Per Cent of Total Workers, Average
Length of Employment and Average Salaries

The data with regard to the number, per cent of total workers, length of employment, and average salaries of employees in each job classification are presented in Table II. The averages in Table II were derived by taking the sum of the employment periods and salaries and dividing by the number of workers in each group. The salaries in the table are rounded off to the nearest dollar.

Forty-six or 34.07 per cent of the employees classified themselves as general clerks with an average length of employment of 6.43 years and an average salary of \$267 per month. General clerks represented the largest group included in the survey. The second largest group, the bookkeepers, consisted of thirty-two or 23.70 per cent of the total workers with an average length of employment of 6.18 years and an

TABLE II

THE NUMBER, PER CENT, AVERAGE LENGTH OF PRESENT
EMPLOYMENT, AND AVERAGE SALARIES OF
BRENHAM OFFICE EMPLOYEES

Job Classification	Number of Office Employees	Per Cent of Total	Average Length of Present Employment (In Years)	Average Salary Per Month
Clerks-General	46	34.07	6.43	\$267
Bookkeepers	32	23.70	6.18	260
Secretaries	24	17.77	6.30	219
Accountants	8	5.93	4.20	255
Receptionists	8	5.93	4.64	210
Stenographers	7	5.19	7.26	214
IBM Operators	7	5.19	5.34	309
Clerk-Typists	3	2.22	4.58	267
Totals	135	100.00	6.05*	\$225*

*Averages

average salary of \$260 per month. Twenty-four or 17.77 per cent were secretaries whose average length of employment was 6.30 years and whose average salary was \$219 per month. There were eight or 5.93 per cent classified as accountants whose average length of employment was 4.20 years and whose average salary was \$255 per month. It should be pointed out that the average salary of the general clerks is higher than the average for accountants, but this is probably due to the fact that the clerks have been employed for a greater length of time. Eight or 5.93 per cent were receptionists with an average salary of \$210 per month and an average length of employment of 4.64 years. This seems to be a small group for receptionists, but in some instances secretaries and general clerks handled the duties of a receptionist but felt that they should be classified under these titles. There were seven or 5.19 per cent classified under each of the titles of stenographers and IBM operators. The average length of employment for the stenographers was 7.26 years and the average salary was \$214 per month. The IBM operators had an average length of employment of 5.34 years and their average salary of \$309 per month was the highest average for any job title listed. Only three employees or 2.22 per cent were classified as clerk typists. The average length of employment for the clerk typists was 4.58 years and \$267 per month was their average salary.

The average length of employment of the 135 office workers was 6.05 years which indicates that there is a slow turnover of office workers in this area. The average salary of the office workers was \$225 per month. The lowest salary reported was \$130 per month by a receptionist and the highest was \$500 per month and was reported by a bookkeeper.

Table III shows the salary ranges of the office workers given in monthly salaries and broken down into \$50 range groups. The first range given, \$100 through \$150, includes the salaries of 6 or 4.45 per cent of the workers. The second range \$151 through \$200, includes the salaries of 32 or 23.70 per cent. The third range, \$201 through \$250, is the largest group and includes the salaries of 42 or 31.11 per cent. Twenty-four or 17.78 per cent reported that they made between \$251 and \$300 per month; eighteen or 13.33 per cent between \$301 and \$350; ten or 7.40 per cent between \$351 and \$400; two or 1.48 per cent between \$401 and \$450; and one or .74 per cent between \$450 and \$500 per month. The largest number of workers makes between \$201 and \$250 per month.

It is the opinion of the writer that the average salary for office workers should be higher, especially when the average length of employment of 6.05 years is taken into consideration.

Table III shows that 28.15 per cent or approximately

TABLE III
THE NUMBER AND PERCENTAGE OF
BRENHAM OFFICE WORKERS IN
GIVEN SALARY RANGES

Range-Per Month	Number	Per Cent
\$100-150	6	4.45
151-200	32	23.70
201-250	42	31.11
251-300	24	17.78
301-350	18	13.33
351-400	10	7.40
401-450	2	1.48
451-500	1	.74
Total	135	100.00

30 per cent of the office workers are making \$200 or less per month and 59.26 per cent or approximately 60 per cent are making \$250 or less per month. However, the salary range is approximately the same as given by Bounds⁴ in which she found the lowest salary reported to be \$144 per month and the highest \$450 per month.

The Number of Brenham Office Workers That
Have Advanced in Salary and Position

Table IV shows the number of office workers that have advanced in salary and position in their present employment. The number of workers that have advanced in salary was: 40 general clerks, 29 bookkeepers, 20 secretaries, 7 accountants, 5 receptionists, 5 stenographers, 4 IBM operators, and 2 clerk typists. The number of workers that have advanced in position in each job classification was: 21 general clerks, 19 bookkeepers, 6 secretaries, 4 receptionists, 1 stenographer, 2 IBM operators and 2 clerk typists.

Out of 135 office workers 112 have received an advancement in salary. Fifty-seven have advanced in position; however, as previously pointed out, all of these have not been advancements in office positions. Some of the advancements have been from some other job in the same business

⁴Ibid., p. 94.

TABLE IV

THE NUMBER OF BRENHAM OFFICE EMPLOYEES IN EACH
JOB CLASSIFICATION AND THE NUMBER RECEIVING
ADVANCEMENTS IN SALARY AND POSITION
IN THE PRESENT EMPLOYMENT

Job Classification	Total in each Classification	Number Advanced in Salary	Number Advanced in Position
General Clerks	46	40	21
Bookkeepers	32	29	19
Secretaries	24	20	6
Accountants	8	7	4
Receptionists	8	5	2
Stenographers	7	5	1
IBM Operators	7	4	2
Clerk Typists	3	2	2
Total	135	112	57

concern to an office position. This fact was established in discussions with the office workers while making the survey.

The Educational Background of
Brenham Office Workers

Grade School and High School Background. The only education received by eleven of the employees in schools was in the elementary grades. Two of these attended 7 years and nine attended 8 years. This represents 8.15 per cent of the office workers included in the survey.

Fifty or 37.04 per cent indicated that they had attended high school but three of these did not graduate.

These figures include only the office workers that had no college or business school education.

Junior College Background. Data with regard to the junior college background is revealed in Table V. Fifty employees had attended junior colleges; of these 32 or 64 per cent of those attending graduated and 18 or 36 per cent did not graduate. They attended four junior colleges: Blinn Junior College, Del Mar Junior College, Victoria Junior College, and Our Lady of Victory Junior College. Forty-seven attended Blinn and one each attended Del Mar, Victoria, and Our Lady of Victory. There were 30 graduates from Blinn and one each from Del Mar and Victoria. Seventeen of the employees that attended Blinn did not graduate and the one that

TABLE V
JUNIOR COLLEGE BACKGROUND OF
BRENHAM OFFICE EMPLOYEES

Name of Junior College	<u>Graduates</u>		<u>Non-Graduates</u>	
	Number Attended	Average Length of Attendance (in years)	Number Attended	Average Length of Attendance (in years)
Blinn Junior College	30	2.00	17	.89
Del Mar Junior College	1	2.00	0	.00
Victoria Junior College	1	2.00	0	.00
Our Lady of Victory	0	.00	1	1.00
Total	32	2.00*	18	.89*

*Averages

attended Our Lady of Victory did not graduate. There were 32 junior college graduates and 18 non-graduates. The average length of attendance for the graduates was 2 years and for the non-graduates .89 of a year. Twenty-seven of the graduates and 9 of the non-graduates were business majors and represented 70.2 per cent of those attending junior college and 29.8 per cent had various other majors.

This shows that approximately 30 per cent of those who have attended a junior college have very little education that would be of benefit to them in office work.

A small number of employees that have attended a junior college also attended a senior college but did not change their major.

Senior College Background. Table VI shows the data with regard to the senior college background of the office workers. Twelve of the office employees attended six different senior colleges. Six of these attended Sam Houston State Teachers College, 2 attended Texas Christian University, and 1 employee attended each of the following: North Texas State, Texas A & M College, Southwest Texas State, and the University of Texas. Only four of these received degrees. One majored in business administration and received a degree from Sam Houston and one received a degree in accounting from Southwest Texas State. The other two persons receiving a degree did not have a business major. One received a degree

TABLE VI
SENIOR COLLEGE BACKGROUND OF
BRENHAM OFFICE EMPLOYEES

Name of Senior College	Total Number Attended	Majors	Minors	Average Length of Attendance (in years)	Number Received Degrees	Number Did Not Graduate
Sam Houston State Teachers College	1	Elem. Ed.	English	4	1	0
North Texas State	1	Bus. Ad.	Math	4	1	0
A & M College of Texas	1	Agronomy	None	4	1	0
Southwest Texas State	1	Accounting	None	4	1	0
Sam Houston State Teachers College	4	Bus. Ad.	None	1	0	4
Sam Houston State Teachers College	1	Education	Bus. Ad.	3	0	1
Texas Christian University	1	Music	None	3	0	1
Texas Christian University	1	Sec. Science	None	1	0	1
University of Houston	1	Accounting	Math	2	0	1
Total	12			2.4	4	8

in elementary education from Sam Houston and the other received a degree in agronomy from Texas A & M.

Eight employees attended a senior college but did not graduate. Of these, four majored in business administration and one in education at Sam Houston State Teachers College, two attended Texas Christian University and majored in secretarial science and music. The other one attended the University of Houston and majored in accounting.

The average length of senior college attendance was 2.4 years. Of the 12 employees who have attended a senior college 8 majored in some field of business.

This shows that the senior college background of Brenham office workers is slight and this becomes more evident when compared with the findings of a survey made in Huntsville, Texas, by Gilmore.⁶ He found that out of 127 office workers, seventy-nine or 62.2 per cent had attended a senior college compared to twelve or 8.89 per cent in Brenham.

Business School Background. Table VII gives the data regarding the business school background of the office workers. Twelve employees attended nine different business schools. Four attended Massey Business College and two of them were graduated. Durham, Heronymus, IAS Business School,

⁶ Gilmore, op. cit., pp. 135-137.

and Southwestern Business University were reported by one employee each who were graduates. Other business schools listed were: Nixon-Clay, Draughn, and Patricia Stevens which had one employee attending each, but were not graduates. One employee reported that he had attended a business school for six months but did not give the name of the school.

The average length of time attended by the graduates was 25.5 months and by the non-graduates it was 6.3 months. The average length of time attended by the 12 employees who had attended a business school was 13.92 months.

The Educational Levels at Which Brenham Office Employees Have Taken Popular Business Courses. The educational levels at which office workers have taken the popular business courses will reflect the intensity of training and will also have a bearing on the ability of the worker to meet with the demands of office work.

The number and per cent of office workers who have taken popular business courses in high school, junior college, senior college, and business schools are presented in Table VIII. Typewriting, bookkeeping, and shorthand were reported as being the most popular business courses taken in high school. There were 106 or 78.52 per cent reporting that they had taken typewriting; sixty-two or 45.93 per cent took bookkeeping, and forty-seven or 34.81 per cent took shorthand. Other high school business courses taken were reported as

TABLE VII
BUSINESS SCHOOL BACKGROUND OF
BRENHAM OFFICE EMPLOYEES

Name of Business School	<u>Graduates</u>		<u>Non-Graduates</u>	
	Number Attended	Average Length of Attendance (in months)	Number Attended	Average Length of Attendance (in months)
Massey Business College	2	27	2	7.5
IAS Business College	1	36	0	.0
Southwestern Business University	1	9	0	.0
Nixon-Clay Business School	0	0	1	8.0
Heronymus Business School	1	12	0	.0
Draughn Business School	0	0	1	6.0
Patricia Stevens Business School	0	0	1	3.0
Durham Business College	1	18	0	.0
(Name not Given)	0	0	1	6.0
Total	6	25.5	6	6.3

TABLE VIII

NUMBER AND PERCENTAGES OF BUSINESS COURSES TAKEN BY
BRENHAM OFFICE EMPLOYEES IN HIGH SCHOOL, JUNIOR,
COLLEGE, SENIOR COLLEGE, AND BUSINESS SCHOOL

Business Course	High School		Junior College		Senior College		Business School	
	#	%	#	%	#	%	#	%
Typewriting	106	78.52	45	33.33	2	1.48	12	8.89
Shorthand	47	34.81	25	18.52	1	.74	11	8.15
Bookkeeping	62	45.93	23	17.04	2	1.48	8	5.93
Accounting	0	.00	27	20.00	3	2.22	7	5.19
Office Machines	1	.74	26	19.26	2	1.48	7	5.19
Filing	6	4.44	13	9.63	0	.00	6	4.44
Business English	15	11.11	20	14.81	1	.74	9	6.67
Business Mathematics	18	11.85	24	17.78	1	.74	7	5.19
Business Law	9	6.67	20	14.81	3	2.22	4	2.96
Office Practice	0	.00	3	2.22	0	.00	0	.00
Secretarial Training	1	.74	3	2.22	0	.00	0	.00
General Business	1	.74	0	.00	0	.00	0	.00

follows: business mathematics, eighteen or 11.85 per cent; business English, fifteen or 11.11 per cent; business law, nine or 6.67 per cent; filing, six or 4.44 per cent; and one or .74 per cent reported office machines, secretarial training, and general business.

Those employees that had attended a junior college took a great many different business courses. Typewriting was taken by forty-five or 33.33 per cent of the total office workers. Fifty employees had attended a junior college; therefore, this shows that only five of the employees that had attended a junior college did not take typewriting at this level. It was noted, however, that these five had taken typewriting in high school. The other business courses taken in junior college were reported as follows: shorthand, twenty-five or 18.52 per cent of the total employees; accounting, twenty-three or 17.04 per cent; office machines, twenty-six or 19.26 per cent; filing, thirteen or 9.63 per cent; business English, twenty or 14.81 per cent; business law, twenty or 14.81 per cent; business mathematics, twenty-four or 17.78 per cent; office practice, three or 2.22 per cent; and secretarial training, three or 2.22 per cent.

Typewriting, accounting, office machines, shorthand, business mathematics, bookkeeping, business English, and business law were the most popular business courses taken

in junior college.

The number of employees taking business courses on the senior college level were reported as follows: three or 2.22 per cent took accounting and business law, two or 1.48 per cent took typewriting, and one or .74 per cent took shorthand, business English, and business law.

The number of business courses taken on the senior college level seems small in view of the fact that eight employees who have attended senior colleges were business majors. However, only two of them earned a degree.

Twelve employees attended a business school and reported that the following courses were taken at this level: typewriting, twelve or 8.89 per cent of the total office workers; shorthand, eleven or 8.15 per cent; business English, nine or 6.67 per cent; bookkeeping, eight or 5.93 per cent; seven or 5.19 per cent took accounting, office machines, and business mathematics; six or 4.44 per cent took filing; and four or 2.96 per cent took business law.

Duties Performed by Brenham

Office Employees

One of the most effective means of determining the educational needs of a local community is by finding out what duties are being performed by the present employees. This information is given in Table IX. As this table

indicates, there is a wide variety of duties performed by the present employees. Typing, handling money in the office, and preparing statements are the principal duties performed. Typewriting is done by 124 or 91.85 per cent of the workers, eighty-nine or 65.93 per cent handle money in the office, and seventy-seven or 57.04 per cent prepare statements. Banking activities, sorting and distributing mail, and composing letters are also performed by a large number of employees: sixty-six or 48.89 per cent handle banking activities, sixty-two or 45.93 per cent sort and distribute mail, and sixty-one or 45.19 per cent compose letters. Other duties were reported as follows: filing, fifty-six or 41.48 per cent; receptionist's duties, fifty-six or 41.48 per cent; answer telephone, fifty-five or 40.74 per cent; prepare payrolls, fifty-three or 39.26 per cent; keep books, forty-nine or 36.30 per cent; shorthand, twenty-six or 19.26 per cent; dictaphone, sixteen or 11.85 per cent; and stenotype, four or 2.96 per cent.

Some of the employees who use the dictaphone stated that they also use shorthand, but that they preferred using a dictaphone because it was more convenient and saved time.

Twenty-three employees listed other miscellaneous duties, such as: auditing, preparing reports, figuring income tax for business firms and individuals, and handling personnel records. In the table these are included under

TABLE IX
DUTIES PERFORMED BY BRENHAM
OFFICE EMPLOYEES

Duties Performed	Number	Per Cent
Typewriting	124	91.85
Handle Money in Office	89	65.93
Prepare Statements	77	57.04
Banking Activities	66	48.89
Mail-Sort and Distribute	62	45.93
Compose Letters	61	45.19
Receptionist Duties	56	41.48
Filing	56	41.48
Answer Telephone	55	40.74
Prepare Payrolls	53	39.26
Keep Books	49	36.30
Shorthand	26	19.26
Dictaphone	16	11.85
Stenotype	4	2.96
Other Misc. Duties	23	17.04

miscellaneous duties.

Business Training Desired by Brenham
Office Employees

An important clue to the educational needs of a community can be established by determining what additional business training is desired by the present office employees. This information is given in Table X. This table clearly indicates that there is a need for additional training in business correspondence, forty-three or 31.86 per cent of the office employees indicated that training in correspondence was desired. Training in accounting, office machines, bookkeeping, and shorthand were also listed as being desired by a relatively large number. Thirty-four or 25.19 per cent indicated a need for additional training in accounting, thirty-two or 23.70 per cent expressed a desire for training in office machines, and twenty-eight or 20.74 per cent indicated a need for more bookkeeping. Although approximately one-third of the employees reported they had taken shorthand, twenty-four or 17.78 per cent indicated a need for additional training in this subject. Other additional training desired was reported as follows: filing, sixteen or 11.85 per cent; typewriting, seven or 5.19 per cent; business law, two or 1.48 per cent; and auditing and banking, one each or .74 per cent.

TABLE X
BUSINESS TRAINING DESIRED BY
BRENHAM OFFICE EMPLOYEES

Training Desired	Number	Per Cent
Correspondence	43	31.86
Accounting	34	25.19
Office Machines	32	23.70
Bookkeeping	28	20.74
Shorthand	24	17.78
Filing	16	11.85
Typewriting	7	5.19
Business Law	2	1.48
Auditing	1	.74
Banking	1	.74

Forty-one or 30.37 per cent indicated that no additional training was desired or needed. In view of the low education standards of the present employees this seems to be a very high percentage. However, some of them pointed out that they had been in their present jobs for a long period of time and they felt that the experience acquired on the job compensates for a lack of formal education.

A large amount of the additional training desired by the employees could be acquired by attending the local junior college and would be helpful in preparing them for possible promotions and to refresh skills that have been forgotten.

By offering a course in office practice, the future graduates of Brenham High School could get some training in these courses.

Training Background for Office Machines Used by Brenham Office Employees

Since office machines are becoming more important to the business world of today educators must decide what type of training should be given to students in the secondary schools. An important clue to the training needs is the kinds of machines that are used in the local community and the type of training background the present employees have to operate them.

The data concerning the training background for office machines used by the Brenham office workers are presented

in Table XI. The number and per cent of employees indicating that they had received training in school on the different office machines were: typewriter, 118 or 87.41 per cent; 10-key adding machine, twenty or 14.81 per cent; full keyboard adding machine, eighteen or 13.33 per cent; posting machine, five or 3.70 per cent; duplicator, six or 4.44 per cent; and checkwriting machine, addressing machine, and bookkeeping machine, two or 1.48 per cent.

The number and per cent of office workers who have had on-the-job training in the operation of office machines were reported as follows: typewriter, one or .74 per cent; 10-key adding machine, sixty-five or 48.15 per cent; full keyboard adding machine, thirty-two or 23.70 per cent; posting machine, thirty-seven or 27.41 per cent; duplicator, thirty-eight or 28.15 per cent; checkwriting machine, thirty-five or 25.93 per cent; addressing machine, twenty-six or 19.26 per cent; bookkeeping machine, fourteen or 10.37 per cent; and calculator, nine or 6.67 per cent.

A few employees indicated that they were self trained on office machines and these were reported as follows: typewriter, five or 3.70 per cent; 10-key adding machine, ten or 7.41 per cent; full keyboard adding machine, sixteen or 11.85 per cent; duplicator, seven or 5.19 per cent; checkwriting machine, one or .74 per cent; and calculator, two or 1.48 per cent.

TABLE XI
TRAINING BACKGROUND OF BRENHAM OFFICE EMPLOYEES
USING OFFICE MACHINES

Name of Machine	Self Trained		On Job Training		School Training	
	#	%	#	%	#	%
Typewriter	5	3.70	1	.74	118	87.41
10-Key Adding Machine	10	7.41	65	48.15	20	14.81
Full Keyboard Adding Machine	16	11.85	32	23.70	18	13.33
Posting Machine	0	.00	37	27.41	5	3.70
Duplicator	7	5.19	38	28.15	6	4.44
Checkwriting Machine	3	2.22	35	25.93	2	1.48
Addressing Machine	1	.74	26	19.26	2	1.48
Bookkeeping Machine	0	.00	14	10.37	2	1.48
Calculator	2	1.48	9	6.67	0	.00
Other Machines Used	3	2.22	12	8.89	0	.00

Other machines used by employees were: folding machine, graphotype machine, proof machine, microfilmer, cash register, and teletype. In Table XI these machines are included under other machines used. Fifteen employees reported that they used at least one of these machines and twelve of them received on-the-job training and three are self trained.

Table XI shows that the majority of the office workers have received on-the-job training for all office machines used with the exception of the typewriter. It was also noted that the employees that had received school training had received most of it in junior college or business school.

From the information presented, the fact that high school graduates are becoming office workers must be accepted and a suitable program in office education provided in the local high school by offering a course in office machines. The importance of teaching the use of office machines in high school is also pointed out by the following statement:

Mechanization is the keynote of today's office. Thirteen per cent of the labor force will work in these offices and the high school has a part of the responsibility for their training. It may follow that the most adequate training must include instruction in office machines.⁷

⁷B. G. Dunn, "Office Machines in High School," The Balance Sheet, Volume XXXXII, No. 5, p. 210.

Since the high school must operate within a limited budget, the basic office machines could be taught in a course, such as office practice, in which not only office machines would be taught, but other skills that would be valuable to office workers as well.

The Importance of Vocational Traits

Nearly everyone recognizes the importance of skill and training to job success. But far too many forget that character development is just as important. "Businessmen say that it is not so important to teach technical skills as it is to develop good character in students."⁸ In providing a sound program in business education, consideration must be given to the development of desirable traits. It has been shown that certain traits influence the extent to which people succeed or fail in their occupations. Price⁹ reports that in a survey of 70 corporations, only 10 per cent of the workers who lost their jobs were discharged for lack of essential skills. The other 90 per cent were let go for personal reasons.

The Brenham office workers were asked to rank twelve

⁸Herbert A. Tonne, Principles of Business Education, Second Edition, p. 64.

⁹Ray G. Price, Vernon A. Musselmann, and Edwin E. Weeks, Jr., General Business for Everyday Living, Second Edition, p. 472.

vocational traits to find out which traits were considered to be most important to them in their jobs. In tabulating the results the rank given by each employee for each trait was added together. The trait having the lowest total score was ranked number one, or the most important. The next lowest score was number two, or the second in importance, and so on until all twelve of the traits were ranked. The results are given in Table XII.

According to the ranks given by the office employees, the vocational traits were ranked in importance in the following order: accuracy, following instructions, courtesy, initiative, loyalty, promptness, speed, neatness in work, personal appearance, spelling, arithmetic, and good grammar.

Sixteen employees did not rank the traits, but did indicate that the traits are important in their work by writing several remarks on the questionnaire.

Summary

In making the survey of the Brenham office employees questionnaires were distributed to 139 full-time office workers. Of these, 135 or 97.12 per cent completed and returned it. Most of the employees showed a great deal of interest in the study and cooperation was excellent.

The employees expressed opinions that more skills are needed to work in Brenham offices than in other towns

TABLE XII
VOCATIONAL TRAITS RANKED IN ORDER OF IMPORTANCE
BY BRENHAM OFFICE EMPLOYEES

Trait	Rank	Total Score
Accuracy	1	296
Following Instructions	2	585
Courtesy	3	707
Initiative	4	737
Loyalty	5	760
Promptness	6	764
Speed	7	775
Neatness in Work	8	850
Personal Appearance	9	927
Spelling	10	955
Arithmetic	11	995
Good Grammar	12	1006

of the same size, that salaries are below average, and that most of the machines are old and out of date.

The study showed that 74.82 per cent of the workers are married and that 73.33 per cent are female. It also showed that job opportunities are few in number for office workers and that married women account for a large part of the competition for these jobs.

The most effective methods of obtaining a job in Brenham are by applying in person, getting the aid of a friend or relative, and by going to the employment agency. These three methods were used by 94.08 per cent of the present employees in getting their present jobs.

The average salary of the office workers is approximately \$225 per month with IBM operators having the highest average of \$309 per month and receptionists having the lowest average of \$210 per month. The salaries ranged from a low of \$130 per month to a high of \$500 per month.

A large number of office workers have advanced in both salary and in position in the Brenham offices which could be expected since the average length of employment for all office workers is 6.05 years.

The educational background of the office workers is not very good with approximately 50 per cent having only a high school education or less. Of these, only a small number have taken any business courses, with the exception

of typewriting, that would be beneficial in office employment. Most of the training in the use of office machines was acquired on the job. A large number of employees showed a desire for additional training in correspondence, accounting, office machines, bookkeeping, and shorthand.

The principal duties performed by the office workers were typewriting, handling money in the office, and preparing statements.

The employees ranked twelve of the most important vocational traits in the following order: accuracy, following instructions, courtesy, initiative, loyalty, promptness, speed, neatness in work, personal appearance, spelling, arithmetic, and good grammar.

CHAPTER III

EMPLOYERS' PREFERENCES

In making a study of the educational wants and needs of a local community it is very important to obtain information concerning the preferences of the local employers because local high school graduates are becoming office workers, and the employers are the people whose desires must be satisfied by the employees in order for them to be successful in their jobs. By obtaining this information it is hoped that the local school authorities will get a better idea of what should be taught in the present courses offered in the high school curriculum and to help determine whether or not new courses should be added.

The Brenham office employers were very cooperative in supplying information for the study and in many cases the writer was shown through the offices with many details being given on its methods of operation.

A number of the employers stated that invitations had been extended to the high school to have its business classes visit their places of business in order for the students to actually see office workers performing their duties. They also stated that very few visits have been made and some of them had given invitations and had never had a high school class to accept them. A few of the employers in the insurance

business also stated that they would be happy to visit the classrooms to explain the insurance business and to answer any questions the students would like to ask. However, they said that appointments would have to be made in advance.

All of the employers were very friendly and willing to cooperate in every way possible, even though many of them were busy at the time the writer called.

In making the initial call to each office, the purpose of the survey was explained to each employer and a questionnaire presented to him before permission was obtained to distribute the questionnaires to the employees. The employers' questionnaire was not the same as the employees'; however, some of the same information was sought on both for comparison purposes.

The information sought on the employers' questionnaire was: the name of the office, the name of the employer, the business classification of the office, number of office employees in the office, requirements concerning experience and education, methods used in obtaining employees, ages of present employees, scholastic shortcomings of present employees, importance of vocational traits, and office machines in the office and those that the employer feels are needed to help the office operate more efficiently.

The Response

Questionnaires were distributed to 56 office employers and 53 or 94.64 per cent were completed and returned. One of the employers that did not return his questionnaire stated that he did not feel that he had enough education to answer the questions asked, but that he would be glad to explain his "set up." The other two promised to complete theirs but failed to do so. This was considered to be a very high percentage of returns.

Size of the Offices

Employed in the 56 offices included in the survey were 139 full-time employees and 36 part-time employees. Of the part-time workers 29 were female and 22 of these were married and 7 were single. There were 7 males working part-time, of these 4 were married and 3 were single. Most of the males and single females were students at Blinn College.

The average number of full-time employees per office was 2.41 workers. The largest office employed 13 workers and the smallest offices employed one worker. There were 26 offices that employed only one worker, 11 employed two, 8 employed three, 6 employed four, 2 employed five, 2 employed seven, and 1 employed thirteen. Approximately 50 per cent of the business offices employed only one worker.

Ages of Present Employees

The employers were asked to give the number of office employees in each age group as listed in Table XIII. This information should help to determine some of the preferences of employers when hiring office workers and to show the type of competition that might be encountered when applying for an office position in Brenham.

The number of office employees in the five-year age group 23 to 27 is the largest group and contains thirty-four or 24.47 per cent of the employees. The smallest group is from 38 to 42 with eleven or 7.91 per cent of the workers. The other groups were reported as follows: 18 to 22, twenty-nine or 20.86 per cent; 28 to 32, nineteen or 13.67 per cent; 33 to 37, twenty or 14.39 per cent; and over 42, twenty-six or 18.70 per cent.

It should be noticed that approximately 80 per cent of the employees are over 22 years of age, which indicates that a high school graduate applying for a job would possibly be competing with persons who have had some office experience. However, slightly over 20 per cent are young persons which shows that employers have been hiring people who have not had much chance to get any office experience.

Business Classifications of Offices

The data with regard to the business classifications

TABLE XIII
AGES OF PRESENT OFFICE EMPLOYEES
AS GIVEN BY EMPLOYERS

Age Group	Number	Per Cent
18-22	29	20.86
23-27	34	24.47
28-32	19	13.67
33-37	20	14.39
38-42	11	7.91
Over 42	26	18.70
Total	139	100.00

of the offices surveyed are given in Table XIV. The business offices were classified into eleven categories and includes all offices in the survey. Although three employers did not return their questionnaires, the functions of their businesses were determined at the time the questionnaires were distributed.

This information should help to clarify some of the data presented in the previous chapter and that which will be presented in the following part of this chapter.

The number and percentage of businesses in each category are: professional, eleven or 19.64 per cent; retail, eleven or 19.64 per cent; service, nine or 16.07 per cent; manufacturing, seven or 12.50 per cent; finance, five or 8.93 per cent; wholesale, four or 7.14 per cent; state, four or 7.14 per cent; education, two or 3.57 per cent; and civic, county, and federal, one each or 1.79 per cent. It should also be pointed out that all of the manufacturers are wholesalers for their own products in this area.

Methods Used in Obtaining Office Employees

In order to determine the methods preferred by employers in obtaining office workers, each employer was asked to check the methods used. This data is presented

TABLE XIV
NUMBER AND PERCENTAGE OF OFFICES IN
EACH BUSINESS CLASSIFICATION

Classification	Number	Per Cent
Professional	11	19.64
Retail	11	19.64
Service	9	16.07
Manufacturing	7	12.50
Finance	5	8.93
Wholesale	4	7.14
State	4	7.14
Education	2	3.57
Civic	1	1.79
County	1	1.79
Federal	1	1.79
Total	56	100.00

in Table XV. The most popular method used by employers is the personal application method. Thirty-seven or 69.81 per cent indicated that this was one method used in securing office workers. Eighteen or 33.96 per cent use the employment agency and ten or 18.87 per cent secure their workers through the recommendations of friends. These three methods are undoubtedly the most popular methods used in Brenham in securing workers because Table I, page 17, shows that these were the three methods used by most of the employees in obtaining their present jobs. Eight or 15.09 per cent checked recommendations from business and the same number checked recommendations from schools. Only one or 1.79 per cent used newspaper advertisements and Merit System.

A number of employers also indicated during discussions, that occasionally, one of the employees working in some other part of the business is moved into the office as a promotion to that individual.

Education and Experience Required
by Brenham Employers

In order to determine the requirements desired by the local employers, each employer was asked to indicate what his requirements were concerning both education and experience.

Twenty-eight or 52.83 per cent of the employers

TABLE XV
METHODS USED IN OBTAINING EMPLOYEES

Method	Number	Per Cent
Employee Application	37	69.81
Employment Agency	18	33.96
Recommendations From Friends	10	18.87
Recommendations From Business Associates	8	15.09
Recommendations From Schools	8	15.09
Newspaper Advertisements	1	1.89
Merit System	1	1.89

require experienced office workers; twenty or 37.74 per cent will consider inexperienced workers and five or 9.43 per cent did not indicate their requirements.

This shows that approximately 50 per cent of the employers require experienced workers, but their educational requirements are not very high since almost 70 per cent required only a high school education. From the educational background of the office workers presented in Chapter II and the information given here, it can be assumed that the local employers are willing to give high school graduates a chance to become office workers.

Scholastic Weaknesses of Brenham Employees

When teaching business courses, teachers often stress the technical skills and overlook other important skills that are necessary for job success. They feel that getting the student to learn the contents of the material in the textbook is all that is necessary, and as a result many of them enter jobs without adequate preparation in the courses they have taken. In order to furnish information on some of the scholastic weaknesses of the employees in this area, the employers were asked to list the items which they felt were weaknesses in their employees.

Table XVI shows the items considered to be scholastic

weaknesses by the employers. The following number of employers listed the following: English grammar, twenty-nine or 54.72 per cent; spelling, twenty-three or 43.40 per cent; ability to compose letters, twenty-three or 43.40 per cent; punctuation, eighteen or 33.96 per cent; shorthand, fourteen or 26.42 per cent; ability to use office machines, twelve or 22.64 per cent; arithmetic, ten or 18.87 per cent; bookkeeping procedures, ten or 18.87 per cent; filing, eight or 15.09 per cent; and attention to detail, one or 1.89 per cent.

Table XVI shows that the present workers are weak in English grammar, spelling, and the ability to compose letters. Table XII shows that the employees ranked good grammar and spelling very low as a desirable trait. This indicates that the employees should place a higher value on both of these traits.

Employers' Rankings of Vocational Traits

Since the employers are the persons whose desires must be satisfied it is important to determine which vocational traits are most important to them. In order to obtain this information twelve of the more important vocational traits were listed on the employers' questionnaire and the employers were asked to rank them in the order of their importance. These were the same traits listed on the

TABLE XVI
NUMBER AND PERCENTAGE OF EMPLOYERS THAT
LISTED SCHOLASTIC WEAKNESSES
OF OFFICE EMPLOYEES

Weakness	Number	Per Cent
English Grammar	29	54.72
Spelling	23	43.40
Ability to Compose Letters	23	43.40
Punctuation	18	33.96
Shorthand	14	26.42
Ability to Use Office Machines	12	22.64
Arithmetic	10	18.87
Bookkeeping Procedures	10	18.87
Filing	8	15.09
Attention to Detail	1	1.89

employees' questionnaire and the same method of tabulating was used.

By comparing Table XII, page 46, and Table XVII, it will be noticed that there is a close correlation between the rankings of the employers and employees.

The employers ranked the traits in the following order: accuracy, courtesy, loyalty, following instructions, neatness in work, promptness, initiative, personal appearance, speed, arithmetic, good grammar, and spelling.

It should be pointed out that good grammar and spelling were noted as scholastic weaknesses by most employers. The employees also ranked them very low when ranking the vocational traits in the order of their importance. This suggests that the employees do not put a proper value on these traits, nor do the employers, if they rank them so low as desirable traits.

Office Machines Preferred By
Brenham Employers

In order to determine employer preferences of office machines in this area, the employers were asked to list the number and brand names of the machines in each office. This will also help to show the types and brands of machines that are being used by the employees.

Table XVIII shows the number and brand names of the

TABLE XVII
VOCATIONAL TRAITS RANKED IN ORDER OF IMPORTANCE
BY BRENHAM OFFICE EMPLOYERS

Trait	Rank	Total Score
Accuracy	1	129
Courtesy	2	206
Loyalty	3	273
Following Instructions	4	287
Neatness in Work	5	319
Promptness	6	327
Initiative	7	334
Personal Appearance	8	352
Speed	9	362
Arithmetic	10	388
Good Grammar	11	405
Spelling	12	522

office machines in the Brenham offices that responded to this study. There were 144 typewriters and the brand names were distributed as follows: Royal, 46; Underwood, 28; Remington, 27; IBM Electric, 26; Smith-Corona, 11; Olympia, 3; Everest, 1; Tower, 1; and R. C. Allen, 1. This indicates that the Royal typewriter is the most popular brand in this area. Underwood, Remington, and IBM were also used by a rather large number of offices and should be considered as important brands.

There were sixty-two 10-key adding machines and the distribution was as follows: Remington, 26; Burroughs, 13; Underwood, 8; Victor, 7; Monroe, 2; Sundstrand, 2; and Odhner, Royal, Addo-X, and General, 1 each. This shows that the most popular brands of 10-key adding machines are Remington, Burroughs, Underwood, and Victor.

There were 49 full keyboard adding machines. Forty-two of these were Burroughs which definitely shows that this is the most popular brand for this type of machine. The others are: National, 3; Sundstrand, 2; Smith-Corona, 1; and Allen-Wales, 1.

There were 39 calculators with the following distribution: Monroe, 11; Remington, 10; Marchants, 5; Olivetti, 4; Friden, 3; Victor, 2; Addo-X, 2; Burroughs, 1; and Totalia, 1. This indicates that Monroe and Remington are the most popular brands of calculators.

TABLE XVIII
NUMBER AND MAKE OF OFFICE MACHINES
IN BRENHAM OFFICES

Office Machines	Number	Total Number
Typewriters:		
Royal	46	
Underwood	28	
Remington	27	
IBM Electric	26	
Smith-Corona	11	
Olympia	3	
Everest	1	
Tower	1	
R. C. Allen	1	
		144
10-key Adding Machines:		
Remington	26	
Burroughs	13	
Underwood	8	
Victor	7	
Monroe	2	
Sunds trand	2	
Odhner	1	
Royal	1	
Addo-X	1	
		62
Full Keyboard Adding Machines:		
Burroughs	42	
National	3	
Sunds trand	2	
Smith-Corona	1	
Allen-Wales	1	
		49

TABLE XVIII (Continued)

Office Machines	Number	Total Number
Calculators:		
Monroe	11	
Remington	10	
Marchants	5	
Olivetti	4	
Friden	3	
Victor	2	
Addo-X	2	
Burroughs	1	
Totalia	1	
		39
Duplicating Machines:		
A. B. Dick	16	
Speed-O-Print	1	
Rocket	1	
Heyer	1	
Bohn-Rex	1	
Multigraph	1	
Gectitner	1	
		22
Copying Machines:		
Verifax	3	
Thermo-Fax	2	
Copy Flex	1	
Apeco Photo Copy	1	
Duplicopy	1	
		8
Bookkeeping Machines:		
Burroughs	28	
IBM	5	
		33

TABLE XVIII (Continued)

Office Machines	Number	Total Number
Dictaphones:		
Gray	6	
Stenorette	3	
Concertone	1	
Time-Master	1	
		11
Addressing Machines:		
Addressograph	9	
Elliott	3	
Master	1	
		13
Cash Registers:		
National	4	
Remington	1	
		5
Micro-filmers:		
Recordak	4	
		4
Checkwriters:		
Paymaster	3	
Speedrite	1	
Burroughs	1	
		5

The most popular duplicating machine is A. B. Dick with a total of sixteen. Only one machine for each of the following brands was found: Speed-O-Print, Rocket, Hayer, Bohn-Rex, Multigraph, and Gectitner. There were ten copying machines found in the offices; of these three were Verifax, two were Thermo-Fax, and one each of Copy-Flex, Apeco Photo Copy, and Duplicopy.

The most popular brand of bookkeeping machine is Burroughs with a total of twenty-eight. The number of IBM machines found was five. Out of eleven dictaphones, six were Gray, three were Stenorette, one was Concertone, and one was Time-Master. There were thirteen addressing machines; of these nine were Addressograph, three were Elliott, and one was a Master. Out of five cash registers four were National and one was Remington. There were four Recordak microfilmers. Out of five checkwriters three were Paymaster, one was Speedrite, and one was Burroughs.

Office Machines Needed

Only eleven employers showed that additional machines were needed in order for the office to operate more efficiently. The number of offices needing additional office machines were given as follows: duplicating machines, 4; calculators, 2; dictaphone, 2; adding machine, 1; typewriter, 1; postal scale, 1; and checkwriting machine, 1.

Although many employers admitted that a large number of their machines were old, they said there was no need for any additional machines.

Summary

The employers of Brenham office workers were interviewed to obtain additional information to help determine the needs of the local community. By obtaining this information it is hoped that the local school authorities will get a better idea of what should be taught in the business courses of the local high school. Fifty-six employers were interviewed and presented questionnaires; of these 53 or 94.64 per cent were completed and returned. Many of the employers expressed a desire to work more closely with the high school business teachers and have extended invitations to have the business students visit their offices.

The offices ranged in size from one to thirteen office workers with approximately 50 per cent employing only one worker. The ages of present employees indicates that local office employers have hired a few of the younger inexperienced people who have applied for jobs.

The business offices were classified under ten categories. The two largest classifications of offices were professional and retail.

The most popular methods used in obtaining office

employees were by personal application, use of the employment agency, and recommendations from friends.

The educational requirements for employing office workers are not very high with only a high school education being required by approximately 70 per cent of the employers. However, approximately 50 per cent require that they have previous experience. The employers indicated that the major scholastic weaknesses of present employees are in English grammar, spelling, and the ability to compose letters.

The most popular brands of office machines were shown to be as follows: typewriters, Royal, Underwood, Remington, and IBM; 10-key adding machine, Remington, Burroughs, Underwood, and Victor; full keyboard adding machine, Burroughs; calculators, Monroe and Remington; duplicating machines, A. B. Dick; bookkeeping machines, Burroughs; and dictaphones, Gray. There were not enough of the other machines named to determine which brands were more popular.

Most of the employers indicated that the present machines were sufficient in operating their offices, only eleven indicated a need for additional machines.

CHAPTER IV

SUMMARY AND RECOMMENDATIONS

Summary

Since the amount of published data on office workers and machines in Brenham is practically non-existent, it was the purpose of this study to obtain occupational information and present it in order to determine whether or not the present courses in Brenham High School are sufficient in preparing its graduates for local employment, if modifications should be made in the courses currently offered, or if new courses should be added to the curriculum. The information will also be used for guidance purposes.

The study was limited to the full-time office workers in Brenham, Texas. Two questionnaires were constructed; a copy of one was presented to each full-time office worker in Brenham and a copy of the other was presented to each office employer. This was the principle means of obtaining data for this study; however, the personal interview and observation method were used to some extent.

Questionnaires were distributed to 139 employees; of these 135 were completed and returned.

In making the study it was found that the married workers far outnumber the single and widowed. They account

for approximately 75 per cent of the total workers. The female workers also outnumber the males by approximately the same number. There were 101 married workers and 99 females.

Most of the respondents were very cooperative and courteous and showed a great deal of interest and concern in giving the correct responses. The percentage of returns was considered to be excellent.

The three methods used by most employees in obtaining their present jobs were by personal application, aid of a friend or relative, and through the employment agency. Over 90 per cent used one of these three methods. Personal application, however, proved to be the most effective means and was used by 56.30 per cent. Other methods used were: recommendation of a school, contacted by employer, aid of a former employer, Merit System, and answered an advertisement in paper. Only three or 2.22 per cent of the employees obtained jobs through the recommendation of a school, which shows that the local high school is doing very little in helping its graduates obtain jobs in this area.

The types of office jobs held by the workers were classified under the following eight categories: general clerks, bookkeepers, secretaries, accountants, receptionists, stenographers, IBM operators, and clerk typists. The largest number of workers were classified as general clerks.

Bookkeepers and secretaries make up the next two largest groups. The number of office workers in each job classification was as follows: general clerks, forty-six or 37.04 per cent; bookkeepers, thirty-two or 23.70 per cent; secretaries, twenty-four or 17.77 per cent; accountants, eight or 5.93 per cent; receptionists, eight or 5.93 per cent; stenographers, seven or 5.19 per cent; IBM operators, seven or 5.19 per cent; and clerk typists, three or 2.22 per cent.

The average length of employment by job classifications were as follows: general clerks, 6.43 years; bookkeepers, 6.18 years, secretaries, 6.30 years; accountants, 4.20 years; receptionists, 4.64 years; stenographers, 7.26 years; IBM operators, 5.34 years; and clerk typists, 4.58 years.

The average salaries by job classifications were: general clerks, \$267 per month; bookkeepers, \$260 per month; secretaries, \$219 per month; accountants, \$255 per month; receptionists, \$210 per month; stenographers, \$214 per month; IBM operators, \$309 per month; and clerk typists, \$267 per month.

The average length of employment is 6.05 years for all office workers and the average salary is approximately \$225 per month. The lowest salary reported was \$130 per month and the highest reported was \$500 per month. The largest number of workers makes between \$201 and \$250 per

month. This group contains 31.11 per cent of the employees and the range also includes the average of \$225 for all office workers. IBM operators have the highest average salary with an average of \$309 per month and receptionists have the lowest average of \$210 per month. In view of the average length of employment these averages seem to be low.

A large number of the employees have advanced in salary in all job classifications. This was to be expected, however, since the average length of employment for all office workers was 6.05 years. Out of 135 workers 112 have advanced in salary. Approximately 50 per cent have advanced in position.

The educational background of the present employees can be considered to be low. The study shows that approximately 45 per cent of the workers have a high school education or less. Of these 8.15 per cent have attended schools only in the elementary grades and 37.04 per cent have attended high school. Of those attending high school, three did not graduate. Fifty or 37.04 per cent of the employees attended junior colleges, but only thirty-two of these have graduated. Only twenty-seven of the graduates and nine of the non-graduates majored in some field of business. Only twelve employees have attended a senior college and of these only four have earned degrees. Two of the senior college graduates majored in some field of

business; one majored in accounting and the other was a business administration major. The other two degrees earned were in elementary education and agronomy. Of the non-graduates six majored in some field of business and the other two majored in music and education. Twelve employees attended business schools. Six of them graduated and attended for an average of 25.5 months and six were non-graduates and attended for an average of 6.3 months.

The most popular business courses taken in high school were typewriting, bookkeeping and shorthand. One hundred and six or 78.52 per cent of the employees took typewriting, sixty-two or 45.93 per cent took bookkeeping, and forty-seven or 34.81 per cent took shorthand. Other business courses taken in high school were: office machines, filing, business English, business mathematics, business law, secretarial training, and general business.

In junior college the most popular business courses taken were: typewriting, accounting, office machines, shorthand, business mathematics, bookkeeping, business English, and business law. Typewriting was the most popular and was taken by forty-five or 33.33 per cent of the total workers. The other popular courses were taken by the following number of employees: accounting, 27; office machines, 26; shorthand, 25; business mathematics, 24; bookkeeping, 23; business English, 20; and business law, 20.

The popular business courses taken in senior college were typewriting, shorthand, bookkeeping, accounting, office machines, business English, and business mathematics. Although twelve employees attended senior colleges, the largest number that have taken any of the courses listed was three.

In the business schools the most popular business courses taken were typewriting and shorthand. All twelve of the employees that attended a business school took typewriting and eleven took shorthand.

The duties that are performed by a majority of the office workers are typewriting, handling money in the office, and preparing statements. Over 90 per cent of the employees use the typewriter, over 60 per cent handle money in the office, and over 55 per cent prepare statements. Other duties performed by a relatively large number of workers are: handle banking activities, sort and distribute mail, compose letters, perform receptionist duties, filing, answer the telephone, prepare payrolls, and keep books.

Many of the office workers indicated that additional business training was desired, especially in correspondence, accounting, office machines, bookkeeping, and shorthand.

The study has also shown that most of the training on office machines used in the local offices has been acquired by on-the-job training. This is true for all machines with the exception of the typewriter. A small number of

employees stated that they were self trained in the operation of office machines. From the information obtained it can readily be seen that a course in office machines should be added to the curriculum offerings in Brenham High School.

The employees were asked to rank twelve of the most important vocational traits in the order of their importance to them on their particular jobs in order to determine which traits are the most important in the Brenham area. After tabulating the results it was found that the traits were ranked in the following order: accuracy, following instructions, courtesy, initiative, loyalty, promptness, speed, neatness in work, personal appearance, spelling, arithmetic, and good grammar.

The employers were also asked to rank the same twelve vocational traits and a close correlation can be noticed in the rankings. The employers ranked them in the following order: accuracy, courtesy, loyalty, following instructions, neatness in work, promptness, initiative, personal appearance, speed, arithmetic, good grammar, and spelling.

Both groups clearly indicated that accuracy, courtesy, following instructions, and loyalty are among the most important traits.

In making the study the writer also interviewed 56 employers and presented a questionnaire to each of them. Of the 56 questionnaires distributed, 53 or 94.64 per cent were completed and returned. During the interviews, the

writer was shown through many of the offices and explanations were given on the functions and operations of the business. A large number of the employers expressed a desire to work more closely with the school authorities and asked that the business classes visit some of their offices. Others stated that they would be happy to come to the high school and talk to the different business classes.

The business offices included in the survey were classified into nine groups with the following number of offices in each group: professional, 11; retail, 11; service, 9; manufacturing, 7; finance, 5; wholesale, 4; state, 4; education, 2; civic, 1; county, 1; and federal, 1. The offices ranged in size from one employee to thirteen employees. Employed in the offices were 139 full-time office workers and 36 part-time workers. Approximately 50 per cent of the offices employed only one office worker.

The three most popular methods used by employers in obtaining office workers are employee application, through the employment agency, and through recommendations from friends. These are the three methods indicated by over 90 per cent of the employees as the methods used in obtaining their present jobs.

Approximately 70 per cent of the employers require only a high school education for beginning workers. However, over 50 per cent require previous experience.

The Brenham employers indicated that the major scholastic weaknesses of the present office workers are in English grammar, spelling, and the ability to compose letters. Other weaknesses listed were: punctuation, shorthand, ability to use office machines, arithmetic, bookkeeping procedures, filing, and attention to detail.

The study shows that the most popular brands of office machines used in the Brenham offices are the following: typewriters, Royal, Underwood, Remington, and IBM; 10-key adding machines, Remington, Burroughs, Underwood, and Victor; full keyboard adding machines, Burroughs; calculators, Monroe and Remington; duplicating machines, A. B. Dick; bookkeeping machines, Burroughs; and dictaphones, Gray.

Only eleven employers indicated a need for additional machines. The machines needed are: duplicating machines, 4; calculators, 2; dictaphones, 2; adding machines, 1; typewriter, 1; postal scale, 1; and checkwriting machine, 1.

Recommendations

After having gathered and analyzed the data collected in this study, the writer feels that certain recommendations are in order.

1. Most of the training received on office machines has been on-the-job training and approximately twenty-five per cent of the employers have indicated that the ability

to use office machines is one of the scholastic weaknesses of the present employees. Therefore, it is evident that a course in office machines should be added to the curriculum in Brenham High School.

2. English grammar, spelling, and the ability to compose letters were shown to be scholastic weaknesses in the present employees. English grammar and spelling should be emphasized in every high school course and students should be taught to compose letters whenever possible in the business courses.

3. It has been established that the local high school is doing very little, if anything, in helping its graduates obtain jobs in the local offices. It is recommended that the school authorities cooperate with the local civic organizations, parents' groups, and the Texas Employment Commission in aiding the high school graduates in obtaining jobs in the local offices.

4. Approximately seventy per cent of the employers require only a high school education for applicants for office positions; however, approximately fifty per cent require previous experience. On-the-job training should be incorporated in the business program. If this proves to be impractical, students should be encouraged to seek office employment on weekends or during the summer months in order to gain a limited amount of experience before applying for

full-time employment.

5. It has been established that there is a need for greater cooperation between the local business employers and the school authorities. School authorities should take advantage of the opportunities offered by the local businessmen and take the business students on tours of the local offices in order to observe office personnel at work. The school authorities should also take advantage of the opportunities to have local businessmen as guest speakers in the business classes.

6. Accuracy, courtesy, loyalty, following instructions, neatness in work, promptness, and initiative are considered by the employers as the most important vocational traits for employees in Brenham offices to possess. It is recommended that these traits be strongly emphasized in all classes in the local high school.

7. The average salary of Brenham office workers is \$225 per month. In view of the long average length of employment, which is 6.05 years, it is the opinion of the writer that this is a low average salary and better salaries can be obtained by seeking employment in other cities, or by increasing skills necessary for office work through better educational preparation.

8. Because of the limited job opportunities available in the local offices and the small percentage of high school

graduates that are employed in these offices each year, it is recommended that a follow-up study be made of recent graduates in order to help determine other curriculum needs.

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APPENDIX A

SURVEY OF BRENHAM OFFICE WORKERS AND MACHINES
(Employee Questionnaire)

Name of office _____

Name of employee _____

1. Check: Male _____ Female _____ Married _____ Single _____

2. What is your job title? _____

3. Length of employment in present job: ____ years and ____ months

4. How did you obtain your present job? (Check)

Personal application _____
Aid of a friend or relative _____
Employment agency _____
Recommendation of a school _____
Other (Specify) _____

5. Did you have to write a letter of application? Yes ____ No ____

6. Salary: Monthly ____, Weekly ____, or Hourly ____
If hourly, approximate number of hours per week. ____

7. Have you advanced in your present employment?

Advanced in salary	Yes	____	No	____
Advanced in position	Yes	____	No	____

8. What duties do you perform? (Check)

Dictation _____
Shorthand _____
Stenotype _____
Typewriting _____
Handle money in the office _____
Banking activities _____
Prepare statements _____
Prepare payrolls _____
Compose letters _____
Receptionist _____
Mail - sort and distribute _____
Other (Specify) _____

9. Check the office machines you use.

	<u>Self</u>	<u>Training</u> <u>On Job</u>	<u>School</u>
Typewriter	_____	_____	_____
Duplicator	_____	_____	_____
10-key adding machine	_____	_____	_____
Full keyboard adding machine	_____	_____	_____
Addressing machine	_____	_____	_____
Posting machine	_____	_____	_____
Dictaphone	_____	_____	_____
Checkwriting machine	_____	_____	_____
Other (Specify) _____	_____	_____	_____

10. Education:

	<u>Name of School</u>	<u>No. Yrs.</u> <u>Attended</u>	<u>Did you</u> <u>Graduate?</u>
Grade School	_____	_____	_____
High School	_____	_____	_____
Business School	_____	_____	_____
Jr. College	_____	_____	_____
Sr. College	_____	_____	_____
Major _____	_____	_____	_____
Minor _____	_____	_____	_____

11. What business courses have you taken? (Check)

	<u>High</u> <u>School</u>	<u>Junior</u> <u>College</u>	<u>Senior</u> <u>College</u>	<u>Business</u> <u>School</u>
Typewriting	_____	_____	_____	_____
Shorthand	_____	_____	_____	_____
Bookkeeping	_____	_____	_____	_____
Accounting	_____	_____	_____	_____
Office Machines	_____	_____	_____	_____
Filing	_____	_____	_____	_____
Business English	_____	_____	_____	_____
Business Mathematics	_____	_____	_____	_____
Business Law	_____	_____	_____	_____
Other (Specify) _____	_____	_____	_____	_____

12. What business training have you not had that you now feel would be beneficial to you in your present job?

Typewriting	_____	Accounting	_____
Shorthand	_____	Filing	_____
Office Machines	_____	Correspondence	_____
Bookkeeping	_____	Other _____	_____

13. Rank the following characteristics in the order of their importance.

Accuracy	_____
Speed	_____
Spelling	_____
Good grammar	_____
Arithmetic	_____
Courtesy	_____
Promptness	_____
Neatness in work	_____
Personal appearance	_____
Loyalty	_____
Initiative	_____
Following instructions	_____

14. Comments:

List any comments you desire regarding Brenham office workers and the machines they use.

APPENDIX B

SURVEY OF BRENHAM OFFICE WORKERS AND MACHINES
(Employer Questionnaire)

Firm name _____

Name of owner and/or manager _____

1. Business classification:

Professional _____	Civic _____	Federal _____
Retail _____	Finance _____	Service _____
Wholesale _____	County _____	Other _____
Education _____	State _____	

2. Number of full-time employees in your office: _____

Male _____	Female _____
Married _____	Married _____
Single _____	Single _____

3. Number of part-time employees in your office: _____

Male _____	Female _____
Married _____	Married _____
Single _____	Single _____

4. How do you secure your office workers?

Employee application	_____
Employment agency	_____
Recommendations from friends	_____
Recommendations from business associates	_____
Schools	_____
Other (Specify) _____	_____

5. Requirements: (Check)

Experienced _____	High School _____
Inexperienced _____	Business School _____
	Jr. College _____
	Sr. College _____

6. Indicate the number of your employees who fall within each of the following age groups:

18-22 _____	33-37 _____
23-27 _____	38-42 _____
28-32 _____	Over 42 _____

7. Check the items listed below which you consider to be shortcomings in the scholastic preparation of your employees.

Punctuation	_____
English grammar	_____
Spelling	_____
Arithmetic	_____
Shorthand	_____
Ability to compose letters	_____
Ability to use office machines	_____
Bookkeeping procedures	_____
Filing	_____
Other (Specify) _____	_____

8. Rank the following characteristics in the order of their importance.

Accuracy	_____
Speed	_____
Spelling	_____
Good grammar	_____
Arithmetic	_____
Courtesy	_____
Promptness	_____
Neatness in work	_____
Personal appearance	_____
Loyalty	_____
Initiative	_____
Following instructions	_____

9. Check the type of office machines available to your employees:

<u>Type of Machine</u>	<u>Brand Name</u>	<u>Number</u>
Typewriters	_____	_____
10-key adding machine	_____	_____
Full Keyboard adding machine	_____	_____
Calculators	_____	_____
Cash register	_____	_____
Duplicating machine	_____	_____
Dictaphone	_____	_____
Addressing machine	_____	_____
Posting machine	_____	_____
Other (Specify) _____	_____	_____

10. What additional office machines do you need?

<u>Type of Machine</u>	<u>Brand Name</u>	<u>Number</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Vita redacted during scanning.