

A SURVEY OF HUNTSVILLE OFFICE WORKERS

by

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A THESIS

Approved:

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A SURVEY OF HUNTSVILLE OFFICE WORKERS

A THESIS

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

for the Degree

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by

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Purpose

The purpose of this study was to collect data and present it to clarify the many situations characteristic in Huntsville offices, thus giving prospective office workers of Huntsville a clearer picture of what to expect in seeking employment. // Special consideration was given to (1) the opportunities available for prospective office workers, (2) the duties performed by Huntsville office workers, (3) the educational background of Huntsville office workers, (4) the salaries of Huntsville office workers, (5) the office machines used in Huntsville offices and the training of the operators, and (6) the employment preferences of Huntsville employers of office workers.

Method

The survey method was used for this study. However, observation and personal contact of Huntsville office workers and their employers was utilized somewhat, implying a combination of personal interview and observation interwoven into the survey method.

Findings

After having gathered and analyzed pertinent information from Huntsville office workers and their employers, the following conclusions appear to be in order:

③ 1. The city of Huntsville has limited opportunities for prospective office workers because of the small number of available jobs, the slow turnover of office workers, and the competition among numerous qualified office workers. The married females with office experience and college background have the best chances for employment, and the secretarial and clerical positions offer more opportunities for advancements in salaries and positions than do any other office positions.

X 2. Typewriting, answering the telephone, and filing are the duties most performed by Huntsville office workers. The most desired training of the Huntsville office workers is more academic and shorthand training.

3. The Huntsville office workers have an outstanding educational background as a whole. Most of the office workers of Huntsville have college training.

4. The average salary for Huntsville office workers is approximately \$215 per month.

5. The office machines that are most widely used in Huntsville offices are: Royal typewriters, Burroughs adding

machines, and Ditto duplicating machines. Most Huntsville office workers were trained on the job or in school for the operation of office machines.

6. Most employers prefer office workers in the age range of 23 to 32 years of age. Accuracy, following instructions, neatness in work, courtesy, and loyalty are considered by the employers as the most essential vocational traits for employees in Huntsville offices to possess.

Approved:


Supervising Professor

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CHAPTER I

THE PROBLEM AND ITS SETTING

An objective of the business departments of high schools, colleges, and universities is the preparation of students for placement in business offices. The importance of this objective is emphasized by the demands of the employers upon the proficiency of the graduates. Therefore, an essential element of vocational business education is the knowledge of what will be required of the students under normal office working conditions.

Ignorance of occupational opportunities and requirements is inexcusable because there is an abundance of secondary data available to aid in job placement, skill development, and the general preparation of the students. This data may be secured from libraries, civic organizations, trade associations, publishers, governmental sources (local, state, and federal), and private sources.

Statement of the Problem

Regardless of the abundance of secondary data, there are specific problems that have not been studied and that do not have secondary data available. Consequently, primary data must be collected to solve a particular problem or problems that involve a particular situation or locality.

As there is very limited secondary data on Huntsville office workers and the opportunities available to prospective Huntsville office workers, this study will probe (1) into the opportunities available for prospective Huntsville office workers, (2) into the duties performed by the Huntsville office workers, (3) into the educational background of Huntsville office workers, (4) into the salaries of Huntsville workers, (5) into the office machines used in Huntsville offices and the training of operators, and (6) into the employment preferences of Huntsville employers of office workers.

Purpose of the Study

The integration of office skills and student knowledge to fill the needs and requirements for successful employment is one of the most important phases of any business education program.¹ "Our students, when they leave the classroom, must be able to apply their skills in many situations."² The various situations must be impressed upon the students in their training in order to achieve the best results.

¹Faborn Etier, "Integrating Office Skills and Knowledges," U B E A Forum, XIV (November, 1954), p. 2.

²Ibid., p. 14.

One has not accomplished a great deal when he learns to typewrite page after page of double-spaced material at sixty-five words a minute. But if he has a rapid typewriting rate and can apply his skills (a) in many situations, (b) with control, and (c) within a reasonable period of time, then he has accomplished a great deal.³

The purpose of this study has been to collect data and present it in order that prospective office workers of Huntsville might have a clearer picture of what to expect in seeking employment. This data will also be valuable to employees in their job adjustments after obtaining office positions in Huntsville.

There has been much written on the importance of higher education and its role in aiding individuals to earn a livelihood. This study delves into the educational backgrounds of the office workers of Huntsville to see what relations exist between education and job success.

The suggestions, opinions, and experiences of the present (1957) office workers of Huntsville and their employers were the basis for recommendations made upon completion of this study.

Definition of Terms

Secondary data. The term, "secondary data," applies

³Ibid., p. 14.

to all information whose collection was performed by some person or agency other than the researcher of this study.

Primary data. "Primary data" comprises all information that has been collected, observed, and recorded by the researcher for the first time. The actual data collected in this study by the writer from the office workers and their employers is referred to as primary data.

Full-time office worker. For the purpose of this study, a "full-time office worker" is one who normally works at least forty hours per week in an office and performs regular office duties. This does not include a worker who maintains office space in an office but has another line of work as a major job.

The Organization

"All research whether it utilizes primary or secondary data, must begin with determination of the general problem involved, for otherwise no direction can be given to work."⁴

In order to prevent a helter-skelter method of solving the existing problem, a well-organized procedure was outlined. The problem was stated and defined within

⁴David J. Luck and Hugh G. Wales, Marketing Research (Englewood Cliffs: Prentice-Hall, Inc., 1952), p. 96.

definite limits so that scientific methodology could be applied to its solution. Since only data pertaining to the problem could be obtained, the inefficiency of collecting irrelevant data was avoided.

A thorough study was made of similar surveys to discover possible hypotheses of the existing problem. This also gave a better background for the scientific approach to the solution.

This research was confined to the study of office workers in the city of Huntsville which is located in Walker County of southeast Texas.

The Method of Investigation

Determining the method for acquiring the primary data was of major importance. There are methods that might be effective in some instances that would completely fail in other situations; consequently, much care was taken in every detail to select and use the most effective method.

Luck and Wales⁵ lists four general methods that are popular among researchers: (1) survey, (2) observation, (3) machine, and (4) experiment.

The survey is a method of securing information by

⁵Ibid., p. 100.

asking for it. This may be done in several ways, namely: (1) by telephone, (2) by personal interview, (3) by mail, or (4) a combination of any of the other three.

Observation is a method by which the researcher sees and records what takes place. The observation is usually done by an individual; however, mechanical means for specific recordings have become popular.

The mechanical method obtains a record of certain types of facts by the use of machines. This coincides with the observation method in many respects. However, this method is very limited because of the limited capacity of available equipment.

The experiment method is distinct from the other three methods because this method is used to test the results or possible solutions of a problem. Experiments tend to prove what is actually right.

And so it should be recognized that:
(1) the experiment serves to confirm the implications of data secured by other methods (2) conversely, no experiment can be performed until tentative conclusions have been reached on the basis of data secured through other methods.⁶

After analyzing the desired pertinent data, the survey method was selected for this study because of the

⁶Ibid., p. 102.

details needed, type of sample, and economy of the study. Investigation of the other methods revealed logical reasons for avoiding their isolated use. However, observation of and personal contact with Huntsville office workers and their employers were utilized somewhat, implying a combination of personal interview and observation interwoven into the survey method.

Selection of Sample

"Sampling is the science of drawing relatively small groups that accurately represent larger groups from which they are drawn."⁷ It is obvious that the sample must be representative of the entire population to be surveyed. "A sample is representative when it provides an accurate cross-section of the characteristics of the population from which it is drawn."⁸

In selecting the sample for this survey much consideration was given to its representation. To increase the degree of accuracy of this study, the sample included all office workers in the city of Huntsville working full-time and performing regular office duties.

⁷David J. Luck and Hugh G. Wales, Marketing Research (Englewood Cliffs: Prentice-Hall, Inc., 1952), p. 174.

⁸Ibid., p. 176.

Related Studies

Many studies of office workers have been made throughout the United States in recent years. Reliable studies were made on both a local and national basis as early as 1914. A study in 1914 by the Boston Chamber of Commerce that showed the business subjects most needed was based upon the opinions of the Boston employers.⁹ The Chambers of Commerce of many cities and counties were the pioneers of this type of survey. Nevertheless, most of the office studies have been made by school authorities in recent years.¹⁰

There has not been a survey of Huntsville office workers; therefore, the need for this study is evident.

Constructing the Questionnaires

Questionnaires were the medium for obtaining the primary data for this study. They were constructed with much consideration given to the sought data, psychological problems, and respondent motivation. As the survey method is that in which the data are obtained from others, it was

⁹R. G. Walters and C. A. Nolan, "Keeping in Step with Business," Principles and Problems of Business Education (Cincinnati: South-Western Publishing Company, 1950), p. 309.

¹⁰Carroll L. Shartle, "Obtaining Occupational Information," Occupational Information (New York: Prentice Hall, Inc., 1952).

very important that the right questions be constructed in the right manner to secure as accurate and complete responses as possible.

For the sake of comparison, accuracy, and thoroughness, two questionnaires were constructed. They were:

- (1) a questionnaire for Huntsville office workers and
- (2) a questionnaire for the employers of Huntsville office workers.

The Huntsville office worker's questionnaire. This questionnaire was designed to be the major medium for data collection from the office workers in Huntsville. As much primary data had to be collected by use of this questionnaire, it was necessary to use a planned scheme of questioning in order to include all sought data as well as for the sake of brevity and simplicity.

All the sought data was listed in question form. This data was organized and combined into the questionnaire shown in Appendix A. Notice that the questionnaire was arranged to motivate responses, as many of the questions can be answered with a simple check, a "yes," or "no." Thus the questionnaire can be answered in less than five minutes even though it is three and a half pages in length.

Identification of the respondent is always important on any questionnaire. This makes it more authoritative and

reliable from several standpoints. Naturally, this identification serves as (1) proof of legitimacy for the survey, (2) a source of comparison, (3) individuality in data tabulation, and (4) a test for validity for each questionnaire. The identification for this particular questionnaire included several items: namely, name of the office, name of office employee, and marital status and sex of respondent.

Questions 1 and 2 sought information pertaining to methods of obtaining present office position. For the convenience of the respondents these questions were designed to save time, to make answering easy, and to motivate the answering of the remainder of the questionnaire. In question 1, four popular methods are listed, allowing each method to be answered with a check. Also, a blank is provided for other methods to be specified. A simple "yes" or "no" indicates the requirements on the letter of application in question 2.

Ordinary job data were sought in questions 3, 4, 5, and 6. Length of employment, job title, monthly salary, and advancements are covered by these questions.

The educational and training background of the office worker are covered in questions 7 and 8. By the tabulated design of these questions, a maximum amount of detailed data was sought, requiring very little effort on the part of the respondents. Blanks were also provided in these questions

to obtain the various educational and training data characteristic of the individual respondent.

The common duties of office workers are listed in question 9 to be checked by the respondent. In addition, blanks were provided for others to be specified. Closely related to the office duties are office machine operations which are covered thoroughly by question 9. This question covers machines training and the machines used in conducting daily office duties.

There are certain vocational traits noted to have a bearing on success or failure of office workers. The most important of these characteristics are listed in question 11, to be rated as to importance in job responsibilities.

The last question sought information on the training and skills not possessed by the worker but desired by him. This question was stated to obtain the desired training and skills data that the worker feels would prove beneficial in his present position.

The questionnaire for the employers of Huntsville office workers. This questionnaire was constructed to coincide with the questionnaire for Huntsville office workers, thus some of the questions are identical or similar. However, many of the questions sought data pertaining to the employer's preferences in educational background, age groups, experience, and office machines available for

employees.

To obtain full cooperation from the employers, this questionnaire was constructed on a well-organized plan. It was carefully worded to obtain the maximum amount of necessary data with little effort on the part of the employer. Conciseness, clarity, and simplicity were considered carefully in its construction.

All the sought data were listed, organized, and combined into the questionnaire shown in Appendix B. To make the survey carry more weight, a section for the identification of the responding employer was included at the beginning of the questionnaire. This identification includes: name of office, name of employer, sex of employer, and marital status.

The number of full-time office employees employed by the responding employer was sought by the first question. This question was designed to be answered with a simple number.

Question 2 sought the methods used by employers in selecting their office employees. The most common methods were listed to be checked by the employer. A blank was provided for the employer to specify other methods used in office employee selection.

Age groups are listed in question 3 for the employer to check his or her preference. Each age group includes

five years, and the first group begins at the age 18. The last group includes all ages over 42.

Question 4 covers preferences of the employer or several miscellaneous personal data. This question sought the employer's preference on office workers on marital status, experience, sex of employee, and educational background.

The function of the business was sought in question 5. Eight of the most common functions were listed for the convenience of the employer in replying. They are: retailing, wholesaling, finance, education, civic, county, service, and professional service. A blank was provided for additional functions to be listed.

Twelve of the most common vocational traits that influence the opinion of an employer as to his employee's efficiency were listed in question 6 to be designated as essential, necessary occasionally, or not important for the employee to possess. They are: speed, spelling, arithmetic, courtesy, accuracy, good grammar, promptness, initiative, loyalty, neatness in work, personal appearance, and following instructions. Blanks were provided to allow these to be designated by a simple check to motivate accurate answers and cooperation from the employer.

Question 7 sought to obtain an office machines inventory in the businesses of Huntsville. The most common

office machines were listed with blanks for the make and number in the office to be filled in by the employer. The machines listed are: typewriter, 10-key adding machine, full keyboard adding machine, calculators, cash registers, bookkeeping machines, duplicating machines, and dictaphones. Blanks were provided for others to be listed.

The last question sought data as to the desired or needed office machines for use in the office. Several blanks were provided for naming the kind, make, and number needed.

The Response

The above mentioned questionnaires were presented directly to the office workers and their employers by the writer. In many instances, the writer waited for the questionnaire to be completed. However, many of the workers were busy and needed time to complete the questionnaires; therefore, stamped, self-addressed envelopes were left with the office workers or employers.

By making personal contact with the office workers and their employers, a high per cent of returns was received. There were 136 office workers' questionnaires issued and 127 were returned. This represents 93.38 per cent of the total. Out of the 33 employers' questionnaires issued, 30 (90.9 per cent) were returned.

CHAPTER II

A SURVEY OF HUNTSVILLE OFFICE WORKERS

In order to be thorough and accurate in this study, all the full-time office workers of the city of Huntsville were presented a questionnaire by the writer. This questionnaire was designed to secure the desired information without much effort on the part of the office workers.

The response of the office workers was extremely gratifying to the writer because of the courtesy and cooperation displayed by the respondents. As a rule, each worker was conscientious about answering questions properly. Many took time to discuss questions at length with the writer to assure themselves of presenting accurate data. Only one person showed any signs of disgust when presented the questionnaire. This person said, "I'm too busy to bother with another questionnaire. I have to put up with those things all the time." There were other instances where the office workers were busy and politely requested that the questionnaires be left with them.

The information desired from the office workers was to find out what methods were used to obtain their present jobs, were they required to write an application letter, how long had they been working for their present employer, what their job titles were, what advancements had they

made, what schools they had attended and for how long, at what stage of their education did they have business courses, what duties each office worker performed daily, what office machines did they use, how they received their office machines training, what degree of importance did they place upon certain vocational traits for office workers, and what additional training they felt would be beneficial in their present jobs.

It was found that most of the office workers were proud of their educational background and office experience. Much of the conversation between the writer and the respondents centered around these subjects. Many of the office workers felt that their background in education and actual office experience accounted for their success, contentment, and efficiency in their work.

The Number, Marital Status, and
Sex of Office Workers

In the city of Huntsville there are 136 office workers. This includes only those that work full-time in office work and perform regular office duties. The part-time office workers are not included in the above figure. There are also many workers such as dental assistants, nurses, and sales people that work an hour or two daily in the office, but because another job is their major line of work,

these people were not surveyed in this study. The employers of the office workers were not included in the above figure either, as they were surveyed separately and the results will be presented in the following chapter. Out of the 136 office workers, the writer was able to secure completed questionnaires from 127 or 93.38 per cent.

Seventeen or 13.39 per cent of the 127 office workers surveyed were single. It was found that a majority of these had been in their present position for a very short time, which is some indication that many are young and perhaps contemplating marriage. The married respondents numbered 106. This represents 83.43 per cent of the total respondents. Only four or 3.15 per cent of the respondents were widowed.

The office workers are composed of 118 females and only 9 males. This represents 92.91 per cent and 7.09 per cent respectively. The trend toward more women in office work has reached a high level as indicated by the above figures. Haynes and Jackson¹ indicated throughout their book, A History of Business Education in the United States, that females were rarely found in the offices before 1900.

¹Benjamin R. Haynes and Harry P. Jackson, A History of Business Education in the United States (New York: South-Western Publishing Company, 1935).

Methods of Obtaining Office Jobs

Table I reveals that 103 or 81.10 per cent of the office workers secured their jobs by personal application, while 18.90 per cent obtained their jobs by various other methods. Ten or 7.88 per cent of these people received aid from friends or relatives, six or 4.73 per cent were contacted by their employers, two or 1.57 per cent were recommended by schools, two or 1.57 per cent received aid from former employers, two or 1.57 per cent got jobs through the Huntsville Chamber of Commerce, one or .79 per cent did not reply, and none of the office workers received the services of an employment agency.

Table I shows the importance of making personal application for an office job in Huntsville. It also reveals that the second best method of securing an office job in Huntsville is through a friend or relative. Burden² also found this to be true in his survey of Willacy County job opportunities.

The office workers did not use an employment agency to secure jobs. As Huntsville does not have an employment

²William G. Burden, "A Survey of the Job Opportunities in Willacy County with Implications for Curriculum Revisions," unpublished Master's thesis, Sam Houston State Teachers College, Huntsville, Texas, 1956, p. 47.

TABLE I
METHODS USED BY HUNTSVILLE OFFICE EMPLOYEES
IN OBTAINING THEIR PRESENT JOBS (1957)

	Number	Per Cent
Personal Application	103	81.10
Aid of Friend or Relative	10	7.88
Contacted by Employer	6	4.73
Recommendation of School	2	1.57
Aid of Former Employer	2	1.57
Through Huntsville Chamber of Commerce	2	1.57
Merit System	1	.79
No Reply	1	.79
Employment Agency	0	0
Total	127	100.00

agency, the workers would have had to use an out-of-city employment agency which would have been inconvenient to both the prospective employer and employee. However, Sam Houston State Teachers College has a placement office that aids graduates in securing jobs.

Twenty or 15.75 per cent of the workers were required to write application letters in order to secure their present employment. A breakdown on the twenty letters written shows that the general clerks wrote ten or 50 per cent of the letters, clerk-typists wrote three or 15 per cent, secretaries wrote two or 10 per cent, receptionists also wrote two or 10 per cent. One bookkeeper, one stenographer, and one IBM operator wrote one letter each.

The Number, Average Length of Employment,
and Average Salaries

There are nine distinct and popular classifications of positions and duties of office workers in Huntsville. Table II shows that the secretaries and general clerks are the most common classifications. There are thirty-three or 25.98 per cent secretaries. General Clerks also lead the list with the same number, thirty-three or 25.98 per cent. As revealed by the above figures, these two classifications include over half of the office workers of Huntsville. There is a big drop in the number in the next ranking classification,

TABLE II

THE NUMBER, AVERAGE LENGTH OF PRESENT EMPLOYMENT,
AND AVERAGE SALARY BY JOB CLASSIFICATIONS
OF HUNTSVILLE OFFICE WORKERS (1957)

Job Classifications	Number of Office Workers	Average Length of Present Employment (In Years)	Average Salary Per Month
Secretaries	33	3.69	\$229.37
Clerks--General	33	4.39	221.58
Bookkeepers	14	4.50	209.20
Cashiers	10	4.70	210.83
Stenographers	9	2.17	183.75
IBM Operators	9	3.00	216.87
Clerks--Typists	7	1.57	200.00
Accountants	6	5.83	219.83
Receptionists	6	4.50	214.00
	127	3.82	\$215.71

bookkeeping. There are fourteen or 11.02 per cent bookkeepers, ten or 7.87 per cent cashiers, nine or 7.09 per cent stenographers, nine or 7.09 IBM operators, seven or 5.51 per cent clerk-typists, six or 4.72 per cent accountants, and six or 4.72 per cent receptionists.

Table II also reveals the average length in years that each group of workers has been in its present employment. This average was derived by taking a sum of the employment periods and dividing by the number in each group. The average secretary has been in present employment 3.69 years, the general clerks have an average of 4.39 years, the average for bookkeepers is still longer with an average of 4.5 years. Cashiers are rated second in length of present employment with an average of 4.7 years, the stenographers only have an average of 2.17 years, and the IBM operators have an average of three years. The group having the shortest period of average employment is the clerk-typists with only 1.57 years average. The accountants have the longest period of employment average with 5.83 years, and receptionists have an average of 4.5 years. The average employment period of Huntsville office workers is 3.82 years.

Table II also reveals that secretaries rank the highest in average salaries per month with \$229.37, the general clerks rank next with \$221.58, accountants rank third with \$219.83, and IBM operators rank fourth with \$216.87. Receptionists

also have a good average salary of \$214, cashiers have a \$210.83 average, bookkeepers fall slightly under that average with \$209.20. Clerk-typists and stenographers have \$200 and \$183.75 averages respectively.

The average salary for all Huntsville office workers is \$215.71 per month. The individual monthly salaries ranged from \$135 to \$350.

Advancements in Salary and Position

Table III shows that 94 out of the 127 office workers have received advancements in salary while only 51 have received advancements in position. A breakdown of Table III reveals the number that advanced in salary in each classification: 33 secretaries, 33 general clerks, 14 bookkeepers, 10 cashiers, 9 stenographers, 9 IBM operators, 7 clerk-typists, 6 accountants, and 6 receptionists.

The number to advance in position in each classification is also revealed in Table III. They are: 11 secretaries, 10 general clerks, 7 bookkeepers, 7 cashiers, 1 stenographer, 6 IBM operators, 2 clerk-typists, 4 accountants, and 3 receptionists.

The Educational Background of Huntsville Office Workers

The office workers were requested to complete a

TABLE III

THE TOTAL NUMBER OF HUNTSVILLE OFFICE WORKERS
IN EACH JOB CLASSIFICATION AND THE NUMBER
THAT HAVE RECEIVED ADVANCEMENTS IN
SALARY AND POSITION (1957)

Job Classifications	Total in Each Classification	Number Advanced in Salary	Number Advanced in Position
Secretaries	33	26	11
Clerks--General	33	24	10
Bookkeepers	14	12	7
Cashiers	10	8	7
Stenographers	9	3	1
IBM Machine Operators	9	7	6
Clerks--Typist	7	4	2
Accountants	6	6	4
Receptionists	6	4	3
Totals	127	94	51

section in the questionnaire giving their entire educational background. This included the names of the high schools, business schools, junior colleges, and senior colleges that each attended, and for how many years. A question was provided to obtain data as to the completion of each of the above phases of education. The majors and minors of those who attended senior colleges were requested. Every respondent completed this section.

It was found that 100 per cent of the Huntsville office workers are high school graduates. The list of high schools they attended is in Appendix C. Thirty-seven of the graduates finished at Huntsville High School, and the remaining 90 attended 67 different high schools.

As shown in Table IV, 27 of the office workers attended business schools for at least three months each. The longest period of attendance in any case was 24 months, and the average as a whole for the graduates was 11 months, compared to an average of only 4.33 months for the non-graduates. Out of the 27, only 6, or 22.22 per cent, did not graduate.

Table IV also reveals that twenty different business schools were attended by the office workers. The number to attend each school is as follows: Federal Institute, 3; Comptometer Business School, 1; Lawrence Business School, 1; Massey Business College, 6; Felt and Tarrant Comptometer

TABLE IV
BUSINESS SCHOOL BACKGROUND OF
HUNTSVILLE OFFICE WORKERS
(1957)

Name of Business School	Graduates		Non-Graduates	
	Number Attended	Average Length of Attendance (In Months)	Number Attended	Average Length of Attendance (In Months)
Federal Institute (Tyler & Dallas)	3	15	0	0
Comptometer Business School (Tyler)	1	12	0	0
Lawrence Business School (Lawrence, Kansas)	1	12	0	0
Massey Business College (Houston)	3	10	3	5
Felt & Tarrant Comptometer School (Dallas)	1	3	0	0
Miller-Hawkins Business School (Memphis, Tenn.)	1	12	0	0
Metropolitan Business School (Dallas & Galveston)	1	12	1	3
Austin Business College (Austin)	1	4	0	0
Tyler Commercial College (Tyler)	2	14	0	0
Wichita Business College (Wichita, Kansas)	1	12	0	0

TABLE IV (continued)
BUSINESS SCHOOL BACKGROUND OF
HUNTSVILLE OFFICE WORKERS
(1957)

Name of Business School	Graduates		Non-Graduates	
	Number Attended	Average Length of Attendance (In Months)	Number Attended	Average Length of Attendance (In Months)
Hamilton School of Commerce (Hamilton, Iowa)	1	12	0	0
Southwestern Business School (Houston)	1	12	0	0
Bish Mathis Institute	1	12	0	0
Byrne Business College	1	3	0	0
Durham Business College	3	11	1	6
Draughan's Business College	2	9	0	0
Nixon Business School	1	24	0	0
Elliot Business College	1	4	0	0
Miller School of Business (Cincinnati, Ohio)	0	0	1	2
Chenier Business School (Beaumont)	1	12	0	0
	27	11	6	4.33

School, 1; Miller-Hawkins Business School, 1; Metropolitan Business School, 2; Austin Business School, 1; Tyler Commercial College, 2; Wichita Business College, 1; Hamilton School of Commerce, 1; Southwestern Business School, 1; Bish Mathis Institute, 1; Byrne Business College, 1; Durham Business College, 4; Draughan's Business College, 2; Nixon Business School, 1; Elliott Business College, 1; Miller School of Business, 1; and Chenier Business School, 1.

Table V shows that 11 office workers attended junior colleges. Six of these graduated, and 5 did not. The average length of attendance for the graduates was 2 years, while the non-graduates' average was only a year. There were eight junior colleges attended. The number that attended each is as follows: Tyler Junior College, 3; Henderson County Junior College, 2; Jacksonville Baptist Junior College, 1; Navarro Junior College, 1; Southwest Bible College, 1; Whitworth Junior College, 1; Lon Morris Junior College, 1; and West Minister Junior College, 1.

Tables VI and VII show that 79 or 62.20 per cent of the office workers attended a senior college for at least a year. Fifty-four or 68.35 per cent of these 79 attended Sam Houston State Teachers College, and the remaining 25 or 31.65 per cent attended various other senior colleges as shown in Table VII. Twenty-four or 18.90 per cent of the office workers have senior college degrees, and the over-all average

TABLE V
JUNIOR COLLEGE BACKGROUND OF
HUNTSVILLE OFFICE WORKERS
(1957)

Name of Junior College	Graduates		Non-Graduates	
	Number Attended	Average Length of Attendance (In Years)	Number Attended	Average Length of Attendance (In Years)
Tyler Junior College	2	2	1	1
Henderson County Junior College	1	2	1	1
Jacksonville Baptist Junior College	0	0	1	1
Navarro Junior College	0	0	1	1
Southwest Bible College	0	0	1	1
Whitworth Junior College	1	2	0	0
Lon Morris Junior College	1	2	0	0
West Minister Junior College	1	2	0	0
	6	2	5	1

TABLE VI

SAM HOUSTON STATE TEACHERS COLLEGE BACKGROUND
OF HUNTSVILLE OFFICE WORKERS (1957)

Total Number Attended	Major	Minor	Average Length of Attendance (In Years)	Number Received Degrees	Number Did Not Graduate
19	Business Adm.	English	2.55	10	9
6	Business Adm.	None	1.91	1	5
1	Business Adm.	Music	1.00	0	1
1	History	Business Adm.	1.00	1	0
3	History	English	2.67	2	1
1	Music	None	1.00	0	1
1	Music	English	1.50	0	1
1	Home Economics	None	1.00	0	1
2	Home Economics	Physical Ed.	1.50	0	2
4	None	None	1.38	0	4
1	English	Spanish	2.00	0	1
3	English	None	1.83	0	3

TABLE VI (continued)
 SAM HOUSTON STATE TEACHERS COLLEGE BACKGROUND
 OF HUNTSVILLE OFFICE WORKERS (1957)

Total Number Attended	Major	Minor	Average Length of Attendance (In Years)	Number Received Degrees	Number Did Not Graduate
1	Journalism	None	1.00	0	1
1	Library Science	English	1.00	0	1
1	Elementary Ed.	English--Science	3.00	0	1
1	Elementary Ed.	Music	1.50	0	1
1	Elementary Ed.	Biology--English	4.00	1	0
1	Art	Home Economics	1.00	0	1
1	Speech	Home Economics	4.00	1	0
2	Physical Ed.	None	2.50	1	1
1	Physical Ed.	Sociology	1.00	0	1
1	Chemistry	General Science	3.00	0	1
54			1.88	17	37

TABLE VII
SENIOR COLLEGE BACKGROUND (OTHER THAN SAM HOUSTON
STATE TEACHERS COLLEGE) OF HUNTSVILLE
OFFICE WORKERS (1957)

Name of Senior College	Total Number Attended	Majors	Minors	Average Length Attendance (In Years)	Number Received Degrees	Number Did Not Graduate
Colo. St. C. of Education	1	Business Adm.	Home Eco.	2.00	0	1
Geo. Washington U.	1	English	Sociology	4.00	1	0
Kansas State C.	1	English	Speech-Business Adm.	2.00	0	1
Louisiana State U.	1	Business Adm.	None	1.50	0	1
Millsap U.	1	English	Journalism	1.00	0	1
North Texas State	1	Business Adm.	None	2.00	1	1
North Texas State	1	Music	None	1.00	0	1
North Texas State	1	Journalism	None	1.00	0	1
So. Methodist U.	2	Business Adm.	None	2.00	1	1
So. Methodist U.	2	Art	English	3.00	1	1
Southwest T. S. C.	1	Business Adm.	None	2.50	0	1

TABLE VII (continued)

SENIOR COLLEGE BACKGROUND (OTHER THAN SAM HOUSTON
STATE TEACHERS COLLEGE) OF HUNTSVILLE
OFFICE WORKERS (1957)

Name of Senior College	Total Number Attended	Majors	Minors	Average Length Attendance (In Years)	Number Received Degrees	Number Did Not Graduate
Southwest T. S. C.	1	Elementary Ed.	None	2.00	0	1
Southwest T. S. C.	1	Home Eco.	Science	4.00	1	0
Stephen F. Austin State T. C.	1	Business Adm.	None	1.00	0	1
Stephen F. Austin State T. C.	1	Elementary Ed.	English	1.50	0	1
Texas A. & M.	1	Agriculture	Economics	1.00	1	0
Texas State C. for Women	2	Business Adm.	English	2.00	0	2
Trinity U.	1	Physical Ed.	None	1.00	0	1
U. of Texas	1	Music	None	2.50	1	0
U. of Texas	1	Journalism	None	1.00	0	1

TABLE VII (continued)

SENIOR COLLEGE BACKGROUND (OTHER THAN SAM HOUSTON
STATE TEACHERS COLLEGE) OF HUNTSVILLE
OFFICE WORKERS (1957)

Name of Senior College	Total Number Attended	Majors	Minors	Average Length Attendance (In Years)	Number Received Degrees	Number Did Not Graduate
U. of Texas	1	Government	Education	4.00	1	0
U. of Texas	1	None	None	1.00	0	1
	25			1.68	7	18

length of senior college attendance was 1.8 years.

Sam Houston State Teachers College has been the major source of training for the college graduates among the Huntsville office workers. Table VI shows the majors, minors, average length of attendance, and number who received degrees among the 54 who attended Sam Houston State Teachers College. Seventeen or 31.48 per cent of the 54 received degrees. The attendance period ranged from one year to four years; thus the average as a whole was 1.88 years. It was found, as shown in Table VI, that 26 or 48.15 per cent of the 54 that attended Sam Houston State Teachers College were business administration majors with 19 minoring in English, 6 without a minor, and one minoring in music. Eleven or 42.31 per cent out of these 26 received degrees. There were four history majors, three of whom minored in English and one in business administration. Three of these received degrees.

Table VI also shows that two music majors with one minoring in English and the other without a minor did not complete requirements for degrees. There were three home economics majors with two minoring in physical education and the other without a minor. These three office workers did not receive degrees.

Four of the office workers attended Sam Houston State Teachers College without designating majors or minors. None of these received degrees. There were four English majors,

one minoring in Spanish and three without minors. None of these received degrees. Five of the office workers had the following majors: journalism, library science, art, speech, and chemistry. Their minors were none, English, home economics, general science, and home economics respectively. The journalism, library science, art, and chemistry majors received degrees. There were three elementary majors with English-science, music, and biology-English minors. Two of these received degrees. Two of the three physical education majors have degrees, and two of these three do not have minors while the third has a minor in sociology.

The average length of attendance of those 54 office workers that attended Sam Houston State Teachers College was 1.88 years. Table VI shows the breakdown by majors and minors. This is summarized as follows: Business administration major with English minor, 2.55 years; business administration major without minor, 1.91 years; business administration major with music minor, 1 year; history major with business administration minor, 1 year; history major with English minor, 2.67 years; music major without minor, 1 year; music major with English minor, 1.5 years; home economics major and physical education minor, 1.5 years; no majors or minors, 1.38 years; English major with Spanish minor, 2 years; English major without minor, 1.83 years; journalism major without minor, 1 year; library science

major with English minor, 1 year; elementary education major with English and science minor, 3 years; elementary education major with music minor, 1.5 years; elementary education major with biology and English minors, 4 years; art major with home economics minor, 1 year; speech with home economics minor, 4 years; physical education major with sociology minor, 1 year; physical education major without minor, 2.5 years; and chemistry major with general science minor, 3 years.

Table VII shows the senior college background for those office workers that attended senior colleges other than Sam Houston State Teachers College. Twenty-five attended 13 different senior colleges and seven or 28 per cent of these 25 received degrees. The over-all average length of attendance was 1.68 years.

Since most individuals that plan to enter the business world major in business administration, it was interesting to find that thirty-three or 41.77 per cent of the Huntsville office workers that attended senior college were business administration majors. This is shown in Tables VI and VII, pages 30 and 32 respectively; 26 attended Sam Houston State Teachers College, and seven attended various other senior colleges or universities.

As shown in Table VII, one business administration major with a home economics minor attended Colorado State

College of Education for two years and did not graduate.

One office worker also attended George Washington University, majoring in business administration and minoring in science, and was graduated after four years of attendance. Another attended Kansas State College for two years with an English major and a combination of speech and business administration as minors. One attended Louisiana State University with a major in business administration for one and a half years and did not finish. Another attended Millsap University for one year with an English major and journalism minor and did not finish.

Four of the office workers attended Southern Methodist University. Two with majors in business administration without minors attended for an average of two years each; one graduated and one did not.

Three attended Southwest Texas State Teachers College. One majored in business administration without a minor for two and a half years and did not graduate. One majored in elementary education without a minor for two years and did not graduate. The third one majored in home economics with a science minor for four years and received a degree.

Table VII also reveals that three office workers attended North Texas State University. All of these attended for only one year each. Their majors were business administration, music, and journalism without minors.

Two of the office workers attended Stephen F. Austin State Teachers College. One business administration major without a minor attended for only a year. The other majored in elementary education with an English minor for one and a half years.

One office worker attended Texas A and M for one year, majoring in agriculture and minoring in economics. Another attended Trinity University for one year with a major in physical education without a minor. Two attended Texas State College for Women with a major in business administration and an English minor for two years each.

Four office workers attended the University of Texas: one music major without a minor for two and a half years, one journalism major without a minor for one year, one government major with education minor for four years, and one without a major or minor for one year.

The Educational Levels at Which Huntsville
Office Workers Took Popular Business
Courses

Some of the most popular and beneficial business courses can be taken in high school, business school, junior college, or senior college. Of course, the intensity of the courses varies with the educational level. The main courses are typewriting, shorthand, bookkeeping, accounting, office

machines, filing, business English, and business mathematics. All of these courses were listed on the office workers' questionnaire with blanks provided to allow the office workers to indicate the levels at which these courses were taken.

Blanks were also provided for the office workers to list other business courses that proved to be beneficial to them in their work. The only other important course listed for the high school level was office practice. The courses listed for the business school level were PBX operation, spelling, business law, handwriting, teletype, and dictaphone operation. Secretarial training was the only other course listed on the junior college level. Several courses were listed on the senior college level, and they were report writing, office management, business law, business organization and finance, marketing, business psychology, statistics, retail business psychology, and salesmanship. These are included within the section, "Other Important Courses," in Table VIII.

Table VIII shows the number and percentage of the office workers taking each course at each level. The number and per cent of office workers that took these basic courses in high school are: typewriting, eighty-eight or 69.29 per cent; shorthand, forty-six or 36.22 per cent; bookkeeping, fifty or 39.37 per cent; accounting, eleven or 8.66 per cent; office machines, eight or 6.30 per cent; filing, seventeen or

TABLE VIII

NUMBER AND PERCENTAGE OF HUNTSVILLE OFFICE WORKERS
WITH THE BACKGROUND OF POPULAR BUSINESS COURSES
TAKEN IN HIGH SCHOOL, BUSINESS SCHOOL,
JUNIOR COLLEGE, AND SENIOR COLLEGE
(1957)

Business Courses	High School		Business School		Junior College		Senior College	
	#	%	#	%	#	%	#	%
Typewriting	88	69.29	27	21.27	5	3.94	49	38.58
Shorthand	46	36.22	26	20.47	5	3.94	41	32.28
Bookkeeping	50	39.37	21	16.54	5	3.94	9	7.09
Accounting	11	8.66	12	9.45	5	3.94	20	15.75
Office Machines	8	6.30	22	17.32	3	2.36	11	8.66
Filing	17	13.39	25	19.69	3	2.36	8	6.30
Business English	21	16.54	26	20.47	7	5.51	19	14.96
Business Math	31	24.41	14	11.02	3	2.36	21	16.54
Other Important Courses	2	1.57	8	6.30	1	.78	28	22.05

13.39 per cent; business English, twenty-one or 16.54 per cent; business math, thirty-one or 24.41 per cent; and other business courses listed, two or 1.57 per cent.

The number and per cent of office workers that took the above courses in business school are: typewriting, thirty-two or 25.10 per cent; shorthand, thirty-one or 24.41 per cent; bookkeeping, twenty-one or 16.54 per cent; accounting, twelve or 9.45 per cent; office machines, twenty-two or 17.32 per cent; filing, 25 or 19.69 per cent; business English, twenty-six or 20.47 per cent; business math, fourteen or 11.02 per cent; and other important courses listed, eight or 6.30 per cent.

As also revealed by Table VIII, the number and per cent of Huntsville office workers that took the popular business courses in junior college are: typewriting, five or 3.94 per cent; shorthand, five or 3.94 per cent; bookkeeping, five or 3.94 per cent; accounting, five or 3.94 per cent; office machines, three or 2.36 per cent; and other important business courses listed, one or .78 per cent.

A further breakdown of Table VIII shows the following number and per cent of office workers that took the popular business courses in senior colleges: typewriting, forty-nine or 38.58 per cent; shorthand, forty-one or 32.28 per cent; bookkeeping, nine or 7.09 per cent; accounting, twenty or 15.75 per cent; office machines, eleven or 8.66 per cent;

filling, eight or 6.30 per cent; business English, nineteen or 14.96 per cent; business math, twenty-one or 16.54 per cent; and other important business courses listed, twenty-eight or 22.05 per cent.

The Duties of Huntsville Office Workers

There are certain duties that are common to most office workers. These duties were listed on the questionnaire for the office workers to indicate if they have to perform them in their routine jobs. These duties were: take dictation in shorthand, typewrite, keep books, file, handle money in the office, banking activities, prepare statements, prepare payrolls, compose letters, reception duties, and answer the telephone.

In order to cover all the duties performed by the Huntsville office workers, blanks were provided for additional duties to be added to the list. The additional duties that were listed by the office workers are: billing, compile and prepare reports, supervising other office duties, open mail, stamp mail, sort mail, transcribe dictation from the dictaphone, take minutes at conferences, posting, proofing of invoices and reports, and operate technical office machines. The section labeled "Other" in Table IX includes all these duties.

Table IX shows the number and per cent of office

TABLE IX
THE DUTIES OF HUNTSVILLE OFFICE
WORKERS (1957)

Duties Performed	Number	Per Cent of Total
Typewrite	120	94.49
Answer the Telephone	110	86.61
File	109	85.83
Compose Letters	86	67.72
Reception Duties	65	51.18
Handle Money in Office	59	46.46
Keep Books	59	46.46
Prepare Statements	51	40.16
Banking Activities	46	36.22
Take Dictation in Shorthand	43	33.86
Prepare Payrolls	40	31.50
Other	45	35.43

workers that perform each duty. A breakdown of the table reveals the following: typewrite, 120 or 94.49 per cent; answer the telephone, 110 or 86.61 per cent; file, 109 or 85.83 per cent; compose letters, 86 or 67.72 per cent; reception duties, 65 or 51.18 per cent; handle money in office, 59 or 46.46 per cent; keep books, 59 or 46.46 per cent; prepare statements, 51 or 40.16 per cent; banking activities, 46 or 36.22 per cent; take dictation in shorthand, 43 or 33.86 per cent; prepare payrolls, 40 or 31.50 per cent; and other duties listed, 45 or 35.43 per cent.

Perhaps the most interesting thing about the above data is that 120 out of 127 office workers typewrite in their daily office duties. This is an indication of the importance that typewriting plays in the business world.

Training Background for Operation of Office Machines Used by Huntsville Office Workers

Office machines have become a necessity for most of the offices of today because they save time, labor, and money for the businesses. An office without the proper office machines is like a farmer without a plow. However, most office machines are somewhat complicated for the layman and require a certain amount of training before a satisfactory degree of speed and efficiency is reached.

There are three common methods of training for the

operation of office machines. They are self training, on-the-job training, and school training. Some office machines are simple to operate and require little training. Therefore, an individual can easily develop speed and efficiency without instruction. Some office workers also receive training on the job with occasional help from fellow workers. Others have the opportunity to receive office machine training in school.

Table X shows the per cent of Huntsville workers that were self trained, trained on the job, and trained in school on various basic office machines. These machines are typewriter, ten-key adding machine, full keyboard adding machine, calculator, cash register, bookkeeping machine, duplicating machine, dictaphone, and check protector. In Table X, "Other Miscellaneous Office Machines" include the following office machines: comptometer, recordak, dextigraph, postage meter, multilith, audiograph, proofing machine, IBM technical machines, and verifax.

The per cent of office workers that trained themselves for each office machine is shown in Table X. These include the following: typewriter, 16.54 per cent; ten-key adding machine, 17.32 per cent; full keyboard adding machine, 14.17 per cent; calculator, 6.30 per cent; cash register, 6.30 per cent; bookkeeping machine, 3.15 per cent; duplicating machine, 3.94 per cent; dictaphone, .78 per cent; and check protector,

TABLE X
 TYPES OF TRAINING BACKGROUND FOR OFFICE
 MACHINES USED BY HUNTSVILLE
 OFFICE WORKERS (1957)

Name of Machine	Self Trained %	Trained on the Job %	School Training %
Typewriter	16.54	22.83	79.53
10-Key Adding Machine	17.32	36.22	22.83
Full Keyboard Adding Machine	14.17	31.49	24.41
Calculator	6.30	24.41	14.96
Cash Register	6.30	18.11	.78
Bookkeeping Machine	3.15	21.60	7.87
Duplicating Machine	3.94	24.41	15.75
Dictaphone	.78	14.17	7.09
Check Protector	2.36	25.20	1.57
Other Miscellaneous Office Machines	0	28.35	2.36

2.36 per cent.

Some of the office workers trained themselves and also received training on the job on some machines. The per cent of the office workers that were trained on the job for the following machines are: typewriter, 22.83 per cent; ten-key adding machine, 36.22 per cent; full keyboard adding machine, 31.49 per cent; calculator, 24.41 per cent; cash register, 18.11 per cent; bookkeeping machine, 21.60 per cent; duplicating machine, 24.41 per cent; dictaphone, 14.17 per cent; check protector, 25.20 per cent; and other miscellaneous office machines, 28.35 per cent.

Some of the office workers received training in school and were also trained on the job for some of the office machines. However, the per cent of the office workers that did receive training in school on the following machines are: typewriter, 79.53 per cent; ten-key adding machine, 22.83 per cent; full keyboard adding machine, 24.41 per cent; calculator, 14.96 per cent; cash register, .78 per cent; bookkeeping machine, 7.87 per cent; duplicating machine, 15.75 per cent; dictaphone, 7.09 per cent; check protector, 1.57 per cent; and other miscellaneous office machines, 2.36 per cent.

The Importance of Vocational Traits

"Businessmen say that it is not so important to teach

technical skills as it is to develop good character in students."³ This idea has caused much controversy in the field of business education for some time. However, Tonne also says, "Character training has always been considered a major aspect of business education."⁴ There is much concern about the importance of good character development in the school, business, and family. There are numerous traits that make up a person's character. Perhaps Tonne⁵ expresses it better when he says, "Character is the sum total of all the traits a person possesses, plus the added quality that a person has as a result of the integration of these traits."

It was evident that all the vocational traits could not have been covered effectively in this study; therefore, a few selected traits were used to advantage. Each office worker was to indicate if the selected traits are essential, necessary occasionally, or not important in their work.

Table XI shows the responses in percentages. The per cent of office workers that considered each of the following traits essential are: speed, 71.65 per cent; courtesy, 92.91 per cent; accuracy, 87.64 per cent; good

³Herbert A. Tonne, Principles of Business Education (New York: Gregg Publishing Division, McGraw-Hill Book Company, Inc., 1954), p. 64.

⁴Ibid.

⁵Ibid., p. 67.

TABLE XI

THE PERCENTAGE OF HUNTSVILLE OFFICE WORKERS
DESIGNATING THE DEGREE OF IMPORTANCE
OF POPULAR SUCCESS TRAITS (1957)

Popular Success Traits	Essential %	Necessary Occasionally %	Not Important %	No Reply %
Speed	71.65	26.77	1.58	0
Spelling	86.62	10.23	3.15	0
Arithmetic	71.65	16.54	6.30	5.51
Courtesy	92.91	5.51	0	1.58
Accuracy	97.64	1.58	0	.78
Good Grammar	85.04	7.09	3.15	4.72
Promptness	94.49	2.36	0	3.15
Initiative	87.41	7.87	2.36	3.36
Loyalty	95.28	.78	0	3.94
Neatness in work	97.64	1.58	0	.78
Personal appearance	93.69	1.58	1.58	3.15
Following instructions	94.49	.78	0	4.72

Note: The figures are given in percentages of the total 127 office workers surveyed.

grammar, 85.04 per cent; promptness, 94.49 per cent; initiative, 87.41 per cent; loyalty, 95.28 per cent; neatness in work, 97.64 per cent; personal appearance, 93.69 per cent; and following instructions, 94.50 per cent.

The percentages drop sharply as shown by Table XI as to the per cent of the office workers considering the traits necessary occasionally. The percentages are: speed, 26.77 per cent; spelling, 10.23 per cent; arithmetic, 16.54 per cent; courtesy, 5.51 per cent; accuracy, 1.58 per cent; good grammar, 7.09 per cent; promptness, 2.36 per cent; initiative, 7.87 per cent; loyalty, .78 per cent; neatness in work, 1.58 per cent; personal appearance, 1.58 per cent; and following instructions, .78 per cent.

It was found that courtesy, accuracy, promptness, loyalty, neatness in work, and following instructions were not marked as "not important" by any of the office workers. A very few of the office workers considered the rest of the traits as "not important" as the following percentages show: speed, 1.58 per cent; spelling, 3.15 per cent; arithmetic, 6.30 per cent; good grammar, 3.15 per cent; initiative, 2.36 per cent; and personal appearance, 1.58 per cent.

The per cent of the 127 office workers that did not reply on each trait are also shown in Table XI for the purpose of comparison. There was a 100 per cent response on speed and spelling. However, the remainder of the traits

were not answered completely as shown by the following percentages: arithmetic, 5.51 per cent; courtesy, 1.58 per cent; accuracy, .78 per cent; good grammar, 4.72 per cent; promptness, 3.15 per cent; initiative, 3.36 per cent; loyalty, 3.94 per cent; neatness in work, .78 per cent; personal appearance, 3.15 per cent; and following instructions, 4.72 per cent.

Accuracy has been rated most essential almost consistently on many surveys. Tonne⁶ ranked accuracy first in his table of frequency ratings on vocational traits. Accuracy was rated the most essential trait, together with neatness in work, by the Huntsville office workers as Table XI shows. Thus, it can be assumed that accuracy is considered the most important trait for office workers to possess.

Speed was rated the least essential of the traits by the office workers; however, over a fourth of the office workers indicated that speed is necessary occasionally as Table XI shows.

Training Desired by Huntsville Office Workers

Most office workers realize a need for additional training that would prove beneficial in their work. The additional training desired by the Huntsville office workers

⁶Ibid., p. 66.

TABLE XII
TRAINING DESIRED BY HUNTSVILLE OFFICE WORKERS
TO AID THEM IN THEIR PRESENT POSITIONS
(1957)

Training Desired	Number Desiring Training	Per Cent of Total
Better Academic Background	37	29.13
Shorthand	36	28.35
Office Machines	21	16.54
Bookkeeping	20	15.75
Letter Writing	12	9.45
Typing	9	7.09
Filing	3	2.36
Banking Procedures	3	2.36
Accounting	2	1.57
Spelling	2	1.57
Financial Statements	2	1.57
Speech and Poise	2	1.57
Company Procedures	2	1.57
Credit Information	1	.78
Library	1	.78

is shown in Table XII. Better academic background ranked first with thirty-seven or 29.13 per cent of the office workers indicating the desire for more academic training. Thirty-six or 28.35 per cent of the office workers desire training in shorthand. The remainder of the desired training is not as popular, as the following will show: office machines, twenty-one or 16.54 per cent; bookkeeping, twenty or 15.75 per cent; letter writing, twelve or 9.45 per cent; typing, nine or 7.09 per cent; filing, three or 2.36 per cent; banking, three or 2.36 per cent; accounting two or 1.57 per cent; spelling, two or 1.57 per cent; financial statements, two or 1.57 per cent; speech and poise, two or 1.57 per cent; company procedures, two or 1.57 per cent; credit information, one or .78 per cent; and library, one or .78 per cent.

CHAPTER III

PREFERENCES OF HUNTSVILLE EMPLOYERS

The importance of the Huntsville employers' preferences is obvious. The employers do the hiring, promoting, and dismissing. Therefore, the employers must be satisfied, and their preferences should not be overlooked. Perhaps the views of the employers as presented in this study will serve as a guide for both prospective and present employees of the Huntsville offices.

The employers of Huntsville were very cooperative in supplying data in this study. The writer approached each employer of office workers in Huntsville and requested help after explaining the survey and its purposes. The employers were extremely friendly and appeared to be anxious to cooperate in every respect.

Permission was always received from the employers to present questionnaires to their office employees. Also, a different questionnaire was given to the employer to be completed. These questionnaires sought data from the employers for the sake of comparison and obtaining their distinct preferences. This data included methods of selecting office employees, age preferences, business functions, rating of character traits, and the makes and types of office machines available in their offices.

Response of Employers

Out of the 33 employers approached, thirty or 90.9 per cent responded by completing the questionnaires. The other three promised to do so but failed to complete and return the questionnaires. However, this was considered to be an excellent response by the writer since most employers were very busy.

Personal Data of Respondents

As distinguished from their employees, it was found that only 3.33 per cent of the employers were single whereas 13.39 per cent of the employees were single. Thus, 96.67 per cent of the employers were married as compared to 83.43 per cent of the employees.

It was also found that 93.33 per cent of the employers were males, and only 6.67 per cent were females. To show how the percentages compare, 92.91 per cent of the employees were females, and only 7.09 per cent were males. This indicated almost an exact reverse.

The Number of Employees Per Office

The number of office employees in each office ranged from 1 to 23; however, the over all average for each office was 5.27. Those offices that were distinct even though a part of the same institution or business were considered

separately.

Primary Functions of the Businesses

In order to present a complete picture, the major functions of the businesses that responded to this study are shown in Table XIII. The functions came under eleven categories, and they should clarify the preferences of the employers. Table XIII shows the per cent of the businesses in each category. This includes only those businesses where the employers of office workers completed and returned questionnaires. The percentages of businesses in the categories are: education, 26.67 per cent; service, 20 per cent; finance, 16.67 per cent; manufacturing, 10 per cent; insurance, 6.67 per cent; wholesaling, 3.33 per cent; retailing, 3.33 per cent; civic, 3.33 per cent; county, 3.33 per cent; professional service, 3.33 per cent; and state service, 3.33 per cent.

Methods of Obtaining Employees

The employers were requested to indicate methods used in securing employees. Table XIV shows that 100 per cent of the employers use the personal application method of obtaining employees. This method is undoubtedly the most popular method in Huntsville. Table I, page 19, shows that 81.10 per cent of the employees obtained their present jobs by

TABLE XIII
FUNCTIONS OF THE HUNTSVILLE BUSINESSES
EMPLOYING FULL-TIME OFFICE WORKERS
(1957)

Functions	Per Cent
Education	26.67
Service	20.00
Finance	16.67
Manufacturing	10.00
Insurance	6.67
Wholesaling	3.33
Retailing	3.33
Civic	3.33
County	3.33
Professional Service	3.33
State Service	3.33

TABLE XIV
METHODS USED BY HUNTSVILLE EMPLOYERS
IN OBTAINING OFFICE WORKERS
(1957)

Methods	Per Cent
Personal Application	100.00
Recommendation of Friend or Business Associate	46.67
Letter of Application	23.33
Through a School	6.67
Transfer from Other Branches of Same Company	3.33
Any Way Possible	3.33
Employment Agency	0

personal application.

Recommendation of a friend or business associate rated second in importance. Table XIV shows that 46.67 per cent of the employers select employees on the recommendation of a friend or relative. It also shows the following percentages of employers using each method: letter of application, 23.33 per cent; through a school, 6.67 per cent; transfer from other departments of the same business, 3.33 per cent; and any way possible, 3.33 per cent.

Age Preferences

From all indications, most employers have preferences as to the age of their office workers. Various reasons have been given to justify these preferences of the employers; each age group presents its distinct advantages and disadvantages. However, some of the general considerations include insurance rates, efficiency, maturity, health, family responsibility, and dependability.

Table XV shows the percentage of Huntsville employers that prefer each five year age group beginning with 18 years of age. The age group of 23 to 27 years of age is the most popular with 53.33 per cent of the employers indicating this particular preference. The per cent of employers preferring each of the other age groups are: 18--22, 20 per cent; 28--32, 50 per cent; 33--37, 30 per cent; 38--42, 23.33 per cent;

TABLE XV
AGE PREFERENCES OF HUNTSVILLE EMPLOYERS
FOR OFFICE WORKERS (1957)

Age Groups	Employer Preferences %
18--22	20.00
23--27	53.33
28--32	50.00
33--37	30.00
38--42	23.33
Over 42	13.33
No Preferences	10.00

over 42, 13.33 per cent; and no preference, 10 per cent. It is obvious that some of the employers preferred two or more of the above groups and made such indications.

Preferences of Marital Status and Sex

The Huntsville employers prefer married office workers as a whole. Sixty per cent of the employers indicated a preference of married employees. There was not any indication of a preference for single office workers. However, the other 40 per cent of the employers did not have any preference as to marital status.

The employers also prefer females for office work; 53.33 per cent of the employers made this indication on the questionnaire. Only 3.33 per cent of the employers prefer males for office work; however, forty per cent did not have any preference. In summary, most of the Huntsville employers prefer married females for office work.

Preference of Educational Background and Experience

Eighty per cent of the employers prefer office workers with a college background, and only 6.67 per cent prefer just a high school background; nevertheless, 13.33 per cent did not have any preference.

Also, eighty per cent of the employers prefer the

office workers with experience. None of the employers prefer inexperienced beginners in the office; however, twenty per cent did not have any preference. Hence, most Huntsville employers desire office workers with a college background and office experience.

Employers' Ratings of Vocational Traits

"More persons obtain positions and promotions because of personality factors than for any other reason."¹ There is not any doubt about the importance of personality in office work. Many studies and surveys confirm this fact; however, Harms further explains the findings of the studies and surveys when he says, "More people lose their jobs because they lack personality traits than for almost all other reasons combined."² This is substantiated by the following: "Of all the surveys of why people lose jobs, none has ever cited less than 80 per cent attributable to personal maladjustments rather than professional deficiency."³

¹Harm Harms, Methods in Vocational Business Education (Dallas: South-Western Publishing Company, 1949), p. 284.

²Ibid.

³Walter Lowen, "Twelve Real Reasons Why People Lose Jobs," Advertising Agency, XLII (July, 1949), p. 69.

There is a close correlation between the indications of the employees and the employers on the vocational traits. By comparing Table XI, page 50, and Table XVI, the correlation is obvious. Courtesy, accuracy, loyalty, neatness in work, and following instructions were rated most essential by the employers with 96.67 per cent of the employers indicating each as essential. All of these traits were also rated high as being essential by the employees with a range from 92.91 per cent to 97.64 per cent of the employees indicating each trait as essential. Hence, speed was also rated the least essential by both the employers and employees.

Table XVI shows the per cent of the employers indicating each trait as essential, necessary occasionally, or not important for the employees to possess. A breakdown of this table shows the following per cent of employers considering each trait as essential. They are: speed, 43.33 per cent; spelling, 80 per cent; arithmetic, 83.33 per cent; courtesy, 96.67 per cent; accuracy, 96.67 per cent; good grammar, 83.33 per cent; promptness, 90 per cent; initiative, 90 per cent; loyalty, 96.67 per cent; neatness in work, 96.67 per cent; personal appearance, 93.33 per cent; and following instructions, 96.67 per cent.

Table XVI also shows the per cent of employers considering each trait as necessary occasionally. They are: speed, 58.33 per cent; spelling, 16.67 per cent; arithmetic,

TABLE XVI

PER CENT OF HUNTSVILLE EMPLOYERS DESIGNATING
TRAITS AS ESSENTIAL, NECESSARY OCCASIONALLY,
OR NOT IMPORTANT FOR OFFICE WORKERS
TO POSSESS (1957)

Traits	Essential %	Necessary Occasionally %	Not Important %
Speed	43.33	53.33	3.33
Spelling	80.00	16.67	3.33
Arithmetic	83.33	16.67	0
Courtesy	96.67	3.33	0
Accuracy	96.67	3.33	0
Good Grammar	83.33	16.67	0
Promptness	90.00	6.67	3.33
Initiative	90.00	10.00	0
Loyalty	96.67	3.33	0
Neatness in Work	96.67	3.33	0
Personal Appearance	93.33	6.67	0
Following Instructions	96.67	3.33	0

16.67 per cent; courtesy, 3.33 per cent; accuracy, 3.33 per cent; good grammar, 16.67 per cent; promptness, 6.67 per cent; initiative, 10 per cent; loyalty, 3.33 per cent; neatness in work, 3.33 per cent; personal appearance, 6.67 per cent; and following instructions, 3.33 per cent.

Only three of these vocational traits were marked by the employers as "Not Important." The per cent of the employers marking each of these traits as, "Not Important," are: speed, 3.33 per cent; spelling, 3.33 per cent; and promptness, 3.33 per cent.

Office Machine Preferences

Since office workers use office machines as a rule, it is pertinent that the popular brands and types be determined.

The best method to secure preferences of office machines is to take an inventory of the offices. Usually, the employers secure office machines that appeal to them; therefore, their preferences are shown in the inventory. Table XVII shows the inventory of the popular office machines in the Huntsville offices that responded to this study. There were 144 typewriters and the distribution was as follows: Royal, 66; IBM (Electric), 25; Underwood, 34; Remington, 12; Smith-Corona, 5; and Adler, 2. It is safe to assume that the Royal typewriter is the most popular brand in Huntsville.

TABLE XVII
NUMBER AND MAKE OF OFFICE MACHINES
IN HUNTSVILLE OFFICES (1957)

Office Machines	Number	Total Number
Typewriters:		
Royal	66	
IBM (Electric)	25	
Underwood	34	
Remington	12	
Smith-Corona	5	
Adler	2	
		144
10-Key Adding Machines:		
Burroughs	17	
Remington Rand	16	
Underwood	11	
Clary	8	
Monroe	6	
Olivetti	2	
		60
Full Keyboard Adding Machines:		
Burroughs	28	
Clary	9	
Monroe	3	
Victor	1	
Remington	1	
		42
Calculators:		
Monroe	10	
Remington	8	
Olivetti	7	
Marchant	7	

TABLE XVII (continued)
 NUMBER AND MAKE OF OFFICE MACHINES
 IN HUNTSVILLE OFFICES (1957)

Office Machines	Number	Total Number
Underwood	3	
Friden	2	
Victor	1	37
Cash Registers:		
National	1	
Burroughs	1	2
Bookkeeping Machines:		
Burroughs	12	
Underwood	2	14
Duplicating Machines:		
Ditto	4	
Wolber	2	
A. B. Dick	2	
Standard	2	
Rex	1	
Gectitner	1	
Geha	1	12
Dictaphones:		
Gray	2	
Time Master	1	3

There were sixty 10-key adding machines. This includes: Burroughs, 17; Remington Rand, 16; Underwood, 11; Clary, 8; Monroe, 6; and Olivetti, 2. Burroughs and Remington Rand appear to be the preferred 10-key adding machines.

There were 42 full keyboard adding machines. Burroughs ranked first with 28. The others are: Clary, 9; Monroe, 3; Victor, 1; and Remington, 1. Seven different brands and a total of 37 calculators were as follows: Monroe, 10; Remington, 8; Olivetti, 7; Marchant, 7; Underwood, 3; Friden, 2; and Victor, 1. Only two cash registers, a National and a Burroughs, were found in the offices.

The Burroughs bookkeeping machines are most popular with a total of twelve. Only two others, Underwoods, were found in the offices. Out of the twelve duplicating machines, four were the Ditto brand, two were Wolber, two were A. B. Dick, two were Standard, one was Rex, one was Gectitner, and one was Geha. There were three dictaphones. Two were Gray and one was Time Master.

CHAPTER IV

SUMMARY AND RECOMMENDATIONS

Summary

As there is very limited secondary data on Huntsville office workers and the opportunities available to present and prospective Huntsville office workers, it was the purpose of this study to collect, analyze, and present primary data relative to duties, educational backgrounds, operation of office machines, salaries, and training of the office workers of Huntsville, Texas. The preferences of the Huntsville employers were also used to throw light on these topics. The suggestions, opinions, and experiences of the office workers and their employers in Huntsville in the year 1957 were the basis for conclusions for this study.

A well-organized procedure was outlined and scientific methodology was applied, thus avoiding the inefficiency of collecting irrelevant data. The survey method was selected, and all the desired data were listed, edited, and arranged in a psychological order in two questionnaires. These questionnaires were designed to secure the maximum amount of data with little effort on the part of the respondents, the employers and employees. A copy of one of these questionnaires was presented to each full-time office worker

in Huntsville, and a copy of the other questionnaire was presented to each employer of office workers. Therefore, these questionnaires served as the medium for primary data collection for this study.

The responses of the office workers and their employers were gratifying. The respondents were extremely friendly and cooperative as a whole. Out of the 136 office workers contacted, 127 completed and returned the questionnaires, and 30 out of 33 of the employers completed and returned their questionnaires.

The information desired from the office workers was to find out what methods were used to obtain their present jobs, were they required to write application letters, how long had they been working for their present employers, what their job titles were, what advancements had they made, what schools they had attended and for how long, at what level in their education did they have business courses, what duties each office worker performed daily, what office machines did they use, how they received their office machine training, what degree of importance did they place upon certain vocational traits, and what additional training they felt would be beneficial in their jobs.

Perhaps the most interesting personal data of the office workers were that 92.91^{100 percent} per cent of the Huntsville employees were females, and 83.43^{80 percent} per cent were married.

It was found that the personal application method ranked first among the methods that the employees used in obtaining jobs; 81.1 per cent indicated the use of this method. Other methods that made up the 18.9 per cent were: aid of friend or relative, contacted by employer, recommendation of school, aid of former employer, through Huntsville Chamber of Commerce, and the merit system. Only 15.75 per cent of the office workers were required to write letters of application.

The office workers of Huntsville fell into nine job classifications: secretaries, general clerks, bookkeepers, cashiers, stenographers, IBM operators, clerk-typists, accountants, and receptionists. A majority of the office workers were secretaries or general clerks. Each of these classifications was composed of 25.98 per cent of the office workers.

The average salary per month was found to be ^{approximately \$60.00} ~~\$215.71~~ for the office workers; however, the individual salaries ranged from ^{\$50} \$135 to ^{\$400} \$350 per month. Eighty-four per cent of the office workers have advanced in salary while in present employment, and only 41.17 per cent have received advancements in positions. It can be assumed that the length of employment had an influence on these advancements. The lengths of employment ranged from three months to thirty-seven years; nevertheless, the average employment for all the

office workers was 3.82 years.

All the office workers were high school graduates with 37 finishing Huntsville High School, and the remaining 90 attended 67 different high schools.

Twenty-seven of the office workers attended 20 different business schools for at least 3 months. The longest period of attendance in any case was 24 months, and the average as a whole for the 21 graduates was 11 months, compared to only 4.33 months for the 6 non-graduates.

There were 11 office workers that attended junior colleges. Six of these graduated and had an average length of attendance of 2 years. The other 5 had only a year of average attendance without finishing.

Seventy-nine of the 127 office workers attended a senior college for at least a year. Twenty-four of the 79 received degrees. It was found that 54 of these 79 attended Sam Houston State Teachers College, and the remaining 25 attended 13 different senior colleges.

Since most individuals that plan to enter the business world major in business administration, it was interesting to find that 33 of the 79 that attended senior colleges were business administration majors. Twenty-six of these attended Sam Houston State Teachers College.

Some of the most popular and beneficial business courses can be taken in high school, business school,

junior college, or senior college. These basic business courses are typewriting, shorthand, bookkeeping, accounting, office machines, filing, business English, and business math. The three most popular high school courses that were taken by the Huntsville office workers were: typewriting, bookkeeping, and shorthand. Eighty-eight took typewriting in high school, 50 took bookkeeping, and 46 took shorthand.

The number of Huntsville office workers that took each of the four top-ranking courses for business school was: typewriting, 27; shorthand, 26; business English, 26; and filing, 25. Business English was the most popular course of the Huntsville office workers that attended junior college with 7 having taken this course. Typewriting, shorthand, bookkeeping, and accounting were next with 5 having taken each of these courses. Typewriting and shorthand were taken by 49 and 41 respectively of those office workers that attended senior colleges. Thus, typewriting and shorthand were the most popular business courses on all four educational levels.

There were eleven popular office duties that were common to most of the office workers. The number that performed each duty are: typewrite, 120; answer the telephone, 110; file, 109; compose letters, 86; reception duties, 65; handle money in office, 59; keep books, 59; prepare statements, 51; banking activities, 46; take dictation in short-

hand, 43; and prepare payrolls, 40.

The three types of training for the operation of office machines are: self-training, on-the-job training, and school training. Most of the office workers trained themselves or received training on the job on the 10-key adding machine. However, some of the office workers were self-trained or trained on the job on most all the other popular office machines. A majority received training on the typewriter in school, and a few received training in school on all other machines.

There are numerous vocational and character traits that have been found essential for the office workers to possess to promote success. It was not practical to attempt to cover all the many traits; therefore, the following twelve were selected: speed, spelling, arithmetic, courtesy, accuracy, good grammar, promptness, initiative, loyalty, neatness in work, personal appearance, and following instructions. Accuracy and neatness in work were rated most essential by the Huntsville office workers. Loyalty was rated next essential to success; however, promptness and following instructions were considered as highly essential. Speed and arithmetic were considered least essential by the Huntsville office workers.

Most office workers realize a need for additional training that would be beneficial in their work. The

Huntsville office workers desired a better academic background more than anything else, and shorthand training was the next most desired training.

The preferences of the employers were collected for the sake of comparison and to aid present and prospective Huntsville office workers to know what the employers expect. Out of the 33 employers contacted, 30 responded by completing and returning their questionnaires. The majority of the employers were males (96.67 per cent) whereas the majority of the office workers were females (92.91 per cent). Also, 96.67 per cent of the employers were married.

All of the employers indicated that they use the personal application method of selecting employees, and nearly half use the recommendations of friends or business associates. Some of the employers obtain office employees on letters of application, through a school, and transfers from other branches of the same company.

Most of the Huntsville employers prefer office workers from the age of 23 to 32 years of age. They also prefer married females by a large majority. Eighty per cent of the employers of office workers also prefer the workers to have office experience and with college background.

There is a close correlation between the opinions of the employers and the employees on the importance of vocational traits and their influence on success. Courtesy,

accuracy, loyalty, and neatness in work, and following instructions were rated the most essential with 96.67 per cent of the employers rating each trait as essential. All of these were also rated most essential by employees by a high percentage. Speed was rated as least essential by employers and employees. The employers' preferences of office machines were based on a machines inventory of the Huntsville offices. The most popular machines were: Royal typewriters, Burroughs and Remington Rand 10-key adding machines, Burroughs full keyboard adding machines, Burroughs bookkeeping machines, Monroe calculators, and Ditto duplicating machines.

Recommendations

After having gathered and analyzed pertinent information from Huntsville office workers and their employers, the writer was able to reach certain conclusions and to make suggestions to prospective Huntsville office workers as well as to the business departments of the high schools and colleges of this area for improvements in training of prospective Huntsville office workers.

1. The city of Huntsville has limited opportunities for prospective office workers because of the small number of available jobs, the slow turnover of office workers, and the competition among numerous qualified office workers.

The married females with office experience and college background have the best chances for employment, and the secretarial and clerical positions offer more opportunities for advancements in salaries and positions than do any other office positions. Since Huntsville employers do prefer employees who have had previous office experience, it is the opinion of the writer that prospective office employees should obtain experience elsewhere and then make application in person to the Huntsville employers.

2. Typewriting, answering the telephone, and filing are the duties most performed by Huntsville office workers. However, Huntsville office workers perform a variety of duties as a whole. It is recommended that prospective office workers qualify to do all office duties efficiently. It is very important that business departments of high schools and colleges train prospective office workers to a very high degree of proficiency in both skill and basic business courses.

The most desired training of the Huntsville office workers is more academic and shorthand training. It is recommended that Huntsville office workers acquire this training by attending night classes at Sam Houston State Teachers College.

3. The Huntsville office workers have an outstanding educational background as a whole. It is recommended that

all prospective Huntsville office workers obtain college degrees, preferably with majors in business administration. The business departments of the high schools and colleges should encourage their students who plan to become office workers to obtain college degrees before accepting office positions because college degrees create many more opportunities for advancements.

4. The average salary for Huntsville office workers is approximately \$215^{6.00} per month. It is the opinion of the writer that this is somewhat low, and prospective office workers of Huntsville have better salary possibilities elsewhere.

5. The office machines that are most widely used in Huntsville offices are: ^{— Royal typewriters and} Royal typewriters, Burroughs adding machines, Monroe calculators, Burroughs bookkeeping machines, and Ditto duplicating machines. Most Huntsville office workers were trained on the job or in school for the operation of office machines. The business departments of high schools and colleges should offer intensive training on all the above machines.

6. Most employers prefer office workers in the age range of 23 to 32 years of age. Accuracy, following instructions, neatness in work, courtesy, and loyalty are considered by the employers as the most essential vocational traits for employees in Huntsville offices to possess. It is recommended,

therefore, that business departments stress these vocational traits in all business courses.

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APPENDIX C

HIGH SCHOOLS ATTENDED BY HUNTSVILLE OFFICE WORKERS

The number of office workers that attended each of the following high schools are:

Alvin High School, 1

Ball High School, Galveston, 3

Baton Rouge High School, Baton Rouge, La., 1

Bay City High School, 3

Bertram High School, 1

Blessing High School, 1

Bronson High School, 4

Buna High School, 1

Burkeville High School, 1

Canon City High School, 1

Canton High School, 1

Cayuga High School, 1

Centerville High School, 2

Cleveland High School, 2

Cold Springs High School, 5

Conroe High School, 3

Coolidge High School, 1

Cooper High School, 1

Crandall High School, 1

Crockett High School, 3

Dangerfield High School, 1

Denton High School, 1
El Campo High School, 1
Frankston High School, 1
Frederick High School, Frederick, Okla., 1
Giddings High School, 1
Gonzales High School, 1
Groveton High School, 2
Hempstead High School, 1
Huntington High School, 1
Huntsville High School, 37
Jeff Davis Senior High School, Houston, 2
John Reagan Senior High School, Houston, 2
Klein High School, 1
Lovelady High School, 1
Lufkin High School, 2
Luling High School, 1
Nacogdoches High School, 1
Madisonville High School, 4
McKinney High School, 1
McGehee High School, 1
Mexia High School, 1
Monroe High School, West Manchester, Ohio, 1
Needville High School, 1
New Waverly High School, 1
Normangee High School, 1

Oakhurst High School, 1
Oakridge High School, Oakridge, La., 1
Orange High School, 1
Osage High School, Osage, Iowa, 1
Palestine High School, 1
Potwin High School, Potwin, Kansas, 1
Richards High School, 1
Robert E. Lee Senior High School, Baytown, 1
Sam Houston Demonstration School, Huntsville, 3
San Jacinto High School, Houston, 1
Spring High School, 1
St. Agnes High School, 1
Stephen F. Austin High School, Houston, 2
Streetman High School, 1
Sunset High School, Dallas, 1
Sweeny High School, 1
Teague High School, 1
Terrell High School, 1
Trinity High School, 1
Troup High School, 1
Van Alstyne High School, 1
Whitehouse High School, 1

Vita was removed during scanning