# A SURVEY OF OFFICE WORKERS IN BRYAN AND COLLEGE STATION, TEXAS 

## by

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## A THESIS

Approved:

# A SURVEY OF OFFICE WORKERS IN BRYAN AND COLLEGE STATION, TEXAS 

## A THESIS

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I. THE PROBLEM AND ITS SETTING ..... 1
Statement of the Problem ..... 1
Purpose of the Study ..... 1
Hypotheses ..... 2
Sources of Data ..... 3
Limitations of the Study ..... 4
Definition of Terms ..... 5
Method of Investigation ..... 5
Background Information about Stephen F. Austin High School ..... 6
Related Studies ..... 8
Summary ..... 9
II. A PORTION OF SURVEY REPORTS READ AS BACKGROUND. ..... 12
Texas Surveys for Thesis Purposes ..... 12
Austin, Texas, 1947 ..... 12
Cuero, Texas, 1950 ..... 13
Fort Worth, Texas, 1947 ..... 13
Houston, Texas, 1949 ..... 15
Huntsville, Texas, 1957 ..... 15
Laredo, Texas, 1953 ..... 15
Marfa, Texas, 1943 ..... 16
Willacy County, Texas, 1942 ..... 16
Community Occupational Surveys ..... 17
Schenectady, New York, 1939 ..... 17
Tulare, California, 1948 ..... 18
Menomonie, Wisconsin, 1949 ..... 19
Summary ..... 21
III. THE IMPORTANCE OF SURVEYS IN CERTAIN ASPECTS OF BUSINESS EDUCATION ..... 23
Public Relations ..... 24
Curriculum ..... 26
Personality Development ..... 29
Guldance ..... 32
Occupational Planning, Placement, and Follow-up. ..... 35
Summary ..... 37
IV. A SURVEY OF 46 EMPLOYERS IN BRYAN AND COLLEGE STATION, TEXAS ..... 40
Industrial Classification of Offices Visited ..... 42
Number and Kind of Workers Employed ..... 44
Requirements for Initial Employment ..... 47
Age ..... 50
Experience ..... 54
Education ..... 56
Sex ..... 58
Methods Used to Secure Office Employees ..... 58
Importance of Applicants' School Accomplishments . ..... 61
Skill Requirements, Testing, and Training ..... 64
Reasons Which Cause Office Vacancles ..... 66
Weaknesses of Beginning Workers in Skills and Certain Activities ..... 68
Skills ..... 68

## CHAPTER

PAGE
Activitles ..... 70
Personal Traits Which Should Be Stressed ..... 71
Adequacy of Business Courses Offered by
Stephen F. Austin High School ..... 76
Opinions about Work Experience and Job Placement ..... 78
Criticisms and Suggestions for Improvement ..... 78
Summary ..... 80
V. A SURVEY OF 150 EMPLOYEES IN BRYAN AND COLLEGE STATION, TEXAS ..... 84
Number, Kind, and Classification of Workers ..... 85
Background and Present Status of Employees ..... 87
Age and Sex. ..... 87
Experience ..... 89
Salary ..... 94
Education ..... 94
Marital Status ..... 101
Methods Used to Obtain Present Positions ..... 101
Factors Related to the General Preparation for Employment ..... 105
Academic Standing in High School ..... 105
Guidance Received in High School ..... 107
Occupational Plans, Hobbies, Musical Ability, and Subscriptions to Office Magazines ..... 109
Business Courses Which Employees Took in High School and after Leaving High School ..... 109
Business Courses Which Employees Wish They Had Taken ..... 115
Weaknesses of Employees in Skills and
Certain Activities ..... 118
Personal Traits Which Need More Stress ..... 120
Office Machines Which Employees Use ..... 124
Duties Which Are Performed ..... 126
Most Difficult Tasks and Easiest Tasks
Performed ..... 128
Adequacy of Courses Offered by Stephen F.
Austin High School ..... 129
Interest in Adult Education, Business Office Experience and Placement ..... 132
Criticisms and Suggestions for Improvement ..... 132
Summary ..... 135
VI. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS ..... 140
Summary of Survey Findings ..... 140
Conclusions ..... 146
Recommendations ..... 148
BIBLIOGRAPHY ..... 151
APPENDIX A. Employer's Questionnaire ..... 157
APPENDIX B. List of Offices Visited ..... 161
APPENDIX C. Employee's Questionnaire ..... 164
APPENDIX D. List of High Schools Attended by Employees ..... 170
VITA ..... 175

## LIST OF TABLES

TABLE PAGE
I. Industrial Classification of 46 Offices and Per Cent of the Total Labor Force Represented by Each Classification ..... 43
II. Occupational Titles of Office Workers Employed by 46 Employers, and Numbers Employed in Each Type of Position ..... 45
III. Size of Each Office Force Reported by 46 Employers ..... 48
IV. Number and Percentage of 46 Employers Who Employ Workers for Each Type of Position ..... 49
V. Minimum Ages Acceptable for Initial Employment in Each Type of Position in 46 Firms ..... 51
V1. Maximum Ages Acceptable for Initial Employment in Each Type of Position in 46 Firms, As Given by Employers Using Each Type ..... 53
VII. Experience Requirements of 46 Employers for Initial Employment in Each Type of Position, As Given by Employers Using Each Type ..... 55
VIII. Minimum Education Requirements of 46 Employers for Initial Employment in Each Type of Position ..... 57
IX. Sex Preference of 46 Employers for Each Type of Position ..... 59
X. Methods Most Often Used by 46 Employers for Securing Office Employees ..... 60
XI. Importance of Certain School Accomplishments to 46 Employers in Considering Applicants for Office Positions ..... 62
XII. Replies of 46 Employers to Questions Conceming Skill Requirements and Testing of Office Applicants before Hiring ..... 65
XIII. Reasons Which Usually Cause Most Office Vacancies in 46 Firms ..... 67
XIV . Weaknesses of Beginning Workers in Fifteen Skills Which Are Important in Office Work in 46 Firms ..... 69
XV.XVI.XVII.XVIII.Opinions of 46 Employers Concerning Their Par-tlclpation in Business Office Experience andPlacement Programs for Students of StephenF. Austin High School79
XIX. Occupational Titles and Industrial Classification of 150 Office Employees in the Study ..... 86
XX . Present Ages of 150 Office Employees ..... 88
XXI. Experience and Inexperience Prior to Present Employment of 150 Employees ..... 90
XXII. Number of Other Firms for Which 150 Employees Have Worked ..... 91
XXIII. Number of Years of Experience of 150 Employees for all Employers and for the Present Employers. ..... 93
XXIV. Present Monthly Salaries of 150 Employees ..... 95
XXV. Educational Background of 150 Employees ..... 97
XXVI. General Locations of the High Schools Attended by 150 Employees ..... 99
XXVII. Size of the High Schools Attended by 150 Employees. ..... 100
XXVIII. Marital Status of 150 Employees ..... 102
XXIX. Employment Status of the Husbands of 112 Married Females of 150 Employees ..... 103
XXX. Methods Used by 150 Employees to Obtain First Jobs with the Present Employers ..... 104
XXXI. Academic Standing of 150 Employees in Their Classes ..... 106
TABLE PAGE
XXXII. Opinions Concerning the Extent to Which 150 Employees Were Given Guidance While in High School ..... 108
XXXIII. Replies of 150 Employees to Questions Concerning Occupational Plans, Job Interviews and Homerooms, and to Questions Concerning Hobbies, Musical Talent, and Magazine Subscriptions ..... 110
XXXIV. Number of Business Courses Which 150 Employees Took in High School ..... 111
XXXV. Names of Business Courses Which 127 of 150Employees Took in High School113
XXXVI. Number of Business Courses Which 150 Employees Took after Leaving High School ..... 114
XXXVII. Names of Business Courses Which 85 of 150 Eme ployees Took after Leaving High School ..... 116
XXXVIII. Names of Business Courses Which 76 of 150 Em- ployees Wish They Had Taken ..... 117
XXXIX. Weaknesses Found by 150 Employees in Their Own Training in Fourteen Skills Which Are Impor- tant in Office Work ..... 119
XL. Weaknesses in Training of 150 Employees in Nine Activities Which Are Important to Office Workers ..... 121
XLI. Ranking of Thirty Personal Traits Which 150 Em- ployees Think Should Be Stressed More by the Schools ..... 122
XLII. Office Machines Used by 150 Employees and the Extent to Which They Are Used ..... 125
XLIII. Duties Performed by 150 Employees and the Extent to Which They Are Performed ..... 127
XLIV. Most Difficult Tasks and Easiest Tasks Performed by 150 Employees ..... 130
XLV. Opinions of 150 Employees Concerning Adequacy of Business Courses Offered at Stephen F. Austin High School ..... 131
XLVI. Opinions of 150 Employees Concerning Need for Business Office Experience and Placement Programs for Students of Stephen F. Austin High School ..... 133

## CHAPTER I

## THE PROBLEM AND ITS SETTING

## Statement of the Problem

The problem of this study is to appraise the effectiveness of the business education program at Stephen F. Austin High School, Bryan, Texas, by weighing that program against the experience of 46 present employers in Bryan and College Station, Texas, and 150 office workers employed by those employers.

Sub-problems are: (1) to secure data conceming initial employment of clerical workers, background and ambitions of present office employees, and other occupational information; (2) to identify weaknesses of beginning workers in certain skills, activities, and personal traits; (3) to obtain evaluations of the adequacy of business courses offered by Stephen F. Austin High School; (4) to determine the extent to which former students of Stephen F. Austin High School have found jobs in local offices; and (5) to recelve criticisms and suggestions for improvement of the business education program at Stephen F. Austin High School.

## Purpose of the Study

The primary purpose of the study is to gain information which can be utilized to improve the training of future business students of Stephen F. Austin High School. Identification of skills and qualities needed for
successful performance in office work can be derived through a survey of opinions conceming what the high schools should teach. ${ }^{1}$ This knowledge can then be related to business education to bulld a stronger program.

Secondary purposes are: (1) to leam the educational needs of the business community and (2) to establish personal contact that will help maintain desirable public relations.

## Hypotheses

1. The guiding principles of business education in Stephen $F$. Austin High School are similar to those of all secondary schools offering business education.
2. Evaluating criteria offered by official accrediting associations for all secondary schools include surveys to measure fulfilment of guiding principles, whether judging course offering or instructional staff. ${ }^{2}$
3. Since surveys are required for the most commendable evaluations of business education, and since Stephen $F$. Austin High School has not conducted one, a survey at the present time should aid the school and the staff member making the survey.
[^0]
## Sources of Data

The main primary source of data is the information gained from the 46 employers and the 150 employees through interviews and questionnaires.

The local branch of the Texas Employment Commission furnished information used to select offices to be visited, and the personnel office of the Texas Agricultural and Mechanical College System helped obtain clearance needed for certain visits. The administrators and teachers of business subjects in Stephen F. Austin High School contributed three items for the questionnaires.

Secondary sources of data include: business education periodicals, books, and yearbooks; Herbert Hyman's Survey Design and Analysis; How to Conduct a Community Occupational Survey, by the Vocational Guidance Committee of Kiwanis International; Appraising Public Attitudes toward Public Schools, by Wallace Strevell; School and Community, by Edward Olsen; Marketing and Distribution Research, by Lyndon O. Brown; The Elements of Research, by Frederick L. Whitney; Standard Industrial Classification Manual by the Bureau of the Budget; and Dictionary of Occupational Titles, Volume II, by the United States Employment Service. ${ }^{3}$
${ }^{3}$ All are included in footnotes and/or the bibliography.

## Iimitations of the Study

This study is limited to Bryan and College Station, whose city limits meet, in Brazos County, Texas. It is limited to 46 offices which employ more than one office worker each because it was felt that the smaller offices constitute subjects for separate studies. Of the approximately 900 offices in the area, over 500 employ only one office worker, according to estimates by the Texas Employment Commlssion.

The study is limited to employees whose main duties are associated with certain clerical workers--bookkeepers, cashiers, clerks, machine operators, receptionists, secretaries, stenographers, and typists--plus accountants, who are classified as professional and managerial workers. It was belleved that some offices inappropriately classified bookkeepers as accountants.

Excluded from this study are other clerical workers, such as postal clerks, telephone operators, and bank cashiers. Also excluded are other office workers, such as draftsmen, who are not considered clerical workers. Employees who work in a supervisory, managerial, or administrative capacity are not included.

The time limitation for the interviews was three weeks, beginning June 27, and ending July 16, 1960. One hundred fifty employees were used.

## Definition of Terms

Definitions of terms as they are used in this study are:

1. Employer refers to the person with the greatest authority in each office or to someone acting for that person. The 46 employers included: eleven local managers of stores, plants, or offices; nine directors of state or federal offices and two of their administrative assistants; five store owners; three county officials, three firm partners; two city managers, two hospital administrators; one private school president; one television station manager; one physician; one personnel director; one office manager; one public school superintendent; one plant owner; one manufacturing company president; and one resident construction engineer.
2. Employee refers to an office worker whose main duties are those associated with an accountant, bookkeeper, cashier, clerk, machine operator, receptionist, secretary, stenographer, or typist; and who does not work in a supervisory, managerial, or administrative capacity.

## Method of Investigation

A combination of the personal interview method and the questionnaire method was used. Most authorities agree that the interview method is the best survey procedure. ${ }^{4}$ Interviews are preferable to mailed

Marguertte Wykoff Zapoleon, Steps to Be Taken in a Community Occupational Survey, p. 2.
questionnaires because the interviewer can explain the purpose of the survey, answer questions which are not clear, and add importance to the survey in the minds of those interviewed. ${ }^{5}$

## Background Information about Stephen F. Austin High School

Bryan has only one high school, which was opened in 1880 and which has had ten superintendents. College Station has its own high school.

Approximately 1,000 students are expected in the upper three grades in the fall of 1960. Twenty credits are required for graduation, including those earned in the ninth grade in either of two junior high schools. Three plans of graduation are offered, two for those who plan to attend college, and one for those who do not plan to attend college, or who want vocational training. The same diploma is granted regardless of the plan pursued. Plan II, the minimum plan for college entrance, requires four credits in English, three in mathematics, two in science, three in social studies, and three in physical education and health. Plan I requires more science and mathematics and two years of a foreign language, while Plan III requires less mathematics, allows substitutions

5
R. G. Walters, The Community Survey, pp. 10-11.
for general science, and offers to juniors and seniors an English course of a more practical nature than the other English courses. This course is especially popular with students in the distributive education and industrial cooperative training program.

Two new courses, German and French, will be taught in the fall of 1960, in addition to two years of Latin and three years of Spanish already offered. Third-year Latin and second-year bookkeeping and shorthand will be added whenever as many as 15 students are interested in them. The following summer courses are taught on a tultion basis: algebra, American history, Texas history, government, typing, driver training, homemaking, and all English courses.

Two years of typing, one year of shorthand, one year of bookkeeping, and one year of secretarial training are taught by the business education staff. One year of business arithmetic and one semester of commercial law are taught in other departments. Secretarial training requires one class period of shorthand daily and another of stenographic practice, and affords two credits.

The faculty is composed of 45 classroom teachers, one librarian, two counselors, and one principal. The male counselor is also assistant principal. The business education department is staffed by three women, all with master's degrees, all with teaching experience, and all with experience as office workers.

Approximately 10 per cent of the students are Latin-Americans. Vocational nursing has been taught one year, and other adult education courses are planned for the fall of 1960.

## Related Studies

The Boston survey in 1914 was the best of the early investigations. Few surveys were made before that time, but in 1915 another was made in Rochester, New York. The Boston survey sought opinions of employers, and the Rochester study involved business employees; both were conducted by chambers of commerce. ${ }^{6}$

Other well-known studies were made in New Castle, Pennsylvania, in 1929; Sioux City, Iowa, in 1930; Oakland, Califomia, in 1935; Los Angeles, Callformia, in 1937; Charleston, West Virginia, in 1939; Decatur, Illinols, in 1939; Stillwater, Oklahoma, in 1941; and Albert Lea, Minnesota, in $1941 .{ }^{7}$

Walters and Nolan describe extensive surveys in Saint Louis and Pittsburgh, made in 1941 by outside agencies at a much greater cost than the ordinary survey. They praise the two surveys, and point out that

[^1]Saint Louis schools made a further study of business education in 1946, with the cooperation of the National Office Management Association. ${ }^{8}$

Business education books, periodicals, and yearbooks report surveys too numerous to mention; and publications reporting research in education show many current theses and dissertations based upon surveys. Libraries at Sam Houston State Teachers College, Baylor University, University of Houston, Agricultural and Mechanical College of Texas, and the University of Texas contain approximately 60 theses and dissertations which are related to this study. Twelve schools and organizations furnished survey reports to be used. The theses and reports were read and a portion of them are described in Chapter II. At Sam Houston State Teachers College, Huntsville, Texas, a graduate student is oonducting a survey of office workers in Brenham, Texas, at the present time.

## Summary

The problem of the study is to appraise the effectiveness of the business education program at Stephen F. Austin High School, Bryan, Texas, and to receive criticisms and suggestions for improvement. The study was made to gain information to be used to bulld a stronger business education program. Hypotheses are that the program in Stephen F. Austin
${ }^{8}$ Walters and Nolan, op. ctt., p. 310 .
estul library

High School is similar to that in all secondary schools, and that since surveys have been helpful to other schools, a survey could help the Bryan School.

Primary sources of data include 46 employers and 150 employees, the Texas Employment Commission, the personnel office of Texas Agricultural and Mechanical College System, and administrators and business teachers of Stephen F. Austin High School. Secondary sources include: business education periodicals, books, and yearbooks; classification manuals of the United States government; and books and pamphlets related to survey techniques.

The study is limited to Bryan and College Station, Texas; it is limited to 46 employers who hire two or more office workers; it is limited to 150 employees in clerical or accounting positions; and it is limited to a three-weeks interviewing period.

Employer is the person having the greatest authority in each office; and employee is one whose duties are associated with duties of an accountant, bookkeeper, cashier, clerk, machine operator, receptionist, secretary, or typist. The personal interview and the questionnaire methods were used to obtain data from employers and employees.

Numerous related studies were previewed by the present researcher before this project was attempted.

Stephen F. Austin High School is a three-year school with approximately 1,000 students. Three plans of graduation are offered, two for
students who plan to go to college, and one for students who do not plan to go to college or who want vocational training. Twenty credits are required for graduation. The faculty includes 45 classroom teachers, a librarian, two counselors, and a principal, with the male counselor serving as assistant principal. Summer school and adult education are offered. Approximately 10 per cent of the students are Latin-Americans.

## CHAPTER II

## A PORTION OF SURVEY REPORTS READ AS BACKGROUND

Hundreds of studies have been made on both a national basis and a local basis to determine what businessmen want. Every community should make its own survey of the opportunities for business employment and the requirements of employers. 1

Many Texas surveys have been made by individuals for thesis purposes. This chapter will present brief statements about a few which were read as background for this study, and will also briefly summarize three community occupational survey reports .

## Texas Surveys for Thesls Purposes

## Austin, Texas, 1947

A survey by Ruth Blalock resulted in the outline of a training program for prospective employees, with objectives, organization procedure, and activities presented. Further cooperation between English teachers and business teachers was advised, since over 90 per cent of office managers checked good grammar, punctuation, and spelling as activities in which they desired that prospective employees have training. Forty per cent of the employers checked instructing new employees as one activity in which prospective workers should be trained. ${ }^{2}$

1 Education, p. 3.

2
Ruth Blalock, "A Job Survey of Office Personnel with a Suggested Training Frogram for Prospective Employees," Master's Thesis, The University of Texas, 1947.

## Cuero, Texas. 1950

Orita Bigger Morrison found these feelings among Cuero businessmen: (1) business teachers are inclined to withdraw from business contact; (2) the school program will be practical when businessmen are assured of obtaining employees; (3) where schools are best, retail sales and average incomes are greatest; (4) education makes people good producers and good consumers; and (5) money spent on schools is a sound investment. Observations were made that business courses have been imitative, that teachers sometimes become too involved in developing skills to attend to the broad aspects of business education, and that school life sometimes tends to retard the maturing of youth and to prolong Irresponsible ways of acting. Bookkeepers were cited as needing to know how to write legibly and work accurately. ${ }^{3}$

## Fort Worth, Texas. 1947

Gladys Bowman found that chief faults in skills of office workers were inability to spell, poor use of English, faulty punctuation, inaccurate transcription, inability to use figures accurately, and unfamiliarity with office machines. Office workers estimated that they had dictation speeds
${ }^{3}$ Orita Bigger Morrison, "Proposed Business Education Program for Cuero High School Based on Job Possibilities," Master's Thesis, The University of Texas, 1950 .
that resulted in a mean speed of 86 words a minute, as compared with 79, an average mean resulting from a controlled experiment reported in the study. Employers used unsolicited applications and employment bureaus most often to secure employees; recommendations of school officials were seldom used.

Businessmen thought that high-school training was sufficient for billing clerks, filing clerks, and cashiers. Some college was necessary for bookkeepers and secretaries, and college graduation was imperative for accountants. Cooperative part-time training was necessary for secretaries and accountants, and highly desirable for other office positions. Qualities needed were accuracy, dependability, initiative, cooperativeness, mental alertness, neatness in appearance, and a pleasing personal manner. Qualities which separated the successful worker from the mediocre were leadership, initiative, resourcefulness, and adaptability. Personality traits were important in initial job procurement and in advancement. Businessmen thought the following subjects were important: business mathematics, business English, typing, business organization, elementary accounting, and personal efficiency. ${ }^{4}$

[^2]
## Houston. Texas. 1949

Woodrow Watts recommended revisions in the high school curriculum after surveying 100 firms, giving special attention to business letters belonging to those firms. He found high school business graduates weak in business arithmetic and spelling. 5

## Huntsville, Texas, 1957

James E. Gilmore found limited opportunities for prospective office workers in Huntsville and recommended their gaining experience elsewhere first. Average monthly salary was $\$ 215$. Office workers in Huntsville had outstanding educational backgrounds. Prospective workers were advised to qualify for a variety of jobs, and teachers were told that they should encourage students to get college degrees, should give intensive training on business machines, and should stress vocational tralts. ${ }^{6}$

## Laredo. Texas, 1953

Bettye Burdett studied business requirements as they related to business courses offered in The Laredo Junior College. The questionnalre and interview method were used, and the survey covered 25 businesses. Purposes were to see if the business curriculum answered the needs of

5 woodrow Watts, "A Commercial Occupational Survey of One Hune dred Selected Business Flrms of Houston, Texss, As a Basis for Recommending Changes in the High School Curriculum, "Doctor's Thesis, University of Houston, 1949 .
${ }^{6}$ James E. Gilmore, "A Survey of Huntgville Office Workers," Master's Thesis, Sam Houston State Teachers College, 1957.

Laredo business houses, to find out what should be the content of business courses, and to find out what courses other Texas junior colleges offered. ${ }^{7}$

## Marfa, Texas, 1943

Will Ann Wheat recommended the following for the Marfa high school: (1) emphasis on arithmetic; (2) drill in English; (3) a course in retail selling; (4) stress on penmanship; (5) practical subject matter; (6) a cooperative program of work; (7) more guidance; (8) better placement service; (9) Job-application training; (10) stress on personality development; and (11) emphasis on vocational training. ${ }^{8}$

Willacy County, Texas, 1942

Electa Butler made 14 recommendations, but the following were unusual: (1) students should be allowed to take four years of business courses; (2) every student should be required to take two years of business courses; (3) typing should be required of every high school student; and (4) fewer courses should be taught and these should be taught more thoroughly. ${ }^{9}$

7 Bettye Burdett, "A Survey of Business Requirements in Laredo, Texas As They Are Related to the Commercial Courses Offered in The Laredo Junior College," Master's Thesis, The University of Texas, 1953.
${ }^{8}$ Will Ann Wheat, "An Occupational Survey of Marfa, Texas, with Implications for the Business Education Program," Master's Thesis, Sam Houston State Teachers College, 1943.

9 Electa Butler, "Commercial Employment Opportunities for High School Graduates in Willacy Ccunty," Master's Thesis, The University of Texas, 1942.

## Community Occupational Surveys

Schools and organizations which had made community occupational surveys provided 12 survey reports for use in this study. Only three of these reports are discussed here since all the reports were similar.

## Schenectady, New York, 1939

Commercial teachers and guidance counselors planned the survey, using approximately 100 upperclassmen in three schools as interviewers. The Schenectady Chamber of Commerce cooperated.

It was found that almost one half of all firms in Schenectady were trade establishments, with only 11 classifled as schools or as government agencies. Women were preferred for office work, but men were preferred as stock clerks, collectors, deliverymen, outside sales workers, mechanics, and accountants. The large firms required less experience but more education, and were exacting in requirements for accountants. Other findings were:

1. Many opportunities existed for young people.
2. There were more persons in sales jobs than in any other single occupation.
3. Occupations emphasizing high school commercial training had the second greatest number of workers.
4. Fifteen per cent of the workers had been hired during the last year.
5. Most firms were one-man establishments.
6. Most firms hired less than 30 workers
7. Eighteen and 21 were the preferred mindmum ages.
8. One half of all employers required experience.
9. High school education was required by a madority .
10. Large firms hired younger workers, generally.
11. Occupations with high proportions of new workers were fountain helpers, waiters, and service station attendants. Accountants, bookkeepers, stenographers, deliverymen, drivers, and Janitors had the most stable jobs.
12. Large firms had a lower percentage of new workers than small firms.
13. The occupation most frequently mentioned as needing good workers was that of inside salesperson.
14. Employers expressed a need for better-trained, better-adjusted 10 workers.

Tulare, Callfornia, 1948

The Tulare survey included 90 per cent of the businesses within the city limits, 464 concerns employing 3,386 persons. The superintendent

10

- "Job Opportunity Survey," Mimeographed Report, Schenectady, New York, 1940.
of Tulare Union High School conducted the survey. The director of curriculum directed it. The state departments of education and employment helped plan the questionnaire, and 100 persons from 15 service organizations and from the high school faculty volunteered as interviewers.

Thirty-four recommendations were made, and were related to guldance and counseling, teachers, general education, the commercial department, the industrial department, and the extension program. ${ }^{11}$

## Menomonie, Wisconsin, 1949

A graduate class in survey procedures at the Stout Institute analyzed 34 occupational surveys published between 1939 and 1949, after requesting sources of such surveys from the 48 chief state school officers. Findings were as follows:

1. Most surveys had multiple purposes.
2. Purposes could be classified generally as curriculum revision and guidance planning.
3. All surveys were made on the basis of industrial and employment areas.
4. All surveys reported ages as below 21 or above 21 ; only one classified workers according to race; none reported sex of workers.

[^3]5. All surveys classified workers on the basis of whether or not they had finished high school.
6. All but one survey listed occupations as skilled, semi-skilled, and unskilled, in combination with other classifications.
7. Ten surveys included all employing establishments, 13 took samplings, and ll did not indicate extent of coverage.
8. Surveys were most frequently sponsored on the local basis, and by the local school system.
9. Twenty-six surveys dealt with occupational information, six pertained to school building needs, and two were follow-up studies.
10. Most surveys utilized national, state, and local sources of data.
11. The greater share of the work was conducted by teachers who were volunteers; many surveys used students; and ten gave no information on personnel.
12. Fifty per cent of the surveys gave no information indicating promotional methods employed. Newspapers, faculty meetings, and radio were named by the others .
13. Ninety-one per cent of the surveys had a committee draft the summary, conclusions, and recommendations, and more than half of the final reports were mimeographed.
14. Curriculum changes were the greatest single result of the surveys.
15. All administrators indicated that their surveys had given the desired information, and all but one stated that they would recommend similar surveys for other communities. ${ }^{12}$

## Summary

Portions chosen from surveys that had been made for thesis purposes included surveys of the following Texas communities: Austin, Cuero, Fort Worth, Houston, Huntsville, Laredo, Marfa, and Willacy County. The surveys usually sought business requirements, opportunities, and salaries. They asked for the things which businessmen considered important, for criticisms, for faults of workers, and for qualities and skills needed by workers. Their results were mainly advice for teachers and curriculum revision. One survey resulted in a training program for prospective employees.

All of the surveys reported weaknesses of employees in the fundamental school subjects. English was mentioned more frequently than any other subject. Grammar, punctuation, and spelling were considered the major weaknesses of employees. Arithmetic and penmanship were next. Training in the use of office machines was the only vocational skill subject criticlzed.

12 1939-1949." Mimeographed Report, Stout Institute, Menomonie, Wisconsin, 1949.

In all of the surveys, the three personal traits of highest importance were accuracy, dependability, and initiative. In order to improve the training of students, English teachers and business teachers were urged to cooperate. Better placement and more emphasis on training for business employment were also suggested.

Portions of community occupational surveys included reports of the following communities: Schenectady, New York; Tulare, California, and Menomonie, Wisconsin. They sought the same information as the individual surveys, but were conducted on a much greater scale. The Wisconsin survey was an analysis of 34 community occupational surveys.

## CHAPTER III

THE IMPORTANCE OF SURVEYS IN CERTAIN ASPECTS

## OF BUSINESS EDUCATION

Questionnaires and opinion polls are used increasingly to learn attitudes toward schools. ${ }^{1}$ Citizens usually are ignorant of all activities of the high school except athletic activities. Employers are not familiar with the business education department, and business teachers are ignorant of the work of local offices and stores. ${ }^{2}$

To keep in step with business, a school must know the educational needs of the business community, and a local survey is probably the most effective method of discovering those needs, since communities differ from one another. ${ }^{3}$

Aspects of business education to which surveys are especially applicable are discussed in this chapter. The relation of these aspects to the present survey is also given.

1
$\qquad$ - American Association of School Administrators. American School Curriculum, Thirty-first Yearbook, p. 349.
${ }^{2}$ R. G. Walters and C.A. Nolan, Principles and Problems of Business Education, p. 298.

3
Ibid.. p. 304.

## Public Relations

In the best sense of the term, public relations means providing better service, and the poll itself can be a good public relations device. ${ }^{4}$ The maintenance of public relations depends upon the quality of the survey and upon the person making the survey; but the personal contact of the teacher with business can help maintain public relations. ${ }^{5}$

One reason why business educators have not been alert to the need for better public relations is that no "sputniks" have challenged the adequacy of business education as they have challenged mathematics and science programs. Too, educators often look upon professional people who engage in public relations work as insincere and underhanded. ${ }^{6}$ Nevertheless, much good work is being done in public relations.

A valuable outgrowth of good public relations programs has been the formation of local advisory groups. These groups help bridge the gap between school and the job, and lead to cooperation between business education and the business world. ${ }^{7}$

4
Kenneth E. McIntyre, "How Useful Are Polls?" The Texas Outlook, Vol. 44, no. 2, February, 1960, p. 16.

5 Wralters and Nolan, op. cit., p. 302.
${ }^{6}$ Richard S. Perry and S. J. Wanous, "Public-Business Department Relations--Key to the Future of Business Education," Joumal of Business Education, vol. 35, no. 7, April, 1960, p. 306.
${ }^{7}$ Jerry E. Gratz, "An Advisory Committee Links School and Business," Business Education World, vol. 38, nc. 1, September, 1957, p. 30.

In New York City, education and business are cooperating through such groups, and the groups have designed a form to provide information to employers conceming students. The form has also been used as a guidance device in junior and senior high schools. ${ }^{8}$

In another city, Proctor and Gamble cooperates with the schools by training 35 high school students each year in a Saturday training program which begins just before Christmas and goes for eight consecutive Saturdays. The students are paid while they work, and are offered full-time employment if their training is satisfactory. They handle correspondence, take dictation, transcribe, and do copy work. All work is checked and returned with suggestions for improvement. Students are rated on accuracy, neatness, productivity, transcription, spelling, training aptitude, attitude, and grooming. On the last Saturday, a plant tour is conducted and Jobs are offered to the students. ${ }^{9}$

Schools are urged to invite businessmen to participate in school projects; to ask teachers to become active in the business community, and to carry on effective publicity programs in order to maintain desirable public relations. ${ }^{10}$

8 Joseph Gruber, "What Business Wants to Know about Your High School Graduate," The Balance Sheet, vol. 38, no. 7, March, 1957, p. 292 ff .

9
Jean Crontz, "Training Solves Problems," Iournal of Business Education, vol. 35, no. 6, March, 1960, pp. 258-259.

Wesley E. Scott, "How Schools Can Promote Good Public Relations in the Business Community, " Business Education Forum, vol. 14, no. 2, November, 1959, p. 21 ff .

The present survey sought the businessmen's wants and the employees' needs. It attempted to acquaint the business community with the business department of the high school; and it tried to find out if closer cooperation between school and business could be brought about. Of the 46 employers visited, only 13 were known by the interviewer prior to the survey.

## Curriculum

Lomax defines the curriculum as a group of subjects or courses of study representative of all major objectives of education. ${ }^{11}$ Hayden writes that curriculum may be broadly defined as the total of the students' experiences in the school, and that two considerations are: (1) which experiences a student should have, and (2) the best way to provide those experiences. ${ }^{12}$

Decisions concerning the curriculum should be made in the light of educational objectives. Nichols declares that each individual is entitled to an opportunity to obtain the largest possible measure of personal development through the discovery and nurture of his own aptitudes, interests, and capacities, so long as that personal development does not lead in anti-social directions. ${ }^{13}$

11
Paul S. Lomax, Commercial Teaching Problems, p. 1.
12 Carlos K. Hayden, Major Issues in Business Education, p. 27.
13 Frederick G. Nichols, Commercial Education in the High School. p. 9.

The Texas Curriculum Study Commission on Business Education recognizes the following objectives:

1. To contribute to general understanding of business, leading to a better understanding of the American economic system and a functional knowledge of common business practices in everyday living basic to intelligent consumership for all students;
2. To provide students with skills, knowledge and attitudes for initial employment, together with background understandings which will enable them to prepare for future advancement. 14

It is the responsibility of the business teachers to insist upon the best business curriculum for the youth of their communities; and only through many and varied contacts with the business community can this be accomplished. ${ }^{15}$

Expanded enroliments in colleges cause higher entrance requirements, so that additional required courses limit the number of elective business courses a student may take; in addition, many people feel that too many courses are offered already, and they would like to see some dropped from the curriculum. ${ }^{16}$

[^4]Surveys can be useful in curriculum improvements, through selection of courses and subject matter and by vitalizing classroom work. ${ }^{17}$ A survey made by a business college in South Carolina resulted in a whole new program; all employers asked for more of whatever was available, and specifically for training in personality and public relations. 18

The Bryan-College Station survey was concemed with attitudes toward the business curriculum. Did employers and employees see a need for more courses or for fewer courses? Another curriculum area, work experience, was also considered, and feelings toward it were sought.

The traditional method of learning a job skill is to actually work on the job. ${ }^{19}$ Business office experience is a cooperative work program in office occupations; students in the program remain in school four hours dally, one hour of which is spent in a class called business office experience. They work at least 15 hours a week, and are paid for that work. ${ }^{20}$ Surveys have been helpful to determing the need for such work experience, and opinions are divided on its value. ${ }^{21}$
${ }^{17}$ William H. Burton and Leo J. Brueckner, Supervision, p. 464. 18

Dean Sweetland, "After Checking with Business, We Built a New Curriculum," Business Education World, vol. 34, no. 5, January, 1954, p. 14.

Herbert A. Tonne, Principles of Business Education, p. 175.

## Personality Development

More persons obtain positions and receive promotions because of personality factors than for any other reason; however, undesirable personality characteristics often show up because of faulty training. The personality weakness might not have appeared had the individual been able to do his work efficiently. ${ }^{22}$ Bullding self-confidence is one of the great responsibilities of teachers of skill subjects. ${ }^{2 \widehat{3}}$

Every survey of job fallures points up personallty deficiencies; every survey of outstanding job success points up personality strengths. Personality has a profound effect on getting a job, on keeping it, on advancing in it. ${ }^{24}$

The importance of personal traits in business was recognized and discussed by business educators as far back as 1889. ${ }^{25}$ Also, a business handbook published in 1892 devoted the entire introduction to a discussion of personal traits as they relate to business. ${ }^{26}$ Character training has always been a major aspect of business education. Numbers of articles

22
Harm Harms, Methods in Vocational Business Education, p. 284.
23
Dennis W. Cambier, "Building Self-Confidence--a Typewriting Teacher's Responsibillty," The Balance Sheet, vol. 39, no. 7, March, 1958, p. 292.

24
R. L. Thistlethwaite, "We Must Give More Attention to Developing Employable Personalities," Buslness Education World, vol. 35, no. 1, September, 1954, p. 25.

25
Tonne, op. cit. . p. 65.
26
J. L. Nichols, The Business Guide, pp. 3-14.
concerning business education reveal that a great deal of attention is given to the subject. 27

A primary aim of education should be to prepare the individual for social living, which preparation requires the ability to make satisfactory social adjustments. Education should help the student to find personal satisfaction in a way that enriches his own life, the lives of those with whom he associates, and society as a whole. ${ }^{28}$

A plan developed by Dr. Ralph H. Ojemann at the University of Iowa calls for parents and teachers to develop understandings of possible causes behind behavior, to teach the causal approach to the pupils, and to educate the parents to the use of the approach in family relations. ${ }^{29}$

Whether personality development is accomplished as a separate subject, as a unit taken in a required subject, or as a part of the teaching of all subjects, more attention needs to be given to specific plans for personality improvement. ${ }^{30}$

The real key to personality development is self-evaluation. ${ }^{31}$ An interesting, versatile, and effective technique to improve personal traits
${ }^{27}$ Tonne, op. cit. . p. 64.
28 Katherine Humphrey, "A New Approach that Applies 'Dynamics' for Personality Development (Part I)," Business Education World, vol. 31. no. 8, April, 1951, p. 391.

29
Ibld.. p. 392.
${ }^{30}$ Thistlethwaite, op. cit., p. 26.
Bruce I. Blackstone, "Self-appraisal as a Personality Technique," Business Education World, vol. 35, no. 1, September, 1954, p. 27.
is dramatization of problem situations. ${ }^{32}$ The value of role-playing is recognized by those who know that motivation comes about through feelings of personal responsibility and accomplishment. ${ }^{33}$ Preaching will not accomplish the goal. ${ }^{34}$

Teachers should first set their own houses in order because their personalities are of great import in the development of student personal lty. ${ }^{35}$ If teachers cover their subjects effectively, they teach proper attitudes. ${ }^{36}$ Parents and teachers need to teach youngsters to do the things they have to do when they ought to do them, whether they like them or not. ${ }^{37}$

Industry expects from the employee emotional stability, selfdiscipline, willingness to work, persistence, initiative, ability to think, and ability to get along with others. ${ }^{38}$

32
Frances Rosenkrans and Jane Shannon, "Dramatization as a Personality Technique," Business Education World, vol. 35, no. 1, September, 1954, p. 28.

33
Ralph Mason, "Education for Business through Role Playing," Ioumal of Business Education, vol. 35, no. 8, May, 1960, p. 338.

34
Tonne, op. clit.. p. 74.
35
Harms, op. cit., pp. 286-287.
36
Leroy A. Brendel, "Develop Desirable Traits," Business Education World, vol. 38, no. 3, November, 1957, p. 18.
${ }^{37}$ Warren M. Jensen, "Absence, Tardiness, and the Office Worker," The Balance Sheet, vol. 40, no. 5, January, 1959, p. 206.

38
Robert L. Briggs, "What Does Industry Expect of our Graduates ?" The Balance Sheet, vol. 37, no. 4, December, 1955, p. 158.

High school business departments must become more conscious of the need for emphasizing personal qualities in order to have better workers for a better business world. 39

The present survey sought opinions concerning the degree of importance of certain skills, activities, and personal traits, especially as they relate to the school.

## Guldance

All effective education is vocational in so far as the knowledge acquired is useful, and all education has guidance value, but to look upon education only as vocational guidance is misleading. Guidance has the more specific purpose of making consclous, organized efforts toward planning for the future. 40

Vocational guidance is the process of helping the student choose an occupation, prepare for 1 t , enter upon $1 t$, and progress in 1 t . ${ }^{41}$ If guidance is to be more than a hit-or-miss affair, the school must set up a guidance program; if that program is to be successful, it must be carefully planned, thoroughly understood by administration and faculty, and fully supported by everyone connected with the school. 42

39
Dorothy Drane, "Personal Characteristics of a Good Office Worker," The Balance Sheet, vol. 38, no. 3, November, 1956, p. 104. 40 Tonne, op. cit., p. 141.

Harms, op. clt., p. 301.
42
Walters and Nolan, op. cit.. p. 262.

A successful vocational guidance program has five bases: (1) complete, cumulative records of students; (2) occupational information for the students; (3) scheduled counselor-student conferences; (4) a job-placement service; and (5) a systematic follow-up after students are placed. ${ }^{43}$ Business has a right to expect that guidance will reduce the number of misfits who seek admittance into the wrong kind of occupations. ${ }^{44}$

The greatest weakness in business education in secondary schools today lies in the guidance program. Many students who are in shorthand classes will never use shorthand; no highly prognostic tests exist for typing, bookkeeping, and salesmanship; students range widely in interest and ability; many are bored and become nuisances; and the number of boys going into business courses is decreasing while the number going into business occupations is increasing. ${ }^{45}$

Educators need to get students interested in business. A survey in Seattle snowed that at least 41 per cent of the people in Seattle who were employed in 1950 should have had business education to prepare them for the work they were doing. ${ }^{46}$

43
Ibld., p. 266.
44
Nichols, op. cit. . p. 242.
45
Lewis R. Toll, "Guidance in Business Education," Iourmal of Business Education, vol. 35, no. 6, March, 1960, pp. 252-254.

46
Verner Dotson, "The Future of Business Education in Seattle," Business Education Forum, vol. 14, no. 5, February, 1960, pp. 19-21.

One problem of guidance is counseling students who either can not, should not, or do not want to go to college. The emphasis on college preparation plays havoc with sensible guidance. 47

A basic concept of guidance in business education has been that students should be well rounded in their training by having several salable skills. 48 However, additional education is required to acquaint students with the cultural side of life which they may enjoy later. 49 Even an individual's hobby or recreation will add pleasure and meaning to his existence and allow him to forget the things that worry, annoy, and tire him in his business life. 50

Extra-curricular activities offer opportunities for broadening the interests of students and for integrating classroom subjects. ${ }^{51}$ One extra-curricular activity is the homeroom. A homeroom should be organlzed

47 John E. Whitcraft, "Business Education versus College Preparatory Guidance," Business Education Forum, vol. 14, no. 7, April, 1960, p. 19 .

48
I. David Satlow, "In Defense of Multiple-Skill Training," The Balance Sheet, vol. 38, no. 6, February, 1957, p. 244.

49
Wilbert E. Scheer, "A Businessman Comments on Today's Students--Tomorrow's Workers," American Business Education, vol. 16, no. 2, December, 1959, p. 117.

50 Elizabeth Lanham, "What Business Needs in the High School Graduate," The Balance Sheet, vol. 33, no. 6, February, 1952, p. 256. 51

Walters and Nolan, op. cit.. p. 38.
in such a way as to make it a significant social unit in the school. It should have a cross section in terms of ability and vocational interest. and students should stay together as a homeroom group during the entire high school period of four years. 52

The Bryan-College Station survey sought opinions on the guidance which employees received in high school, and on the value of the homeroom in guidance.

## Occupational Planning, Placement, and Follow-up

An important phase of guidance is dissemination of occupational Information. More opportunities should be provided for students to discuss their future vocations. ${ }^{53}$ It is rare for a young man to know what his life work will be at the time he enters college, and it is not unusual for a college senior to graduate without a goal. This is tragic; it is vital that students make career choices early. 54

Occupational information is indispensable. ${ }^{55}$ The present survey sought occupational information relative to initial employment requirements, employment opportunities, background of present workers, and the extent of Job competition given by wives of students of Agricultural and Mechanical College of Texas.

52 James B. Conant, The American High School Today, p. 74.
53 J. Frank Dame, "Research Notes," The Balance Sheet, vol. 25, no. 2, October, 1943, p. 85.

54
Gavin A. Pitt, The Twenty-minute Lifetime, p. 4.
55
Robert Hoppock, Occupational Information, p. 4.

Job placement is so closely related to vocational guidance that it is considered a part of the guidance program. ${ }^{56}$ Determination of the responsibility for placement is debatable. One group says that placement is the concern of the school, and the other group feela that placement is not a concem of the school at all. Many writers feel that the schools at least should see that students have the opportunity for placement services, whether they are provided by the school or by other agencies. ${ }^{57}$ The present survey sought opinions regarding the need for placement services at Stephen F. Austin High School.

A follow-up of students will show (1) whether the placement office is recommending suitable candidates for jobs, and (2) whether the teaching staff is performing an efficient service in vocational training. 5 Teachers sometimes train students to the limit of their abilities but fail to prepare them for the demands of business. Problems of beginning workers are: the various fears of the job, additional responsibility, difficulty with office machines, and the feeling that instructors had been too easy. 59

56
Walters and Nolan, op. cit.. p. 317.
57
Roy DeVerl Willey and Dean C. Andrew, Modern Methods and Techniques in Guidance, pp. 397-398.

58
Walters and Nolan, op. cit., p. 333.
59
Ethel Hale Blackledge, "Help Solve the Problems for the Beginning Worker," Iournal of Business Education, vol. 35, no. 8, May, 1960, p. 343.

A greater appreciation of the placement and follow-up aspect of guidance will strengthen the business education program and build better public relations. 60

The present survey sought the following information concerning former students: (1) the number of graduates or drop-out students of Stephen F. Austin High School among present office workers; (2) the number who received all of their business training there; (3) their interest in adult education; and (4) their opinions concerning all phases of the survey .

## Summary

Surveys are important in the following aspects of business education: public relations, curriculum, personality development, guidance, occupational planning, placement, and follow-up. Maintenance of public relations depends upon visits of businessmen to the schools, participation in community affalrs by the teachers, and publicity.

Business educators have not been alert to the need for public relations because their programs have not been challenged, and because they look upon public relations workers as insincere. Nevertheless, good work is being done in public relations. One good result has been the formation of advisory groups. These groups lead to cooperation between business education and the business world.
${ }^{60}$ Inez Ahlering, "Placement and Then Follow-up," American Business Education, vol. 14, no. 3, March, 1958, p. 157.

Curriculum is defined as a group of subjects representative of all major objectives of education, and also as the total of the students' experiences in school. Curriculum decisions should be made in the light of objectives, and those objectives should provide the opportunity for individual devebpment. Business educators should insist upon the best curriculum to provide general business understandings and vocational skills. Some schools provide work experience in which students try out these skills. Work experience is a cooperative work program in which students remain in school four hours dally and work at least 15 hours a week in office occupations, and receive pay.

Personality development is important in getting a job, keeping it. and advancing in 1t. Its importance was recognized as early as 1889, and is still stressed. Self-evaluation is the key to personality improvement, and role-playing is a valuable technique. Teachers should set good examples and teach proper attitudes. Industry expects workers who are emotionally mature, willing to work, and able to get along with others.

Guldance makes conscious, organized efforts toward planning for the future. It must be planned, understood, and supported by everyone connected with the school. Its bases are individual student records, dissemination of occupational information, counselor-student conferences, placement serrices, and follow-up. Guidance can help reduce the number of occupational misfits. Extra-curricular activities offer many opportunities for guidance, and the homeroom is one of those activities.

Students should be helped to make career cholces early, and occupational information is indispensable. Job placement is also a part of the guidance program, but determination of the responstbility for placement is debatable. A follow-up of students will show whether the placement office is recommending suitable candidates and whether the teaching staff is performing an efficient service in vocational training. A greater appreciation of the placement and follow-up aspects of guidance will strengthen the business education department.

## CHAPTER IV

## A SURVEY OF 46 EMPLOYERS IN BRYAN AND

## COLLEGE STATION, TEXAS

This chapter presents data obtained from the 46 employers who were interviewed, and who filled out questionnaires. The questionnaire, shown in Appendix A, was designed to procure from each employer the following information: industrial classification; number and kind of office workers employed; requirements for initial employment; use of employment tests; methods used to secure employees; reasons for office vacancies; and feelings toward applicants' school accomplishments. Any preferences for students of specific schools were requested. Many Latin-Americans at Stephen F. Austin High School are interested in office work; therefore, the present number of Latin-American office employees was requested.

The questionnaire asked for the training an employee could expect If hired, and asked employers to name weaknesses of beginning workers In skills and certain activities. Employers were requested to name personal traits which needed more stress by the schools, and to give opinions concerning the adequacy of the business courses offered at Stephen $F$. Austin High School. They were asked to give opinions on the need for a placement service and the worth of business office experience for students. Criticlsms and suggestions for improvement were requested.

A majority of the employers showed great interest in the survey, and all were courteous and attentive. Interviews usually lasted 30 minutes. One, however, was scarcely more than five minutes long, and many lasted an hour or more. After each interview, questionnaires were left for the employer and all office employees in the small offices, and for a representative sampling of employees in the large offices. Dates were set for later visits in order to pick up the questionnalres. Fifty employers constituted the survey goal, and 53 were interviewed, but only 46 completed responses in time for the questionnaires to be used. Those 46 employers employ 431 office workers. A list of the offices which were visited is given in Appendix B.

The greatest value of the survey came from the personal contacts made. Of 46 employers, 33 were persons not known by the interviewer. Some of the employers asked to be told results of the survey; one even pralsed the school for the endeavor. One apologized for not doing more for the school and asked to be told ways to help. One employer served coffee during the interview, and two conducted office tours. Several Introduced office employees. One host proudly displayed an old chair upon which tnitials had been carved, each set of initials signifying a girl who had worked in the office. Response of the employers was very gratifying. The survey came at a busy time for them, but all were courteous.

## Industrial Classification of Offices Visited

The labor force of the Bryan-College Station community is composed mainly of government workers. According to the Texas Employment Commission, approximately 38 per cent of the labor force is in government, 24 per cent in wholesale and retail trade, 15 per cent in services, 8 per cent in manufacturing, 7 per cent in contract construction, 4 per cent in transportation, communications, electricity, gas, and sanitary services, and 4 per cent in finance, insurance, and real estate. The state employment office uses the Standard Industrial Classification Manual, which recognizes ten divisions; ${ }^{1}$ however, two divisions are not represented at all in the local area, and one (agriculture, forestry, and fisheries) is represented so slightly that the three divisions were not included in the study.

The offices to be visited were selected according to the breakdown of the entire labor force. Table I shows that the selection was satisfactory except in the case of contract construction. Three offices had been chosen, but only two responded; it was not possible to find another office in contract construction with more than one office employee.

1
United States Bureau of the Budget, Standard Industrial Classication Manual, pp. v-vil.

INDUSTRIAL CLASSIFICATION OF 46 OFFICES AND PER CENT OF THE TOTAL LABOR FORCE REPRESENTED BY EACH CLASSIFICATION

| Classification Division | Per Cent | Offices Visited |  |
| :---: | :---: | :---: | :---: |
|  | of Labor Force | Number | $\begin{array}{r} \text { Per } \\ \text { Cent } \end{array}$ |
| Government | 38.0 | 18 | 39.2 |
| Wholesale and Retail Trade | 24.0 | 11 | 23.9 |
| Services | 15.0 | 7 | 15.2 |
| Manufacturing | 8.0 | 4 | 8.8 |
| Contract Construction | 7.0 | 2 | 4.3 |
| Transportation, Communications, Electricity, Gas, and Sanitary Services | 4.0 | 2 | 4.3 |
| Finance, Insurance, and Real Estate | 4.0 | 2 | 4.3 |
| Totals | 100.0 | 46 | 100.0 |

Offices visited in each classification were: government, 18 offices or 39.2 per cent; wholesale and retall trade, 11 offices or 23.9 per cent; services, seven offices or 15.2 per cent; manufacturing, four offices or 8.8 per cent; contract construction, two offices or 4.3 per cent, transportation, communications, electricity, gas, and sanitary services, two offices or 4.3 per cent; and finance, insurance, and real estate, two offices or 4.3 per cent.

## Number and Kind of Workers Employed

It was expected that the industries employing the greatest portions of the entire labor force would also employ the greatest number of office workers; however, this did not strictly hold true. Employers in services and contract construction hired fewer office workers than expected, and those in manufacturing and in finance, insurance, and real estate had a higher ratio of office workers to other workers than was expected. Table II reveals the following breakdown of office workers in the 46 offices: government, 284 workers or 65.9 per cent; wholesale and retail trade, 44 workers or 10.2 per cent; manufacturing, 41 workers or 9.5 per cent; services, 25 workers or 5.8 per cent; finance, insurance, and real estate, 16 workers or 3.7 per cent; transportation, communications, electricity, gas and sanitary services, 14 workers or 3.3 per cent, and contract construction, seven workers or 1.6 per cent.

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In many offices it appeared that occupational titles had not been discussed, and employers were not sure how to classify workers. One man laughed and said, "Well, let's call one of you a bookkeeper and one of you a secretary." This had been predicted by local personnel workers. Among those who did use strict classifications, several methods were found.

The Dictionary of Occupational Titles, Volume II, was used for classifications. ${ }^{2}$ All titles represent clerical workers except accountants, who are classified as professional and managerial. Table II, page 45, shows the following breakdown of 431 employees in all classifications: 112 clerks or 26.0 per cent; 92 stenographers or 21.3 per cent; 57 secretaries or 13.2 per cent; 52 bookkeepers or 12.1 per cent; 31 accountants or 7.2 per cent; 27 machine operators or 6.3 per cent; 23 cashiers or 5.3 per cent; 16 typists or 3.7 per cent; 10 receptionists or 2.3 per cent; and 11 others or 2.6 per cent. The latter occupational classification was required because some employers reported more titles than they reported employees, saying that many titles were combined, and also because one employer hired a continulty director and a traffic director as office workers.

A majority of the employers classified employees by three or fewer occupational titles; however, as many as eight titles were reported by two of the large offices.

2 United States Bureau of Employment Security, Dictionary of Occupational Titles, Volume II, p. xi.

Table III shows that 27 employers or 58.7 per cent employed from two to five office workers; nine employers or 19.6 per cent hired from six to 10 ; four employers or 8.7 per cent employed from 11 to 15 ; and six employers or 13.0 per cent employed more than 15 office workers. The range was from two to 88 office employees.

## Requirements for Initial Employment

The next six tables show a different order of importance for the various types of positions, because they rank the positions according to the number of employers who hire workers in each type of position. Clerks moved from the first position they occupied in earlier tables to second position in these six tables, stenographers moved from second to fourth, and bookkeepers from fourth to first. In other words, even though more clerks than bookkeepers were hired, they were hired by fewer employers than the bookkeepers were. The ratio of clerk to employer was four to one, while the bookkeeper-employer ratio was little more than one to one.

Table IV shows that bookkeepers were hired by 32 employers or 69.6 per cent; clerks by 28 employers or 60.9 per cent; and secretarles by 25 employers or 54.3 per cent. Stenographers were hired by 18 employers or 39.1 per cent; cashiers by 15 employers or 32.6 per cent; and accountants by 14 employers or 30.4 per cent. Machine operators were employed by 12 employers or 26.1 per cent; receptionists by 10

TABLE III

## SIZE OF EACH OFFICE FORCE REPORTED BY 46 EMPLOYERS

| Number of Office <br> Workers | Number | Per Cent |
| :--- | :---: | :---: |
| $2-5$ Workers | 27 | 58.7 |
| 6-10 Workers | 9 | 19.6 |
| 11-15 Workers | 4 | 8.7 |
| More than 15 Workers | 6 | 13.0 |
| Totals | 46 | 100.0 |

NUMBER AND PERCENTAGE OF 46 EMPLOYERS WHO EMPLOY WORKERS FOR EACH TYPE OF POSITION

| Type of Position | Number | Per Cent |
| :--- | :---: | :---: |
| Bookkeeper | 32 | 69.6 |
| Clerk | 28 | 60.9 |
| Secretary | 25 | 54.3 |
| Stenographer | 18 | 39.1 |
| Cashier | 15 | 32.6 |
| Accountant | 12 | 30.4 |
| Machine Operator | 10 | 26.1 |
| Receptionist | 9 | 19.7 |
| Typist | 6 | 13.0 |
| Other. | $46 *$ | $100.0 *$ |
| Totals |  | 19.6 |

* Many employers employ workers for several different types of positions.
employers or 21.7 per cent; typists by nine employers or 19.6 per cent; and others by six employers or 13.0 per cent.

Age
Age did not seem to be important, since almost 25 per cent failed to respond for minimum age, and almost 30 per cent failed to respond for maximum age. The most popular minimum age was 18 years, with 19 to 22 second; and the most popular maximum age was tied between 35 to 40 years of age and 45 to 50 years. Only in government offices were rigid rules followed. One employer said that he preferred applicants with "a few gray hairs."

Table V shows the following minimum ages reported most frequently for each position: bookkeepers, 19 to 22 years, given by nine employers or 28.1 of 32 who employ bookkeepers; clerks, 18 years, preferred by 15 employers or 53.6 per cent of 28 who employ clerks; secretaries, 18 years, reported by 11 employers or 44.0 per cent of 25 who employ secretaries; stenographers, 18 years, favored by 12 employers or 66.7 per cent of 18 who employ stenographers; cashiers, 18 years, given by six employers or 40.0 per cent of 15 who employ cashiers; accountants, 19 to 22 years or 23 to 26 years, named by three employers or 21.4 per cent of 14 who employ accountants; machine operators, 18 years, preferred by eight employers or 66.7 per cent of 12 who employ machine operators; receptionists, 18 years, preferred by four employers or 40.0 per cent of ten who employ receptionists; typists, 18 years, given

MINIMUM AGES ACCEPTABLE FOR INITIAL EMPLOYMENT IN EACH TYPE OF POSITION IN 46 FIRMS

| Type of Position | $\begin{aligned} & 17 \\ & \text { Years } \\ & \text { Num-Per } \\ & \text { ber Cent } \end{aligned}$ |  | $\begin{gathered} 18 \\ \text { Years } \\ \text { Num- Per } \\ \text { ber } \quad \text { Cent } \end{gathered}$ |  | $\begin{aligned} & 19-22 \\ & \text { Years } \end{aligned}$ <br> Num- Per |  | $\begin{aligned} & 23-26 \\ & \text { Years } \\ & \text { Num- Per } \\ & \text { ber Cent } \end{aligned}$ |  | ```27-30 Years Num- Per ber Cent``` |  | No <br> Response <br> Num- Per <br> ber Cent |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bookkeeper | 1 | 3.1 | 8 | 25.0 | 9 | 28.1 | 2 | 6.2 | 3 | 9.5 | 9 | 28.1 |
| Clerk | 0 | 0.0 | 15 | 53.6 | 6 | 21.4 | 1 | 3.6 | 0 | 0.0 | 6 | 21.4 |
| Secretary | 1 | 4.0 | 11 | 44.0 | 6 | 24.0 | 2 | 8.0 | 0 | 0.0 | 5 | 20.0 |
| Stenographer | 0 | 0.0 | 12 | 66.7 | 3 | 16.7 | 0 | 0.0 | 0 | 0.0 | 3 | 16.6 |
| Cashier | 0 | 0.0 | 6 | 40.0 | 3 | 20.0 | 2 | 13.3 | 1 | 6.7 | 3 | 20.0 |
| Accountant | 1 | 7.2 | 2 | 14.3 | 3 | 21.4 | 3 | 21.4 | 2 | 14.3 | 3 | 21.4 |
| Machine Operator | 0 | 0.0 | 8 | 66.7 | 1 | 8.3 | 0 | 0.0 | 0 | 0.0 | 3 | 25.0 |
| Receptionist | 1 | 10.0 | 4 | 40.0 | 2 | 20.0 | 0 | 0.0 | 2 | 20.0 | 1 | 10.0 |
| Typist | 0 | 0.0 | 7 | 77.8 | 1 | 11.1 | 0 | 0.0 | 0 | 0.0 | 1 | 11.1 |
| Other | 0 | 0.0 | 1 | 16.7 | 1 | 16.7 | 0 | 0.0 | 2 | 33.3 | 2 | 33.3 |

by seven employers or 77.8 per cent of nine who employ typists; and others, 27 to 30 years, named by two employers of six who employ others.

Only for clerks, stenographers, and typlsts did more than 50 per cent of the employers who hire them give minimum ages and all preferences were 18 years. Only for accountants ddd as many as 50 per cent of the employers who hire them give maximum ages, which were 45 to 50 years.

Table VI shows that the maximum ages named most frequently for each type of position were: bookkeepers, 45 to 50 years, named by nine employers or 28.1 per cent of 32 who employ bookkeepers; clerks, 35 to 40 years or 45 to 50 years, named by seven employers or 25.0 per cent of 28 who employ clerks; secretaries, 35 to 40 years, given by five employers or 20.0 per cent of 25 who employ secretarlesg stenographers, 45 to 50 years, given by six employers or 33.3 per cent of 18 who employ stenographers, cashiers, 35 to 40 years, named by six employers or 40.0 per cent of 15 who employ cashiers; accountants. 45 to 50 years, named by seven employers or 50.0 per cent of 14 who employ accountantes machine operators, 35 to 40 years, given by ive employera or 41.7 per cent of 12 who employ machine operatorsf receptionists, 45 to 50 years, named by four amployers or 40.0 per cent of 10 who employ receptionlsts; typlsts, 80 to 34 years, named by three employers of 9 who employ typlets; and others, 35 to 40 years or 45 to 50 years, named by two employers of six who employ others.

MAXIMUM AGES ACCEPTABLE FOR INITIAL EMPLOYMENT IN EACH TYPE OF POSITION IN 46 FIRMS, AS GIVEN BY EMPLOYERS USING EACH TYPE

| Type of Position | 30-34 <br> Years <br> Num- Per ber Cent |  | 35-40 <br> Years <br> Num- Per ber Cent |  | 45-50 <br> Years <br> Num- Per <br> ber Cent |  | 55-60 <br> Years <br> Num- Per <br> ber Cent |  | $\begin{aligned} & 62-65 \\ & \text { Years } \\ & \text { Num-Per } \\ & \text { ber Cent } \end{aligned}$ |  | No <br> Response <br> Num- Per <br> ber Cent |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bookkeeper | 1 | 3.1 | 6 | 18.8 | 9 | 28.1 | 1 | 3.1 | 1 | 3.1 | 14 | 43.8 |
| Clerk | 3 | 10.7 | 7 | 25.0 | 7 | 25.0 | 0 | 0.0 | 2 | 7.1 | 9 | 32.2 |
| Secretary | 0 | 0.0 | 5 | 20.0 | 4 | 16.0 | 2 | 8.0 | 4 | 16.0 | 10 | 40.0 |
| Stenographer | 2 | 11.1 | 5 | 27.8 | 6 | 33.3 | 0 | 0.0 | 3 | 16.7 | 2 | 11.1 |
| Cashier | 1 | 6.6 | 6 | 40.0 | 4 | 26.7 | 0 | 0.0 | 0 | 0.0 | 4 | 26.7 |
| Accountant | 0 | 0.0 | 3 | 21.4 | 7 | 50.0 | 0 | 0.0 | 1 | 7.2 | 3 | 21.4 |
| Machine Operator | 2 | 16.7 | 5 | 41.7 | 0 | 0.0 | 0 | 0.0 | 1 | 8.3 | 4 | 33.3 |
| Receptionist | 0 | 0.0 | 3 | 30.0 | 4 | 40.0 | 1 | 10.0 | 0 | 0.0 | 2 | 20.0 |
| Typist | 3 | 33.3 | 2 | 22.2 | 1 | 11.1 | 0 | 0.0 | 2 | 22.2 | 1 | 11.2 |
| Other | 0 | 0.0 | 2 | 33.3 | 2 | 33.3 | 0 | 0.0 | 0 | 0.0 | 2 | 33.4 |

## Experience

Experience was required by more than one half of the employers for bookkeepers, secretaries, cashiers, and accountants, and was not required by more than one half of the employers for clerks, stenographers, receptionists, and typists. For all positions combined, experience was required more often than it was not required. Wholesale and retall trade required experience more often than any other industry, with government second; contract construction required experience less often than any industry.

Table VII shows the following number who required experience for each type of position: bookkeepers, 24 employers or 75.0 per cent of 32 who hire bookkeepers; clerks, 10 employers or 35.7 per cent of 28 who hire clerks; secretaries, 14 employers or 56.0 per cent of 25 who hire secretaries; stenographers, eight employers or 44.4 per cent of 18 who hire stenographers; cashlers, 12 employers or 80.0 per cent of 15 who hire cashiers; accountants, 13 employers or 92.9 per cent of 14 who hire accountants; machine operators, six employers or 50.0 per cent of 12 who hire machine operators; receptionists, four employers or 40.0 per cent of ten who hire receptionists; typists, two employers of nine who hire typists; and others, three employers of six who hire others.

EXPERIENCE REQUIREMENTS OF 46 EMPLOYERS FOR INITIAL EMPLOYMENT IN EACH TYPE OF POSITION, AS GIVEN BY EMPLOYERS USING EACH TYPE

| Type of Position | Yes |  | No |  | No Response |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per Cent | Number | Per Cent | Number | Per Cent |
| Bookkeeper | 24 | 75.0 | 4 | 12.5 | 4 | 12.5 |
| Clerk | 10 | 35.7 | 17 | 60.7 | 1 | 3.6 |
| Secretary | 14 | 56.0 | 7 | 28.0 | 4 | 16.0 |
| Stenographer | 8 | 44.4 | 10 | 55.6 | 0 | 0.0 |
| Cashier | 12 | 80.0 | 2 | 13.3 | 1 | 6.7 |
| Accountant | 13 | 92.9 | 1 | 7.1 | 0 | 0.0 |
| Machine Operator | 6 | 50.0 | 5 | 41.7 | 1 | 8.3 |
| Receptionist | 4 | 40.0 | 6 | 60.0 | 0 | 0.0 |
| Typist | 2 | 22.2 | 6 | 66.7 | 1 | 11.1 |
| Other | 3 | 50.0 | 1 | 16.7 | 2 | 33.3 |

## Education

High school education was reported to be adequate by one half or more of the employers for all positions except accounting. For accounting it was fairly evenly divided between high school, business college, and college. Requirements were highest in govemment, and lowest in transportation, communications, electricity, gas, and sanitary services and in finance, insurance, and real estate.

Table VIII shows the following number of employers requiring high school education for each type of position: bookkeepers, 18 employers or 56.2 per cent of 32 who employ bookkeepers; clerks, 22 employers or 78.6 per cent of 28 who employ clerks; secretaries, 15 employers or 60 per cent of 25 who employ secretaries; stenographers, 11 employers or 61.1 per cent of 18 who employ stenographers; cashiers, 11 employers or 73.3 per cent of 15 who employ cashiers; accountants, five employers or 35.7 per cent of 14 who employ accountants; machine operators; eight employers or 66.7 per cent of 12 who employ machine operators; receptionists, elght employers or 80.0 per cent of 10 who employ receptionists; typists, Beven employers or 77.8 per cent of nine who employ typists; and others, three employers of six who employ others.

## TABLE VIII

MINIMUM EDUCATION REQUIREMENTS OF 46 EMPLOYERS FOR INITIAL EMPLOYMENT IN EACH TYPE OF POSITION

| Type of Position | High School |  | Business School |  | College |  | No Response |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per Cent | Number | Per Cent | Number | Per <br> Cent | Number | Per Cent |
| Bookkeeper | 18 | 56.2 | 10 | 31.2 | 0 | 0.0 | 4 | 12.6 |
| Clerk | 22 | 78.6 | 4 | 14.3 | 0 | 0.0 | 2 | 7.1 |
| Secretary | 15 | 60.0 | 6 | 24.0 | 0 | 0.0 | 4 | 16.0 |
| Stenographer | 11 | 61.1 | 5 | 27.8 | 0 | 0.0 | 2 | 11.1 |
| Cashier | 11 | 73.3 | 4 | 26.7 | 0 | 0.0 | 0 | 0.0 |
| Accountant | 5 | 35.7 | 4 | 28.6 | 4 | 28.6 | 1 | 7.1 |
| Machine Operator | 8 | 66.7 | 2 | 16.7 | 0 | 0.0 | 2 | 16.6 |
| Receptionist | 8 | 80.0 | 2 | 20.0 | 0 | 0.0 | 0 | 0.0 |
| Typist | 7 | 77.8 | 1 | 11.1 | 0 | 0.0 | 1 | 11.1 |
| Other | 3 | 50.0 | 0 | 0.0 | 0 | 0.0 | 3 | 50.0 |

Sex

Women were overwhelmingly preferred for all positions except accounting, in which case the preference for males was given by nine employers or 64.3 per cent of 14 who employ accountants.

Table IX reveals the following preferences for females for all positions: bookkeepers, 23 employers or 71.9 per cent of 32 who employ bookkeepers; clerks, 25 employers or 89.2 per cent of 28 who employ clerks; secretaries, 23 employers or 92.0 per cent of 25 who employ secretaries; stenographers, 15 employers or 83.3 per cent of 18 who employ stenographers; cashiers, 13 employers or 86.7 per cent of 15 who employ cashiers; accountants, three employers or 21.4 per cent of 14 who employ accountants; machine operators, $11 \mathrm{em}-$ ployers or 91.7 per cent of 12 who employ machine operators: receptionists, ten employers of ten who employ receptionists; typists, nine employers of nine who employ typists; and others, six employers of six who employ others .

## Methods Used to Secure Office Employees

Personal applications were the most popular source used by employers to secure office workers. Table X shows that it was mentioned by 35 employers or 76.1 per cent. Government employment agencies were second, named by 20 employers or 43.5 per cent; and recommendations of friends were third, named by 14 employers or 30.4 per cent.

SEX PREFERENCES OF 46 EMPLOYERS FOR EACH TYPE OF POSITION

| Type of Position | Male |  | Female |  | No Response |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per Cent | Number | Per Cent | Number | Per Cent |
| Bookkeeper | 7 | 21.9 | 23 | 71.9 | 2 | 6.2 |
| Clerk | 1 | 3.6 | 25 | 89.2 | 2 | 7.2 |
| Secretary | 0 | 0.0 | 23 | 92.0 | 2 | 8.0 |
| Stenographer | 0 | 0.0 | 15 | 83.3 | 3 | 16.7 |
| Cashier | 1 | 6.7 | 13 | 86.7 | 1 | 6.6 |
| Accountant | 9 | 64.3 | 3 | 21.4 | 2 | 14.3 |
| Machine Operator | 1 | 8.3 | 11 | 91.7 | 0 | 0.0 |
| Receptionist | 0 | 0.0 | 10 | 100.0 | 0 | 0.0 |
| Typist | 0 | 0.0 | 9 | 100.0 | 0 | 0.0 |
| Other | 0 | 0.0 | 6 | 100.0 | 0 | 0.0 |

## TABLE X

METHODS MOST OFTEN USED BY 46 EMPLOYERS FOR SECURING OFFICE EMPLOYEES

| Method Used | Number | Per Cent |
| :--- | :---: | :---: |
| Personal Application | 35 | 76.1 |
| Government Employment Agency | 20 | 43.5 |
| Recommendation of Friend | 14 | 30.4 |
| Firm Employee | 7 | 15.2 |
| Want Ad | 5 | 10.9 |
| School Placement Agency | 2 | 6.5 |
| Private Employment Agency | 2 | 4.3 |
| Business Associate | $46 *$ | $100.0 *$ |
| Totals |  |  |

* Many employers gave more than one method.

Five other methods combined were mentioned by only 19 employers or 41.3 per cent--firm employees, want ads, school placement agencies, and business associates.

Government agencies included the Civil Service Register, the Texas Employment Commission, and the personnel office of the Texas Agricultural and Mechanical College System. School placement offices were those at McKenzie-Baldwin Business College and at the Agricultural and Mechanical College of Texas.

Employers said that they hired applicants for particular jobs, rather than starting all new employees in the same position. One employer said that he used the "grapevine" system. Another sald that he and other employers discussed good employees during coffee breaks, and that it was hard not to "steal" employees from each other. Most employers reported using only one source to secure office employees, a few reported two or three, and none reported more than four sources .

## Importance of Applicants' School Accomplishments

Table XI shows that when considered in the light of great importance, opinions of teachers ranked first among school attainments, named by 23 employers or 50.0 per cent; grades ranked second, given by 12 employers or 26.1 per cent; extra-curricular participation ranked third, reported by seven employers or 15.2 per cent; elective offices placed fourth, named by three employers or 6.5 per cent; and honors placed fifth, given by two employers or 4.4 per cent.

## TABLE XI

IMPORTANCE OF CERTAIN SCHOOL ACCOMPLISHMENTS TO 46 EMPLOYERS IN CONSIDERING APPLICANTS FOR OFFICE POSITIONS

| School Accomplishment | Great <br> Importance <br> Num- Per ber Cent |  | Some <br> Importance <br> Num- Per ber Cent |  | No <br> Importance <br> Num- Per <br> ber Cent |  | No <br> Response Num- Per ber Cent |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Opinions of Teachers | 23 | 50.0 | 12 | 26.1 | 8 | 17.4 | 3 | 6.5 |
| Grades Earned | 12 | 26.1 | 26 | 56.5 | 4 | 8.7 | 4 | 8.7 |
| Extra-curricular Participation | 7 | 15.2 | 23 | 50.0 | 13 | 28.3 | 3 | 6.5 |
| Elective Offices Held | 3 | 6.5 | 20 | 43.5 | 20 | 43.5 | 3 | 6.5 |
| Honors Won | 2 | 4.4 | 23 | 50.0 | 17 | 36.9 | 4 | 8.7 |

On the questionnaires, employers expressed a preference for students who made above-average grades, but in interviews they sald that they never inquired about grades. In only three cases were preferences given for graduates of certain schools, with one employer naming A. \& M. Consolidated High School, and two naming Stephen F. Austin High School. One of the three named Sam Houston State Teachers College also.

Anglo-American students were obviously preferred, since only one Latin-American office worker, out of 431, was reported. However, a few employers stated that they would hire Latin-Americans if the Latin-Americans could qualify.

Table XI, page 62, also gives the degree of importance mentioned most frequently for each accomplishment as follows: opinions of teachers, great importance, mentioned by 23 employers or 50.0 per cent; grades earned, some importance, given by 26 employers or 56.5 per cent; extra-curricular participation, some importance, named by 23 employers or 50.0 per cent; elective offices, some importance or no importance, reported by 20 employers or 43.5 per cent; and honors won, some importance, mentioned by 23 employers or 50.0 per cent.

## Skill Requirements, Testing, and Training

Table XII reveals that the shorthand skill necessary for the highest grades in Stephen F. Austin High School (80 words a minute for five minutes, with 99 per cent transcription accuracy) was reported adequate by 41 employers or 89.1 per cent. The typing skill necessary for the highest grades, 45 words a minute for five minutes, was said to be adequate by 38 employers or 82.6 per cent. Typing ability was reported as being necessary for all office applicants by 33 employers or 71.7 per cent. Twenty-four employers, or 52.2 per cent, reported that they gave typing and shorthand tests to office applicants, but very few, 11 employers or 23.9 per cent, reported giving other pre-employment tests.

The reason given by many employers for not administering tests was that office applicants were nervous and could not perform so well as they later would on the job. Employers were muck more interested in accuracy than in speed.

Most of the employers noted that they had no training programs for office workers. Some employers, however, said that they hired new employees two weeks before the incumbents left, thus providing at least two weeks' time for training of new workers.

REPLIES OF 46 EMPLOYERS TO QUESTIONS CONCERNING SKILL REQUIREMENTS AND TESTING OF OFFICE APPLICANTS BEFORE HIRING

| Area of Questioning | Yes |  | No |  | No Response |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per Cent | Number | Per Cent | Number | Per Cent |
| Adequacy of 80 words a minute in shorthand | 41 | 89.1 | 3 | 6.5 | 2 | 4.4 |
| Adequacy of 45 words a minute in typing | 38 | 82.6 | 8 | 17.4 | 0 | 0.0 |
| Requirements of typing ability for all office applicants | 33 | 71.7 | 13 | 28.3 | 0 | 0.0 |
| Tests in typing and shorthand before hiring | 24 | 52.2 | 22 | 47.8 | 0 | 0.0 |
| Other pre-employment tests | 11 | 23.9 | 35 | 76.1 | 0 | 0.0 |

## Reasons Which Cause Office Vacancies

The two strikingly obvious reasons for office vacancies were pregnancy and moving away. Twenty-seven employers or 58.7 per cent gave pregnancy as the main reason (llsted as "Other" in Table XIII), and 21 employers or 45.6 per cent named moving away (listed as "Job Elsewhere" in Table XIII. The only other significant reason causing office vacancies was marriage, named by 15 employers or 32.6 per cent. Other reasons given in Table XIII were: promotion, named by eight employers or 17.4 per cent; increased business, given by seven employers or 15.2 per cent; retirement, reported by six employers or 13.0 per cent; operational changes, mentioned by five employers or 10.9 per cent; inadequate training, named by four employers or 8.7 per cent; personality defect, given by one employer or 2.2 per cent; and illness or death, mentioned by one employer, or 2 . 2 per cent.

One employer sald that he would no longer employ wives of students at the Agricultural and Mechanical College of Texas because they moved away too soon after they began work. Others, however, stated preferences for students' wives, and said that they worked as long as anyone else did.

TABLE XIII

## REASONS WHICH USUALLY CAUSE MOST OFFICE VACANCIES IN 46 FIRMS

| Reason for Vacancy | Number | Per Cent |
| :--- | :---: | :---: |
| Job Elsewhere | 21 | 45.6 |
| Marriage | 15 | 32.6 |
| Promotion | 8 | 17.4 |
| Increased Business | 7 | 15.2 |
| Retirement | 6 | 13.0 |
| Operational Changes | 5 | 10.9 |
| Inadequate Training | 4 | 8.7 |
| Personality Defect | 1 | 2.2 |
| Illness or Death | 27 | 58.7 |
| Other | 46 * |  |
| Totals | 100.0 * |  |

## Weaknesses of Beginning Workers in Skills <br> and Certain Activities

The questionnaire listed 15 skills and nine activities which are important in office work. Employers were asked to rank five weaknesses of employees but many gave fewer or more than five, so the weaknesses were ranked only by number of times mentioned. One employer said that it was difficult to answer because each position required a different set of skills. Weaknesses were found more often in fundament al training than in business skill training, except in the case of office machines.

## Skills

Employers stressed the need for employees with well-rounded training. They emphasized that employees needed skill in selfexpression, in the ability to communicate effectively with others, and in the ability to work with ideas. Table XIV shows the tremendous importance of English; the top three weaknesses were associated with English subjects. The table also shows the following rank of the 15 skills as voted upon by the employers: spelling, first, 31 employers or 67.4 per cent; self-expression, second, 27 employers or 58.7 per cent; grammar, third, 21 employers or 45.7 per cent; office machines, fourth, 20 employers or 43.5 per cent; penmanship, fifth, 18 employers

TABLE XIV

## WEAKNESSES OF BEGINNING WORKERS IN FIFTEEN SKILLS WHICH ARE IMPORTANT IN OFFICE WORK IN 46 FIRMS

| Name of Skill | Rank | Number | Per Cent |
| :--- | :---: | :---: | :---: |
| Spelling | 1 | 31 | 67.4 |
| Self-expression | 2 | 27 | 58.7 |
| Grammar | 3 | 21 | 45.7 |
| Office Machines | 4 | 20 | 43.5 |
| Penmanship | 5 | 18 | 39.1 |
| Arithmetic | 6 | 17 | 37.0 |
| Shorthand | 6 | 17 | 37.0 |
| Vocabulary | 8 | 15 | 32.6 |
| Bookkeeping | 9 | 11 | 23.9 |
| Typing | 11 | 10 | 21.7 |
| Punctuation | 12 | 9 | 19.6 |
| Filing | 13 | 7 | 15.2 |
| Transcription | 15 | 4 | 8.7 |
| Tabulation | 13 | 1 | 2.2 |
| Other |  | 8.7 |  |

or 39.1 per cent; arithmetic and shorthand, sixth, 17 employers or 37.0 per cent; vocabulary, eighth, 15 employers or 32.6 per cent; bookkeeping, ninth, 11 employers or 23.9 per cent; typing, tenth, 10 employers or 21.7 per cent; punctuation, eleventh, nine employers or 19.6 per cent; filing, twelfth, seven employers or 15.2 per cent; transcription and others, thirteenth, four employers or 8.7 per cent; and tabulation, fifteenth, one employer or 2.2 per cent. Credit knowledge and mastery of office routine were mentioned most often as others.

## Activities

During the interviews, employers mentioned weaknesses of beginning workers in the following activities which are important to office workers: telephone technique, applying for a job, and personality development. One employer said that the telephone technique of employees often determined whether customers were lost or gained. The same employer said that applicants too often applied for work with the attitude that they could not possibly get a job, and that applicants should be taught to use a more positive approach. Many employers said that more stress should be placed on development of employable personalities. When the questionnaires were tabulated, activities which had not been mentioned during interviews were named most frequently. This was perhaps due to a weaknessth the questionnalre, because it is hard to separate personality developinent from work-habits development,
instructing others, and meeting callers. It is noticeable, however, that most of the activities were mentioned by almost 50 per cent of the employers.

Table XV reveals the following information: work-habits development was named first among weaknesses in certain activities, reported by 36 employers or 78.3 per cent; telephone technique was second, rated by 30 employers or 65.2 per cent; instructing others came third, named by 25 employers or 54.3 per cent; applying for a job and personality development were fourth, mentioned by 23 employers or 50.0 per cent; meeting callers was slxth, given by 22 employers or 47.8 per cent; use of business forms was seventh, reported by 19 employers or 41.3 per cent; use of legal documents was elghth, named by 12 employers or 26.1 per cent; and other activities were ninth, mentioned by six employers or 13.0 per cent. The other activities given most frequently included taking instructions and leaming office routine.

## Personal Traits Which Should Be Stressed

The interviews revealed that employers think human relations and personality development are very important, and that these can be taught in school. One person suggested a course in human relations. However, one employer took the opposing view that personality development goes on from the cradle to the grave and that the school can not do much about it. He said that the home should attend to that training. The same

## TABLE XV

WEAKNESSES OF BEGINNING WORKERS IN NINE ACTIVITIES WHICH ARE IMPORTANT IN OFFICE WORK IN 46 FIRMS

| Name of Activity | Rank | Number | Per Cent |
| :--- | :---: | :---: | :---: |
| Work-habits Development | 1 | 36 | 78.3 |
| Telephone Technique | 2 | 30 | 65.2 |
| Instructing Others | 3 | 25 | 54.3 |
| Applying for a Job | 4 | 23 | 50.0 |
| Personality Development | 4 | 23 | 50.0 |
| Meeting Callers | 6 | 22 | 47.8 |
| Use of Business Forms | 7 | 19 | 41.3 |
| Use of Legal Documents | 8 | 12 | 26.1 |
| Other | 9 | 6 | 13.0 |

person, however, volunteered to visit Stephen F. Austin High School and to work with small groups to try to do something about it. He suggested the use of skits rather than speeches. One man said that teachers should look for personality handicaps and try to correct them. Another sald that human relations are even more important in small offices than in large ones because workers stay so "cooped up" that aggressive workers try to tell other workers how to run their affairs.

One employer said that students should be taught more about democracy and the qualities that made this country great. Several said that initlative should be stressed more, as well as the value of hard work. One said that honesty and morals should be emphasized. Another said that workers must know when to be businesslike and when to "play." One employer said that students should have a desire to work when they take a job, and to take pride in their work. One said that too many employees are content with ugly strikeovers, erasures, and other indications of inferior work. Another employer sald that the school should do more to honor the students who make good grades, in order to help teach pride of accomplishment.

It was very difficult for some employers to decide which ten traits to name, and many sald that all of the 30 traits listed on the questionnaire were important and needed more stress. Some asked for definitions, but were urged to make decisions lipon the basis of what they thought the
tralts meant. Two employers gave fewer than ten traits and three employers gave more than ten. Numbers given ranged from eight to 13 traits.

Table XVI shows the following rank of traits considered important by employers: initiative, first, 35 employers or 76.1 per cent; accuracy, second, 33 employers or 71.7 per cent; dependability, third, $31 \mathrm{em}-$ ployers or 67.4 per cent; responsibility, fourth, 27 employers or 58.7 per cent; honesty, fffth, 26 employers or 56.5 per cent; personal appearance, sixth, 25 employers or 54.3 per cent; loyalty, seventh, 24 employers or 52.2 per cent; neatness in work, eighth, 23 employers or 50.0 per cent; cooperativeness, ninth, 20 employers or 43.5 per cent; judgment, tenth, 18 employers or 39.1 per cent; adaptabllity, eleventh, 16 employers or 34.8 per cent; friendiness, twelfth, 15 employers or 32.7 per cent; determination, mental alertness, and punctuality, thirteenth, 13 employers or 28.3 per cent; tact, sincerity, enthusiasm, self-confidence, and following directions, sixteenth, 12 employers or 26.1 per cent; integrity, twenty-first, 11 employers or 23.9 per cent; poise, trustworthiness, cheerfulness, and voice quality, twenty-second, eight employers or 17.4 per cent; health and courtesy, twenty-sixth, seven employers or 15.2 per cent; industry, twenty-eighth, six employers or 13.0 per cent; self-control, twenty-ninth, four employers or 8.7 per cent; and consideration, thirtieth, three employers or 6.5 per cent.

## TABLE XVI

RANKING OF THIRTY PERSONAL TRAITS WHICH 46 EMPLOYERS THINK SHOULD BE STRESSED MORE BY THE SCHOOLS

| Name of Trait | Rank | Number | Per Cent |
| :---: | :---: | :---: | :---: |
| InItiative | 1 | 35 | 76.1 |
| Accuracy | 2 | 33 | 71.7 |
| Dependability | 3 | 31 | 67.4 |
| Responsibility | 4 | 27 | 58.7 |
| Honesty | 5 | 26 | 56.5 |
| Personal Appearance | 6 | 25 | 54.3 |
| Loyalty | 7 | 24 | 52.2 |
| Neatness in Work | 8 | 23 | 50.0 |
| Cooperativeness | 9 | 20 | 43.5 |
| Judgment | 10 | 18 | 39.1 |
| Adaptability | 11 | 16 | 34.8 |
| Friendliness | 12 | 15 | 32.7 |
| Determination | 13 | 13 | 28.3 |
| Mental Alertness | 13 | 13 | 28.3 |
| Punctuality | 13 | 13 | 28.3 |
| Tact | 16 | 12 | 26.1 |
| Sincerity | 16 | 12 | 26.1 |
| Enthusiasm | 16 | 12 | 26.1 |
| Self-confidence | 16 | 12 | 26.1 |
| Following Directions | 16 | 12 | 26.1 |
| Integrity | 21 | 11 | 23.9 |
| Polse | 22 | 8 | 17.4 |
| Trustworthiness | 22 | 8 | 17.4 |
| Cheerfulness | 22 | 8 | 17.4 |
| Voice Quality | 22 | 8 | 17.4 |
| Health | 26 | 7 | 15.2 |
| Courtesy | 26 | 7 | 15.2 |
| Industry | 28 | 6 | 13.0 |
| Self-control | 29 | 4 | 8.7 |
| Consideration | 30 | 3 | 6.5 |

## Adequacy of Business Courses Offered by

## Stephen F. Austin High School

Employers were asked whether they thought that Stephen F. Austin High School should add new business courses, make additions to any of the six courses already offered, drop any of those already offered, or leave the courses as they were. An average of 25 per cent of the employers failed to give opinions concerning most courses, saying that they were not well enough informed to offer opinions. Almost 40 per cent of the employers failed to state opinions concerning secretarial training.

A majority of those who did respond suggested leaving courses as they were or adding more. Additions to shorthand and bookkeeping were requested by 16 employers or 34.8 per cent, as shown in Table XVII. Opinions expressed by the greatest number of employers for each course were: typing, no change, 33 employers or 71.7 per cent; business law, no change, 25 employers or 54.4 per cent; business arithmetic, no change, 20 employers or 43.5 per cent; bookkeeping, no change, $19 \mathrm{em}-$ ployers or 41.3 per cent; secretarial training, no change, or no response, 18 employers or 39.1 per cent; and shorthand, no change, 18 employers or 39.1 per cent.

Most employers felt that business office experience should be provided for students. Many praised the local distributive education program, and one employer named several employees who had leamed a

TABLE XVII
OPINIONS OF 46 EMPLOYERS CONCERNING ADEQUACY OF THE SIX BUSINESS COURSES OFFERED AT

STEPHEN F. AUSTIN HIGH SCHOOL

| Name of Course | Leave As Is |  | Add More |  | No Response |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per Cent | Number | Per Cent | Number | Per Cent |
| Typing | 33 | 71.7 | 3 | 6.5 | 10 | 21.8 |
| Business Law | 25 | 54.4 | 9 | 19.5 | 12 | 26.1 |
| Business Arithmetic | 20 | 43.5 | 14 | 30.4 | 12 | 26.1 |
| Bookkeeping | 19 | 41.3 | 16 | 34.8 | 11 | 23.9 |
| Secretarial Training | 18 | 39.1 | 10 | 21.8 | 18 | 39.1 |
| Shorthand | 18 | 39.1 | 16 | 34.8 | 12 | 26.1 |

variety of jobs through that program. He sald that business should give all youngsters a chance, but should pay them while they leam. However, another employer said that students should be willing to work without pay in order to gain experience.

## Opintons about Work Experience and Job Placement

Table XVIII shows that 28 employers or 60.9 per cent would be willing to participate in programs which provided business office experience and job placement services for students of Stephen F. Austin High School. It can be assumed that more employers would participate, because many said that they needed more information before they could commit themselves.

## Criticisms and Suggestions for Improvement

Responses offering criticisms and suggestions for improvement were disappointing, because only five employers offered criticisms, and only nine employers offered suggestions for improvement. Many employers, however, expressed pride in the school and in the community.

The four criticisms were: (1) instruction is theoretical instead of practical; (2) students lack training in care of equipment; (3) teachers should be younger and more modern; and (4) teachers should be brought up to date on office operations.

TABLE XVIII

OPINIONS OF EMPLOYERS CONCERNING THEIR PARTICIPATION IN BUSINESS OFFICE EXPERIENCE AND PLACEMENT PROGRAMS FOR STUDENTS OF STEPHEN F. AUSTIN HIGH SCHOOL

| Area of Questioning | Yes |  | No |  | No Response |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per <br> Cent | Number | Per <br> Cent | Number | Per Cent |
| Office Experience | 28 | 60.9 | 11 | 23.9 | 7 | 15.2 |
| Placement | 28 | 60.9 | 12 | 26.1 | 6 | 13.0 |

The nine suggestions for improvement are:

1. Utilize men and women from the business world to a greater extent.
2. Add a course in letter writing.
3. Require all students to take shorthand and typing.
4. Let students gain experience in downtown offices, similar to student teaching in college.
5. Sell students on the realism of business courses.
6. Make courses more practical than they are.
7. Use more dictating equipment.
8. Teach the care of typewriters, and the use of carbons.
9. Teach the use of stenclls and mimeograph machines.

## Summary

The 46 employers who employ 431 office workers, were interviewed and they filled out questionnalres which were designed to secure occum pational information. Employers were asked for requirements for indtial employment, weaknesses observed in workers, personal traits needing stress, and opinions of business education at Stephen F. Austin High School. All employers were courteous, and the personal contacts constituted the greatest value of the survey. The offices were gelected according to the breakdown of the community labor force in which govemment is the leading industry.

Offices in services and contract construction employed slightly fewer office workers than was expected, and those in manufacturing and in finance, insurance, and real estate employed slightly more than was expected. Little attention to occupational titles was found. A majority of the offices had two to five office workers.

It was found that more clerks than bookkeepers were hired, but they were hired by fewer employers than bookkeepers were. Age was not an important factor. The minimum age mentioned most frequently by employers who gave age requirements was 18 years. The maximum age was tied between 35 to 40 years and 45 to 50 years. Government offices reported the most rigid rules.

Expertence was required more often than it was not required. It was required more often in wholesale and retail trade than in any other industry and less often in contract construction. High school education was generally adequate for all positions except accounting. Requirements were highest in government. Women were overwhelmingly favored for all positions except those in accounting.

Personal applications were the most popular source used by employers to secure office workers. Employers reported hiring applicants for particwar positions rather than starting all new employees in the same job.

Opinions of teachers are of great importance to employers when considering applicants. Grades are of some importance. Extra-curricular participation was reported as being of some importances elective offices
were equally reported as being important and not important; and honors were sald to be of some importance.

The shorthand and typing skills necessary for the highest grades in Stephen F. Austin High School were reported adequate for initial employment. Typing ability was reported as being necessary for all office applicants. Slightly more than one half of the employers said that they gave typing and shorthand tests to applicants, but very few mentioned other pre-employment tests. Employers were more interested in accuracy than speed. Most of the employers sald that they provided no training programs. The two most obylous reasons causing office vacancies were pregnancy and moving away.

Weaknesses in skills and activities were reported more often in fundamental training than in business skill training. The top three skill weaknesses reported by employers were associated with English--spelling, self-expression, and grammar. The fourth was office machines, and the fifth penmanship. The five main weaknesses in activities which are important in office work were: work-hablts development, telephone technique, instructing others, applying for a job, and personality development. The first ten personal traits which employers named as needing stress by the schools were: initiative, accuracy, dependability, responsibllity, honesty, personal appearance, loyalty, neatness in work, cooperativeness, and judgment.

Employers who gave opinions of the courses offered at Stephen $F$. Austin High School suggested leaving courses as they are or adding more. Additions to shorthand and bookkeeping courses were requested by approximately one third of the employers. Most of the employers sald that they would participate in programs providing office experience and Job placement services for students. Only five employers offered criticisms, and many offered praise instead. Only nine employers offered suggestions for improvement.

## CHAPTER V

## A SURVEY OF 150 EMPLOYEES IN BRYAN AND COLLEGE STATION, TEXAS

The employees were selected from 431 employed in 46 offices. They were chosen in such a way that the industries employing the greatest number of office workers would have the greatest representation in the group of 150 employees.

After interviews, questionnaires were left with employers who distributed them to representative samplings of employees. In small offices, questionnaires were left for all employees. The questionnalre, shown in Appendix C, asked for the background of employees and for their opinions conceming the business education program at Stephen $F$. Austin High School. It was hoped that the occupational information could be of help in training students who are still in school.

In a few cases where the employers were not in, the initial interviews were held with employees; questionnaires were left for both groups, and return calls were made to interview the employers. In many cases employees asting as receptionists came to be very friendly.

Interviews with employees were especially helpful, because in most cases the employees were secretaries who would eventually fill out the questionnaires for their employers. The main complaint about
applicants as voiced by those secretaries was personal appearance. Three different secretaries objected to girls who came to apply for jobs wearing flat-heeled shoes and no hose. Two secretaries reported that applicants often came in with pins and curlers in their hair, and chewed gum. One mentioned shyness as a handicap for some workers who were otherwise qualified.

All who were interviewed were friendly and cooperative. Many were friends or former students of the interviewer. The responses of former students of Stephen F. Austin High School who filled out questionnaires were not noticeably different from responses of other employees.

## Number, Kind, and Classification of Workers

Table XIX shows that the number of employees in each industrial classification was as follows: 62 employees or 41.3 per cent in government; 31 employees or 20.7 per cent in wholesale and retail trade; 20 employees or 13.3 per cent in manufacturing; 16 employees or 10.7 per cent in services; nine employees or 6.0 per cent in finance, insurance, and real estate; seven employees or 4.7 per cent in transportation, communications, electricity, gas, and sanitary services; and five employees or 3.3 per cent in contract construction.

Numbers in each occupation were: 42 clerks or 28.0 per cent; 25 secretaries or 16.7 per cent; 24 bookkeepers or 16.0 per cent; 21 stenographers or 14.0 per cent; seven cashiers or 4.7 per cent; six accountants

OCCUPATIONAL TITLES AND INDUSTRIAL CLASSIFICATION OF 150
OFFICE EMPLOYEES IN THE STUDY

| Occupational Title | Government | Number by Industrial Classification |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Wholesale and Retail Trade | Manu- <br> factu- <br> ring | Services | Finance, Insurance, and Real Estate | Transportation, Communications, Electricity, Gas and Sanitary Services | Contract Construction | Totals | Per Cent |
| Clerk | 22 | 6 | 2 | 1 | 6 | 4 | 1 | 42 | 28.0 |
| Secretary | 14 | 1 | 3 | 6 | 0 | 1 | 0 | 25 | 16.7 |
| Bookkeeper | 3 | 13 | 2 | 3 | 1 | 0 | 2 | 24 | 16.0 |
| Stenographer | 15 | 2 | 2 | 0 | 2 | 0 | 0 | 21 | 14.0 |
| Cashier | 0 | 4 | 1 | 0 | 0 | 2 | 0 | 7 | 4.7 |
| Accountant | 1 | 1 | 3 | 1 | 0 | 0 | 0 | 6 | 4.0 |
| Machine |  |  |  |  |  |  |  |  |  |
| Operator | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 6 | 4.0 |
| Receptionist | 1 | 0 | 3 | 2 | 0 | 0 | 0 | 6 | 4.0 |
| Typist | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1.3 |
| Other | 0 | 3 | 3 | 3 | 0 | 0 | 2 | 11 | 7.3 |
| Totals | 62 | 31 | 20 | 16 | 9 | 7 | 5 | 150 | 100.0 |
| Per Cent | 41.3 | 20.7 | 13.3 | 10.7 | 6.0 | 4.7 | 3.3 | 100.0 |  |

or 4.0 per cent; six machine operators or 4.0 per cent; six receptionists or 4.0 per cent; two typists or 1.3 per cent; and 11 others or 7.3 per cent. The latter group was made up of those who checked many titles on the questionnaire. It was obvious that many did not know their true occupational titles.

## Background and Present Status of Employees

Employees were asked to give information relative to their qualifications for employment. Salary and marital status were asked. Married female employees were asked to give the employment status of their hus~ bands, in order to find the number who were wives of students at the Agricultural and Mechanical College of Texas.

## Age and Sex

Table XX shows that more employees were 21 to 30 years old than any other age. Ages ranged from 17 years to 83 years; the youngest employee sald that she was a stenographer, and her employer reported that she was a secretary. She was a graduate of Stephen F. Austin High School, and worked in govemment, eaming $\$ 180$ monthly. The oldest employee reported that he was an accountant and his employer sald that he was a bookkeeper. He was a graduate of a high school within 100 miles of Bryan, had 64 years of experlence, and worked in wholesale and retail trade, eaming $\$ 220$ monthly.

TABLE XX
PRESENT AGES OF 150 OFFICE EMPLOYEES

| Type of Position | Number by Age |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $17-20$ <br> Years | $\begin{aligned} & 21-30 \\ & \text { Years } \end{aligned}$ | $\begin{aligned} & 31-40 \\ & \text { Years } \end{aligned}$ | $\begin{aligned} & 41-50 \\ & \text { Years } \end{aligned}$ | Over 50 Years | No <br> Response |
| Stenographer | 9 | 9 | 2 | 0 | 1 | 0 |
| Clerk | 5 | 13 | 8 | 10 | 4 | 2 |
| Bookkeeper | 2 | 10 | 2 | 6 | 3 | 1 |
| Receptionist | 2 | 2 | 2 | 0 | 0 | 0 |
| Secretary | 1 | 8 | 3 | 8 | 3 | 2 |
| Cashier | 1 | 5 | 0 | 0 | 0 | 1 |
| Accountant | 1 | 3 | 1 | 0 | 1 | 0 |
| Machine Operator | 1 | 1 | 2 | 2 | 0 | 0 |
| Typlst | 1 | 1 | 0 | 0 | 0 | 0 |
| Other | 3 | 4 | 1 | 2 | 1 | 0 |
| Totals | 26 | 56 | 21 | 28 | 13 | 6 |
| Per Cent | 17.3 | 37.3 | 14.0 | 18.7 | 8.7 | 4.0 |

Only eight employees or 5.3 per cent were males, and they represented many occupational titles and industrial classifications.

The most popular age group was 21 to 30 years, given by 56 employees or 37.3 per cent. The youngest group, 17 to 20 years, had 26 employees or 17.3 per cent, and included more stenographers than any other type of worker; however, all titles were represented in that group. Other age groups and representations were: 31 to 40 years, 21 employees or 14.0 per cent; 41 to 50 years, 28 employees or 18.7 per cent; and over 50 years, 13 employees or 8.7 per cent. The oldest group of employees had more clerks than any other type of worker. It also contained numbers of secretaries and bookkeepers.

## Experience

Table XXI shows that 136 employees or 90.7 per cent had experience prior to their present employment, and that 11 employees or 7.3 per cent did not have previous experience. Inexperience was found most often among stenographers, cashlers, and clerks.

Table XXII reveals that 32 employees or 21.3 per cent had worked for only one other firm; 33 employees or 22.0 per cent had worked for two others; 28 employees or 18.7 per cent had worked for three others; 16 employees or 10.7 per cent had worked for four others; 12 employees or 8.0 per cent had worked for five others; and 15 employees or 10.0 per cent had worked for more than five other firms. The range was from none to 12 other firms.

## TABLE XXI

EXPERIENCE AND INEXPERIENCE PRIOR TO PRESENT EMPLOYMENT OF 150 EMPLOYEES

| Type of Position | Experience |  | Inexperience |  | No Response |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per Cent | Number | Per Cent | Number | Per Cent |
| Clerk | 37 | 88.1 | 3 | 7.1 | 2 | 4.8 |
| Secretary | 22 | 88.0 | 2 | 8.0 | 1 | 4.0 |
| Bookkeeper | 22 | 91.7 | 2 | 8.3 | 0 | 0.0 |
| Stenographer | 18 | 85.7 | 3 | 14.3 | 0 | 0.0 |
| Cashier | 6 | 85.7 | 1 | 14.3 | 0 | 0.0 |
| Accountant | 6 | 100.0 | 0 | 0.0 | 0 | 0.0 |
| Machine Operator | 6 | 100.0 | 0 | 0.0 | 0 | 0.0 |
| Receptionist | 6 | 100.0 | 0 | 0.0 | 0 | 0.0 |
| Typist | 2 | 100.0 | 0 | 0.0 | 0 | 0.0 |
| Other | 11 | 100.0 | 0 | 0.0 | 0 | 0.0 |
| Totals | 136 |  | 11 |  | 3 |  |
| Per Cent | 90.7 |  | 7.3 |  | 2.0 |  |

## TABLE XXII

NUMBER OF OTHER FIRMS FOR WHICH 150 EMPLOYEES HAVE WORKED

| Number of Other Firms | Number | Per Cent |
| :---: | :---: | :---: |
| None | 11 | 7.3 |
| 1 | 32 | 21.3 |
| 2 | 33 | 22.0 |
| 3 | 28 | 18.7 |
| 4 | 16 | 10.7 |
| 5 | 15 | 10.0 |
| More than 5 | 3 | 2.0 |
| No Response | 150 | 100.0 |
| Totals |  |  |

Table XXIII shows that for all employers 49 employees or 32.6 per cent had from one to five years of experience; 30 employees or 20.0 per cent had six to ten years; 19 employees or 12.7 per cent had 11 to 15 years; 16 employees or 10.7 per cent had 16 to 20 years; and 12 employees or 8.0 per cent had 21 to 25 years. Only 16 employees or 10.7 per cent had more than 25 years of experience, and elght employees or 5.3 per cent had less than one year. The range of experience was from one month to 64 years.

The following picture is shown when experience with the present employer is considered: 52 employees or 34.7 per cent had worked less than one year; 57 employees or 38.0 per cent had worked from one to five years; 18 employees or 12.0 per cent had worked from six to ten years; and only 22 employees or 14.7 per cent had worked longer than ten years for the present employers. One person had worked only two weeks, while one had worked 34 years for the same firm.

First jobs were mainly clerical, named by 101 employees or 67.3 per cent. Sales jobs, including jobs in filling stations, were reported by 18 employees or 12.0 per cent, while 16 employees or 10.7 per cent named others, and 15 employees or 10.0 per cent gave no response. No patterns for first jobs or for lines of advancement were discernible; and 104 employees or 69.3 per cent had held only one position with the present firm.

## TABLE XXIII

## NUMBER OF YEARS OF EXPERIENCE OF 150 EMPLOYEES

FOR ALL EMPLOYERS AND FOR THE PRESENT EMPLOYERS

| Number of Years <br> of Experience | For All Employers <br> Number | For Present Employers <br> Number | Per Cent |
| :--- | :---: | :---: | :---: | :---: |

## Salary

Only 17 employees or 11.3 per cent failed to respond when asked to give monthly salary. It was found that salary was dependent upon age, experience, and qualifications more than upon occupational titles. Most employees earned from $\$ 200$ to $\$ 249$ monthly. Salarles ranged from $\$ 144$ to $\$ 450$. The lowest salary was eamed by a 20 -year-old cashler in wholesale and retail trade, who had been with the firm only five months, and who had high school education. The highest salary was paid to a 55-year-old secretary in govemment who had been with the firm 25 years and who had three years of college education. Nelther was a graduate of Stephen F. Austin High School. Table XXIV shows that the breakdown of salaries was as follows: under $\$ 150$ monthly, one employee or .7 per cent; $\$ 150$ to $\$ 199$ monthly, 18 employees or 12.0 per cent; $\$ 200$ to $\$ 249$ monthly, 53 employees or 35.3 per cent; $\$ 250$ to $\$ 299$ monthly, 26 employees or 17.3 per cent; $\$ 300$ to $\$ 349$ monthly, 19 employees or 12.7 per cent; $\$ 350$ to $\$ 399$ monthly, nine employees or 6.0 per cent; and $\$ 400$ to $\$ 450$ monthly, seven employees or 4.7 per cent.

## Education

Only 11 employees or 7.3 per cent were not high school graduates, and 51 employees or 34.0 per cent had no further education. Those with

TABLE XXIV

PRESENT MONTHLY SALARIES OF 150 EMPLOYEES

| Amount of Monthly Salary | Number | Per Cent |
| :---: | :---: | :---: |
| Under \$150 | 1 | .7 |
| $150-199$ | 18 | 12.0 |
| $200-249$ | 53 | 35.3 |
| $250-299$ | 26 | 17.3 |
| $300-349$ | 19 | 12.7 |
| $350-399$ | 9 | 6.0 |
| $400-450$ | 17 | 4.7 |
| No Response | 11.3 |  |
| Totals | 150 | 100.0 |

only high school education were mainly clerks and bookkeepers, while those with college degrees were mainly secretarles. Four years of English were studied in high school by 114 employees or 76.0 per cent.

Table XXV shows that 139 employees or 92.7 per cent finished high school; 48 employees or 32.0 per cent attended business school; eight employees or 5.3 per cent obtained college degrees; 32 employees or 21.4 per cent attended college but did not obtain degrees; nine employees or 6.0 per cent attended both business school and college; and two employees or 1.3 per cent took post-graduate work in high school. Several employees also took extension courses from La Salle Extension University.

McKenzie Baldwin Business College, Bryan, Texas, was attended by 24 employees or 16.0 per cent, while 33 employees or 22.0 per cent attended 17 other Texas business schools and three out-of-state business schools.

The most popular colleges were Sam Houston State Teachers College, Huntsville, Texas; Agricultural and Mechanical College of Texas, College Station, Texas; Mary Hardin-Baylor, Belton, Texas and Texas Woman's University, Denton, Texas. Seventeen other Texas colleges and six out-of-state colleges were mentioned. Most of the eight college degrees were granted in business administration, but three other major fields of study were named. Of those employees who attended college but did not earn degrees, most attended one year.

## EDUCATIONAL BACKGROUND OF 150 EMPLOYEES

| Type of Position | Further Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High <br> Gradu <br> Num- <br> ber | chool uation Per Cent |  | ne Per Cent | Busin <br> Sch <br> Number | ness <br> ool <br> Per <br> Cent | Coll <br> De <br> Num ber | ege <br> gree <br> Per <br> Cent | Co <br> Atten <br> Num ber | lege <br> dance <br> Per <br> Cent | Busine <br> and <br> Number | Chool <br> ege <br> Per <br> Cent |  | er <br> Per <br> Cen |
| Clerk | 40 | 95.2 | 15 | 35.7 | 13 | 30.9 | 1 | 2.4 | 9 | 21.4 | 2 | 4.8 | 2 | 4.8 |
| Secretary | 23 | 92.0 | 3 | 12.0 | 14 | 56.0 | 3 | 12.0 | 2 | 8.0 | 3 | 12.0 | 0 | 0.0 |
| Bookkeeper | 19 | 79.2 | 11 | 45.8 | 7 | 29.1 | 1 | 4.2 | 4 | 16.7 | 1 | 4.2 | 0 | 0.0 |
| Stenographer | 21 | 100.0 | 8 | 38.1 | 4 | 19.0 | 1 | 4.8 | 7 | 33.3 | 1 | 4.8 | 0 | 0.0 |
| Cashier | 7 | 100.0 | 4 | 57.1 | 0 | 0.0 | 0 | 0.0 | 3 | 42.9 | 0 | 0.0 | 0 | 0.0 |
| Accountant | 6 | 100.0 | 0 | 0.0 | 3 | 50.0 | 1 | 16.7 | 2 | 33.3 | 0 | 0.0 | 0 | 0.0 |
| Machine Operator | 5 | 83.3 | 3 | 50.0 | 2 | 33.3 | 0 | 0.0 | 1 | 16.7 | 0 | 0.0 | 0 | 0.0 |
| Receptionist | 6 | 100.0 | 1 | 16.7 | 0 | 0.0 | 0 | 0.0 | 3 | 50.0 | 2 | 33.3 | 0 | 0.0 |
| Typist | 2 | 100.0 | 1 | 50.0 | 1 | 50.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Other | 10 | 90.9 | 5 | 45.4 | 4 | 36.4 | 1 | 9.1 | 1 | 9.1 | 0 | 0.0 | 0 | 0.0 |
| Totals | 139 |  | 51 |  | 48 |  | 8 |  | 32 |  | 9 |  | 2 |  |
| Per Cent | 92.7 |  | 34.0 |  | 32.0 |  | 5.3 |  | 21.4 |  | 6.0 |  | 1.3 |  |

Table XXVI shows that 39 employees or 26.0 per cent attended Stephen F. Austin High School; six employees or 4.0 per cent attended A. \& M. Consolidated High School; 36 employees or 24.0 per cent attended high schools within 100 miles of Bryan; 48 employees or 32.0 per cent attended other Texas schools; and nine employees or 6.0 per cent attended out-of-state high schools. A list of the high schools is given in Appendix D.

Of the 39 former students of Stephen F. Austin High School, 36 were graduated and three dropped out in the eleventh grade. Sixteen students had no further training, and 13 took all their business training In high school. Of the 23 former students who had further education, 16 attended McKenzie-Baldwin Business College, one attended another business school, three attended college, two eamed college degrees, and one took post-graduate work in high school.

Table XXVII shows that most of the employees attended small high schools, although many employees reported that they made guesses about the size of the schools they attended. The number of students in the upper three grades of the high schools attended by employees were: 100 students or less, 22 employees or 14.7 per cent; 100 to 300 students, 33 employees or 22.0 per cent; 300 to 500 students, 25 employees or 16.7 per cent; 500 to 750 students, 14 employees or 9.3 per cent; 750 to 1,000 students, 20 employees or 13.3 per cent; and 1,000 to 1,500

TABLE XXVI

## GENERAL LOCATIONS OF THE HIGH SCHOOLS

 ATTENDED BY 150 EMPLOYEES| General Location of School | Number | Per Cent |
| :--- | :---: | :---: |
| Stephen F. Austin High School, <br> Bryan, Texas | 39 | 26.0 |
| A. \& M. Consolidated High School, <br> College Station, Texas | 6 | 4.0 |
| Schools within loo Miles of <br> Bryan, Texas <br> Other Texas Schools <br> Out-of-state Schools | 36 | 24.0 |
| No Response | 48 | 6.0 |
| Totals | 12 | 8.0 |

TABLE XXVII
SIZE OF THE HIGH SCHOOLS ATTENDED BY 150 EMPLOYEES

| Number of Students in <br> Upper 3 Grades | Number | Per Cent |
| :--- | :---: | :---: |
| 100 or less students | 22 | 14.7 |
| $100-300$ students | 33 | 22.0 |
| $300-500$ students | 25 | 16.7 |
| $500-750$ students | 14 | 9.3 |
| $750-1000$ students | 20 | 13.3 |
| $1000-1500$ students | 5 | 6.7 |
| $1500-2000$ students | 5 | 3.3 |
| $2000-2500$ students | 1 | 3.3 |
| $2500-3000$ students | 4 | 2.7 |
| Over 3000 students | 11 | 100.0 |
| No Response | 150 | 7.3 |
| $10 t a l s$ | 10 |  |

students, ten employees or 6.7 per cent. High schools with more than 1,500 students in the upper three grades were attended by only 15 employees or 10 per cent.

## Marital Status

Table XXVIII shows that 118 employees or 78.7 per cent were married, and 17 employees or 11.3 per cent were single. Six employees or 4.0 per cent were widowed, and seven employees or 4.7 per cent were divorced.

Table XXIX reveals that of the 118 married employees, 112 were females. Husbands of 62 employees or 55.3 per cent of the 112 married females were employed by organizations other than the Agricultural and Mechanical College of Texas. However, husbands of 45 employees or 40.2 per cent of the 112 married females were students, faculty members, or employees of that school. Two husbands were unemployed. One employee was the wife of one of the 46 employers in the study.

## Methods Used to Obtain Present Positions

Evidently the best way to get an office job in Bryan and College Station is to apply in person. Personal applications were used by 79 employees or 52.6 per cent to obtain their first jobs with the present employers, according to Table XXX. Govemment employment agencies were used by 40 employees or 26.6 per cent, and recommendations of friends were named by 17 employees or 11.3 per cent. Only five

TABLE XXVIII

MARITAL STATUS OF 150 EMPLOYEES

| Marital Status | Number | Per Cent |
| :--- | :---: | :---: |
| Married | 118 | 78.7 |
| Single | 17 | 11.3 |
| Widowed | 6 | 4.0 |
| Divorced | 7 | 4.7 |
| No Response | 2 | 1.3 |
| Totals | 150 | 100.0 |

TABLE XXIX

EMPLOYMENT STATUS OF THE HUSBANDS OF 112 MARRIED FEMALES OF 150 EMPLOYEES

| Employment Status | Number | Per Cent |
| :--- | :---: | :---: |
| Employed Elsewhere | 62 | 55.3 |
| Student at A. \& M. College | 34 | 30.4 |
| Employee of A. \& M. College | 7 | 6.2 |
| Faculty Member of A. \& M. College | 4 | 3.6 |
| Unemployed | 2 | 1.8 |
| No Response | 3 | 2.7 |
| Totals | 112 | 100.0 |

TABLE XXX

## METHODS USED BY 150 EMPLOYEES TO OBTAIN FIRST JOBS WITH THE PRESENT EMPLOYERS

| Method Used | Number | Per Cent |
| :--- | :---: | :---: |
| Personal Application | 79 | 52.6 |
| Govemment Employment Agency | 40 | 26.6 |
| Recommended by Friend | 17 | 11.3 |
| School Placement Agency | 5 | 3.3 |
| Firm Employee | 4 | 2.7 |
| Want Ad | 1 | .7 |
| Private Employment Agency | 1 | .7 |
| Letter of Application | 1 | .7 |
| No Response | 1 | .7 |
| Other | 150 | 100.0 |
| Totals | 1 |  |

employees or 3.3 per cent used school placement agencies; and four employees or 2.7 per cent obtained jobs through firm employees. Want ads, private employment agencies, letters of recommendation, and others were used by only one employee each.

## Factors Related to General Preparation for Employment

Employees were asked to give information about the grades which they received in high school, the guidance they were given, the occupational plans which they made in the past and for the future. Hobbles and musical ability were requested as well as magazines for office workers which employees subscribe to. All of these factors influence job success and pleasure.

## Academic Standing in High School

Most of the employees made good grades, although 36 employees or 24.0 per cent did not remember their academic standing. Table XXXI shows that 45 employees or 30.0 per cent were in the upper 10 per cent of their classes; 36 employees or 24.0 per cent were in the upper 25 per cent; 28 employees or 18.7 per cent were in the upper 50 per cent, and only five employees or 3.3 per cent were in the lower 50 per cent of their classes.

TABLE XXXI

ACADEMIC STANDING OF 150 EMPLOYEES IN THEIR CLASSES

| Academic Rank | Number | Per Cent |
| :--- | :---: | :---: |
| Upper 10\% | 45 | 30.0 |
| Upper $25 \%$ | 36 | 24.0 |
| Upper 50\% | 28 | 18.7 |
| Lower 50\% | 5 | 3.3 |
| No Response | 150 | 24.0 |
| Totals | 100.0 |  |

## Guidance Received in High School

Employees felt that they did not receive much guidance in high school, according to Table XXXII. They felt that the schools had helped most in the areas of course selection, preparation for college, and serving school and community; and that the schools had helped least in getting jobs, in problems of a personal nature, and in choosing occupations. One employee added that she was helped especially in learning tolerance.

The extent of help received by the greatest number of employees in each of nine guidance areas was as follows: getting a job, not at all, designāted by 95 employees or 63.3 per cent; problems of a personal nature, not at all, reported by 84 employees or 56.0 per cent; choosing an occupation, not at all, given by 72 employees or 48.1 per cent; using leisure time, fairly well, stated by 61 employees or 40.6 per cent; preparation to earn a living, fairly well, named by 61 employees or 40.6 per cent; selection of courses, very well, mentioned by 53 em ployees or 35.4 per cent; choosing purposes and values, fairly well, reported by 67 employees or 44.7 per cent; preparation for college, fairly well, given by 53 employees or 35.3 per cent; and serving school and community, fairly well, named by 66 employees or 43.9 per cent.

OPINIONS CONCERNING THE EXTENT TO WHICH 150 EMPLOYEES WERE GIVEN GUIDANCE WHILE IN HIGH SCHOOL

| Area of Help | Not at Num- ber | All Per <br> Cent | Fairly Num- ber | Well Per Cent | Very Num- ber | Well <br> - Per <br> Cent | No Re Num- ber | ponse Per Cent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Getting a Job | 95 | 63.3 | 25 | 16.7 | 19 | 12.7 | 11 | 7.3 |
| Problems of a Personal Nature | 84 | 56.0 | 42 | 28.0 | 17 | 11.3 | 7 | 4.7 |
| Choosing an Occupation | 72 | 48.1 | 35 | 23.3 | 32 | 21.3 | 11 | 7.3 |
| Using Leisure Time | 46 | 30.7 | 61 | 40.6 | 33 | 22.0 | 10 | 6.7 |
| Preparation to Earn a Living | 44 | 29.3 | 61 | 40.6 | 34 | 22.8 | 11 | 7.3 |
| Selection of Courses | 38 | 25.3 | 51 | 34.0 | 53 | 35.4 | 8 | 5.3 |
| Choosing Purposes and Values | 31 | 20.7 | 67 | 44.7 | 41 | 27.3 | 11 | 7.3 |
| Preparation for College | 29 | 19.3 | 53 | 35.3 | 52 | 34.7 | 16 | 10.7 |
| Serving School and Community | 28 | 18.7 | 66 | 43.9 | 46 | 30.7 | 10 | 6.7 |

Occupational Plans, Hobbies, Musical Ability, and Subscriptions to Office Magazines

It was found that 135 employees or 90.0 per cent desired to continue office work, but that only 72 employees or 48.0 per cent intended to become office workers when they were in high school. Moreover, only 20 employees or 13.3 per cent ever participated in a job interview in high school, pointing out again the lack of guidance given to the employees. When asked about the helpfulness of homerooms in guidance, 95 employees or 63.3 per cent replied that they thought a strong homeroom program could have helped them in high school.

Table XXXIII also shows the following: 109 employees or 72.7 per cent had hobbles; 50 employees or 33.3 per cent reported ability to play a musical instrument; but only 15 employees or 10.0 per cent subscribed to magazines for office workers. Most of the employees named only one hobby, but the range was from none to six. Altogether, 110 hobbies were named, but reading was reported most frequently. Other popular hobbles were: sewing, bowling, swimming, and music.

## Business Courses Which Employees Took In High School and after Leaving

## High School

One hundred twenty-seven employees or 84.8 per cent took business courses in high school. Most of the employees took from one to three courses, but one took seven. Table XXXIV shows that 23 employees or

TABLE XXXIII

REPLIES OF 150 EMPLOYEES TO QUESTIONS CONCERNING OCCUPATIONAL PLANS, JOB INTERVIEWS, AND HOMEROOMS, AND TO QUESTIONS CONCERNING HOBBIES, MUSICAL TALENT, AND MAGAZINE SUBSCRIPTIONS

| Area of Questioning | Yes |  | No |  | No Response |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per Cent | Number | Per Cent | Number | Per Cent |
| Desire to Continue |  |  |  |  |  |  |
| Office Work | 135 | 90.0 | 14 | 9.3 | 1 | . 7 |
| Intention to Become |  |  |  |  |  |  |
| Office Worker | 72 | 48.0 | 76 | 50.7 | 2 | 1.3 |
| Participation in Job |  |  |  |  |  |  |
| Interviews | 20 | 13.3 | 124 | 82.7 | 6 | 4.0 |
| Helpfulness of Homerooms <br> 95 <br> 63.3 <br> 36 <br> 24.0 $19$ <br> 12.7 |  |  |  |  |  |  |
| Hobbies | 109 | 72.7 | 41 | 27.3 | 0 | 0.0 |
| Musical Ability | 50 | 33.3 | 98 | 65.4 | 2 | 1.3 |
| Subscription to Office |  |  |  |  |  |  |
| Magazines | 15 | 10.0 | 135 | 90.0 | 0 | 0.0 |

TABLE XXXIV

NUMBER OF BUSINESS COURSES WHICH 150 EMPLOYEES TOOK IN HIGH SCHOOL

| Number of Courses <br> Taken | Number | Per Cent |
| :---: | :---: | :---: |
| None | 23 | 15.2 |
| 1 | 22 | 14.7 |
| 2 | 42 | 28.0 |
| 3 | 39 | 26.0 |
| 4 | 15 | 10.0 |
| 7 | 7 | 4.7 |
| 7 | 1 | .7 |
| Totals | 150 | 100.0 |

15.2 per cent took no business courses; 22 employees or 14.7 per cent took one course; 42 employees or 28.0 per cent took two courses; 39 employees or 26.0 per cent took three courses, 15 employees or 10.0 per cent took four courses; and nine employees or 6.1 per cent took more than four business courses.

Typing was the most popular business course in high school, followed, in order, by shorthand, bookkeeping, business arithmetic, secretarial training, and business law. Table XXXV reveals the following information about the 127 employees who took business courses: 116 employees or 91.4 per cent took typing; 77 employees or 60.6 per cent took shorthand; 54 employees or 42.5 per cent took bookkeeping; 48 employees or 37.8 per cent took business arithmetic; 23 employees or 18.1 per cent took secretarial training, and nine employees or 7.1 per cent took business law.

Table XXXVI shows that after leaving school, 65 employees or 43.3 per cent took no business courses. Nine employees or 6.0 per cent took one course; 13 employees or 8.7 per cent took two courses and the same number took four courses; 16 employees or 10.7 per cent took three courses and the same number took five courses; and 18 employees or 12.0 per cent took more than five business courses after leaving high school.

Again, typing, shorthand, and bookkeeping were the most popular business courses; but secretarial training was slightly more popular than

TABLE XXXV

NAMES OF BUSINESS COURSES WHICH 127 OF 150 EMPLOYEES TOOK IN HIGH SCHOOL

| Number | Per Cent <br> of 150 | Per Cent <br> of 127 |  |
| :--- | :---: | :---: | :---: |
| Name of Taken | 116 | 77.3 | 91.4 |
| Typing | 77 | 51.3 | 60.6 |
| Shorthand | 54 | 36.0 | 42.5 |
| Bookkeeping | 48 | 32.0 | 37.8 |
| Business Arithmetic | 23 | 15.3 | 18.1 |
| Secretarial Training | 9 | 6.0 | 7.1 |
| Business Law | 4 | 2.7 | 3.1 |
| Other | $127 *$ | $100.0 *$ | $100.0 *$ |
| Totals |  |  |  |

* Only 127 employees took courses, but many took more than one course.

TABLE XXXVI
NUMBER OF BUSINESS COURSES WHICH 150 EMPLOYEES TOOK AFTER LEAVING HIGH SCHOOL

| Number of Courses | Number | Per Cent |
| :---: | :---: | :---: |
| None | 65 | 43.3 |
| 1 | 9 | 6.0 |
| 2 | 13 | 8.7 |
| 3 | 16 | 10.7 |
| 4 | 13 | 8.7 |
| 5 | 16 | 10.7 |
| 7 | 8 | 5.3 |
| 8 | 7 | 4.7 |
| Totals | 3 | 100.0 |

business arithmetic with employees after they left high school. Table XXXVII shows the following courses taken by the 85 employees: typing, 74 employees or 87.1 per cent; shorthand, 65 employees or 76.5 per cent; bookkeeping, 54 employees or 63.5 per cent; secretarial training, 47 employees or 55.3 per cent; business arithmetic, 45 employees or 52.9 per cent; business law, 23 employees or 27.1 per cent; and others. 28 employees or 32.9 per cent. The last group mainly included courses in office machines.

## Business Courses Which Employees Wish They Had Taken

Employees seemed to be better satisfied with the amount of typing which they took than with any other course. Table XXXVIII shows that 76 employees or 50.7 per cent named business courses which they wish they had taken. Since only 23 employees failed to take business courses in high school, this means that 53 employees who did take business courses wish that they had taken more. In most cases, the courses were offered in the high schools attended.

Among the courses which the 76 employees wish they had taken, bookkeeping was named by 34 employees or 44.7 per cent; shorthand was reported by 22 employees or 28.9 per cent; secretarial training was given by 21 employees or 27.6 per cent; business arithmetic was mentioned by ten employees or 13.0 per cent; business law was named

TABLE XXXVII

## NAMES OF BUSINESS COURSES WHICH 85 OF 150 EMPLOYEES TOOK AFTER LEAVING HIGH SCHOOL

| Number | Per Cent | of 150 | Per Cent <br> of 85 |
| :--- | :---: | :---: | :---: |
| Name of Course | 74 | 49.3 | 87.1 |
| Typing | 65 | 43.3 | 76.5 |
| Shorthand | 54 | 36.0 | 63.5 |
| Bookkeeping | 47 | 31.3 | 55.3 |
| Secretarial Training | 45 | 30.0 | 52.9 |
| Business Arithmetic | 23 | 15.3 | 27.1 |
| Business Law | 28 | $150.0 *$ | 100.0 * |
| Other | $85 *$ | 32.9 |  |
| Totals |  |  |  |

* Only 85 employees named courses, but many named more than one course.

TABLE XXXVIII

NAMES OF BUSINESS COURSES WHICH 76 OF 150 EMPLOYEES WISH THEY HAD TAKEN

| Name of Course | Number | Per Cent <br> of 150 | Per Cent <br> of 76 |
| :--- | :---: | :---: | :---: |
| Bookkeeping | 34 | 22.6 | 44.7 |
| Shorthand <br> Secretarial Training | 22 | 14.7 | 28.9 |
| Business Arithmetic | 21 | 14.0 | 27.6 |
| Business Law | 10 | 6.7 | 13.2 |
| Typing | 6 | 6.0 | 11.8 |
| Other | 18 | 12.0 | 23.7 |
| Totals | $76 *$ | $100.0 *$ | $100.0 *$ |

* Only 76 employees wish they had taken business courses, but many named more than one course.
by nine employees or 11.8 per cent; and typing was reported by six employees or 7.9 per cent of those who named courses which they wish they had taken.


## Weaknesses of Employees in Skills and Certain Activities

Five of the first six skill weaknesses in their own training which employees reported were associated with English. Table XXXIX reveals the following ranking of skill weaknesses: self-expression, first, named by 89 employees or 59.3 per cent; vocabulary, second, 79 employees or 52.7 per cent; penmanship, third, 60 employees or 40.0 per cent; spelling, fourth, 56 employees or 37.3 per cent; grammar, fifth, 54 employees or 36.0 per cent; and punctuation, sixth, 51 employees or 34.0 per cent.

Arithmetic was seventh, named by 48 employees or 32.0 per cent; shorthand, eighth, named by 46 employees or 30.7 per cent; office machines, ninth, named by 39 employees or 26.0 per cent; transcription, tenth, named by 34 employees or 22.7 per cent; bookkeeping, eleventh, named by 29 employees or 19.3 per cent; typing, twelfth, named by 28 employees or 18.7 per cent; filing, thirteenth, named by 22 employees or 14.7 per cent; and tabulation, fourteenth, named by 16 employees or 10.7 per cent.

## TABLE XXXIX

WEAKNESSES FOUND BY 150 EMPLOYEES IN THEIR OWN TRAINING IN FOURTEEN SKILLS WHICH ARE IMPORTANT IN OFFICE WORK

| Name of Skill | Rank | Number | Per Cent |
| :---: | :---: | :---: | :---: |
| Self-expression | 1 | 89 | 59.3 |
| Vocabulary | 2 | 79 | 52.7 |
| Penmanship | 3 | 60 | 40.0 |
| Spelling | 4 | 56 | 37.3 |
| Grammar | 5 | 54 | 36.0 |
| Punctuation | 6 | 51 | 34.0 |
| Arithmetic | 7 | 48 | 32.0 |
| Shorthand | 8 | 46 | 30.7 |
| Office Machines | 9 | 39 | 26.0 |
| Transcription | 10 | 34 | 22.7 |
| Bookkeeping | 11 | 29 | 19.3 |
| Typing | 12 | 28 | 18.7 |
| Flling | 13 | 22 | 14.7 |
| Tabulation | 14 | 16 | 10.7 |

Table XL shows that the outstanding activity in which employees felt weaknesses was use of legal documents, named by 96 employees or 64.0 per cent. Instructing others was second, named by 86 employees or 57.3 per cent. Other weaknesses were: use of business forms, third; reported by 65 employees or 43.3 per cent; personality development, fourth, mentioned by 62 employees or 41.3 per cent; applying for a job, fifth, designated by 58 employees or 38.7 per cent; work-habits development, sixth, given by 52 employees or 34.7 per cent; telephone technique, seventh, named by 50 employees or 33.3 per cent; and meeting callers, eighth, mentioned by 46 employees or 30.7 per cent.

## Personal Tralts Which Need More Stress

Employees were asked to rank 30 personal traits which they think should be stressed by the schools. Table XLI reveals the following rank of the traits reported most often: responsibility, first, checked by 102 employees or 68.0 per cent; accuracy, second, reported by 96 employees or 64.0 per cent; dependability, third, named by 94 employees or 62.7 per cent; honesty, fourth, given by 88 employees or 58.7 per cent; cooperativeness, fifth, mentioned by 76 employees or 50.7 per cent; neatness in work, sixth, reported by 72 employees or 48.0 per cent; personal appearance, seventh, given by 71 employees or 47.3 per cent; self-confldence, elghth, mentioned by 67 employees or 44.7 per cent; initiative, ninth, named by 65 employees or 43.3 per cent; and following

## TABLE XL

WEAKNESSES IN TRAINING OF 150 EMPLOYEES IN NINE ACTIVITIES WHICH ARE IMPORTANT TO OFFICE WORKERS

| Activity | Rank | Number | Per Cent |
| :--- | :---: | :---: | :---: |
| Use of Legal Documents | 1 | 96 | 64.0 |
| Instructing Others | 2 | 86 | 57.3 |
| Use of Business Forms | 3 | 65 | 43.3 |
| Personality Development | 4 | 62 | 41.3 |
| Applying for a Job | 5 | 58 | 38.7 |
| Work-habits Development | 6 | 52 | 34.7 |
| Telephone Technique | 7 | 50 | 33.3 |
| Meeting Callers | 8 | 46 | 30.7 |
| Other | 9 | 2 | 1.3 |

## TABLE XLI

RANKING OF THIRTY PERSONAL TRAITS WHICH 150 EMPLOYEES THINK SHOULD BE STRESSED MORE BY THE SCHOOLS

| Name of Trait | Rank | Number | Per Cent |
| :---: | :---: | :---: | :---: |
| Responsibility | 1 | 102 | 68.0 |
| Accuracy | 2 | 96 | 64.0 |
| Dependability | 3 | 94 | 62.7 |
| Honesty | 4 | 88 | 58.7 |
| Cooperativeness | 5 | 76 | 50.7 |
| Neatness in Work | 6 | 72 | 48.0 |
| Personal Appearance | 7 | 71 | 47.3 |
| Self-confidence | 8 | 67 | 44.7 |
| Initiative | 9 | 65 | 43.3 |
| Following Directions | 10 | 59 | 39.3 |
| Self-control | 11 | 57 | 38.0 |
| Courtesy | 12 | 52 | 34.7 |
| Tact | 13 | 50 | 33.3 |
| Adaptability | 14 | 47 | 31.3 |
| Punctuality | 15 | 44 | 29.3 |
| Friendliness | 16 | 40 | 26.7 |
| Consideration | 16 | 40 | 26.7 |
| Mental Alertness | 16 | 40 | 26.7 |
| Sincerity | 19 | 38 | 25.3 |
| Poise | 20 | 34 | 22.7 |
| Trustworthiness | 20 | 34 | 22.7 |
| Judgment | 22 | 33 | 22.0 |
| Loyalty | 23 | 28 | 18.7 |
| Cheerfulness | 24 | 25 | 16.7 |
| Voice Quality | 25 | 22 | 14.7 |
| Integrity | 26 | 21 | 14.0 |
| Enthusiasm | 27 | 16 | 10.7 |
| Health | 28 | 14 | 9.3 |
| Industry | 29 | 6 | 4.0 |
| Other | 30 | 3 | 2.0 |

directions, tenth, reported by 59 employees or 39.3 per cent.

The next 11 traits mentioned most often were: self-control, eleventh, named by 57 employees or 38.0 per cent; courtesy, twelfth, given by 52 employees or 34.7 per cent; tact, thirteenth, reported by 50 employees or 33.3 per cent; adaptabllity, fourteenth, designated by 47 employees or 31.3 per cent; punctuality, fifteenth, identified by 44 employees or 29.3 per cent; friendliness, consideration, and mental alertness, sixteenth, reported by 40 employees or 26.7 per centi nineteenth, sincerlty, named by 38 employees or 25.3 per cent; and polse and trustworthiness, twentieth, mentioned by 34 employees or 22.7 per cent.

The last nine personal traits ranked by employees were: judgment, twenty-second, named by 33 employees or 22.0 per cent; loyalty, twentythird, given by 28 employees or 18.7 per cent; cheerfulness, twentyfourth, reported by 25 employees or 16.7 per cent; voice quality, twenty-fifth, mentioned by 22 employees or 14.7 per cent; integrity, twenty-sixth, designated by 21 employees or 14.0 per cent; enthusiasm, twenty-seventh, identified by 16 employees or 10.7 per cent; health, twenty-eighth, suggested by 14 employees or 9.3 per cent; industry, twenty-ninth, named by six employees or 4.0 per cent; and others, thirtieth, given by three employees or 2.0 per cent. The last group consisted mainly of pleas for higher moral standards.

## Office Machines Which Employees Use

Most employees reported using only one or two machines daily, with a few using three or four, and one employee using nine. The number and kinds of machines employed depended upon the type of position and the size of the office force. Sixty employees or 40.0 per cent leamed to use office machines on the job; 32 employees or 21.3 per cent leamed to use them in school; and 56 employees or 37.3 per cent learned to use office machines in school and on the job.

Table XLII revecls that the four machines in most frequent daily use were: the manual typewriter, used by 78 employees or 52.1 per cent; the electric typewriter, used by 52 employees or 34.7 per cent; the $10-\mathrm{key}$ adding machine, used by 41 employees or 27.3 per cent; and the calculator, used by 31 employees or 20.7 per cent.

The extent of use reported by the greatest number of employees for each machine was as follows: manual typewriter, dally, 78 employees or 52.1 per cent; electric typewriter, never, 83 employees or 55.3 per cent; 10-key adding machine, never, 70 employees or 46.7 per cent; calculator, never, 87 employees or 58.0 per cent; full-keyboard adding machine, never, 102 employees or 67.9 per cent; bookkeeping machine, never, 127 employees or 84.7 per cent; check writer, never, 115 employees or 76.7 per cent; duplicating machine,

OFFICE MACHINES USED BY 150 EMPLOYEES AND THE EXTENT TO WHICH THEY ARE USED

| Name of Machine | Daily <br> Number PerCent |  | Occasionally <br> Number PerCent |  | Never <br> Number Per Cent |  | No Response Number PerCent |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Typewriter (Manual) | 78 | 52.1 | 38 | 25.3 | 32 | 21.3 | 2 | 1.3 |
| Typewriter (Electric) | 52 | 34.7 | 15 | 10.0 | 83 | 55.3 | 0 | 0.0 |
| 10-key Adding Machine | 41 | 27.3 | 38 | 25.3 | 70 | 46.7 | 1 | . 7 |
| Calculator | 31 | 20.7 | 30 | 20.0 | 87 | 58.0 | 2 | 1.3 |
| Full-key Adding Machine | 22 | 14.7 | 25 | 16.7 | 102 | 67.9 | 1 | . 7 |
| Bookkeeping Machine | 17 | 11.3 | 4 | 2.7 | 127 | 84.7 | 2 | 1.3 |
| Check Writer | 14 | 9.3 | 20 | 13.3 | 115 | 76.7 | 1 | . 7 |
| Duplicating Machine | 10 | 6.7 | 39 | 26.0 | 100 | 66.6 | 1 | . 7 |
| Dictaphone | 9 | 6.0 | 26 | 17.3 | 113 | 75.4 | 2 | 1.3 |
| Addressograph | 4 | 2.7 | 25 | 16.7 | 119 | 79.3 | 2 | 1.3 |
| IBM Machine | 2 | 1.3 | 5 | 3.3 | 140 | 93.4 | 3 | 2.0 |

never, 100 employees or 66.6 per cent; Dictaphone, never, 113 employees or 75.4 per cent; Addressograph, never, 119 employees or 79.3 per cent; and IBM machine, never, 140 employees or 93.4 per cent.

## Duties Which Are Performed

Employees were asked to state the extent to which they performed certain duties which are usually described in textbooks for secretarial training courses. Most employees reported performing six duties daily, with five duties second, seven duties third, and eight duties fourth. The duties performed depended upon the occupational title of the employees and upon the size of the office force. Very few employees indicated speeds of dictation, but of those who did, most reported 80 words a minute. No useful information was obtained concerning the number of letters transcribed daily.

Table XLIII shows that the six duties performed daily by the greatest number of employees were: using the telephone, filing, addressing envelopes, recelving callers, keeping books, and handing the mail. The second six duties were: checking involces, transcribing letters, handling bank activities, typing reports, composing and typing letters, and preparing statements. The last five duties were: taking dictation, keeping stock records, operating switchboards, typing form letters, and cutting stencils.

DUTIES PERFORMED BY 150 EMPLOYEES AND THE EXTENT TO WHICH THEY ARE PERFORMED

| Name of Duty | Daily |  | Occasionally |  | Never |  | No Response |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per Cent | Number | Per Cent | Number | Per Cent | Number | Per Cent |
| Use Telephone | 109 | 72.7 | 27 | 18.0 | 12 | 8.0 | 2 | 1.3 |
| File | 88 | 58.7 | 46 | 30.7 | 14 | 9.3 | 2 | 1.3 |
| Address Envelopes | 88 | 58.7 | 45 | 30.0 | 15 | 10.0 | 2 | 1.3 |
| Receive Callers | 79 | 52.7 | 38 | 25.3 | 33 | 22.0 | 0 | 0.0 |
| Handle Mail | 74 | 49.3 | 42 | 28.0 | 33 | 22.0 | 1 | . 7 |
| Keep Books | 61 | 40.6 | 25 | 16.7 | 61 | 40.7 | 3 | 2.0 |
| Check Invoices | 41 | 27.3 | 32 | 21.3 | 76 | 50.7 | 1 | . 7 |
| Transcribe Letters | 35 | 23.3 | 35 | 23.3 | 77 | 51.4 | 3 | 2.0 |
| Handle Bank Activities | 35 | 23.3 | 27 | 18.0 | 84 | 56.0 | 4 | 2.7 |
| Type Reports | 32 | 21.3 | 77 | 51.4 | 38 | 25.3 | 3 | 2.0 |
| Compose and Type Letters | 29 | 19.3 | 66 | 44.0 | 51 | 34.0 | 4 | 2.7 |
| Prepare Statements | 29 | 19.3 | 50 | 33.3 | 68 | 45.4 | 3 | 2.0 |
| Take Dictation | 26 | 17.3 | 30 | 20.0 | 92 | 61.4 | 2 | 1.3 |
| Keep Stock Records | 21 | 14.0 | 22 | 14.7 | 104 | 69.3 | 3 | 2.0 |
| Operate Switchboard | 18 | 12.0 | 17 | 11.3 | 113 | 75.4 | 2 | 1.3 |
| Type Form Letters | 16 | 10.7 | 76 | 50.6 | 55 | 36.7 | 3 | 2.0 |
| Cut Stencils | 12 | 8.0 | 66 | 44.0 | 69 | 46.0 | 3 | 2.0 |

The extent to which each duty was reported by the greatest number of employees follows: use of telephone, dally, 109 employees or 72.7 per centf fling, dally, 88 employees or 58.7 per cent; addressing envelopes, dally, 88 employees or 58.7 per cent; recelving callers, dally, 79 employees or 52.7 per cent; handling mall, dally, 74 employees or 49.3 per cent; keeping books, dally, 61 employees or 40.6 per cents checking Involces, never, 76 employees or 50.7 per cent transcribing letters, never, 77 employees or 51.4 per cents handling banking activities, never, 84 employees or 56.0 per cents typing reports, occasionally, 77 employees or 51.4 per cent; composing and typing letters, occasionally, 66 employees or 44.0 per cent; preparing statements, never, 68 employees or 45.4 per cents taking dictation, never, 92 employees or 61.4 per cents keeping stock records, never, 104 employees or 69.3 per cent; operating switchboard, never, 113 employees or 75.4 per cents typing form letters, occasionally, 76 employees or 50.6 per cent; and cutting stenclls, never, 69 employees or 46.0 per cent.

## Most Difficult Taske and Eatort Taske Poriormad

Employees were asked to tell their most difficult and their easleat taske, but 53 employees or 35.3 per cent gave no reply for the moat duflcult task; 48 employees or 32.0 per cent gave no response for the easlest task; and nine employees or 6.0 por cent feplied that no tanks wore difficult and that all were easy. The same tasks which were called difficult
by some were labeled easy by the same number of employees, except typing. Twenty-three employees or 15.3 per cent found typing easy and only ten employees or 6.7 per cent found it difficult. Tasks which involved reasons of a personal nature were found difficult by eight employees or 6.3 per cent.

Table XLIV shows that the tasks which were found difficult and easy by approximately equal numbers were: general clerical work, named by 32 employees or 21.4 per cent; bookkeeping, reported by 14 employees or 9.3 per cent; dealing with other people, given by 12 employees or 8.0 per cent; shorthand or dictating machines, mentioned by eight employees or 5.3 per cent; and filing, given by seven employees or 4.7 per cent.

## Adequacy of Courses Offered by Stephen F, Austin High School

As in the case of the employers, approximately 25 per cent of the employees falled to respond concerning adequacy of the business course offerings, and in the case of secretarial training, 33 per cent falled to give opinions.

Most of those who did respond recommended leaving courses as they were, except shorthand, as shown in Table XLV. Fifty nine employees or 39.3 per cent sald to add more shorthand, whlle 54 employees or 36.0 per cenit said to leave it as it was. Only four employees or 2.7 per cent said to drop part of typing, and two employees or 1.3 per cent said to drop part of secretarial training.

## TABLE XLIV

MOST DIFFICULT TASKS AND EASIEST TASKS PERFORMED BY 150 EMPLOYEES

| Nature of Task | Most Difficult <br> Number | Easiest <br> Number PerCent |  |  |
| :--- | :---: | :---: | :---: | :---: |
| General Clerical Work | 32 | 21.4 | 32 | 21.4 |
| Bookkeeping | 14 | 9.3 | 13 | 8.6 |
| Dealing with Other People | 12 | 8.0 | 10 | 6.7 |
| Typing | 10 | 6.7 | 23 | 15.3 |
| Reasons of a Personal Nature | 8 | 5.3 | 0 | 0.0 |
| Shorthand or Dictating Machine | 6 | 4.0 | 8 | 5.3 |
| Filing | 6 | 4.0 | 7 | 4.7 |
| None (Difficult) and All (Easy) | 9 | 6.0 | 9 | 6.0 |
| No Response | 53 | 35.3 | 48 | 32.0 |
| Totals | 150 | 100.0 | 150 | 100.0 |

TABLE XLV
OPINIONS OF 150 EMPLOYEES CONCERNING ADEQUACY OF BUSINESS
COURSES OFFERED AT STEPHEN F. AUSTIN HIGH SCHOOL

| Name of Course | Leave As Is |  | Add More |  | Drop Part |  | No Response |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per Cent | Number | Per Cent | Number | Per Cent | Number | Per Cent |
| Typing | 100 | 66.7 | 7 | 4.7 | 4 | 2.7 | 39 | 25.9 |
| Business Arithmetic | 86 | 57.4 | 26 | 17.3 | 0 | 0.0 | 38 | 25.3 |
| Secretarial Training | 77 | 51.4 | 21 | 14.0 | 2 | 1.3 | 50 | 33.3 |
| Business Law | 74 | 49.3 | 36 | 24.0 | 0 | 0.0 | 40 | 26.7 |
| Bookkeeping | 67 | 44.7 | 44 | 29.3 | 0 | 0.0 | 39 | 26.0 |
| Shorthand | 54 | 36.0 | 59 | 39.3 | 0 | 0.0 | 37 | 24.7 |

Those who voted to leave each remalning course as it is were as follows: typing, 100 employees or 66.7 per cent; business arithmetic, 86 employees or 57.4 per cent; secretarial training, 77 employees or 51.4 per cent; business law, 74 employees or 49.3 per cent, and bookkeeping, 67 employees or 44.7 per cent.

## Interest in Adult Education, Business Office Experience, and Placement

Twenty-one employees or 14.0 per cent indicated an interest in adult education, naming 18 courses. Eight were business courses, of which business law, shorthand, and bookkeeping were most popular. English was mentioned as frequently as any other course. Most employees were interested in two courses, with one course being next.

Employees felt that high school students needed both business office experience and placement services. Table XLVI reveals that 114 employees or 76.0 per cent recommended office experience, and $89 \mathrm{em}-$ ployees or 59.4 per cent recommended placement services.

## Criticisms and Suggestions for Improvement

Only 11 employees or 7.3 per cent offered criticisms, and many praised the business education department. The criticisms could generally be classified as one of the following eleven:

TABLE XLVI
OPINIONS OF 150 EMPLOYEES CONCERNING NEED FOR BUSINESS OFFICE
EXPERIENCE AND PLACEMENT PROGRAMS FOR STUDENTS OF STEPHEN F. AUSTIN HIGH SCHOOL


1. Business courses are not "pushed" enough, and lack the glamour to attract all students.
2. No placement service is available.
3. Shorthand frightens students, and is dull and boring.
4. Shorthand speed is not adequate.
5. No practice is given in a real office situation.
6. Business men and women do not visit the school often enough.
7. Movies are not used often enough.
8. Too little bookkeeping and shorthand are offered.
9. No courses in office machines are offered.
10. Typing tests are too short.
11. Too few practical problems and too much book leaming are given.

Only 13 employees or 8.7 per cent offered suggestions for improvement. These were as follows:

1. Get all girls to take business courses, because they help in college or in entrance into any field.
2. Get more girls to take public speaking and debate.
3. Teach appreciation for high school opportunities.
4. Emphasize the importance of Job satisfaction from work well done.
5. Teach that progress is up to the individual.
6. Stress penmanship.
7. Offer typing in the tenth grade.
8. Offer a course in business machines.
9. Offer more secretarial training.
10. Drop part of secretarial training.
11. Use visitors for dictation more often in secretarial training.
12. Have students write shorthand homework two or three times.
13. Increase shorthand speed achlevement.
14. Group fast students in shorthand and let them work at higher speeds.
15. Use pamphlets designed for secretarles.
16. "Sell" the secretarial profession.
17. Get help from the National Secretaries Association and the Bryan Professional Women's Club.
18. Give more practice, especially in filing.

## Summary

The employees were selected from 431 employed in 46 offices, in such a way that industries employing the greatest number of office workers would have the greatest representation in the group of 150 employees. Questionnaires were left with employers, after interviews, and were given to representative samplings of employees. In a few cases,
interviews were held with secretaries of the employers, and their main complaint was the personal appearance of young applicants.

Employees represented the following industries: government; wholesale and retail trade; manufacturing; services; finance, insurance, and real estate; transportation, communications, electricity, gas, and sanitary services; and contract construction. Occupational titles were: clerks; secretaries, bookkeepers, stenographers, cashiers, accountants, machine operators, receptionists, typists, and others. Many did not know their occupational titles .

Ages ranged from 17 to 83 years, with the most popular age group being 21 to 30 years. The youngest group included more stenographers than any other type of worker, and the oldest group included more clerks.

Over 90 per cent of the employees had experience prior to their present employment, and inexperience was found most often among stenographers, cashiers, and clerks. Most employees had worked from one to five years. The range of experience was from one month to 64 years for all firms and from two weeks to 34 years for the present employers.

First Jobs were mainly clerical, and no lines of advancement were discemible. Most empluyees had held only one position with the present firm. Salary was found dependent upon age, experience, and qualifications. Most employees reported salaries of $\$ 200$ to $\$ 249$ monthly, but the range was from $\$ 144$ to $\$ 450$.

Over 90 per cent of the employees were high school graduates, and nearly 70 per cent had further education. Those with only high school education were mainly clerks and bookkeepers, while the elght with college degrees were malnly secretaries. Over 75 per cent studied four years of English in high school. Business schools were the most popular schools attended after high school.

Of 39 former students of Stephen F. Austin High School, 36 were graduated and three dropped out in the eleventh grade. Sixteen had no further training, 17 attended business school, three attended college, two more eamed degrees, and one took post-graduate work in high school. Their questionnaire responses were similar to those of all other employees. High schools with 100 to 300 students in the upper three grades were attended by more employees than were schools of any other size, and almost 90 per cent of the employees attended Texas schools.

A great majority of the employees were married, and most of the husbands of female employees were employed by organizations other than the Agricultural and Mechanical College of Texas. Personal applications were used most oftento obtain employment, and school placement agencies were used infrequently. Most employees made good grades in high school.

Employees did not receive much guidance in high school. Schools helped the most in course selection and the least in getting jobs.

Most employees did not plan to become office workers, but almost all reported a desire to continue office work. Most felt that homerooms could have been helpful in their guidance. A majority of the employees named hobbies, and one third reported ability to play musical instruments, but only one tenth subscribed to magazines for office workers.

Almost 90 per cent of the employees took business courses in high school, but slightly mare than 50 per cent took courses after leaving high school. Typing was the most popular course taken. More than 50 per cent named courses which they wish they had taken, and they named bookkeeping most often.

Employees said that five of the first six skill weaknesses were in English; self-expression was first, vocabulary second, penmanship third, spelling fourth, grammar fifth, and punctuation sixth. Arithmetic was seventh and shorthand eighth. The outstanding activity weakness was use of legal documents, and instructing others was second. Other weaknesses were: use of business forms, personality development, and applying for a job. The ten most important personal traits were responsibility, accuracy, dependability, honesty, cooperativeness, neatness in work, personal appearance, self-confidence, initlative and following directions.

Most employees reported using only one or two office machines daily, and they learned to use them on the job. The four machines

The four machines named most frequently were: the manual typewriter, electric typewriter, ten-key adding machine, and calculator. Duties performed by the employees depended upan the size of the office force and the type of position held. Most of the employees performed six duties dally. The six duties mentioned most frequently were: using the telephone, filing, addressing envelopes, receiving callers, keeping books, and handling the mall. The same tasks which were called difficult by some employees were called easy be the same number, with the exception of typing. More employees found typing easy than found it difficult.

Employees advised a second year of shorthand, but suggested leaving other courses as they are. They felt that students need business office experlence and placement services. Very few were interested in adult education. Only 11 employees offered criticisms and only 13 offered suggestions for improvement. The advice applied to general education, business education, and to specific courses.

## CHAPTER VI

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This survey of employers and clerical workers in 46 offices sought to gain occupational information; to identify weaknesses of office workers; to obtain opinions of course offerings; to locate former students in local offices; and to receive criticisms and suggestions for improvement of the business education program at Stephen F. Austin High School. Personal interviews and questionnaires were used with the 46 employers: as well as with 150 employees selected from among 431 employed in the 46 offices. The offices were selected according to the breakdown of the community labor force, with government offices leading, and all offices had two or more office employees.

Approximately 75 similar studies were read, and 11 were briefly reviewed in this study. Surveys have been important to schools in public relations, curriculum planning, personality development, guidance, occupational planning, placement, and follow-up.

## Summary of Survey Findings

Fewer office workers than was expected are employed in services and in contract construction, and more than was expected are employed in manufacturing and in finance, insurance, and real estate. Occupational titles mean little, and no uniform method of classification was
found to be used. Most offices employ from two to five office workers. More clerks are employed than any other type of office worker, but more employers hire bookkeepers than hire clerks. Most employers hire persons for particular jobs, rather than starting all new employees at the same job; and salary depends upon age, experience, and qualifications. Age is not important to most employers. Among employers who replied, 18 years was mentioned most frequently as the minimum age for initial employment, and 35 to 40 years or 45 to 50 years as the maximum age group. Experience is required more often than it is not required; it is required most often by offices in wholesale and retall trade and least often by those in contract construction.

High school education is generally adequate for all positions except those in accounting, and women are overwhelmingly favored for all positions except those in accounting. Personal applications are the main method used to secure office workers.

Opinions of teachers are the only school attainment to which employers attach great importance. Grades, extra-curricular participation, and honors are of some importance; but elective offices are about equally regarded as being important or not important.

The shorthand and typing skills necessary for the best grades at Stephen F. Austin High School are adequate for initial employment, and tests of those skills are given by more than 50 per cent of the employers.

Very few employers give other tests. Typing ability is required of all office applicants. Employers are more interested in accuracy than in speed. Training is usually given to the new employee by the person who is leaving the job. Pregnancy and moving away cause most office vacancies, with marriage being a third important cause.

The five skill weaknesses mentioned most frequently by employers were spelling, self-expression, grammar, office machines, and penmanship. The five weaknesses in certain activities named most often were development of work-habits, telephone technique, instructing others, applying for a job, and personality development.

The ten personal tralts reported most often by employers were: initiative, accuracy, dependablity, responsibility, honesty, personal appearance, loyalty, neatness in work, cooperativeness, and judgment.

Opinions conceming course offerings indicated employers thought courses should be kept as they are; however, additions to shorthand and bookkeeping were requested by approximately one-third of the employers. Most employers indicated a willingness to participate in programs providing office experience and job placement.

Only five employers offered criticisms, and many offered praise. Their criticisms were: instruction is not practical; training in care of equipment is not given; teachers should be young and modern; and teachers should be brought up to date on office operations.

Only nine employers offered suggestions for improvement, which were: utllize more people from business; add a course in letter writing; require all students to take typing; require all girls to take typing and shorthand; provide business office experience; sell students on the realism of the courses; make courses practical; use dictating equipment; teach typewriting care; and teach use of carbons, stencils, and mimeograph machines.

The group of 150 employees was composed of: 42 clerks, 25 secretaries, 24 bookkeepers, 21 stenographers, seven cashiers, six accountants, six machine operators, six receptionists, two typists, and 11 others. Ages ranged from 17 to 83 years, but most employees are 21 to 30 years old. The youngest group includes more stenographers. than any other type of worker, and the oldest group includes more clerks. Over 90 per cent have had previous experience, and inexperience was found most often among stenographers, cashiers, and clerks. Most employees have worked from one to five years, but the range was one month to 64 years. Most employees have worked for only one or two other firms, and have held only one position with the present firm. First jobs were mainly clerical. Most office employees reported salaries of $\$ 200$ to $\$ 249$ monthly, but the range was $\$ 144$ to $\$ 450$.

Over 90 per cent of the employees are high school graduates, and nearly 70 per cent have had further education, mostly in business schools.

Forty attended college, and eight of those eamed degrees. Of 39 former students of Stephen F. Austin High School, 16 had no further education. 17 attended business school, five attended college and two of the five earned degrees. Almost 90 per cent of the employees attended Texas high schools, and employees attended schools generally having 100 to 300 students in the upper three grades. Over 75 per cent of the employees studied four years of English in high school.

A great majority of the employees are married, and most of the husbands of female employees are employed by organizations other than the Agricultural and Mechanical College of Texas. Personal applications were used most often to obtain employment. Most employees made good grades.

Employees received little guidance in high school. Schools had helped them most in course selection, and least in getting jobs. Most employees did not originally intend to become office workers, although 90 per cent do desire to continue office work now that they are in it. Most employees said that homerooms can be helpful in guidance. A majority have hobbies, and one third of the employees play musical instruments; but only one tenth subscribe to magazines for office workers.

Almost 90 per cent of the employees took business courses in high school, but little more than 50 per cent took business courses after leaving high school. Typing was the most popular course taken. More
than 50 per cent of the employees named courses which they wish they had taken; bookkeeping was mentioned most frequently.

The flve skill weaknesses which employees have found most often are: self-expression, vocabulary, penmanship, spelling, and grammar. The five greatest weaknesses found by employees in activities which are important in office work are: use of legal documents, instructing others, use of business forms, personality development, and applying for a job.

The ten personal traits which employees seid need stress are: responsibility, accuracy, dependability, honesty, cooperation, neatness, in work, personal appearance, self-confidence, initiative, and following directions.

Most employees use only one or two office machines dally, and they usually learned to use them on the fob. The four machines used most frequently are: manual typewriter, electric typewriter, ten-key adding machine, and calculator. Most employees perform six duties dally, and the duties depend upon the size of the office force and the type of position held. The six duties performed daily by the most employees are: using the telephone, filing, addressing envelopes, receiving callers, keeping books, and handling the mall. No particularly easy or difficult tasks were found, except typing, which is regarded as easy.

Employees suggested a second year of shorthand. They sald that students need office experience and placement services. Few employees
reported an interest in adult education. Only 11 employees gave criticisms, and 13 offered suggestions; many praised the school. Most criticisms and suggestions called for: more emphasis on business courses; increased shorthand skill; stress on personality development; more visits of businessmen and women to the school; improvements in specific courses; and job placement.

Findings of this survey are similar to those of other surveys which were studied. Findings of all indicated major weaknesses in spelling and grammar. In this study, self-expression and vocabulary were among the five major weaknesses, whereas punctuation and arithmetic had been named in other studies. Penmanship was found among the five major weaknesses in all studies. Employers in this study ranked weaknesses in the use of office machines as fourth, but employees ranked it ninth.

In the other surveys, the three most important personal traits were accuracy, dependability, and initiative. In this survey, employers named initiative first, and both the employers and the employees named accuracy, dependability, responsibility, and honesty among the five most important personal traits. Initiative, however, was ranked ninth by the employees in this study.

## Conclusions

The data collected for this study seem to support the following conclusions:

1. The classification of industries and occupations in Bryan and College Station, Texas, should recelve more attention by business, industry, and education.
2. Many job opportunities exist for local high school graduates, but the graduates must be well quallfied in order to meet competition.
3. Wives of students at the Agricultural and Mechanical College of Texas do not present overwhelming competition for local jobs. While many employers hire the wives of students, they also employ permanent residents.
4. No new business courses are needed at Stephen F. Austin High School. The second years of bookkeeping and of shorthand have always been offered provided as many as 15 students onrolled in each. A course in office machines is not practical in view of the cost and of the fact that the local business college offers machine training.
5. No placement service is needed at Stephen F. Austin High School at the present time. The school should work closely with local employment agencies and personnel workers, however.
6. Office experience should be provided on a small scale for students who are qualified and interested.
7. Human relations need more emphasis in high school. Employers consider teachers' opinions of applicants of greater importance than grades, honors, or participation in clubs and other activities.
8. Personal development needs more attention in high school than can be given during regular class periods.
9. English is so important to employers and employees that measures to improve the local program should be taken.
10. The findings of this survey are similar to those of other surveys which were studied.

## Recommendations

After consideration of data obtained from the interviews and questionnaires, the following recommendations are made in order to improve the training of all students enrolled in business courses at Stephen F. Austin High School:

1. Business teachers and counselors should make regular visits to local offices, and should continue to invite businessmen and women to the school.
2. An advisory committee of leaders in business and industry should be formed. This would help business teachers to know the local needs and practices, and help employers obtain better workers. Meetings should be infrequent, informal, and mutually beneficial.
3. During the years when Career Week is not held (every third year), plant tours or exhibits by business and industry should be planned.
4. Students should be given more occupational information.

Careers in government should be emphasized since more local workers are employed in government than in any other industry.
5. Students should be encouraged to get jobs or to go to school during part of each summer. Jobs would broaden their experience, and summer school would allow more time during the regular term for elective courses.
6. High school students should be encouraged to take several business courses, and as much general education as possible. Many offices are small and need workers with many skills.
7. Accuracy and peak performance should be stressed in high school business courses.
8. Students should be screaned carefully for the fourth semester of typing and for secretarial training in order that the courses may be kept on a vocational level. Many students who now take those courses would be better off if they took more training in other business subjects.
9. The homeroom program should be strengthened by having weekly meetings which help provide guidance without taking class time. It is regrettable that so many employees reported that the schools helped very little in areas which were related to guidance.
10. Before the new homeroom program is begun, teachers should receive in-service training which does not involve extra work. This training program should utilize resource persons outslde the school, should stress human relations and personality development, and should provide insplration and concrete suggestions for the teachers.
11. English teachers should be given lighter teaching loads so that they can teach more effectively. All teachers should help students to become more aware of the importance of English.

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APPENDIX A.

1. Industrial classification of the firm:

Contract Construction
Manufacturing Transportation, Communication, Electric, Gas Sanitary Services

Wholesale and Retail Trade
Finance, Insurance, Real Estate
Services
__Government
2. Information about office employees:

|  | No. | $\begin{aligned} & \text { Min。 } \\ & \text { Age } \end{aligned}$ | $\begin{aligned} & \text { Max. } \\ & \text { Age } \end{aligned}$ | $\begin{aligned} & \text { Exp. } \\ & \text { Req. } \end{aligned}$ |  | Education Required |  |  | $\begin{gathered} \text { Sex } \\ \text { Pref. } \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Position | Emp. | Acc. | Acc. | Yes | No | H.S. | Bus. Col. | Col. | M. | F. |
| Accountant |  |  |  |  |  |  |  |  |  |  |
| Bookkeeper |  |  |  |  |  |  |  |  |  |  |
| Cashier |  |  |  |  |  |  |  |  |  |  |
| Clerk |  |  |  |  |  |  |  |  |  |  |
| Machine Operator |  |  |  |  |  |  |  |  |  |  |
| Receptionist |  |  |  |  |  |  |  |  |  |  |
| Secretary |  |  |  |  |  |  |  |  |  |  |
| Stenographer |  |  |  |  |  |  |  |  |  |  |
| Typist |  |  |  |  |  |  |  |  |  |  |
| Other (Name): |  |  |  |  |  |  |  |  |  |  |
| TOTAL |  |  |  |  |  |  |  |  |  |  |

3. How do you most often secure office employees? (Check methods used)
__ Unsolicited letters
Personal applications Government employment agency Private employment agency Recommendations of friends Want ads

Business associates
Firm employees

- School placement agency (Name):
___ Other (Name):

4. Of what importance are the following school accomplishments in considering an office applicant? (Check):

Accomplishment

| No Imp. | Some Imp. | Great Imp. |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |

5. Is a skill of 45 words a minute on a 5 -minute timed writing, with no more than 3 errors, adequate for a beginning worker?

Yes $\qquad$ No $\qquad$
6. Is a skill of 80 words a minute for 5 minutes of dictation, with $99 \%$ transcription accuracy, adequate for a beginning worker? Yes

No $\qquad$
7. Do you test typing and shorthand skills before employment?

Yes No $\qquad$
8. Do you give other pre-employment tests?

Yes $\qquad$ No
9. Is typing ability required of all office applicants?

Yes $\qquad$ No $\qquad$
10. As measured by academic standards, which type of student do you prefer?

Superior
Above average

Average
__ Below average
11. Check reasons which usually cause most office vacancies in this firm: Promotion or shifting of employee to new position Discharge of employee because of personality defect Discharge of employee because of inadequate training Prolonged illness or death of employee Resignation to accept job elsewhere Resignation to marry

- Resignation to retire Increased business, calling for more workers Changes in operation requiring new position Other (Name):

12. Do you now have any Latin-American office workers?

Yes(No.)__ No $\qquad$
13. Do you have a training program for office employees?

Yes $\qquad$ No $\qquad$ -
14. Check the group for whom the training program is organized:
__ All office employees
__ Old office employees New office employees
__ Certain office employees (Name):
5. Name any school whose graduates you prefer: $\qquad$
16. In which of the following skills do you find the greatest weaknesses among beginning workers? (Rank five in 1, 2, 3 order):

- Grammar
- Filing
_ Vocabulary
Transcription
Punctuation
Bookkeeping
Spelling
Shorthand
Penmanship
Typing
Tabulation Office machines
- Arithmetic

Other (Name):
17. In which of the following activities do you find the greatest weaknesses among beginning workers? (Rank five in 1, 2, 3 order):
__ Applying for a job
_ Use of legal documents
Personality development
Work-habits development
Instructing others
Use of business forms
__ Meeting callers
Telephone technique
Other (Name):
18. Which of the following personal traits do you think the schools should stress more? (Check only 10):

| Honesty |  |
| :--- | :--- |
| Dependability | Accuracy |
| Initiative | $=$ |
| Cooperativeness | $=$ |
| Personal appearance | $=$ |
| Loyalty | $=$ |
| Tact | $=$ |
| Adaptability | $=$ |
| Poise |  |
| Friendliness |  |

Sincerity
Health
Enthusiasm Self-control Neatness in work Judgment Integrity Self-confidence Courtesy Determination Consideration

Responsibility Trustworthiness Cheerfulness Voice quality Mental alertness Punctuality Industry Following directions Other (Name):
19. Give your opinion concerning adequacy of business courses offered at Stephen F. Austin High School by checking appropriate columns:

| Name of course | Leave as is | Add more | Drop part |
| :--- | :--- | :--- | :--- |
| Typing, 2 years |  |  |  |
| Shorthand, 1 year |  |  |  |
| Bookkeeping, 1 year |  |  |  |
| Business arithmetic, l year |  |  |  |
| Business law, 1/2 year <br> Secretarial training, 1 year, 2 credits <br> (One hour daily of shorthand, and one <br> hour daily of stenographic practice) |  |  |  |

20. Would you participate in a business office experience program for senior business students at Stephen F. Austin High School? Yes_No
21. Would you participate in a placement service for students at Stephen $\mathbf{F}$. Austin High School?

Yes $\qquad$ No $\qquad$
22. List any criticisms of the business education department of Stephen F . Austin High School:
23. List any suggestions for improvement of the business education department of Stephen F . Austin High School:

APPENDIX B.

## LIST OF OFFICES VISITED

A. \& M. Consolidated Schools, Superintendent's Office Agricultural and Mechanical College of Texas, Fiscal Department Agricultural and Mechanical College of Texas, Placement Office Agricultural Marketing Service, Cotton Division Agricultural Stabilization and Conservation, State Office Albritton Engineering Company (Manufacturing) Allen Academy, President's Office Andrews-Parker, Incorporated (Construction) Brazos County Clerk
Brazos County Superintendent of Schools
Brazos County Tax Assessor-Collector
Bryan Building Products Company
Bryan Hospital
Cade Motor Company
Central Texas Hardware Company
City of Bryan, City Manager's Office
City of College Station, City Manager's Office
Edge's (Department Store)
Federal Crop Insurance Corporation
General Motors Acceptance Corporation
Guthrie-Greer Assoclates (Advertising)
International Furniture Company
International Shoe Company
J. C. Penney Company
J. Weingarten, Incorporated (Super Market)
KBTX-TV
Kraft Fumiture Company
Lester's Smart Shop
Lone Star Gas Company
Memorial Student Center, Director's Office
Mitchell-Vincent Company (Insurance)
Montgomery Ward and Company
Orr' s Super Markets
Pennsalt Chemicals Corporation
R. B. Butler, Incorporated (Construction)
Rural Electrification Association
St. Joseph's Hospital
Searcy-Marsh Clinic
Sears Roebuck and Company
Southwestern States Telephone Company
Texas Agricultural Experiment Station, Director's Office
Texas Agricultural Experiment Station, Fiscal Department
Texas Agricultural Extension Service (Two Employers Used)
Texas Engineering Extension Service

Texas Highway Department

APPENDIX C.

1. Industrial classification of the firm:

Contract Construction
Manufacturing
Transportation, Communication, Electric, Gas, Sanitary Services
_ Wholesale and Retail Trade Finance, Insurance, Real Estate Services
Government
2. Type of position:

| Accountant | Machine operator | Typist |
| :---: | :---: | :---: |
| Bookkeeper | Receptionist | Other (Name): |
| Cashier | Secretary |  |
| Clerk | Stenographer |  |

3. Sex: Male $\qquad$ Female $\qquad$ Monthly salary \$ $\qquad$ Age $\qquad$
4. Marital status: Married $\qquad$ Single $\qquad$ Widowed $\qquad$ Divorced $\qquad$ (If a married woman, give employment status of husband):
__ Student at A \& M College __ Employed elsewhere

- Faculty member at A \& M College -_ Unemployed
__ Employee of A \& M College

5. Length of time with present firm:

Years $\qquad$ Months $\qquad$
6. Number of positions held with present firm: (If more than one, give name of last position): $\qquad$
7. How did you get your first job with this firm?

Letter of Application Personal application Government employment agency Private employment agency Recommendation of friend Want ad
_ Business associate

- Firm employee
- School placement agency (Name):
-_Other (Name):
$\qquad$

8. For how many other firms or individuals have you worked?
9. How long have you worked?

Years $\qquad$ Months $\qquad$
10. What was your first job after graduation?
11. Are you a high-school graduate? Yes $\qquad$ No (If "nos" give last grade attended): $\qquad$
12. How many students were in the upper 3 grades of the high school attended?

| 100 or less | $-\quad 750-1,000$ |
| :--- | :--- | :--- |
| $100-300$ | $1,000-1,500$ |
| $300-500$ | $1,500-2,000$ |$\quad-\quad 2,500-3,000$

13. Further education:

Business college (for how long? ) Name and location of school:
College degree: Bachelor's__ Master's__ Other (kind?___
$\quad$ Name and location of college__
Major field of study
College attendance: (how long?

```
        Major field of study
Other (Name):
```

14. How did you rank in your class?
__ Upper 10\% - Upper $25 \%$
Upper 50\%
Lower 50\%
15. How many years of English did you take in high school? $\qquad$
16. To what extent were you helped with the following in high school?

| Not at all | Fairly <br> Well | Very <br> Well | Area of help |
| :---: | :---: | :---: | :---: |
|  |  |  | Problems of a personal nature |
|  |  |  | Selection of high school courses |
|  |  |  | Choosing an occupation |
|  |  |  | Getting a job |
|  |  |  | Preparation to earn a living |
|  |  |  | Preparation for college |
|  |  |  | Becoming an active member of school and community |
|  |  |  | Choosing purposes and values for life |
|  |  |  | Using leisure time |
|  |  |  | Other (Name) : |

Do you think that a strong homeroom program could have helped you with the above-stated problems? Yes__ No Did you actually go through a job interview in high school? Yes_ No__
17. Write the number of years that you studied each of the following business courses in high school, and put a check beside those studied after you left high school:
Years Check
Years Check

———— | Typing |
| :---: |
| Shorthand |
| Bookkeeping |
| Secretarial training |

18. List any business courses which you did not take which you now wish you had taken, and tell whether they were offered in your school:

|  | Yes__ No |
| :--- | :--- |
| $\ldots$ | Yes__ No__ |
|  | Yes__ No__ |

19. When you were in high school, did you intend to be an office worker?

Yes_No
20. In which of the following skills have you found the greatest weaknesses in your training? (Rank five in $1,2,3$ order):
 Grammar Filing
Vocabulary
Transcription
Se1f-expression
Bookkeeping
Punctuation
Shorthand
Spelling
Typing
Penmanship Office machines
Tabulation
Other (Name):
Arithmetic
21. In which of the following activities have you found the greatest weaknesses in your training? (Rank five in $1,2,3$ order):

Applying for a job
Personality development Work-habits development

Use of legal documents

Instructing others Use of business forms
Meeting callers
Telephone technique
22. Which 10 of the following personal traits do you think the schools should stress more? (Check only 10)

```
Honesty
Dependability
    Accuracy
    Initiative
    Cooperativeness
    Personal appearance
    Loyalty
    Tact
    Adaptability
    Poise
    Friendliness
_ Friendliness
```

- Sincerity

Health Enthusiasm Self-control Neatness in work Judgment Integrity Self-confidence Courtesy Determination Consideration

Responsibility Trustworthiness Cheerfulness Voice quality Mental alertness Punctuality Industry Following directions Other (Name):
- Other (Name):

Where did you learn to use office machines? On the job
In school Other $\qquad$
25. Check the extent to which you perform the following duties in your present position:

| Daily | Occa-sionally | $\begin{gathered} \mathrm{Ne} \mathrm{~V} \\ \mathrm{er} \\ \hline \end{gathered}$ | Duties |
| :---: | :---: | :---: | :---: |
|  |  |  | Take shorthand dictation (at what rate? ) |
|  |  |  | Transcribe letters (number of letters per day? ) |
|  |  |  | Type reports (tabulation, statistical work) |
|  |  |  | Type form 1etters |
|  |  |  | Compose and type letters (number per day? ) |
|  |  |  | Handle mail |
|  |  |  | File |
|  |  |  | Address envelopes |
|  |  |  | Prepare statements |
|  |  |  | Receive callers |
|  |  |  | Keep books |
|  |  |  | Cut stencils or masters |
|  |  |  | Handle banking activiti.es |
|  |  |  | Use telephone |
|  |  |  | Check invoices |
|  |  |  | Keep stock records |
|  |  |  | Operate switchboard |
|  |  |  | Other (Name): |

26. What is your most difficult task?

What is your easiest task?
27. Give your opinion concerning adequacy of business courses offered at Stephen $F$. Austin High School by checking appropriate columns:

| Names of courses | Leave as is | Add more, Drop part |  |
| :--- | :--- | :--- | :--- |
| Typing, years |  |  |  |
| Shorthand, 1 year |  |  |  |
| Bookkeeping, l year |  |  |  |
| Business arithmetic, 1 year |  |  |  |
| Business law, l/2 year |  |  |  |
| Secretarial training, 1 year, 2 credits <br> (One hour daily of shorthand, and one <br> hour daily of stenographic practice) |  |  |  |

28. Do you desire to continue office work?

What are your hobbies?
Do you play a musical instrument? Yes Yes__ No

Name magazines for office workers to which you subscribe:
29. Do you think a placement service is needed at Stephen F. Austin High School?

Yes__No
30. If you are interested in attending adult-education classes at Stephen F. Austin High School, list courses you desire:
31. List any criticisms of the business education department of Stephen $F$. Austin High School:
32. List any suggestions for improvement of the business education department of Stephen F. Austin High School:

APPENDIX D.

## LIST OF HIGH SCHOOLS ATTENDED BY EMPLOYEES

## Name of School and Number of Employees. Who Attended It

A. \& M. Consolidated High School, College Station, Texas 6

Abilene High School, Abilene, Texas 2
Adamson High School, Dallas, Texas I
Albuquerque High School, Albuquerque, New Mexico 1
All Saints' Episcopal School, Vicksburg, Mississippi 1
Alto High School, Alto, Texas 1
Anderson High School, Anderson, Texas 2
Arlington Heights High School, Fort Worth, Texas 1
Ballinger High School, Ballinger, Texas 1
Bremond High School, Bremond, Texas 1
Brenham High School, Brenham, Texas 2
Brownwood High School, Brownwood, Texas 1
Caldwell High School, Caldwell, Texas 3
Carroliton High School, Carrollton, Texas 1
Central High School, Ennis, Texas 1
Chilton High School, Chilton, Texas 1
Coleman High School, Coleman, Texas 1
Comanche High School, Comanche, Texas 1
Crockett High School, Crockett, Texas 1
Denton High School, Denton, Texas 1
Dime Box High School, Dime Box, Texas 1
Drew High School, Drew, Mississippi ..... 1
Edna High School, Edna, Texas ..... 1
Franklin High School, Franklin, Texas ..... 2
Groesbeck High School, Groesbeck, Texas ..... 1
H. B. Plant High School, Tampa, Florida ..... 1
Hearne High School, Hearne, Texas ..... 1
Hempstead High School, Hempstead, Texas ..... 1
Iola High School, Iola, Texas ..... 1
Jefferson Davis High School, Houston, Texas ..... 1
Jonesboro High School, Jonesboro, Arkansas ..... 1
Lamar High School, Rosenberg, Texas ..... 1
La Marque High School, La Marque, Texas ..... 1
Lathrop High School, Lathrop, Missouri ..... 1
Leona High School, Leona, Texas ..... 1
Liberty Hill High School, Liberty Hill, Texas ..... 1
Lipan High School, Lipan, Texas ..... 1
Livingston High School, Livingston, Texas ..... 1
Malakoff High School, Malakoff, Texas ..... 1
Milby High School, Houston, Texas ..... 4
Navasota High School, Navasota, Texas ..... 3
New Iberia High School, New Iberia, Louisiana ..... 1
Normangee High School, Normangee, Texas ..... 1
North Dallas High School, Dallas, Texas ..... 1
North Zulch High School, North Zulch, Texas ..... 2
Palestine High School, Palestine, Texas ..... 1
Paschal High School, Fort Worth, Texas ..... 2
Petrolia High School, Petrolla, Texas ..... 1
Prairleville High School, Prairleville, Texas ..... 1
Reagan High School, Houston, Texas ..... 2
Rockdale High School, Rockdale, Texas ..... 1
Rusk High School, Rusk, Texas ..... 1
Sam Houston High School, Houston, Texas ..... 1
Shawnee High School, Shawnee, Oklahoma ..... 1
Smetana High School, Smetana, Texas ..... 1
Snook High School, Snook, Texas ..... 4
Steep Hollow High School, Steep Hollow, Texas ..... 1
Stephen F. Austin High School, Bryan, Texas ..... 39
Sunset High School, Dallas, Texas ..... 1
Tabor High School, Tabor, Texas ..... 1
Tarleton State High School, Stephenville, Texas ..... 1
Teague High School, Teague, Texas ..... 1
Temple High School, Temple, Texas ..... 1
Texarkana High School, Texarkana, Texas ..... 1
Thomas Jefferson High School, San Antonio, Texas ..... 1
Thorndale High School, Thomdale, Texas ..... 1
Tivy High School, Kerrville, Texas ..... 1
Van High School, Van, Texas ..... 1
Van Hom High School, Van Hom, Texas ..... 1
Waco High School, Waco, Texas ..... 1
Waller High School, Waller, Texas ..... 1
Waxahachie High School, Waxahachie, Texas ..... 2
Wichita Falls High School, Wichita Falls, Texas ..... 2
Winthrow High School, Cincinnati, Ohio ..... 1
Yoe High School, Cameron, Texas ..... 2

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[^0]:    ${ }^{1}$ Herbert A. Tonne, Estelle L. Popham, and M. Herbert Freeman, Methods of Teaching Business Sublects, pp. 10-11.

    2 $\qquad$ - Cooperative Study of Secondary-School Standarde. Evaluative Criteria, pp. 82-84.

[^1]:    6
    R. G. Walters and C. A. Nolan, Principles and Problems of Business Education, p. 309.
    ${ }^{7}$ Walters, op. cit., pp. 19-26.

[^2]:    ${ }^{4}$ Gladys Bowman, "Business and College Cooperate to Improve Office Training," Doctor's Thesis, The University of Texas, 1947.

[^3]:    11 Survey," Mimeographed Report, Tulare, Califomia, 1948.

[^4]:    ## 14

    Texas Curriculum Studies, Report of the Commission on Business Education, Report Number Eleven, p. ili.15 Robert D. Balthaser, "Cooperation with Business in the Teaching of Bookkeeping،" Business Education Forum, vol. 14, no. 3, December, 1959, p. 26.

    16 Perry and Wanous, loc. cit.

