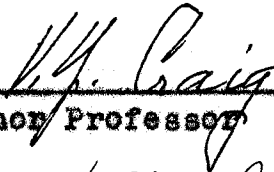


A SURVEY OF THE CLERICAL OCCUPATIONS IN  
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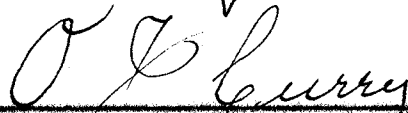
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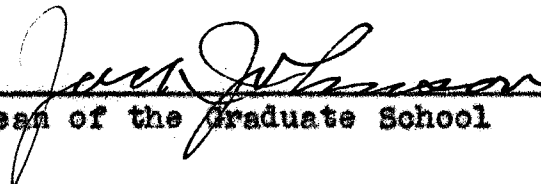
Major Professor



Minor Professor



Dean of the School of Business  
Administration



Dean of the Graduate School

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HIGH SCHOOL

THESIS

Presented to the Graduate Council of the  
North Texas State College in Partial  
Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By

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Denton, Texas

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151933

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## CHAPTER I

### INTRODUCTION

#### The Problem

The reasons for making a survey of the clerical occupations of Sugar Land, Texas are to determine whether or not graduates of Sugar Land High School are qualified to accept positions offered them, and to obtain suggestions for revising the commercial curriculum of the school.

Clerical work has often been called the "Great Field of Opportunity" for youth. More young people come out of high school desiring to enter clerical work than any other field.<sup>1</sup> Sugar Land, though small in size, offers many opportunities for clerical employment to the high school graduate; yet there are many who must accept jobs of the common labor class because their clerical training is not sufficient to qualify them for employment in the clerical field.

The commercial courses offered in the high school have been criticised by the business men and by the clerical employees as being inadequate for training students in business practice. This makes it difficult for the commercial graduate to find his place in the business office. If these

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<sup>1</sup> Lester J. Schloerb and Leland L. Medsken, The Outlook for Clerical Workers, p. 42.

charges are true then it is the duty of the school to ascertain what is demanded of the beginning clerical employees and to prepare students to meet these demands.

It seems an axiom of education in this age that, as they are about to enter active life, each group should be prepared for life in some special way. The third of their high school courses remaining beyond general education would then represent that special training for these young people. Here would be the opportunity for business courses, for the work in the arts, for agriculture and home economics and a thousand other practical fields. These courses are not wholly vocational in intent, nor is the break complete between them and general education. On the contrary they should carry forward the spirit of it into these realms and for these young people, exactly as does further mathematics or language for those who are going to college.<sup>2</sup>

The training of students to fill positions in the business office is one of the major objectives of the commercial department of Sugar Land High School. Since this is the case, the department should set standards of competency which will meet the demands of the business world. This study is made for two purposes, the first of which is three fold; to secure information concerning requirements necessary for employment in various clerical positions, characteristics of work performed in those positions, and deficiencies in the work of the employees; the second purpose is, upon the basis of facts discovered, to draw conclusions concerning a desirable high school program for training clerical workers.

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<sup>2</sup> "Excerpts from the Harvard Report," Harvard Committee on General Education, American Business Education, (1946) p. 61.



### Limitations of the Study

This study is limited to the following clerical positions found in Sugar Land, Texas: Accountants, Bookkeepers, Cashiers, Office Machine Operators, Secretaries, Stenographers, Typists, Bill Clerks, Credit Clerks, File Clerks, Payroll Clerks, Sales Clerks, Shipping Clerks, and Stock Clerks.

### Definition of Terms

#### Clerical Occupations

The term "clerical occupations" is so loosely used that the writer thinks the definition given in the "Dictionary of Occupations" should be presented to clarify the meaning of the term as used in this study.

Clerical occupations include positions concerned with preparation, transcribing, transferring, systematizing, or preserving of written communications and records in the offices, shops, and other places of work where such functions are performed. Most of these occupations are performed by mental and manual processes, but a few include in part or in whole the operation of such machines as bookkeeping machines and calculating machines.<sup>3</sup>

The clerical occupations listed above in "Limitations of the Study" are used in enumerating the positions in Sugar Land.

### Sources of Data

This study is based upon data obtained from the following sources:

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<sup>3</sup>"Dictionary of Occupations," United States Employment Service. p. 21.

1. Personal interviews and questionnaire contacts with employers and employees.
2. Opinions and statements from recognized authorities.
3. Findings of similar surveys.

#### Procedure

In making the survey of the business firms, a combination of the questionnaire and personal interview types of normative-survey method of research is used. It is believed that this method will give the best results because the questionnaire will aid in securing uniformity of information secured from the interview.

In making the survey, the steps followed are:

1. Secure permission and cooperation of authorities to make the survey.
2. Formulate a questionnaire to be presented to the employers asking for the requirements and qualifications in each position, the salary schedule, the promotion opportunities, the office machines and filing systems in use, and suggestions for improving the commercial curriculum in the high school.
3. Formulate a questionnaire to be presented to the employees who are graduates of Sugar Land High School, asking for the duties of their positions, school subjects that were most beneficial to them, subjects they think should be added to make the commercial program more effective, and criticisms and suggestions

they care to make for improving the commercial curriculum in the high school.

4. Use the questionnaire as the basis for discussion, and interview the employer and employees.
5. Tabulate carefully, the data given in the questionnaire and compile the facts in tables to present a true picture of the results of the survey.
6. Analyze the data and, using this as a basis, formulate a curriculum to be suggested for use in the Sugar Land High School.

The survey, it is believed, reveals information that will be constructive and helpful to the business firms, the schools, and to the students who plan to enter clerical work upon graduation from high school.

#### Related Studies

Before a new curriculum, to train high school students for positions they may secure on graduation from high school, can be planned, related studies should be examined to find out what others have accomplished. Some of the studies examined in this survey are:

In 1944, Thelma Maude Potter conducted a similar survey by sending out questionnaires to both employers and employees. The general purpose of the study was to clarify the concept of the work of the general clerical employee. The specific purposes were to determine, (1) the education and experience required of the general clerical workers, (2) the employment policies of business concerning general clerical workers, and,

(3) the general and specific characteristics of the work of the typical general clerical employee with particular emphasis on the use of machines. From this study a desirable secondary school training program for general clerical workers was formulated.

Miss Potter found that over eighty-five per cent of the work of beginning clerical employees involves skills in typewriting, filing, and such non-specialized clerical work as classifying and sorting or checking names and numbers for accuracy.

She also found that one half of the total hours of work performed by general clerical employees is spent in filing activities, operating adding-calculating machines, and using miscellaneous machines.

Miss Potter recommends that the general clerical training program in secondary schools should be devoted to the development of skills in typewriting, filing, non-specialized clerical work, and simple adding machines operations. Intensive training in secondary schools for complicated calculating and bookkeeping machines are of questionable value.<sup>4</sup>

In his book, "Reorganization of Commercial Education in the Public High School," Frederick J. Weersing made a survey of the commercial positions in Minnesota. This survey was made by the use of questionnaires and interviews.

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<sup>4</sup>Thelma Maude Potter, "An Analysis of the Work of General Clerical Employees," Unpublished Doctors Thesis, Teachers College, Columbia University, (1944), pp. 71-81.

From the survey Mr. Weersing came to the following conclusions: (1) commercial education as now administered is still far too mechanical and on too low an educational level; (2) if the increasing enrollment in commercial classes is evidence, commercial education is one of the most popular and one of the most important courses in the curriculum; (3) training of clerical workers is well taken care of in most instances, but too many students study shorthand who never make any use of it; (4) the average commercial graduate is so deficient in English, reading, arithmetic, spelling and handwriting that he makes an undesirable business employee. If these deficiencies are not taken care of in other departments of the school, the commercial department must see to it that its graduates acquire the necessary knowledge and training before graduation.<sup>5</sup>

Eula B. Reno made a survey of the business firms in Austin, Texas, for the purpose of securing the views, suggestions, and criticisms of ninety-five Austin employers as to the personal and academic qualifications expected of employees in the business office.

The interviews brought out a unanimous opinion that the business training program of schools needs enriching, that it needs to go beyond the point of mere commercial or vocational training. Seemingly, emphasis has been placed on the teaching

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<sup>5</sup>Frederick Weersing, Reorganization of Commercial Education in Public High Schools, South-Western Publishing Company, Cincinnati, Ohio, (1929).

of some particular skill such as bookkeeping, shorthand, or typewriting, rather than on the essentials that will enable a person to profit through knowledge of one or more of those skills. Some of the essentials to success and growth in business occupations as found in the survey are: (1) an acceptable degree of marketable efficiency in some skill in order to gain entrance into business; (2) a knowledge of the requirements, opportunities, and limitations of his chosen field in order to develop happy and satisfactory working conditions for the employee, his employer and his associates; (3) a knowledge of the personal traits and characteristics that particularly qualify him for the special type of work he does. The earlier a student learns that his personal traits fall short of those traits essential to a successful salesman, accountant, etc., the better.<sup>6</sup>

In 1941, Leo E. Donohew made a survey of the vocational opportunities for commercial graduates of the smaller and medium-sized high schools in Lafayette County, Missouri, for the purpose of suggesting adjustments of the commercial curriculum of that county.

The following conclusions were reached: (1) there is an urgent need for reorganization of the commercial curricula of the high schools in Lafayette County, since the present curricula do not provide for adequate vocational preparation for

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<sup>6</sup>Eula B. Reno, "Integration of Commercial Teaching with Business," Unpublished Thesis, University of Texas, Austin, Texas, (1938).

various occupational groups, nor for non-vocational groups; (2) needed skills and techniques should be acquired in high schools; with these skills and techniques, facilities should be provided for developing the social qualities that form a vital part of the workers in business; (3) there is no demand for specialization in any one field of commercial education, therefore, a generalized course in commercial education should be planned.<sup>7</sup>

J. D. Bryant made a survey of the commercial employees in Gladewater, Texas, in 1941. The principal purpose of this study was to revise the commercial curriculum of Gladewater High School to fit the needs of the commercial employees.

The results of this survey show a definite need for more guidance as a part of the commercial program in the high school. In order to know what qualifications are demanded of commercial workers and how to fit the subject matter of the business courses to these qualifications, one should keep in touch with the community.

This study showed that the skills and subject matter taught in the commercial courses of the high school were not adequate to meet the needs of the worker in his first position.

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<sup>7</sup> Leo E. Donohew, "Commercial Curriculum for Lafayette County, Missouri," Unpublished Masters Thesis, North Texas State College, Denton, Texas, (1941), pp. 88-90.

It was recommended that the commercial curriculum be made to include three major fields; bookkeeping, secretarial work, and general business, and that the courses in occupations be required of all beginning high school students who desire to take business courses.<sup>8</sup>

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<sup>8</sup>J. D. Bryant, "A Survey of Commercial Employees in Gladewater, Texas with Recommendations for Commercial Training Program of the Secondary School Level," Unpublished Masters Thesis, North Texas State Teachers College, Denton, Texas, (1941).



## CHAPTER II

### OPPORTUNITIES FOR CLERICAL EMPLOYMENT IN SUGAR LAND, TEXAS

Sugar Land, Texas, is located in Fort Bend County, twenty-three miles west of Houston on the "Old Spanish Trail" highway, running from San Diego, California, to St. Augustine, Florida.

The Sugar Land Industries is the parent company at Sugar Land and is known as the Massachusetts Trust. It is operated by a board of trustees. The officers of the organization, composed of five members chosen by the board, make up the governing body of the town.<sup>1</sup>

The property incorporated within the city limits of Sugar Land is owned and controlled by the Sugar Land Industries. Everyone living in the town is a renter, and, from the general manager down to the day laborer, gives a monthly check as a rental for his home. The houses are alike in-so-far as modern conveniences are concerned; the only difference is in the size of house required by each renter. During the present war period when rents, wages, as well as everything else, is abnormally high, rents at Sugar Land have retained their prewar level.

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<sup>1</sup>Quoted from an interview with Mr. H. G. Thompson, Vice-President and General Manager of the Sugar Land Industries.

Sugar Land is a town where everybody works. Some till the soil on the Sugar Land farms or tend the Sugar Land stock that roam its broad pastures. Others are engaged in the refining of sugar or canning food in the large Marshall Canning Company plant. Some mix stock feed at the big plant of the Sugar Land Feed Company or operate the electrically driven gin, while others serve as accountants, bookkeepers, clerks, secretaries, stenographers or typists.<sup>2</sup>

Since the school has accepted the responsibility of preparing students for the business field, it is necessary to know what to teach and what phases of the subjects to emphasize,

#### Business Organizations

No satisfactory business training can be given without considering the actual business organizations of the community.

A sound program for business education must be squared against the needs of the business community which it serves. These needs cannot be complacently regarded as static. Every available source of information must be constantly checked to identify trends and determine new directions for training.<sup>3</sup>

Every business organization of Sugar Land that employs clerical workers is included in this study.

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<sup>2</sup>C. B. Gillispie, What Becomes of Your Sugar Dollar?  
p. 11.

<sup>3</sup>A. D. Eastman, "What Standards Does Management Desire?"  
The Journal of Business Education, Vol. XXII, (February 1947),  
p. 34.

Table 1 shows the names of the business organizations, the clerical positions, and the number of clerical workers in each position.

TABLE 1

THE POSITIONS AND NUMBER OF COMMERCIAL EMPLOYEES  
EMPLOYED BY BUSINESS ORGANIZATIONS  
OF SUGAR LAND, TEXAS

Business Organizations	Accountants	Bookkeepers	Cashiers	Bill Clerks	Credit Clerks	File Clerks	Payroll Clerks	Sales Clerks	Shipping Clerks	Stock Clerks	Telephone Operators	Secretaries	Shorthand Stenographers	Typist	Total
Harris-Ft. Bend Telephone											1				1
Humble Oil & Refinery Co.	1				1			2			1		2		7
John Deere Implement Co.	2				1		4				1		2		10
Imperial Bakery			1												1
Imperial Bank & Trust Co.	1	1	2											1	5
Imperial Cleaners			1												1
Imperial Dry Good Co.							5	1							6
Imperial Drug Co.		1					5	1							7
Imperial Grocery Co.							6	2							8
Imperial Market			1												1
Imperial Sugar Co.	4	9	2	2	4	3	1	2	3	1	7	1	7		45
Marshall Canning Co.		1			2	1		2		1	1	1	2		11
Medical & Surgical Clinic		1									2		2		5
Sugar Land Industries	4	7	4	4	1	4		4		4			7		39
Sugar Land Motor Co.		1					2	1			1				5
Sugar Land Public Schools											1				1
Southern Pacific Railroad											1				1
Visco Products Inc.											1				1
<b>Total</b>	9	24	9	2	6	9	8	22	6	12	2	21	2	23	155
<b>Percentage</b>	6	16	6	1	4	6	5	14	4	8	1	13	1	15	100

From these data it is found that there are eighteen business organizations employing 155 clerical employees. Only those business organizations employing clerical workers are listed. All these organizations are controlled by the Sugar Land Industries, except the Humble Oil Company and the Southern Pacific Railway which are owned and controlled by large corporations outside of Sugar Land. The two companies are included in this study because the employees in the clerical positions are from Sugar Land.

Further study of Table 1 shows that only one business organization for each type of business is found in Sugar Land; for example, there is one drug store, one grocery store, one sugar refinery, etc. It is a town free from competition in business which naturally has its good and bad features but the high prices etc., that usually accompany such a plan are taken care of by the governing body, The Sugar Land Industries.<sup>4</sup>

Also in Table 1, the reader will observe that the main business industry of Sugar Land is the Imperial Sugar Company where forty-five clerical workers are employed.

The company is a Texas corporation operated by a board of directors. This board is composed largely of men in the Sugar Land Industries; therefore, the two organizations are very closely related.<sup>5</sup>

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<sup>4</sup> C. S. Gillispie, What Becomes of Your Sugar Dollar?  
p. 14

<sup>5</sup> Quoted from an interview with Mr. H. G. Thompson.

Again, Table 1, shows the different clerical positions and the distribution of the 155 clerical employees. The largest clerical group is the bookkeepers, with twenty-four or sixteen per cent of the employees. The second largest clerical group is the typists, with twenty-three or fifteen per cent of the employees. Sales clerks ranks third in order with twenty-two or fourteen per cent. Next in line is the secretaries, with twenty-one or thirteen per cent. The remaining clerical employees were distributed as follows: stock clerks, twelve or eight per cent; accountants, cashiers and file clerks, nine or six per cent each; payroll clerks, eight or five per cent; credit clerks and shipping clerks, six or four per cent; bill clerks, dictaphone operators and stenographers, two or one per cent. Over fifty per cent of the employees are found in the positions of bookkeepers, typists, sales clerks and secretaries. This information should be beneficial to the counselors and teachers in their guidance work.

#### Annual Rate of Turn-over and New Positions Created

Table 2 shows the average rate of turn-over and the average number of new positions created each year. This information is taken from a statement made by Mr. H. G. Thompson Vice-President and General Manager of the Imperial Sugar Company. It reveals that the average rate of turn-over each year is about forty-five or twenty-nine per cent of the 155 employees, and the average number of new jobs created each year is eight. Thus, fifty-three workers are employed annually. This increase in personnel is high and characteristic of a community that is meeting occupational opportunities for its people.

TABLE 2

THE NUMBER OF EMPLOYEES HIRED EACH YEAR IN THE  
BUSINESS ORGANIZATIONS OF SUGAR LAND, TEXAS

Business Organizations	Annual Turn-over	New Positions Created
Harris-Fort Bend Telephone Company..	3	0
Humble Oil and Refining Company.....	2	1
John Deere Plow Company.....	0	0
Imperial Bakery.....	2	0
Imperial Bank and Trust Company.....	3	0
Imperial Cleaners.....	0	0
Imperial Dry Goods.....	4	0
Imperial Drugs.....	5	0
Imperial Grocery.....	5	2
Imperial Market.....	0	0
Imperial Sugar Company.....	5	2
Marshall Canning Company.....	3	1
Medical and Surgical Clinic.....	3	0
Sugar Land Industries.....	6	2
Sugar Land Motor Company.....	0	0
Sugar Land Public School.....	1	0
Southern Pacific Railway.....	2	0
Visco Products.....	1	0
Total	45	8

Usually there are about thirty students in the graduating class each year; therefore, all the graduates of the commercial department if properly trained should be placed in positions. It is the duty of the school to prepare the students in every way possible to take advantage of the opportunities offered them.

To serve the students and the community most adequately, the commercial department of the school must give careful attention to the plan for training this large group of clerical workers, who make such an important contribution to the industrial picture.<sup>6</sup>

6

Frederick G. Nichols, Commercial Education in the High School, p. 123.

Opportunities for Sugar Land High School  
Graduates

The data in Table 3 indicate that 111, or about seventy-two per cent of the 155 clerical employees, are graduates of Sugar Land High School.

TABLE 3

THE NUMBER OF EMPLOYEES--GRADUATES  
OF SUGAR LAND HIGH SCHOOL

Business Organizations	Number of Graduates
Harris-Ft. Bend Telephone Company.....	1
Humble Oil and Refinery Company.....	5
John Deere Implement Company.....	5
Imperial Bakery.....	1
Imperial Bank and Trust Company.....	4
Imperial Cleaners.....	0
Imperial Dry Good Company.....	3
Imperial Drug Company.....	4
Imperial Grocery.....	3
Imperial Market.....	1
Imperial Sugar Company.....	35
Marshall Canning Company.....	11
Medical and Surgical Clinic.....	5
Sugar Land Industries.....	25
Sugar Land Motor Company.....	5
Sugar Land Public Schools.....	1
Southern Pacific Railroad Company.....	1
Visco Products.....	1
Total	111

From these data, it appears that business men of Sugar Land give preference to the local high school graduates. Only twenty-eight per cent of the employees are graduates of other high schools.

Requirements for Employment in Positions

Table 4 shows that of the 155 employees, eighty-one are women and seventy-four are men, the percentage being forty-eight and fifty-two respectively.

TABLE 4  
DISTRIBUTION OF CLERICAL EMPLOYEES  
ACCORDING TO SEX

Positions	Number of Employees		
	Male	Female	Total
Accountants.....	9	0	9
Bookkeepers.....	19	5	24
Cashiers.....	3	6	9
Bill Clerks.....	2	0	2
Credit Clerks.....	2	4	6
File Clerks.....	0	9	9
Payroll Clerks.....	7	1	8
Sales Clerks.....	12	10	22
Shipping Clerks.....	6	0	6
Stock Clerks.....	12	0	12
Dictaphone Operators.....	0	2	2
Secretaries.....	0	21	21
Shorthand Stenographers.....	0	2	2
Typists.....	2	21	23
<b>Total</b>	<b>74</b>	<b>81</b>	<b>155</b>
<b>Percentage</b>	<b>48%</b>	<b>52%</b>	<b>100%</b>

These data indicate an almost equal distribution of employment between women and men. However, in the accounting, bookkeeping, payroll clerk, shipping clerk and stock clerk positions, men are employed almost exclusively. On the other hand, in the positions of cashiers, secretaries, stenographers and typists, a large majority are women.

This tendency is further indicated in Table 5 which shows the employers' preference for women or men workers in each position.



TABLE 5

THE NUMBER OF EMPLOYERS WHO INDICATED SEX PREFERENCE OF EMPLOYEES FOR EACH TYPE OF CLERICAL POSITION

Positions	Preference				
	Male	Female	Total	Percentage	
				Male	Female
Accountants.....	3	0	3	100	0
Bookkeepers.....	7	2	9	78	22
Cashiers.....	2	3	5	40	60
Bill Clerks.....	1	0	1	100	0
Credit Clerks.....	0	1	1	0	100
File Clerks.....	1	4	5	20	80
Payroll Clerks.....	1	1	2	50	50
Sales Clerks.....	3	1	4	75	25
Shipping Clerks.....	3	0	3	100	0
Stock Clerks.....	5	0	5	100	0
Dictaphone Operators....	0	2	2	0	100
Secretaries.....	0	11	11	0	100
Shorthand Stenographers..	0	1	1	0	100
Typists.....	1	6	7	14	86

These data indicate that men are preferred exclusively in the positions of accountants, shipping clerks, stock clerks, and bill clerks. Men are also preferred in over seventy-five per cent of the cases as bookkeepers and sales clerks. Women are preferred exclusively in the positions of credit clerks, dictaphone operators, secretaries, stenographers, and eighty-five per cent in the positions of typists and file clerks. In the case of cashiers, the percentage is more evenly divided between men and women.

Table 6 shows the minimum age requirement for employees in each position as expressed by employers of Sugar Land.

A study of this table reveals that the age limit for most positions is eighteen years.

TABLE 6

MINIMUM AGE LIMIT FOR EACH CLERICAL POSITION  
IN SUGAR LAND, TEXAS

Positions	Minimum Age Limit for the Employee as Expressed by the Employer				
	16	17	18	19	20
Accountants.....	0	0	2	0	2
Bookkeepers.....	0	1	6	0	0
Cashiers.....	0	3	3	0	0
Bill Clerks.....	0	1	0	0	0
Credit Clerks.....	1	1	0	0	0
File Clerks.....	0	1	3	0	0
Payroll Clerks.....	1	1	1	0	0
Sales Clerks.....	4	0	1	0	0
Shipping Clerks.....	0	1	1	0	0
Stock Clerks.....	3	1	1	0	0
Dictaphone Operators.....	1	0	1	0	0
Secretaries.....	0	1	6	0	0
Shorthand Stenographers..	1	0	2	0	0
Typists.....	1	1	4	0	0
<b>Total</b>	<b>12</b>	<b>12</b>	<b>31</b>	<b>0</b>	<b>2</b>

Since the twelve grade system was organized in the Sugar Land schools in 1937, three years before it was adopted in the state program, the average high school graduate is older than in other high schools of the state, and may usually accept a position requiring the employee to be eighteen years of age.<sup>7</sup>

Table 7 shows the educational qualifications required by employers of Sugar Land, Texas.

7

Course of Study for the Sugar Land High School, Prepared by the Faculty and Superintendent of School (May, 1938), p. 4, (Mimeographed).

TABLE 7

MINIMUM EDUCATIONAL REQUIREMENTS OF CLERICAL EMPLOYEES  
IN THE BUSINESS ORGANIZATIONS OF SUGAR LAND, TEXAS

Positions	Minimum Educational Requirements			
	Elem. School	High School	Business College	College
Accountants.....	0	2	2	0
Bookkeepers.....	0	10	0	0
Cashiers.....	0	5	0	0
Bill Clerks.....	0	1	0	0
Credit Clerks.....	0	2	0	0
File Clerks.....	0	4	0	0
Payroll Clerks.....	0	3	0	0
Sales Clerks.....	0	5	0	0
Shipping Clerks.....	0	4	0	0
Stock Clerks.....	0	7	0	0
Dictaphone Operators...	0	2	0	0
Secretaries.....	0	11	0	0
Shorthand Stenographers.....	0	3	0	0
Typists.....	0	6	0	0

From these data the reader will find that to obtain a position in the clerical occupations of Sugar Land, the applicant must have at least a high school education. Two employers in the accounting field indicated that at least a business college education is one of the requirements for obtaining employment in their organizations. Apparently then the high school graduate, so far as the education requirements are concerned, has very little trouble securing a position as a clerical employee in Sugar Land.

Table 8 shows the experience required of the beginning employee.

TABLE 8

DISTRIBUTION OF CLERICAL POSITIONS BASED ON THE NUMBER  
AND PERCENTAGE OF EMPLOYERS WHO REQUIRE OR DO NOT  
REQUIRE EXPERIENCE OF EMPLOYEES

Positions	Number of Employers who Require or do not Require Experience			
	Yes		No	
	Number	Per cent	Number	Per cent
Accountants.....	1	25	3	75
Bookkeepers.....	1	10	9	90
Cashiers.....	1	20	4	80
Bill Clerks.....	0	0	1	100
Credit Clerks.....	0	0	2	100
File Clerks.....	0	0	3	100
Payroll Clerks.....	1	30	2	70
Sales Clerks.....	0	0	5	100
Shipping Clerks.....	1	25	3	75
Stock Clerks.....	0	0	7	100
Dictaphone Operators...	1	50	1	50
Secretaries.....	1	9	10	91
Shorthand				
Stenographers.....	1	30	2	70
Typists.....	1	20	5	80

The data in this table indicate that most of the positions may be secured without experience. Only in the positions of accountants, bookkeepers, cashiers, shipping clerks, dictaphone operators, secretaries, and stenographers is experience required and then by only one employer in each case.

#### Salary Schedule

Table 9 shows the salary that a high school graduate may expect to receive in each position.

The highest salaries are paid the employees of the Humble Oil and Refining Company. The lowest salaries are paid the

cashiers, bill clerks, credit clerks, and sale clerks; these are the employees of the retail stores. Beginning employees in the business offices are paid \$30 per week.

TABLE 9

MINIMUM SALARY PAID THE BEGINNING EMPLOYEES  
BY THE BUSINESS ORGANIZATIONS OF  
SUGAR LAND, TEXAS

Positions	Minimum Salary Paid Beginning Employees per week		
	\$25	\$30	\$35
Accountants.....	0	2	1
Bookkeepers.....	1	6	1
Cashiers.....	4	1	0
Bill Clerks.....	1	1	0
Credit Clerks.....	1	1	0
File Clerks.....	1	3	1
Payroll Clerks.....	1	2	0
Sales Clerks.....	4	0	0
Shipping Clerks.....	1	1	1
Stock Clerks.....	4	1	0
Dictaphone Operators.....	0	2	0
Secretaries.....	2	8	2
Shorthand Stenographers.....	0	2	0
Typists.....	1	5	1
<b>Total</b>	<b>21</b>	<b>34</b>	<b>7</b>

Considering the fact that the majority of the employees are from homes in Sugar Land, the salaries paid the beginning employee are probably adequate.

#### Promotion Opportunities

Opportunities for promotion vary widely with the kind of business, the size of the office, and the type of work. Secretaries, stenographers, etc., in the home office of the

Sugar Company and the Industries do not find the same opportunities open to them as those in the small branch offices of the Humble Oil Company, Visco Products, Marshall Canning Company, etc. The clerical worker in the small branch offices has opportunities for advancement to the main office in some of the larger cities. Promotions of the clerical worker in the Sugar Company and Industries consist mainly in salary increases and advancement in the department where he starts. A secretary may advance from a position in the general office to a position in one of the offices of the officials. The typist, who is a "wide awake" employee may use her position as a stepping stone to one of the better secretarial positions.<sup>8</sup>

Typing is a skill that is of great value to almost every clerical worker. As an added skill it gives the young job hunter an edge over others who may be as efficient clerks, bookkeepers or office boys. Such an edge often means a job.<sup>9</sup>

#### Summary

From the data presented in this chapter, the general conclusion is that Sugar Land offers opportunities for employment to the commercial graduate if he chooses to enter the business world. Only in the field of accounting are the requirements of education, experience, and age above the high school level.

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<sup>8</sup>Quoted from an interview with Mr. H. G. Thompson, Vice-President and General Manager of the Imperial Sugar Company.

<sup>9</sup>Lester J. Schloerb and Leland L. Medsken, The Outlook of the Clerical Worker, p. 45.

## CHAPTER III

### QUALIFICATIONS AND DUTIES OF THE CLERICAL EMPLOYEES

During the war years the high schools of the nation devoted themselves to teaching business subjects as rapidly as possible in order to satisfy the steady demand for clerical workers. Regardless of individual ability or extent of education, jobs were plentiful. The applicant, or employee, could take his choice of several positions, and if his qualifications did not fit him for the vacancy, the employer was willing to give on-the-job training. Today the picture is changing. The employer is seeking employees who are capable and energetic high school graduates and who are alert and interested in making places for themselves in the business field.<sup>1</sup>

#### Qualifications

To determine the qualifications of clerical employees, employers were asked to check the qualifications they required in each position.

In every case the employer checked correct spelling, grammar and punctuation, legible penmanship, and accuracy. Accuracy in all phases of clerical work is considered the most important qualification.

In addition to those mentioned above, Table 10 shows, in the order of their importance, the five most frequently mentioned qualifications of employees in each clerical position.

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<sup>1</sup>Beatrice E. Hertwig, "Business Requirements and School Placement Today," National Business Education Quarterly, Vol. XV No. 3, (March 1947), p. 17.

TABLE 10

DISTRIBUTION AND FREQUENCY OF THE QUALIFICATIONS  
REQUIRED OF BEGINNING EMPLOYEES

Position	Qualifications
Accountants	<ol style="list-style-type: none"> <li>1. Ability to use figures</li> <li>2. Knowledge of the principles of bookkeeping</li> <li>3. Ability to analyze records</li> <li>4. Ability to operate adding machine</li> <li>5. Ability to operate calculating and bookkeeping machine</li> </ol>
Bookkeepers	<ol style="list-style-type: none"> <li>1. Knowledge of the principles of bookkeeping</li> <li>2. Ability to use figures</li> <li>3. Ability to operate adding machine</li> <li>4. Ability to operate calculating machine</li> <li>5. Ability to operate bookkeeping machine</li> </ol>
Cashiers	<ol style="list-style-type: none"> <li>1. Knowledge of general business</li> <li>2. Ability to use figures</li> <li>3. Knowledge of basic principles of bookkeeping</li> <li>4. Ability to operate adding machine</li> <li>5. Ability to operate cash register and calculator</li> </ol>
Bill Clerks	<ol style="list-style-type: none"> <li>1. Knowledge of general business</li> <li>2. Ability to use figures</li> <li>3. Knowledge of basic principles of bookkeeping</li> <li>4. Ability to operate adding machine</li> <li>5. Ability to operate calculating machine</li> </ol>
Credit Clerks	<ol style="list-style-type: none"> <li>1. Knowledge of general business</li> <li>2. Ability to use figures</li> <li>3. Ability to use adding machine</li> <li>4. Ability to use calculating machine</li> <li>5. Knowledge of the basic principles of filing</li> </ol>



TABLE 10--Continued

Position	Qualifications
File Clerks	<ol style="list-style-type: none"> <li>1. Knowledge of general business</li> <li>2. Knowledge of the principles of filing</li> <li>3. Ability to use figures</li> <li>4. Ability to operate duplicating machines</li> <li>5. Ability to type</li> </ol>
Payroll Clerks	<ol style="list-style-type: none"> <li>1. Ability to use figures</li> <li>2. General business knowledge</li> <li>3. Knowledge of the general principles of bookkeeping</li> <li>4. Ability to operate adding machines</li> <li>5. Ability to operate calculating machines</li> </ol>
Sales Clerks	<ol style="list-style-type: none"> <li>1. Knowledge of general business</li> <li>2. Ability to use figures</li> <li>3. Knowledge of the basic principles of bookkeeping</li> <li>4. Ability to operate adding machines</li> <li>5. Ability to operate cash register</li> </ol>
Shipping Clerks	<ol style="list-style-type: none"> <li>1. Knowledge of general business</li> <li>2. Ability to use figures</li> <li>3. Knowledge of the basic principles of bookkeeping</li> <li>4. Ability to operate adding machines</li> <li>5. Ability to operate cash register</li> </ol>
Stock Clerks	<ol style="list-style-type: none"> <li>1. Knowledge of general business</li> <li>2. Ability to use figures</li> <li>3. Knowledge of the basic principles of selling</li> <li>4. Ability to operate cash register</li> </ol>
Dictaphone Operator	<ol style="list-style-type: none"> <li>1. Knowledge of general business</li> <li>2. Ability to use figures</li> <li>3. Ability to use dictaphone</li> <li>4. Typing speed of 50 words per minute</li> <li>5. Knowledge of the basic principles of filing</li> </ol>
Secretaries	<ol style="list-style-type: none"> <li>1. Typing speed of 50 words per minute</li> <li>2. Shorthand speed of 80 words per minute</li> <li>3. Knowledge of general business</li> <li>4. Ability to use figures</li> <li>5. Ability to operate adding machine</li> </ol>

TABLE 10--Continued

Position	Qualifications
Shorthand Stenographers	<ol style="list-style-type: none"> <li>1. Typing speed of 60 words per minute</li> <li>2. Shorthand speed of 100 words per minute</li> <li>3. Knowledge of general business</li> <li>4. Knowledge of the general principles of filing</li> <li>5. Ability to use figures</li> </ol>
Typists	<ol style="list-style-type: none"> <li>1. Typing speed of 50 words per minute</li> <li>2. Knowledge of general business</li> <li>3. Knowledge of the general principles of filing</li> <li>4. Ability to operate duplicating machines</li> <li>5. Ability to use figures</li> </ol>

From these data we find that an accountant must be thoroughly trained in all the problems of the bookkeeper, but he must also be able to do other work. He should know how to analyze the information contained in the records kept by the bookkeeper. "He must be able to read a living story in the columns of the ledgers and other accountant books."<sup>2</sup>

The work of bookkeepers and accountants is based on the same general principles. A high school course in business arithmetic, business machines, business forms and bookkeeping would provide a good preparation for a career in bookkeeping.<sup>3</sup>

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<sup>2</sup>Lester J. Schloerb and Leland L. Medsken, The Outlook for Clerical Workers, p. 30.

<sup>3</sup>Ibid

The qualifications for cashiers given in Table 9 are based on the interviews with employers who employ cashiers in the bank and the General Office of the Sugar Land Industries. The cashiers listed in the cafe, market, etc., need to know how to operate a cash register, but they do not do the work of bookkeepers or accounting processes that involves the handling of money and checks.

The qualifications for positions such as bill clerks, credit clerks, payroll clerks, shipping clerks, and stock clerks are about the same; ability to use figures, knowledge of the general principles of bookkeeping, and ability to operate adding and calculating machines.

The position of file clerk is one of the most important parts of office work. Most business offices in Sugar Land combine this work with that of the secretary, the typists, or the stenographers.

In addition to qualifications of the file clerk mentioned in Table 10, interviews with business men brought out the fact that an employee doing filing work must have a good memory, must be accurate, and must be honest.

The positions of dictaphone operators and shorthand stenographers have about the same qualifications; the only difference is in whether dictation is taken from a machine or taken in shorthand.

In Sugar Land we find few employees who are strictly dictaphone operators or shorthand stenographers. Taking

dictation is usually combined with other routine jobs of the secretary, who must be skilled in almost every position in the office.

The positions of typist usually involves the copying of material from previously written material. The principal skill is the ability to type. The average typing speed required by most employers is fifty words a minute. A knowledge of filing and figures, and the ability to operate duplicating machines are among the qualifications most frequently mentioned for typists.

#### Duties

Table 11 shows five duties, in each position, that were most frequently mentioned by graduates of Sugar Land High School. The material was compiled from seventy-five questionnaires which had been distributed to a representative group of employees.

TABLE 11

THE FIVE PRINCIPAL DUTIES OF EACH POSITION  
MENTIONED MOST FREQUENTLY BY EMPLOYEES

Position	Duties
Accountant	<ol style="list-style-type: none"> <li>1. Check records</li> <li>2. Make entries</li> <li>3. Check postings</li> <li>4. Prepare statements showing financial conditions of the business</li> <li>5. Use bookkeeping machines</li> </ol>

TABLE 11--Continued

Position	Duties
Bookkeeping	<ol style="list-style-type: none"> <li>1. Make daily records</li> <li>2. Prepare monthly statements</li> <li>3. Post on machine</li> <li>4. Type</li> <li>5. File</li> </ol>
Cashiers (bank)	<ol style="list-style-type: none"> <li>1. Receive money, in checks and cash</li> <li>2. Post the days transactions</li> <li>3. Cash checks</li> <li>4. Mark checks</li> <li>5. Order ready cash</li> </ol>
Cashiers (Others)	<ol style="list-style-type: none"> <li>1. Use cash register</li> <li>2. Cash checks for customers</li> <li>3. Make deposits</li> <li>4. Use adding machine</li> <li>5. Write charge slips</li> </ol>
Credit Clerks	<ol style="list-style-type: none"> <li>1. Receive pay for bills</li> <li>2. File</li> <li>3. Type</li> <li>4. Prepare monthly statements of customers accounts</li> <li>5. Keep records of charge accounts</li> </ol>
Filing Clerks	<ol style="list-style-type: none"> <li>1. Code</li> <li>2. File letters and other business papers</li> <li>3. Type</li> <li>4. Distribute mail</li> <li>5. Prepare letters for mailing</li> </ol>
Payroll Clerks	<ol style="list-style-type: none"> <li>1. Make up payroll each month</li> <li>2. Prepare checks</li> <li>3. Post</li> <li>4. Make deductions</li> <li>5. Keep personal records</li> </ol>

TABLE 11--Continued

Position	Duties
Sales Clerks	<ol style="list-style-type: none"> <li>1. Wait on customers</li> <li>2. Use cash register</li> <li>3. Use adding machine</li> <li>4. Replenish shelves</li> <li>5. Keep shelves in order</li> </ol>
Shipping Clerks	<ol style="list-style-type: none"> <li>1. Prepare sugar for shipping</li> <li>2. Keep records of shipments</li> <li>3. Inspect shipments</li> <li>4. Type records</li> <li>5. Keep shipping room in order</li> </ol>
Stock Clerks	<ol style="list-style-type: none"> <li>1. Keep stock room records</li> <li>2. Replenish stock</li> <li>3. Reorder</li> <li>4. Fill requisitions from stock</li> <li>5. Make daily reports</li> </ol>
Dictaphone Operators	<ol style="list-style-type: none"> <li>1. Transcribe letters from dictaphone</li> <li>2. File</li> <li>3. Answer telephone</li> <li>4. Distribute mail</li> <li>5. Type</li> </ol>
Secretaries	<ol style="list-style-type: none"> <li>1. Transcribe letters from dictation</li> <li>2. File</li> <li>3. Answer telephone</li> <li>4. Type purchase orders, and invoices</li> <li>5. Post</li> </ol>
Typists	<ol style="list-style-type: none"> <li>1. Type form letters</li> <li>2. Type orders, invoices, etc.</li> <li>3. Distribute mail</li> <li>4. Prepare letters for mailing</li> <li>5. Receive callers</li> </ol>

From the data shown in Table 11, it is found that the following duties or skills were performed most frequently by the clerical employees: typewriting, filing, preparing reports, and operating adding, calculating, and duplicating machines and cash registers.

The information contained in Tables 10 - 11 is most important to the school because it will serve as a guide in setting up a program that will train students to become more efficient in their beginning positions.

## CHAPTER IV

### OFFICE MACHINES AND FILING SYSTEMS IN USE

#### Office Machines

Office machines are used in almost every branch and department of office work. We have moved forward very rapidly during the past two decades in the development of new office practices especially in the use of machines.<sup>1</sup>

One of our major problems in training students to accept positions in the office is securing adequate equipment. Office machine courses call for expensive equipment; but, if there is a demand for skilled workers, the cost of equipment is of minor importance.<sup>2</sup> The standards for selecting the type of office training program needed, and the equipment that should be purchased depend upon the actual needs as reflected by the equipment used at present in stores and offices of the community.

Tables 12-17 show the type of machines, the make of machines, the number of business firms in which the machines are used, and the number of men and women using them.

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<sup>1</sup>Hilton D. Shepherd, Recent Observations Relative to Office Practices, Mimeograph Series, May 1933, p. 7.

<sup>2</sup>Olga Alber, "Office Training in the Smaller School," The Business Education World, Vol. 24, (October 1943), p. 96.



### Typewriters

Table 12 gives information concerning the typewriters used by the business organizations.

TABLE 12

#### TYPENRITERS USED BY THE EMPLOYEES IN THE BUSINESS ORGANIZATIONS OF SUGAR LAND, TEXAS

Make of Machine	Number of Business Firms Using Machine	Number of Employees Using Machine		
		Males	Females	Total
Underwood	12	19	21	40
Royal	4	7	7	14
Woodstock	1	0	1	1
<b>Total</b>	<b>17</b>	<b>16</b>	<b>29</b>	<b>55</b>

The data presented in this table indicates that there are three makes of typewriters in use in the offices of Sugar Land. The Underwood machine is used by twelve of the seventeen business organizations. The Royal and Woodstock machines are used by the other five.

The Commercial Department of the high school used Underwood machines exclusively. However, the typewriters need to be replaced with new ones.

### Adding Machines

Table 13 shows that ten of the fourteen business firms having adding machines prefer the Burroughs machine. There are forty-three employees using the machine, twenty-eight men and fifteen women.

TABLE 13

ADDING MACHINES USED BY THE EMPLOYEES IN THE BUSINESS  
ORGANIZATIONS OF SUGAR LAND, TEXAS

Make of Machine	Number of Business Firms Using Machine	Number of Employees Using Machine		
		Males	Females	Total
Burroughs	10	28	15	43
Sunstrand	4	8	7	15
Total	14	36	22	58

The table also shows that the only other adding machine is the Sunstrand which is used by four of the firms. Eight men and seven women or a total of fifteen employees use the machine.

#### Bookkeeping Machines

Table 14 shows that six business firms use bookkeeping machines.

TABLE 14

BOOKKEEPING MACHINES USED BY THE EMPLOYEES IN THE BUSINESS  
ORGANIZATIONS OF SUGAR LAND, TEXAS

Make of Machine	Number of Business Firms Using Machine	Number of Employees Using Machines		
		Males	Females	Total
Burroughs	5	7	4	11
National	1	1	0	1
Total	6	8	4	12

Five of the six business firms use Burroughs machine while one uses the National machine. Twelve employees use bookkeeping machines; eleven of these are operating the Burroughs machine and one the National machine.

The data in Table 14 further show that there are seven men and four women using the Burroughs machine while one man operates the National machine.

#### Calculating Machines

The calculating machine seems to be popular with the business organizations of Sugar Land. Table 15 shows that there are three makes of calculators in use; the Marchant, the Monroe, and the Fridir.

TABLE 15  
CALCULATORS USED BY THE EMPLOYEES IN THE BUSINESS ORGANIZATIONS OF SUGAR LAND, TEXAS

Make of Machine	Number of Business Firms Using Machine	Number of Employees Using Machine		
		Males	Females	Total
Marchant	5	11	2	13
Monroe	4	7	9	16
Fridir	1	1	0	1
<b>Total</b>	<b>10</b>	<b>19</b>	<b>11</b>	<b>30</b>

The Marchant machine is used by five of the ten business organizations. Thirteen employees use this machine, eleven men and two women.

The Monroe is used by four business firms. Sixteen employees, seven men and nine women use this machine.

The Fridir machine is used by one business organization and one employee (a man).

#### Cash Register

Table 16 shows that nine business organizations use cash registers.

TABLE 16

CASH REGISTERS USED BY THE EMPLOYEES IN THE BUSINESS ORGANIZATION OF SUGAR LAND, TEXAS

Make of Machine	Number of Business Firms Using Machine	Number of Employees Using the Machine		
		Males	Females	Total
National	5	5	5	10
Burroughs	4	6	6	12
Total	9	11	11	22

The National Machine is used by five of the business organizations and by ten employees, five men and five women. The Burroughs machine is used by four of the business organizations and by twelve of the employees, six men and six women.

#### Duplicating Machines

Table 17 shows the duplicating devices that are used by six business organizations.

TABLE 17

DUPLICATING DEVICES USED BY THE EMPLOYEES OF THE BUSINESS ORGANIZATIONS OF SUGAR LAND, TEXAS

Types of Machines	Number of Business Firms Using Machine	Number of Employees Using Machines		
		Males	Females	Total
Addressograph	2	0	2	2
Mimeograph	2	0	2	2
Ditto	2	0	2	2
Total	6	0	6	6

From these data the reader will observe that the duplicating machines in use are the addressograph, the mimeograph and the ditto. Mimeograph and ditto machines are very common in our schools. They are also used in business for printing letters to the employees, and for other material for which a large number of copies are needed. The addressograph machine is a duplicating device used in addressing large numbers of letters or mail pieces. All these machines are operated by women.

Filing System Used

Filing has grown rapidly from its infancy in 1892. The study of filing is a broad one.<sup>3</sup> This study is confined to the systems found in the offices of Sugar Land.

<sup>3</sup>Hilton D. Shepard, "Recent Observations Relative to Office Practices," p. 29.

Table 18 and 19 show the filing systems and the methods of filing used in those systems.

TABLE 18

FILING SYSTEMS USED BY BUSINESS ORGANIZATIONS  
IN SUGAR LAND, TEXAS

System	Frequency Mention	Rank
Vertical	15	1
Loose Sheet	4	2

As shown in the table the system used most frequently is the Vertical System. Fifteen business organizations use this system. The only other filing system in use is the Loose Sheet which is used by four business organizations. It is not the purpose of this study to try to determine the best method of filing, but rather to discover the methods used in all the offices and to stress these in our training program.

TABLE 19

METHODS OF FILING USED BY BUSINESS ORGANIZATIONS IN  
SUGAR LAND, TEXAS

Method of Filing	Frequency Mention	Rank
Direct Alphabetic	11	1
Subject	10	2
Numeric	5	3
Geographic	1	4

From this table we see that the most commonly used method is the Alphabetic method. However, all methods are used to a certain extent; therefore, it would be well to include all methods in the training program.

#### Summary

From this survey of the office machines and filing systems used in Sugar Land, we conclude that it is necessary for students to learn more about the different kinds and makes of office machines and the systems and methods of filing.

The inventory of the office equipment of the commercial department in the Sugar Land High School shows that there is one Mimeograph machine, one vertical filing system and twelve Underwood typewriters. This equipment is inadequate for training students for office positions.

From the personal interviews with the Sugar Land business man and the employees, one of the criticisms of our department was the lack of training in the use of office machines.

Students of the commercial department cannot hope to receive training that will fit them for office jobs if they lack the office equipment they will be called upon to use when they are placed in positions.

The trend of the business world to mechanize itself and to take advantage of the many labor-saving and error-eliminating devices of the machine age demands that schools modify or extend their business education program if they are to prepare students for the type of positions which they will be called upon to fill when they enter the business world.<sup>4</sup>

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<sup>4</sup>Arthur C. Muns and Wendel G. Anderson, "A small School Trains for Business," The Journal of Business Education, Vol. XXII, (January 1947), p. 17.

## CHAPTER V

### DEFICIENCIES OF CLERICAL EMPLOYEES

If youth is to be tolerated in an office where the space on which he and his desk sit cost his employer rent by the square foot, he must come possessing marketable skill with which to pay his admission. He must then have a desirable personality to hold the position after he has obtained it.<sup>1</sup>

The demand put on business during World War II made it very obvious that the average high school commercial graduate is poorly equipped when he applies for a position as typist, stenographer, file clerk, bookkeeper, or general clerk. Business men complained about the lack of proficiency in written and spoken English, spelling, arithmetic and commercial subjects; however, the greatest single complaint is the students' lack of responsibility. It appears that students are not given to opportunity to accept responsibility in high school when they enter the office, they require too much help from the employers in learning how to do their work. After a time in the office, they become more independent.<sup>2</sup>

In the questionnaire presented to the business men of Sugar Land, they were asked to check the chief weaknesses found in the work of the employee. The weaknesses were

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<sup>1</sup> Martha E. Neher, "The Market Demands Skill," The Business Education World, Vol. XXVII No. 9, May 1947, p. 524.

<sup>2</sup> Albert Felmit, "What Office Managers Can Do to Help Provide Better Trained Clerical Workers," American Business Education, Vol. III No. 2, December 1946, p. 124.



divided into two groups, those due to inadequate training and those due to personal traits.

#### Inadequate Training

Table 20 shows the weaknesses due to inadequate training; these were checked by the employers and arranged according to the frequency mentioned. Each employer was urged to check all the weaknesses he observed in his employees.

TABLE 20  
WEAKNESSES DUE TO INADEQUATE TRAINING

Weakness	Frequency Mention	Rank
Poor in arithmetic.....	13	1
Poor in spoken English.....	11	2
Poor in spelling.....	10	3
Poor in written English.....	8	4
Poor in penmanship.....	7	5
Inaccurate Typing.....	6	6
Inaccurate Transcription.....	4	7
Slow Typewriting.....	4	7

Data in this table show the three chief weaknesses to be in arithmetic, English, and spelling. These are not altogether due to inadequate commercial training; however, they are so important to the success of a clerical worker that the commercial department cannot afford to ignore them in its training program. As shown in the qualifications for all jobs, it is very important that students have effective training in written and spoken English, spelling, and arithmetic.

These data indicate, therefore, that we should place more emphasis on developing skills in arithmetic and in written and spoken English.

#### Personal Traits

Business teachers have always known (and, I hope have always taught young people) that success in any profession must be bought with the dependable personality traits that enabled our Puritan ancestors to build a nation out of a wilderness. One must possess industry, thrift, integrity, initiative, dependability, punctuality, curtesy, cheerfulness and emotional stability to succeed in any job.<sup>3</sup>

Commercial education has stressed skills, but has disregarded the fact that, if a person does not develop a desirable personality to accompany these skills, his training will be of little value to him. Personality does not just happen; it is built up through training in those qualities which are very important in securing a job.<sup>4</sup>

Table 21 shows the results of the questionnaire presented to the business men in Sugar Land asking them to check the weaknesses due to the personal traits of their employees.

TABLE 21

#### WEAKNESSES DUE TO PERSONAL TRAITS

Weakness	Frequency Mention	Rank
Lack of ability to meet people..	14	1
Lack of tact.....	12	2
Lack of courtesy.....	6	3
Lack of neatness.....	4	4
Lack of initiative.....	3	5
Lack of common sense.....	2	6
Lack of honesty.....	2	6

<sup>3</sup> Neher, The Business Education World, Vol. XXVII, May 1947, p. 524.

<sup>4</sup> Ibid.

From the data in this table, we observe that lack of ability to meet people is the greatest weakness; it is mentioned fourteen times. Next in order of frequency mentioned are lack of tact, lack of courtesy, lack of neatness, lack of initiative, lack of common sense, and lack of honesty.

Personal traits of employees are very important to the business man. An employee lacking these personal traits can cost the business much in loss of customers; on the other hand, the employee who is very tactful, courteous, and friendly can be a real asset to the business.

In a questionnaire survey made by the United Business Education Association, the business men were asked to name the actual factors of personality which contribute to the success of the office employees. Some of the factors mentioned were:

1. Reliability--not just when the boss is around.
2. Punctuality--no unnecessary absence.
3. Initiative in undertaking new work that has never been handled before, or finishing a job when someone else has had to stop.
4. Willingness to accept jobs that may not be as desirable as others, but just as important.
5. Willingness to learn other little things about the business.
6. Co-operation with the employees in each department--friendliness toward each other.
7. Enthusiasm in the work and the success of the business as a whole.
8. An alert, neat and industrious appearance.

9. Willingness to accept responsibility for doing a job satisfactorily and keeping it up to date.
10. A pleasant smile and the ability to greet visitors, by calling their names when they enter the office.<sup>5</sup>

Mrs. Esther E. Brooke, President of the E. E. Brooke, Inc., Personnel Service, New York City, New York, has written a pamphlet, "60 Easy Ways to Improve Your Personality". In the pamphlet she says:

Success in holding a job depends nearly 90 per cent upon personal traits. Your care in watching the details of your appearance, your attitude, and your manners will be richly rewarded by self-confidence which you will enjoy in everyday life.

Some of the qualities which make up a good personality are:

1. Willingness to help others
2. Orderliness
3. Co-operation
4. Cheerfulness
5. Sincere interest in the work
6. Promptness
7. Trustworthiness
8. Courtesy
9. Persistence
10. Emotional stability
11. Right spirit toward accepting corrections
12. Spirit which will avoid the curse of the ever-ready alibi<sup>6</sup>

Since the schools are being criticised for not developing business habits and characteristics necessary for successful office workers, it would be well for the

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<sup>5</sup> Harm Harms, "Business Men Comment on Standards," United Business Education Association Forum, Vol. I No. 3, May 1947, p. 35.

<sup>6</sup> Esther Eberstadt Brooke, "60 Ways to Improve Your Personality," Pamphlet prepared for Southwestern Business University, Houston, Texas. 1946.

commercial department to use the suggestions made by the local business men and others in trying to develop prospective office employees that will be an asset to any office.

## CHAPTER VI

### THE REORGANIZATION OF THE COMMERCIAL CURRICULUM

The study thus far has dealt with the actual business "set-up" and the conditions which have some bearing on opportunities for employment in the clerical positions in Sugar Land, Texas. The purpose of securing data is to use it as a basis in setting up a more adequate program for training students enrolled in the high school commercial department.

In this chapter we are concerned with the development of a commercial training program to be suggested for use in the Sugar Land community.

Several factors enter into the planning of such a program: who benefits from the business education courses taught in the high school, what are the purposes of business education or what are its objectives, what is included in the present curriculum, what changes, if any, need to be made, what plan would best fit the needs of the community. These factors will all be discussed in the following pages.

#### Relation of the Community and Business

There has been much discussion recently on the relation of the community and business education. Clyde W. Humphrey in an article "Community Relationship in Business Education,"

says,

Functional education for business benefits the individual who receives it, the business that employs him, and the community of which both the individual and the business are a part. The purposes of business education are the purposes of people in almost every walk of life; its achievements are their achievements; and its shortcomings are theirs to deplore or to remedy.<sup>1</sup>

The business education program therefore should be of keen interest to everyone in the community: the executives and managers, business employees, housewives, farmers, and citizens in general. It is not something that the teacher and student alone will benefit from, but a program that will benefit the entire community. It is not the duty of the school alone, but all must contribute in at least three ways: first, in the development of competence to do productive work in a business occupation, including skills and personal traits; second, in the development of better understanding of the business practices most common, for example, how to obtain and make efficient use of business goods and services and how to deal satisfactorily with personal or family business problems; third, in the development of the relation of government, trade, and professional associations, and other organizations, this development involves a knowledge of minimum age and wages, safety protection, compensation, taxation, seniority systems etc.<sup>2</sup>

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<sup>1</sup> Clyde W. Humphrey, "Community Relationships in Business Education," The Journal of Business Education, Vol. XXII No. 6 February 1947, p. 13.

<sup>2</sup> Ibid.

## Objectives of Commercial Education in the High School

Before a training program for any particular activity can be set up, the school must have objectives to guide the training; a decision as to what subjects should be offered in high school cannot be made until those who are preparing the curriculum know what they are trying to accomplish. In this study, several groups of secondary school objectives for commercial education were examined. Direct statements were collected from the business men and employees as to the most desirable knowledge, traits, and skills required of employees. These were checked with objectives set up by certain research organizations, such as the state department and others.

A century ago, there was little doubt as to the aims of high school business education. It was intended to prepare students to earn their living as office workers, particularly bookkeepers and stenographers; at the same time it was to give them essentials of academic education. Primarily it was set up for vocational purposes.

Today there is much uncertainty in the minds of school officials, business teachers, and employers as to what high school business education should accomplish.

As a result of the changes in aims of business education there has emerged a more complex business curriculum. There has been a great increase in the number of students electing business subjects. The expenditures for business education



have doubled. Many new terms have been evolved to describe subjects and kinds of curricula, as well as methods of teaching.<sup>3</sup>

Walters, lists the following as objectives of business education:

1. Vocational efficiency in at least one business occupation, such as bookkeeping, stenography, selling, or office machine operation, sufficient to permit a graduate to secure an initial business position.
2. The ability to adapt oneself to occupational changes brought about by inventions or social and economic changes.
3. Knowledge of the business practices, and proficiency in the business skills, needed by all intelligent consumers.
4. An appreciation and understanding of the more important economic problems of present-day life, with a desire to contribute to their solution.
5. The development of a personality which will be welcomed in the business and society alike.
6. High ethical business standards.<sup>4</sup>

Parker Liles, in discussing the objectives of the clerical curriculum, says, "The general clerical curriculum should be designed to meet employment in the various types of clerical positions prevalent in business today." It should, therefore, be vocational in purpose, leaving personal-use objectives to other curricula or as incidental outcomes. Obviously it is impossible to give specific skills training for each of the several hundred types of duties performed by clerical

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<sup>3</sup> R. G. Walters, "The Business Curriculum," Monograph 55, Southwestern Publishing Company, March 1942, p. 5-6.

<sup>4</sup> Ibid.

workers; nevertheless, vocational skill can be developed for those duties and operations which comprise the majority of clerical positions.<sup>5</sup>

In Texas, the State Department of Education formulated objectives to aid commercial teachers in the high schools of the state in planning instruction in commercial subjects. In general, the high schools are expected to accept and follow the objectives. These objectives are divided into three groups, social usage, personal affairs, and vocational choice.

#### 1. Social Usage

- A. Developing in a practical way an understanding of some pertinent concepts concerning the organization, principles, and problems of modern business.
- B. Reacting to situations which will emphasize the need for ethical thinking and behavior in the business world.
- C. Directing capabilities in commercial skills into fields of activity where they can render society the maximum service.

#### 2. Personal Affairs

- A. Developing such basic knowledge, habits, skills, and attitudes as will be useful in personal business affairs.
- B. Building a background to aid in appraising and judging business contacts and obligations.
- C. Exploring business possibilities and stimulating worthy interests.
- D. Preparing to enter junior wage-earning positions at the end of the secondary period.

#### 3. Vocational Choice

- A. Gaining information about conditions, opportunities, and requirements for success in various types of business occupations.

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<sup>5</sup>Parker Liles, "Clerical Training in the High School," The Journal of Business Education, (December 1946, p. 13.

- B. Acquiring information, experiences, and advice for successful adjustment in commercial wage-earning positions.<sup>6</sup>

The objective of commercial education in Sugar Land High School are:

1. To develop occupational skill in the actual performance of a great variety of clerical duties sufficient to enable graduates to secure business positions.
2. To provide essential vocational and educational guidance.
3. To develop an appreciation of the importance of desirable character traits and actions.
4. To develop an understanding of business as the social agency that makes more and more worth-while goods and services available to more and more people for the satisfaction of human wants and needs.
5. To offer worth-while study, exploration and practice in the subjects included in the usual business course.
6. To develop the essential business knowledge needed by the intelligent consumer.<sup>7</sup>

A study of these objectives makes it obvious that the vocational, social and personal aims of business education must be considered. Perhaps none of the authorities on business education would fail to recognize the social and personal needs of commercial training, but the practical side of the subject must have an important place in the curriculum.

#### Present Curriculum

The present commercial curriculum in Sugar Land includes one year each of bookkeeping, shorthand, and typing. Shorthand

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<sup>6</sup>Bulletin No. 381, Teaching Commerce in Junior and Senior High Schools in Texas, 1938, p. 10.

<sup>7</sup>The Course of Study for the Sugar Land High School, May 27, 1938, p. 56.

is open to senior or twelfth grade students only. Bookkeeping is offered to the eleventh and twelfth grades, and typing is offered to the tenth, eleventh, and twelfth grades.

The length of the periods is forty-five minutes per day.

The period of training is divided into two semesters of eighteen weeks each, five days per week. One unit of credit is given in each of the three courses.

Commercial Arithmetic is combined with General Mathematics course and is taught in the mathematics department.

#### Inadequacy of Present Program

Very little effort has been made to improve the commercial curriculum; if there has been any effort, it was simply discussion about the weaknesses of the program with no resultant action. Criticisms have come to the school about the deficiencies of employees, but so far very little has been done to remedy the situation.

Now that there is an opportunity to change the program, the question of just what is wrong with the present program arises.

One of the main weaknesses, is that in the present program the courses as they are now taught are too much concerned with theory; not enough opportunity is given the students to apply these theories in practice.

Another weakness is that too much teacher time is required to teach typing. The teacher must teach three or four classes in typing because of the lack of typewriters to

provide for the number of students taking the course. There are twelve typewriters in the department, and usually about thirty-five students taking the course each semester. If more equipment could be purchased all of these students could be taught in one period.

Another inadequacy of the program is that no second year commercial courses have been offered. Little opportunity is given for the perfecting of those skills learned in one year.

Another weakness is that there is very little guidance on the part of the administration. If a student lacks a course here and there, he usually finds his way to some commercial course, thereby taking the space that is much needed by those interested in a clerical career.

Very little attention has been given to grade placement. It is true that, as far as the plan in the course of study is concerned, students are given grade placement; but, if a student in the eleventh grade lacks a course to make the four required units for each year, he is very probably placed in a shorthand class, which is supposed to be for seniors only; if a student in the tenth grade lacks a course in having a full schedule, he usually finds his way to the bookkeeping class, which supposedly requires junior standing.

The plan as it is now conducted is inadequate for training clerical workers.

### Criticisms and Suggestions

In the interviews with eighteen employers and seventy-five employees, each was asked to give his opinion, criticisms, or suggestions concerning the present commercial curriculum.

The following were most frequently mentioned by the employer:

1. There appears to be a lack of knowledge of English grammar, spelling and arithmetic.
2. Employees do not have enough pride in their work. Students should be taught to appreciate work well done, letters well placed on the page and accurately typed.
3. Beginning employees lack practical knowledge; they can't apply what they have learned in school to the problems in the business office.
4. Instruction in the practical use of carbon paper is needed.
5. More emphasis should be placed on training students in the operation of office machines.
6. There is a need for more training in typing on business forms and more drill on typing numbers.
7. Students should be instructed in handling telephone calls, the prerequisites of being a good clerical employee and office ethics.
8. More attention should be given to training students in business ethics, in a higher sense of responsibility, and in a greater appreciation of the rights of others.
9. Commercial students are very poor in penmanship and are unable to write good business letters. A course in penmanship should be required of all students in high school.
10. There should be more instruction in the routine work of an office.

The following are the suggestions and criticisms most frequently mentioned by the employee:

1. Graduates show a lack of training in common business practices; for instance, making out checks and invoices.
2. Graduates are very deficient in spelling and grammar.
3. Courses should be offered in office practices, in which students are working in an actual office doing work they will probably do in business.
4. A course in penmanship should be taught; we have trouble reading names on checks, etc., where students use hand writing.
5. A course in business etiquette should be taught; how to dress for the office and to respect the rights of others.
6. More time should be spent on statistical typing, such as financial statements, reports, etc.
7. Courses in regular office routine work should be offered.
8. Students should have instruction in how to speak, walk, and dress. A student who has mastered a business course with little knowledge of simple ethics has gained very little.
9. Students should be trained in retail selling.
10. Students should be given practical problems to solve like those they will be required to solve in the business world.

#### A Suggested Curriculum

Before attempting to suggest a curriculum for the Sugar Land High School Commercial Department, a number of programs planned by authorities in the field were examined.

R. G. Walters, Director of Teacher Training and Personnel Officer, Grove City College, Pennsylvania, gives several typical examples of sequences of business subjects offered

in the high schools of the United States. The following is the program offered at Stockton, California:<sup>8</sup>

#### Bookkeeping Sequence

Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade
General Bus. Penmanship	Bookkeeping Bus. Arith. Eco. Geog. Typewriting	Bookkeeping Typewriting	Bus. Principles Office Practice Bus. Law

#### Clerical Sequence

Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade
Gen. Bus. Bus. Arith.	Bookkeeping Eco. Geog. Penmanship Typewriting	Typewriting	Bus. Principles Salesmanship Economics Bus. Law

#### Stenographic Sequence

Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade
Gen. Bus. Bus. Arith.	Bookkeeping Eco. Geog. Penmanship Typewriting	Shorthand Typewriting	Shorthand Office Practice Bus. Principles Bus. Law *Typewriting

\*Elective

#### Selling Sequence

Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade
Gen. Bus. Penmanship	Bookkeeping Eco. Geog. Typewriting Bus. Arith.	Salesmanship	Bus. Principles Retail Selling Economics Business Law Merchandise

Mr. Walters also gave a program for a small rural high

School:

Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade
Genl Bus.	Bus. Law	Gen. Selling Economics	Bookkeeping Typewriting

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<sup>8</sup>R. G. Walters, The Business Curriculum, Monograph 55, March 1942, pp. 30-31.



Parker Liles, head of the commercial department of Atlanta, Georgia, gives the following plan:<sup>9</sup>

Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade
Gen. Bus.	Typewriting I Accounting I Bus. Arith.	Typewriting II Clerical Pract. Bus. Law Eco. Geog.	Office Practice Bus. Machines Applied Eco. Bus. Prin.

The clerical curriculum is still in the experimental stage; this fact accounts for the almost total lack of uniformity in grade placement and content of subjects. An accepted principle of curriculum construction in business education is that the development of all vocational skills should reach their maximum at, or, as near as possible, the time of graduation. It is impossible, however, to defer all skills to the twelfth year without crowding out subjects which are required in many schools, such as English and social science. Also some subjects are necessary as prerequisites to others. The inclusion of general business as a constant in the ninth grade is fairly well accepted because of its exploratory and general use values. Since typewriting is one of the most important skills, two years or four semesters are necessary as prerequisite to stenographic and clerical practice.<sup>10</sup>

Although a certain amount of arithmetic can be integrated with accounting, clerical practice, and business machines,

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<sup>9</sup> Liles, The Journal of Business Education, Vol. XXII, (December 1946), p. 13

<sup>10</sup> Walters, The Business Curriculum, p. 17

one year of business arithmetic is desirable in the tenth grade to review the mathematical skills previously gained and to gain speed in the fundamental processes. One year of bookkeeping should be required in the tenth grade to prepare for clerical record keeping to serve as a basis for clerical practice.<sup>11</sup>

In the light of information obtained from authorities on the subject, and from interviews with employers and employees the following program is suggested:

#### Bookkeeping

Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade
Gen. Bus.	Bus. Arith.	Bookkeeping Typewriting	Office Practice *Remedial Arith.

#### Secretarial

Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade
Gen. Bus.	Bus. Arith.	Bookkeeping Typewriting	Office Practice Shorthand *Remedial Arith.

#### Clerical

Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade
Gen. Bus.	Bus. Arith.	Bookkeeping Typewriting	Office Practice *Remedial Arith.

\*Required of students showing deficiencies in arithmetic.

In constructing the program for the Sugar Land High School, the following points are taken into consideration: the objectives set by the state and school; the required

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<sup>11</sup>Liles, The Journal of Business Education, Vol. XXII, (December 1946) p. 12.

employment skills in typewriting, business machines, book-keeping, and shorthand; the non-specialized duties and the necessary basic business information needed for all employees. An important fact to keep in mind is that there is only one teacher in the department and that the school is in the small school class. It is a small school that has objectives of a large school system because of the opportunities offered the graduates when they finish school. Clerical workers typical of those trained by larger schools must be developed.

Local conditions under which any type of commercial education must be given tend to impose certain limitations on the kind of training that can be offered. A curriculum that works well in one type of school probably will not work equally well in another type of school.<sup>12</sup> A program like those used in Stockton, California or Atlanta, Georgia cannot be used in Sugar Land, since these are large systems in which more teachers are employed. Neither can the program planned by R. G. Walters for the small rural school be used, since Sugar Land is an industrial community. The problem is to plan a program that will furnish adequate training for positions found in a small industrial community; one that is not so broad as to be impossible for a one-teacher commercial department, and yet broad enough to include training that will be so thorough as to enable students to be successful

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<sup>12</sup>Frederick G. Nichols, Commercial Education in the High School, p. 116.

in their beginning positions.

High school training in the one-teacher commercial department should begin in the ninth grade with a course in general business training. This course should be required by every ninth grade student because no other high school subject, except English, will be used more often by a larger proportion of high school graduates. The teaching of this subject should be made practical by including visits to the different offices in Sugar Land to observe business in action.

The criticism offered by employers and employees include many complaints about the poor penmanship of our graduates. Since its place in the curriculum is challenged, and since it is not included among those courses offered for credit by the Texas State Department of Education, it is not advisable to make a separate course for penmanship, but to include it in the course in General Business Training. It should be taught as corrective penmanship in connection with other courses, since it is necessary to raise students to an acceptable grade from the standpoint of standards in business offices.

A course in business arithmetic, taught in the commercial department, should be offered. Several years ago it was combined with General Mathematics and taught in the mathematics department. Since arithmetic is so important in the work of almost all clerical positions, and since clerical employees are so weak in this subject, it should be

separated from the General Mathematics course and taught for one semester in the commercial department. Table 10 shows the ability to use figures to be one of the main qualifications for all positions. Table 20 shows that the chief weakness of employees is inefficiency in arithmetic. It is very important that a clerical employee be well trained in arithmetic. This course should be offered in the tenth grade and should be a prerequisite to the bookkeeping course. There seems to be a tendency, in some parts of the country, to offer this course in the twelfth grade as a short review course just before students enter business. It is believed that this helps to eliminate the weaknesses found by most employers. One fact must be kept in mind; a knowledge of arithmetic is essential to the mastery of bookkeeping. In the proposed program, where only one year in bookkeeping can be offered, too much time would be necessary in teaching the mathematical skills which should be given to the teaching of bookkeeping.

In order to give the students who are weak in arithmetic further training and review before graduation, a remedial course in arithmetic should be offered at the end of the twelfth year. The students taking this course should be selected by a test given during the spring semester of the eleventh year. These students showing a deficiency in arithmetic should be required to enroll for this course during the last half of the senior year.

The same procedure should be followed in the English department. Many students who enter positions after graduation are weak in spelling, grammar, and punctuation, according to the business men in Sugar Land. Since it is so important that employees know how to spell and to use correct written and spoken English, a course in remedial English would be more helpful to a graduate who is deficient in this subject than the usual course in English literature which is offered in the senior year.

According to the survey as shown by Table 1, very few accountants are employed, and most of these require at least a business college education, therefore, only one year of bookkeeping should be offered. This will be sufficient since a course is included in business arithmetic and office practice. The one year will give students planning to enter the bookkeeping field the fundamental knowledge of the principles of bookkeeping; this together with the office practice training course, should train them adequately for beginning positions in the bookkeeping field.

In typewriting, one year of intensive training should be sufficient. A two year course in typing is desirable, but in a one-teacher department, the teacher's time can probably be used more advantageously in other courses. High speed in typing is required only in secretarial, stenographic, and typing positions. Students desiring to accept positions in these fields of employment will be required to take the office practice course, where further training in

typing is given. Therefore, one year will adequately train the students in typing.

Shorthand is a vocational subject entirely; therefore, it should be required of only those students who desire to become stenographers or secretaries. It should not be taught before the twelfth year because, if it is not used continuously, there may be considerable loss of skill. Two years in shorthand is desirable; however, in the present one-teacher department, only one year can be devoted to shorthand. A course in office practice will benefit more students than will two years of shorthand.

No amount of study of any text, however good, will qualify a person to do office work involving any manipulative skill. A study of text and observation will not suffice. Actual practice under office conditions is essential. Probably the most desirable office training is the cooperative training program that is being used extensively at this time. In this program high school commercial students do part-time office work in connection with their school work. However, the business men of Sugar Land think that this would require too much of their time. In view of this fact, an office practice course, to be offered to those seniors who have taken most of their vocational training in the field of business, should be added. Since the business men have voiced their opinions and given their suggestions about the needs of the department, it would be well to use these as a guide in training students in the office practice course.

A plan similar to that used in Rosedale High School, Kansas City, Kansas, could be followed. In this school, the office machine course and the office practice course are combined in one, the Office Training Course.

The course is divided into six weeks periods keeping it flexible; for instance, if the demand comes for filing information in the six weeks period set aside for office machines, filing is taught. The work is divided according to the following plan:

First six weeks period

1. Drill on typing figures
2. Make a survey of secretarial practices for general information
3. Type report cards, personal record cards, and practice speed development in typing

Second six weeks period

1. Study duplicating devices
2. Practice cutting stencils and using mimeograph machine
3. Practice using hectograph, carbon, and ink
4. Survey other duplicating devices other than mimeograph and hectograph

Third six weeks period

1. Study the filing systems in use by business firms
2. Practice in indexing and filing material

Fourth six week period

1. Practice typing and tabulation
2. Review manuscript writing by typing themes and plays for dramatic clubs
3. Type invoices

Fifth six weeks period

1. Drill on operation of adding machine
2. Drill on operation of calculating machine
3. Demonstrate office machines not included in school equipment



## Sixth six weeks

1. Review most commonly used office practices and office machines
2. Give national clerical ability test<sup>13</sup>

An inventory of the equipment in the commercial department that could be used in a course of this kind includes a vertical filing system, a mimeograph machine, a ditto machine, and twelve typewriters. In addition to these an adding machine and a calculating machine should be purchased. Later, as the need arises, the equipment could be increased to include other office machines.

## Summary

Vocational education is an essential part of the high school work. The ultimate test of the effectiveness of the school will be reflected in the reaction of the boys and girls to the many varied problems which they will meet. Our students must be well trained to succeed in our present social and economic life.

An education for life, that is for living and learning how to make a living, is infinitely more important in the life of an individual than the accumulation of credits for admission to some other educational institution. A horizontal education for life, therefore, is viewed as more important than a vertical education for more education.<sup>14</sup>

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<sup>13</sup>Olga Alber, "Office Training in the Small School," Business Education World, (October 1943), pp. 94-96.

<sup>14</sup>Paul M. Boynton, "Business Education in the New Pattern for Connecticut Secondary School," The Business Education World, Vol XXVII, (November 1946), p. 130.

## CHAPTER VII

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The basic purpose of this study is to determine whether or not graduates of the Sugar Land High School are qualified to accept positions offered them, and to obtain suggestions for revising the commercial curriculum of the high school.

Since the procedure used in obtaining the information is by the personal interview and questionnaire method, the information obtained should give a fairly accurate picture of the opportunities for clerical work in Sugar Land. The survey includes all business men who employ clerical workers: Accountants, bookkeepers, cashiers, office machine operators, secretaries, stenographers, typists, bill clerks, credit clerks, file clerks, payroll clerks, sales clerks, shipping clerks, and stock clerks. It also includes seventy-five graduates of the Sugar Land High School. It reveals how inadequate the training program is.

Even though the number of employers and employees is small, the survey is important to the community, the business men, the students, and the school. It gives information that is very much needed if the objective of training for positions in the offices of Sugar Land is to be realized.

The business men of Sugar Land are offering our graduates opportunities in their clerical offices, and there are young people eager to fill those positions; yet, in many cases, their training is inadequate to fill them competently.

The solution to this problem is obvious: courses from which students will gain a knowledge that will prepare them to fill the offered positions satisfactorily must be offered. The commercial education department must reorganize and retool its program. A program has been planned that will better prepare students to accept positions offered them.

#### Conclusions and Recommendations

By the survey just completed, it is evident that there is an urgent need for reorganization of the commercial curriculum of the high school in Sugar Land, Texas. The results of the questionnaires and interviews indicate that the average employee is deficient in requirements of skills and personal traits which are necessary to an employee in a clerical position. The present curriculum makes little provision for training students except in a very general knowledge in typing, bookkeeping, and shorthand. Office machines and office practice are not a part of the present curriculum; this makes practice in the application of business problems impossible.

Needed skills, techniques, and facilities for developing social qualities should be provided for. It is the duty of all departments in the school to develop desirable social qualities, but these are too important in the clerical field to be slighted just because this training belongs partly to other departments.

The work of the clerical employee in the business organizations is not specialized. Clerical workers have many skills in common. Business and the schools share a responsibility in making continuous efforts to discover these basic skills and to establish a program to train successful workers in this field. The findings of this study and the recommendations will make a contribution in this direction.

The survey shows that seventy-two per cent of the clerical employees of the business firms of Sugar Land are graduates of Sugar Land High School. An estimate of the average rate of turnover plus the number of new jobs created shows a total of fifty-three job openings each year. Therefore, there is a possibility of placing fifty-three graduates each year if they are adequately trained.

The core of clerical training, then, should be the development of skills checked by the business men in the different positions in order to adequately prepare the students to take advantage of the opportunities offered them.

There is an indication that preference is given to men in the positions of accounting, bookkeeping, payroll clerks,

shipping clerks, and stock clerks. Women are preferred as secretaries, stenographers, and typists. The positions of sales clerks and cashiers are about equally divided between men and women.

It is recommended, therefore, that boys be encouraged to pursue courses outlined in the program under the Bookkeeping or Clerical Sequence, which included General Business Training, Typewriting, Business Arithmetic, Bookkeeping and Office Practice. The girls should be encouraged to pursue the courses outlined under the Secretarial Sequence; General Business, Business Arithmetic, Bookkeeping, Office Practice, and Shorthand.

The average age required by the business men for beginning workers is eighteen years. Most of the high school graduates of Sugar Land may accept jobs where the age requirement is eighteen years but there are a few graduates who are sixteen and seventeen years of age when they finish high school.

It is recommended therefore that these students be trained in those courses that will give them the desired requirements for jobs not requiring the beginning employee to be eighteen years of age. Some of these jobs are: cashiers, sales clerks, stock clerks, and typists.

A high school education is the primary requirement for a position in the clerical field. The high school, therefore, should assume the responsibility for training

in office skills. Standards for work in various positions should be considered in establishing standards for the commercial department of the school.

It is indicated that most of the positions may be secured without experience. Only in the positions of accountants, bookkeepers, cashiers, shipping clerks, dictaphone operators, secretaries, and stenographers, is experience required, and in these by only one employer.

It is recommended that students be trained to accept positions in all fields except that of accountant which requires training in qualifications impossible for the high school to offer.

The best salaries are paid to bookkeepers, file clerks, dictaphone operators, secretaries, stenographers and typists. Special stress should be placed on training for these salary positions.

Information concerning typewriters indicates that this machine is used in most of the business organizations in Sugar Land. The teaching of typewriting should develop a high degree of skill in the performance of typewriting activities which are used most frequently by employees.

Over one half of the positions in the clerical field require the ability to operate adding and calculating machines. The first consideration of the office practice course should be the development of efficient operation of the office machines.

The cash register which is used chiefly by the cashiers and sales personnel deserves a place in the Office Practice course. A study should be made of the operations of this machine because it is very important to the success in the positions of cashier and sales clerk.

Duplicating machine operation forms but a minor part of the usual office routine. Usually, master copies are prepared by the secretary, stenographer, or typist; a special duplicating machine operator has charge of the machine operation.

Long training periods on duplicating machines are not necessary, but training should be given in the operation of the most used types of machines; the addressograph, the mimeograph, and the ditto. Training in typewriting for the clerical worker should include the preparation of master copies for duplicating.

The filing systems used most frequently in the business organization are vertical system and the loose sheet system. The methods used in connection with these two systems are alphabetic, subject, and numeric.

The teaching of filing in the office practice course should have as its first consideration the development of a high degree of skill in alphabetic, subject, and numeric methods of filing as used in connection with the vertical and loose sheet systems. Teaching of filing in the clerical field should include not only instruction in putting

material away, but also specific attention to other skills, such as finding, sorting, coding, and indexing.

The inventory of the office equipment of the commercial department shows the following: one mimeograph machine, one ditto machine, one verticle filing system, and twelve Underwood typewriters. This equipment is not enough to train students adequately for office positions.

For one thing, too much teacher time is required for teaching typewriting. An average of thirty-six students are enrolled in the typewriting classes each year. At present, to teach these thirty-six students, three class periods must be used. If enough machines were available, the thirty-six students could be taught in one class period; this would leave two periods free for the teaching of other business subjects so necessary to the training of future clerical employees. The program planned for the department cannot be followed unless enough typewriters are provided.

Another reason for the inadequacy is that it does not include training in the most used office machines, such as the adding and calculating machines that are used extensively in the business organizations.

Therefore, the purchase of the following business machines is recommended:

- 35 Underwood Typewriters
- 5 Royal Typewriters
- 1 Burroughs Adding Machine
- 1 Marchant or Monroe Calculating Machine
- 1 National or Burroughs Cash Register



This list of equipment is based upon the survey made of the office machines used in the business organizations of Sugar Land.

The above equipment will be sufficient around which to build the office practice course. Later on, a bookkeeping and a dictating machine may be purchased.

The business men and employees have given some valuable information on the qualities, duties, and deficiencies of clerical employees in Sugar Land. It is recommended that the training program use these extensively as basis for training students to accept positions in office work.

The study also indicates that many students lack a knowledge of general business and the ability to write legibly.

It is recommended that an exploratory course be offered at the beginning of the high school training program. This course should be required of every ninth grade student and should include training in the common practices with which he will come in contact every day.

Penmanship should be taught as a part of the general business course.

Many graduates of the high school are deficient in arithmetic. The program outlined for use includes a business arithmetic course to be taught in the tenth grade, and in addition a remedial course in the last half of the twelfth grade. This remedial course should be required of students

showing a lack of proficiency; this lack to be determined by tests at the end of the eleventh year.

The same procedure should be followed in the English department by giving a test in spelling, grammar and punctuation at the end of the eleventh year. A course in remedial English should be taught in the last half of the senior year instead of literature.

Over fifty per cent of the work of the beginning clerical employees involves skills in typewriting, bookkeeping and secretarial practices.

In the twelfth year, a well-organized "polish-up" course in office training should be given in those skills he has acquired in previous courses. In this course he should also develop skills in the most commonly used office machines.

To be effective, that part of commercial education which has to do with the development of skills and occupational intelligence must be organized on the basis of occupational requirements and not on the basis of existing "subjects" such as are found in most high schools.<sup>1</sup>

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<sup>1</sup>Nichols, Commercial Education in the High School, p. 346.

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