

A SURVEY OF COMMERCIAL GRADUATES OF
SALEM HIGH SCHOOL

by

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A THESIS

submitted to the

OREGON STATE COLLEGE

in partial fulfillment of
the requirements for the
degree of

MASTER OF SCIENCE

June 1941

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ACKNOWLEDGEMENTS

I am indebted to Mr. Merritt Davis, Head of the Salem High School Commercial Department, for making the records of the graduates available. Dr. R. J. Clinton, Professor of Education, has been in charge of my major work and has contributed many helpful suggestions and criticisms. The writer also wishes to acknowledge the very helpful advice and assistance given by Mrs. Bertha Stutz and Dr. F. W. Parr of the Oregon State College Faculty.

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CHAPTER I
INTRODUCTION

The rapid growth of the high schools in America is one of the outstanding features of public education. High school enrollment in the United States has practically doubled every decade since 1890, and the enrollment in the commercial courses has increased even more rapidly than the high school enrollment as a whole. During this period, commercial education has tried to meet the demand for trained workers, a demand which has increased continually with the changing economic and social systems. Although its efforts have been retarded by traditional ideas of education, by social prejudices, and by lack of cooperation with business, it is beginning to establish aims and to realize standards that make it of practical value to the business world.

Since the development of the commercial course of study has followed the demands of a rapidly developing commercial activity, it has grown from a very limited course in clerical training to include instruction in several different phases of commerce. Early schools had

bookkeeping as their foundation subject. From this the courses have been increased gradually until at the present time many of our public schools offer not only a complete clerical training course, but include courses in salesmanship, banking, advertising, and business organization. The development of the special commercial course in the general high school defined more clearly the aims of commercial training and pointed out the studies necessary to realize those aims.

The California State Department of Education⁽¹⁾ sets forth these aims of commercial education: "First, the vocational, which is to prepare for a specific business occupation; and second, the social, which is to give any student a knowledge of such business information as he may need to carry on best as a member of the social group."

Bina Mae Traxler⁽²⁾ says, "The primary objective of a commercial course in high school is vocational in nature; it does not preclude cultural values or character building qualities, but it aims to direct the child toward a definite goal and fit him for a useful vocation that will

1 Bulletin C-5 Post: The Objectives of and Majors in Business Education. California State Department of Education, Division of Secondary Education, Bureau of Business Education, Sacramento, Cal., 1929

2 A Follow-up Study of Commercial Graduates, with respect to Shorthand, Office Training, Bookkeeping, and Salesmanship. South-Western Publishing Company, Cincinnati, 1930.

give him economic independence."

The Oregon State Department of Education⁽³⁾ sets forth this statement: "Three rather distinct, though related, functions of high school business education are worthy of special consideration. They may be classified as consumer, prevocational, and vocational."

It will be seen from this that aims or objectives of commercial education in high schools deal principally with two things: first, the training for a vocation; and second, better citizenship as the result of such training. Our problem is not so much to train those who are going on to school, either in university or business college, but to give sufficient training so that the pupil may be prepared, when he graduates from high school, to go out into the business world and hold down successfully a position without the need of immediate further business training. We do not aim to train, in high school, people for the higher phases of business, such as executive positions, which, because of the nature of the work, require more than a high school education.

3 A Course of Study for the Commercial Departments in the High Schools of Oregon. Issued by Rex Putnam, Superintendent of Public Instructions, 1940.

Statement of the Problem

The problem of this thesis is to determine to what extent the commercial department of Salem High School has been equipping its students for the positions they fill after graduation and to make recommendations for the improvement of the curriculum, so that the students graduating in the future may be fitted better to go directly into office employment.

Today, government and private employers are flooded with applications from those who have no specific training for the business jobs they are seeking. When these applicants are asked what they can do, "Anything" is a typical reply, although "Nothing" would be more appropriate. There is a tendency for instruction in schools of business education not to keep pace with the changes that are going on in the business world. The changes in commercial work in offices take place with great rapidity, and these should be made available to the commercial educators. Subjects designed primarily to meet vocational objectives now have greater specialized emphasis than ever before. Business operations are becoming more technical, specialized, and mechanized; and standards of efficiency are correspondingly increased. These higher standards of vocational efficiency must be met by our graduate if he is to be a part of the modern business world.

Placement is the ultimate end of commercial education, and if this is to be accomplished, it is necessary that subject matter be taught in terms of standards of accomplishment as set up by business. The commercial department of the Salem High School has had excellent success in the past with the placement of its students, and it is with a view to maintain and improve, if possible, this condition that this investigation was made.

Importance of the Problem

After the initial placement, there should be sufficient follow-up to determine the types of work being done, the adequacy of salary, and the types of preparation needed.

The follow-up study is important from three different points of view. In the first place, there is a distinct service to the graduate, who usually relies on the school to bring him into contact with an opportunity for employment. In the second place, there is the service to the employer, who is looking for ability and who is served by having persons suitably trained and such qualified persons called to his attention. In the third place, the school itself is benefited, for by following up its graduates in the employment situation, the school is able to evaluate its work.

Early business training was adapted to the individual

felt needs as to business employments. Today, the occupational survey or follow-up studies are the basis for justification or reconstruction of the curriculum.

The Community of Salem

The city of Salem is located in Marion County, Oregon covering seven square miles in the center of Willamette Valley. It is located midway between the mountains and the Pacific ocean. The population in the 1940 census was 30,753. The climatic conditions of Salem, with its annual medium temperature of 53.6 degrees, and average of 31.68 inches of rainfall annually is nearly perfect. Seasonal changes in temperature are not pronounced but gradual.

The school system of Salem is well taken care of, with one high school with an enrollment of 1800 students; two junior high schools with more than 1800 pupils in the seventh and eighth grades and the first year of high school; and eight grade schools with an enrollment of more than 5000 students.

Salem is the hub of the diversified farming activity of Marion and Polk counties which have more operating farms than any other two counties in the state. The total of more than 7,000 individual farms represent an immense trading area adjacent to Salem. Eleven modern packing plants prepare, pack, and ship millions of cases of fruits,

berries, and vegetables to the markets of the world. Other agricultural products which find their way to the markets are flax tow and flax seed, hops, walnuts, filberts, field and grass seeds, peppermint oil, celery and other fresh vegetables, poultry products, cattle, sheep and many other products.

Commercial, industrial and financial activities of the central Willamette Valley also center in Salem. Since 1851 the capital of Oregon has been in Salem, and with the gradual growth of the state and the development of state governmental departments it represents the largest single payroll-producing business of the city. Private industry includes: one paper mill, eleven fruit and vegetable packing plants, two linen mills, two sawmills, fourteen creameries and dairies, four meat packing plants, five furnace manufacturing plants, two fruit and vegetable freezing plants, one woolen mill, two box factories, and many other smaller industries. In addition there are the many retail stores and private offices which are necessary in conducting business to make this a well-rounded community. All this business activity makes Salem one of the best business cities in the Northwest.

From the foregoing description of Salem and surrounding territory, it will be seen that the schools of Salem have as a means of outlet many industries, a large amount of agriculture, and the administration of the State govern-

ment. The positions available in the industries themselves are not so important for the commercial graduate as are the clerical, stenographic, etc., jobs which are necessarily included in the payroll of each activity.

Number of Graduates Included

As a representative group for study, the writer selected the students who graduated from the Salem High School commercial department during the four year period, 1935-1938. From the records on file in the office of Mr. Merritt Davis, head of the commercial department, the writer secured the names of the students who were graduated from the school during this time.

The writer then got in touch with the graduate wherever possible, or his parents, either personally or by telephone. The graduates addresses and telephone numbers at the time of graduation were taken from the school records, and were checked with the Salem city directory and the telephone directory. In some cases where information could not be secured from the graduate or his parents, it was supplied by friends or business associates who had knowledge of his whereabouts. The graduates who could not be located had either found employment in some other locality, or had established homes of their own and were not residents of Salem.

The questionnaire* was then taken personally to each graduate and collected several days later, or on a date set by the graduate. The name was omitted from the questionnaire in order that all information might be held in strict confidence.

Number of Questionnaires Delivered and Returned

The writer distributed a total of 146 questionnaires to the graduates and was able to collect 135, or 92 per cent. This is quite a high percentage to be returned, and is probably due to the fact that the questionnaires were delivered and collected personally instead of through the mail. It is interesting to note that the length of time out of school had very little bearing upon the number and per cents of returns. The years 1935, 1937, and 1938 had practically the same percentage returned, 91%, 93%, and 92%; while 1936 had 96% returned.

The Commercial Department of Salem High School

The commercial department of Salem High School is divided into two distinct courses known as the accounting and secretarial majors, and by careful selection of electives, it is possible for students to carry the major

* See Appendix A

commercial subjects of each division.

Those taking the accounting course enter Bookkeeping I as an elective and if they are still interested at the end of the first year they continue with Bookkeeping II and then banking, bookkeeping machine work, and some combination of salesmanship, business economics, and income tax recording. These students may also choose between commercial law, commercial geography, commercial arithmetic, and the second year of shorthand and typewriting for electives. These courses with the exception of shorthand and typewriting are all semester courses.

The accounting department has the following mechanical equipment: 1 Monroe Educator calculating machine, 1 comptometer, 1 bookkeeping machine, and 1 billing machine.

The requirements of the secretarial major are two years of shorthand and typewriting, and one year of office practice. One of the fundamental aims of the office practice class is to maintain and to develop further the skills in taking dictation, in transcribing, and in setting up letters in mailable form. Since this is truly a finishing course, it covers the theory and principles of office procedure, office organization, and a study of common office machines and equipment. It also holds, as its objectives, the development of those personal qualities so necessary for desirable contact with other members of society. These students may choose for their electives from the accounting subjects

in addition to commercial law, commercial geography and commercial arithmetic.

The equipment in the secretarial department is as follows: 96 typewriters for ordinary use, 8 typewriters for stencil cutting, 1 dictaphone, 1 Monroe Educator calculating machine, 1 Sunstrand adding machine, 1 mimeoscope, 1 mimeograph, 1 ditto, 1 multigraph, and 1 addressograph. In addition to these machines, there is sufficient filing equipment to supply the office practice class.

Each student who expects to find employment must serve as an apprentice in an office outside of school. This is done as part of the regular school work and a report is filed concerning the student's work by the employer. This gives the student an opportunity to find out exactly what office work is and it also makes an attempt to bridge the gap between business and school, which we hear so much about.

Limitations of the Study

One factor limiting the thoroughness of this study is the constant shifting of population from place to place. Eighteen per cent of the total graduates could not be located.

The element of time must be reckoned with in interpreting the results of the study. In the case of the most recent graduates, not even a year had elapsed since gradu-

ation and the jobs at which they were employed the first year after graduation were probably the same as the jobs they held at the time the statistics were compiled; whereas, in the case of those who were graduated in 1935, four years had elapsed. This fact would have some bearing on the replies given in the questionnaire.

Another factor which limits this study somewhat was the difficulty in determining whether the further training which the graduates had taken was from business college, university, extension work, or correspondence work. In most cases classification was simple but in some cases, where graduates had taken various subjects from different schools, classification was subject to error.

CHAPTER II

PREVIOUS STUDIES

Research in commercial education is not abreast either in range or depth with research in other fields of education. The studies made so far have served only to reveal countless problems yet ahead. There are numerous follow-ups and investigations made in all parts of the United States, but it is difficult to obtain such studies which have been carried on in Oregon.

A Survey of Junior Commercial Occupations was made by the Federal Board for Vocational Education⁽⁴⁾ through State Boards for Vocational Education in 19 different states. The survey was confined to the commercial positions held, business training received, and the function of business training. The survey includes studies in the following cities and states.

In Albuquerque, New Mexico the investigation pertained to the positions held at that time by twenty-one graduates. Of the total, nine were employed as messengers, six as switchboard operators, two in delivery service, one as a general clerk, one as a cashier, one as a stock clerk, and one as a file clerk. As to the types of

4 U.S. Department of Labor. Bureau of Labor Statistics. Bulletin 197, June 1926.

business they were employed in, seven were in the retail business, one in the wholesale business, three employed by railroads, and 10 by public-utility concerns.

An experimental survey was made in Milwaukee where there were approximately 1,067 persons who were doing office work. From this total only 5.5 per cent were doing actual bookkeeping work, and only 11 per cent were doing stenographic work. The conclusion was drawn from this that more time can profitably be given to teaching the essentials of English, arithmetic, penmanship, general clerical work, filing, and machine operation, rather than technical bookkeeping and stenography.

From the 223 positions reported in Minneapolis, 20 different types of offices were represented and the largest number were found in retail, factory, wholesale, and such other companies as telephone, telegraph, and railroad. Although 22 kinds of office work were covered, the majority of employees were found at stenography and its combinations with bookkeeping, clerical, and cashier work.

Two essentials obtained from this survey are accuracy and the power of analysis. Accuracy in the technical work of stenography, copying, filing and executing orders is needed in every company and by every business worker. Ability to analyze the day's work in order to reduce it to system, and to analyze figures to appreciate their

significance is the common quality which makes for advancement. The best preparation for this vocation is therefore general education plus intensive training plus advanced extension courses taken in connection with actual employment.

In Minneapolis another survey was made under the auspices of the graduate economics department of the University of Minnesota in regard to kinds of office work and salary received. More than 138 different kinds of positions were found in a group of 2,630 workers. The largest group was found in stenography. No girl working less than one year was paid more than \$65 a month and 60 per cent received salaries between \$35 and \$50. The maximum wage was fairly high, but the large majority, 90 per cent, received less than \$65; 33 per cent received from \$35 to \$40; and 40 per cent received from \$40 to \$60. The lowest average for bookkeeping was paid in professional offices, \$52; printing and publishing houses paid the highest average wage, \$107, while the highest single wage, \$182 was found in a factory office. The lowest single wage for clerical work was \$22, paid by four different business firms.

Lyda Elizabeth McHenry⁽⁵⁾ conducted a survey of

5 McHenry, Lyda Elizabeth. A Vocational Follow-up of Post Graduates and Regular Commercial Graduates of the Detroit High School of Commerce. Ann Arbor: University of Michigan, 1935.

the graduates of the Detroit High School of Commerce. Of these graduates, there were 32 per cent who attended some educational institutions after graduation, and there were 59 per cent of the group who desired more training either to retain or acquire more speed or skill or to make promotions possible. Further training on office machines, especially the comptometer, calculator, book-keeping machine, dictaphone and mimeograph was emphasized. In addition to office-machine work, other subjects emphasized were shorthand for letter dictation, typewriting for transcribing shorthand, and composition of business letters.

The Graduate School of Education of Harvard University conducted a survey based on individual reports from 6,050 office workers. The general conclusions were: Extensive business arithmetic training is not needed for clerical work, but arithmetic ability peculiar to special types of work should be developed. Arithmetic courses beyond the fundamentals of computation should be discontinued in favor of short units of functioning arithmetic work which can be given as a part of the vocational skill training. There is no such thing as a general course in business English which will meet the occupational requirements of all commercial workers. Instead of extensive business English courses for all

commercial students, specialized English should be given as a part of the skill training wherever needed.

CHAPTER III

THE STUDY

In a commercial follow-up, the employment question merits consideration. Today there are more jobs to be filled and more opportunities than ever before, for the reason that business and industry are growing continuously. New improvements are being made and everything is becoming more exacting, with the result that more people who are skilled and resourceful are required in all lines. It is generally accepted by both business men and educators that this initial employment in business is a stepping stone and while remuneration is often low and hours sometimes long, these positions eventually lead to something better. Table I gives a summary of the types of work the graduates are doing at the present time.

TABLE I
Present Positions Held by
135 Salem High Graduates

Position	Number	Per Cent
Stenographer	42	32
Clerical	22	16
Typist	20	14
Typist-clerk	10	8
Bookkeeper	6	4.3
College student	6	4.3
Filing clerk	5	3.7
No position	5	3.7
Stenographer-clerk	4	3
Calculator operator	3	2
Salesman	3	2
Beauty operator	2	1.5
Bank teller	2	1.5
Statistician	2	1.5
Shipping clerk	2	1.5
Reporter & telephone operator	1	1
Total	135	100

Of the entire 135 completed questionnaires only 5, or 3.7 per cent did not have positions, and 6, or 4.3 per cent were college students. Stenography claims 42, or 32 per cent of the group, while clerical work is in second place with 22, or 16 per cent. The first four groups: stenographer, clerical, typist, and typist-clerk take in 68 per cent of the group, while the other 32 per cent is divided among 12 different types of work.

Table II gives the distribution of workers into the different types of business.

TABLE II
Types of Business

Business	Number	Per Cent
State offices	37	30
Small offices	24	19
Retail stores	21	17
Factories-mills	14	11
Banking institutions	9	7
Wholesale establishments	7	6
Public utilities	7	6
Others	5	4
Total	124	100

The state offices employ 37 of these graduates, or 30 per cent. This group is relatively large. Small private offices are next with 24, or 19 per cent and then retail stores come next with 22, or 17 per cent. Firms which have only one or two graduates employed are grouped together as others.

Table III presents the salary received by the 124 Salem High graduates when they first started their present positions.

TABLE III
Beginning Monthly Salaries of
Salem High School Graduates

Position	\$30- \$44	\$45- \$59	\$60- \$74	\$75- \$89	\$90- \$104
Stenographer	2	12	16	9	3
Clerical		5	9	8	
Typist		11	5	4	
Typist-clerk		2	5	3	
Bookkeeper		3	1	1	1
Filing clerk			2	3	
Stenographer-clerk		1	1	2	
Calculator operator			3		
Salesman		2	1		
Beauty operator	1	1			
Bank teller				2	
Statistician			2		
Shipping clerk			2		
Reporter & telephone operator	1				
Totals	4	37	47	32	4

The beginning salaries range from \$30 to \$104. Forty-seven of the 124 graduates began their present positions with salaries between \$60 and \$74, 37 received

between \$45 and \$59, 32 between \$75 and \$89. The lowest bracket, \$30 to \$44, and the highest, \$90 to \$104, had each four workers.

Table IV shows the salaries received at the present time.

TABLE IV
Present Monthly Salaries of
Salem High School Graduates

Position	\$45- \$59	\$60- \$74	\$75- \$89	\$90- \$104	\$105- \$119	\$120- \$135
Stenographer	6	12	19	3	2	
Clerical			20	2		
Typist	8	7	3	2		
Typist-clerk	1	3	6			
Bookkeeper		1	3	1	1	
Filing clerk			5			
Stenographer-clerk		1	3			
Calculator operator			2	1		
Salesman	1	2				
Beauty operator	2					
Bank teller					1	1
Statistician			2			
Shipping clerk				2		
Reporter & telephone operator		1				
Totals	18	27	63	11	4	1

The salaries are tabulated under six different headings, ranging from \$45 to \$135. The largest group of graduates receive between \$75 and \$89 a month. Of these 63, 19 are stenographers and 20 clerical workers. The next largest group falls in the \$60 to \$74 bracket. This includes 12 stenographers and 7 typists. Eighteen graduates' salaries are between \$45 and \$59. The highest salary recorded is that of a bank teller. It is interesting to note that the present salaries show quite an increase over the beginning salaries.

To the question, "Have you had further commercial training since completion of high school?" eighty-one answered "no" and 54 "yes". Table V shows the subjects taken, types of school, and year.

TABLE V
Training Following Graduation
from the Salem High School

Subject	Type of School			Year			
	College or Univ.	Corr.	Bus. Col- lege	1935 to 1936	1936 to 1937	1937 to 1938	1938 to 1939
Typewriting	5		13	5	1	6	8
Shorthand	4		12	6		5	7
Bookkeeping	6		4	1	2	3	5
Business English	4		6	3	1	3	4
Letter writing			7	3	2	1	1
Commercial law	2	1	5	2	1	3	4
Spelling			5	2		1	2
Money and banking	1	1	1			2	1
Machines			2				2
Totals	22	2	55	22	7	24	34

Of the 54 graduates who were able to obtain additional training, 35 secured this in business college, 17 in college or university, and 2 in a correspondence school. However, the business college has a total of 55 which means that more than one subject was taken by some; likewise, college and university has a total of 22 while only 17 attended. Commercial law, and money

and banking are the only two subjects which the graduates studied through a correspondence school. As to the time the work was taken, the year 1936 to 1937 is far behind the other three years. During 1938-1939, 34 graduates took additional commercial work. Here again, the total as to years does not correspond to the number who have had further training since some have participated more than one year.

The questionnaire included the information concerning the type of work at which the graduate was employed previous to his present position and the length of service. Table VI indicates all jobs held before the present one and length of time for each job.

TABLE VI
Previous Positions Held by the
Salem High School Graduates

Type of Work	Months Job Held					Total
	less than 1	1-6	7-12	13-18	19-24	
Stenographer	6	10	5	2	6	29
Bookkeeper		1	2		1	4
File-clerk		4	1	1	1	7
Typist	3	11	3		1	18
Beauty operator		1	1			2
Clerk (sales)	2			1		3
Shipping clerk		1			1	2
Clerical	3	4	3		2	12
Totals	14	32	15	4	12	77

Of the 124 individuals employed at the time of this survey, 77 had held previous positions. Stenographers, typists, and clerical workers are the three which rank highest, with 29 18 and 12 graduates respectively. The balance of the positions were divided into 5 other groups. As to length of time the job was held, 32 positions fell in the one to six months group. This is probably due to the fact that many Salem High School graduates work in the Secretary of States Office during rush seasons.

The questionnaire contained a list of activities for which the person could indicate whether he considered his training in each subject over-emphasized, sufficient, or insufficient. Table VII shows the results relative to Business English.

TABLE VII
Opinions of Graduates Relative to English Training
Received in High School

	over- emphasis		suffi- cient		insuffi- cient		
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Total Number
Writing letters of application	0	--	87	64	48	36	135 *
Writing business letters	6	4	81	60	48	36	
Punctuation	15	11	78	58	42	31	
Spelling	9	7	87	64	39	29	
Pronunciation	0	--	78	58	57	42	
Grammar	9	7	84	62	42	31	
Vocabulary	6	4	57	42	72	54	

The total number, 135, checked the activities relative to English. Of these, writing letters of application and pronunciation were the only two not considered over-emphasized. Punctuation with 15, or 11 per cent received the highest rating for over-emphasis, while

* Total number refers to total in table

9, or 7 per cent indicated that they did not need the amount of spelling and grammar they received in high school. Eighty-seven, or 64 per cent indicated their training in both writing letters of application and spelling as sufficient. It would seem that there is a need for more intensive training relative to vocabulary. Seventy-two, or 54 per cent checked this item as being insufficient. Pronunciation was second with 57, or 42 per cent.

Table VIII presents the opinions of the graduates regarding the training they received in filing.

TABLE VIII
Opinions of Graduates Relative
to Training in Filing

	over- emphasis		suffi- cient		insuffi- cient		Total Number
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
Alphabetic	12	11	66	58	36	32	114*
Direct Name	18	16	60	53	36	32	
Geographic	15	13	63	55	36	32	
Numeric	18	16	66	58	30	26	
Cross Reference	18	16	60	53	36	32	

Table VIII shows that 114 out of the 135 who replied received training in filing. Not one of the five kinds

* Total number refers to total in table

of filing received a large majority in either over-emphasis, sufficient or insufficient. Eighteen or 58 per cent considered direct name, numeric and cross reference over-emphasized, 66 or 58 per cent indicated alphabetic and numeric sufficient, and 36, or 32 per cent checked alphabetic, direct name, geographic and cross reference as insufficient. These figures would indicate that all types of filing are on the same scale as far as training is concerned.

Table IX presents the findings from tabulation of answers pertaining to business information received in high school.

TABLE IX
Opinions of Graduates Relative to
Training in Business Information

	over- emphasis		suffi- cient		insuffi- cient		
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Total Number
Business and legal papers	0	--	54	47	60	53	114*
Message sending	0	--	57	50	57	50	
Use of telephone	0	--	30	26	84	74	
Transportation and mailing	0	--	45	39	69	61	
Banking procedures	0	--	54	47	60	53	
Business terms	0	--	72	63	42	37	

* Total number refers to total in table

It is interesting to note that not one graduate of the 114 who filled out the questionnaires checked the activities listed above as over-emphasized. This might be due to the fact that this information is so necessary to anyone employed, or still it might be due to the small amount of training offered in this field. With the exception of business terms, all activities were checked insufficient by over 50 per cent of the group. The use of the telephone heads this list with 84 individuals, or 74 per cent who considered the training lacking in quantity while only 30, or 26 per cent indicated that it was sufficient. The results of this table certainly indicates a place for revision in either the subject matter or amount of time devoted to this type of study.

Commercial law and salesmanship were not divided into smaller items. Table X shows the findings of these two subjects.

TABLE X

Opinions of Graduates Relative to Training
in Commercial Law and Salesmanship

	over- emphasis		suffi- cient		insuffi- cient		
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Total Number
Commercial Law	6	10	30	48	27	43	63
Salesmanship	6	9	39	56	24	35	69

Commercial law is given, not that the individual can carry on important transactions without the advice of a lawyer, but so that he may recognize his fundamental rights in many business affairs and have a knowledge of the common, every-day commercial transactions. Sixty-three of the 135 graduates checked this section. Thirty-four or 47 per cent felt they had sufficient law training, while 27, or 43 per cent would have benefited by more.

Salesmanship is used by everyone, whether employed as a salesman or in some other form of business. Thirty-nine of the 69 reported their training as sufficient, while 24, or 35 per cent indicated they desired more training in this field.

Table XI shows the findings from the questionnaire regarding shorthand.

TABLE XI

Opinions of Graduates Relative to Training in
Shorthand Received in High School

	over- emphasis		suffi- cient		insuffi- cient		
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Total Number
Speech reporting	6	7	39	43	45	50	90
Speed	3	3	45	50	42	47	
Brief forms	6	7	66	73	18	20	
Phrasing	0	--	48	53	42	47	
Fundamentals	6	7	72	80	12	13	

The 90, who checked this division of the questionnaire, were unanimous in their belief that shorthand phrasing was not over-emphasized. Insufficient training in speed and phrasing was checked by 42, or 47 per cent of the participants. Forty-five individuals, or 50 per cent reported that they had not had enough drill on speech reporting. Fundamentals and drill on brief forms received the highest percentage of sufficient votes, 72 and 66 per cent respectively. Speed was fairly evenly divided with 45, or 50 per cent believing they had sufficient speed and 42, or 47 per cent desiring more training in regard to this item.

Table XII indicates the results relative to bookkeeping.

TABLE XII

Opinions of Graduates Relative to Training in
Bookkeeping Received in High School

	over- emphasis		suffi- cient		insuffi- cient		Total Number
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
General Journal	0	--	63	84	12	16	75
Purchases Journal	6	8	54	72	15	20	
Sales Book	0	--	57	76	18	24	
Accounts Payable Ledger	0	--	63	84	12	16	
Accounts Receivable Ledger	6	8	57	76	12	16	
Books with Special Columns	6	8	48	64	21	28	
Income Tax	6	8	36	48	33	44	

From the total of 135 graduates, 75 gave their opinions regarding the different phases of bookkeeping. No worker reported the general journal, sales book, and accounts payable ledger over-emphasized, while only 8 per cent indicated that the purchases journal, accounts receivable ledger, special columns and income tax were over-emphasized. Income tax reporting is required more and more both in business and personal use. This is strengthened by the fact that 33 individuals, or 44 per cent considered this item insufficient. The other items

were listed as sufficient by over 50 per cent.

The next phase of the questionnaire was on typewriting. Table XIII presents the opinions on this subject.

TABLE XIII

Opinions of Graduates Relative to Training in
Typewriting Received in High School

	over- emphasis		suffi- cient		insuffi- cient		Total Number
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
Transcription	0	--	66	56	51	44	117
Letter set-up	0	--	84	72	33	28	
Use of forms	3	3	78	67	36	31	
Rough draft work	0	--	72	62	45	38	
Manuscript work	0	--	87	74	30	26	
Numbers	3	3	45	38	69	60	
Legal forms	6	5	48	41	63	54	
Speed	15	13	84	72	18	15	
Accuracy	3	3	45	38	69	59	

One hundred and seventeen graduates checked this division of the questionnaire. In typewriting there is the eternal question of speed versus accuracy. These findings show that the graduates desire more accuracy in their typewriting and are of the opinion that they have enough drill on speed. Sixty-nine, or 59 per cent checked accuracy as not having had enough stress, and 84

individuals or 72 per cent reported having ample speed training. Sixty-nine, or 59 per cent felt that more training on numbers would be helpful. In the typewriting of legal forms 63, or 54 per cent reported having insufficient training.

Table XIV shows the results relative to the operation of machines.

TABLE XIV
Opinions of Graduates Relative to Training
in Operation of Machines

	over- emphasis		suffi- cient		insuffi- cient		Total Number
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
Adding machine	9	10	39	43	42	47	90
Calculator	4	7	17	30	35	63	56
Comptometer	3	6	9	18	39	76	51
Dictaphone	0	--	21	35	39	65	60
Bookkeeping machine	0	--	12	25	36	75	48
Billing machine	3	7	3	7	36	86	42
Multigraph	6	14	6	14	30	72	42
Addressograph	6	12	15	29	30	59	51
Mimeograph	0	--	51	57	39	43	90
Ditto	3	6	18	38	27	56	48

Office machine training is becoming more and more an important subject for high schools. Here, the

instruction was not uniform for all persons. This was due to the fact that some machines are included in the bookkeeping course and some in the office practice or typewriting class. Then again there are not enough machines available for the entire group. Each machine listed received a high per cent checked for insufficient training. The billing machine leads with 86 per cent, comptometer 76 per cent, bookkeeping machine 75 per cent, and multigraph 71 per cent. Fifty-seven per cent reported the work on the mimeograph as adequate and 43 per cent as insufficient.

Table XV indicates the findings from the tabulation of business arithmetic.

TABLE XV
Opinions of Graduates Relative to Training
in Business Arithmetic

	over- emphasis		suffi- cient		insuffi- cient		Total Number
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
Addition	6	7	75	86	6	7	87*
Subtraction	6	7	81	93	0	--	
Division	6	7	72	83	9	10	
Multiplication	6	7	75	86	6	7	
Fractions	6	7	75	86	6	7	
Percentage	6	7	60	69	21	24	
Interest	9	10	48	55	30	34	
Denominate numbers	6	7	60	69	21	24	

Training in subtraction was the only part of business arithmetic which was not considered insufficient and knowledge of interest received the highest vote, 34 per cent. Six, or 7 per cent of the graduates reported that all items listed under this division, with the exception of interest, were over-emphasized. Twenty-four per cent indicated the training in percentage and denominate numbers as insufficient.

In addition to the interest which the commercial department has in the training itself, is the desire to

* Total number refers to total in table

discover if the program is meeting the demands and needs of the pupils. Table XVI contains a list of the English activities to be checked whether the individual has used his training much, some, or none.

TABLE XVI
Opinions of Graduates Relative to Use
Made of English Training

	much		some		none		Total Number
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
Writing letters of application	21	16	81	60	33	24	135
Writing business letters	66	49	42	31	27	20	
Punctuation	87	64	48	36	0	--	
Spelling	111	82	24	18	0	--	
Pronunciation	87	64	48	36	0	--	
Grammar	108	80	27	20	0	--	
Vocabulary	93	69	42	31	0	--	

Only two of the activities listed under English were checked as "not used", writing letters of application and writing business letters. However, 66, or 49 per cent made much use of their training in writing business letters. One hundred and eleven graduates or 82 per cent indicated they had opportunities to make use of their spelling training, and 108, or 80 per cent, likewise

checked grammar.

Table XVII indicates to what extent the graduates used their training in filing.

TABLE XVII
Opinions of Graduates Relative to Use
Made of Training in Filing

	much		some		none		Total Number
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
Alphabetic	72	63	24	21	18	16	114 *
Direct name	48	41	36	32	30	26	
Geographic	12	11	24	21	78	68	
Numeric	45	39	33	29	36	32	
Cross reference	42	37	36	32	36	32	

For geographic filing, there were 78 persons, or 68 per cent who did not make use of this training. This would seem to indicate that geographic filing was not used as generally as the other types of filing. Alphabetic, having 63 per cent checked "much", is used most extensively, while direct name is second with 41 per cent.

Table XVIII gives a picture of the use made of the business information received in high school.

* Total number refers to total in table

TABLE XVIII
Opinions of Graduates Relative to Use
Made of Business Information

	much		some		none		Total Number
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
Business and legal forms	57	50	36	32	21	18	114
Message sending	12	11	57	50	45	39	
Use of telephone	78	68	36	32	0	--	
Transportation and mailing	42	37	42	37	30	26	
Banking procedures	36	32	38	33	40	35	
Business terms	48	42	48	42	18	16	

The telephone was reported to be used the most with business and legal forms second. Furthermore, everyone who had training in the use of the telephone used this ability, while 45 graduates, or 39 per cent of the 114, did not need their training in message sending. The business terms acquired in high school are evidently useful, as 48 indicated they made frequent use of these terms and the same number checked "some". This means that only 18 per cent believed they did not need this training.

Table XIX shows the results of the tabulation regarding use of bookkeeping training.

TABLE XIX
Opinions of Graduates Relative to Use
Made of Bookkeeping Training

	much		some		none		Total Number
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
General journal	15	20	36	48	24	32	75
Purchase journal	3	4	27	36	45	60	
Sales book	9	12	24	32	42	56	
Accounts payable ledger	15	20	24	32	36	48	
Accounts receivable ledger	24	32	21	28	30	40	
Books with special columns	15	20	18	24	42	56	
Income tax	0	--	51	68	24	32	

Income tax reporting and record keeping is the only item in the bookkeeping division which was not used a great deal. However, 51 graduates, or 68 per cent used this knowledge some, and only 32 per cent not at all. The training in the use of the purchases journal was not needed by 45, or 60 per cent of the 75 graduates who had training in this method of record keeping. The general journal was used at some time or other by 48 per cent, which is the highest ranking item in this group.

The use 90 graduates made of their shorthand training

TABLE XX
Opinions of Graduates Relative to Use
Made of Shorthand Training

	much		some		none		
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Total Number
Speech reporting	9	10	21	23	60	67	90 *
Speed	42	47	24	27	24	27	
Drill on brief forms	45	50	18	20	27	30	
Phrasing	54	60	18	20	18	20	
Fundamentals	39	43	30	33	21	23	

According to the results of this check list, phrasing and brief forms are the types of shorthand training which are actually put to use in stenography. Speech reporting is not used a great deal, as 60, or 67 per cent had no use for it whatsoever. Evidently those graduates who did not use their brief forms, phrasing and other requisites of shorthand, are not employed as stenographers. Adding the reports on "some" and "much", speed is required by 74 per cent of those replying. This would seem to indicate that in shorthand speed is necessary in addition to accuracy. Accuracy was not listed for checking as this is a known necessity.

* Total number refers to total in table

Table XXI presents the findings from tabulation of 117 questionnaires regarding typewriting.

TABLE XXI
Opinions of Graduates Relative to Use
Made of Typewriting Training

	much		some		none		Total Number
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
Transcription	72	62	24	21	21	18	117 *
Letter set-up	87	74	30	26	0	--	
Use of forms	57	49	60	51	0	--	
Rough draft work	36	31	51	44	30	26	
Manuscript work	39	33	45	38	33	28	
Numbers	60	51	51	44	6	5	
Legal forms	51	44	24	21	42	36	
Speed	57	49	60	51	0	--	
Accuracy	102	87	15	13	0	--	

One-hundred and two believed that they carried over into their business typewriting the accuracy they acquired in learning to typewrite, as compared to 57 who were required to type often at a high rate of speed. These two items, accuracy and speed, with letter set-up and use of forms were used by the entire 117 graduates who had typewriting in high school.

* Total number refers to total in table

Table XXII presents the results of commercial law and salesmanship training received in high school.

TABLE XXII

Opinions of Graduates Relative to Use
Made of Commercial Law and Salesmanship Training

	much		some		none		
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Total Number
Commercial law	24	38	24	38	15	24	63
Salesmanship	18	26	36	52	15	22	69

Of the total number, 63, who reported on commercial law, 24 graduates, or 38 per cent used this knowledge frequently; 24, or 38 per cent, some and 15, or 24 per cent none. Sixty-nine checked salesmanship and the results were that only 18, or 26 per cent used this subject much, while 36, or 52 per cent had some occasion to apply their knowledge, and 15, or 22 per cent had no use for it whatsoever. It may be that these 15 graduates did not realize they were using this training, because it is a known fact that the principles of salesmanship are used in all activities carried on by an individual.

Table XXIII indicates how much the participants of this questionnaire have used their training in machine operation.

TABLE XXIII
Opinions of Graduates Relative to Use
Made of Training in Machine Operation

	much		some		none		Total Number
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
Adding machine	30	33	45	50	15	17	90
Calculator	9	16	10	18	37	66	56
Comptometer	2	4	1	2	48	94	51
Dictaphone	1	2	15	25	44	73	60
Bookkeeping machine	9	19	3	6	36	75	48
Billing machine	0	--	3	7	39	93	42
Multigraph	0	--	6	14	36	86	42
Addressograph	4	8	4	8	43	84	51
Mimeograph	21	23	33	37	36	40	90
Ditto	3	6	12	25	33	69	48

Again, the number who reported on these machines is not uniform. Fifty-one had training in operating the comptometer and 48 of these did not have a chance to use this ability. Ninety-two per cent of those reporting have not used the billing machine since graduation. Both of these figures seem quite high for no use whatsoever. The adding machine and mimeograph both are a necessity in fulfilling the requirements of most office positions.

Table XXIV presents the findings on business arithmetic.

TABLE XXIV
Opinions of Graduates Relative to Use
Made of Training in Business Arithmetic

	much		some		none		Total Number
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	
Addition	48	55	39	45	0	--	87*
Subtraction	45	52	42	48	0	--	
Division	42	48	45	52	0	--	
Multiplication	42	48	45	52	0	--	
Fractions	30	34	39	45	18	21	
Percentage	39	45	36	41	12	14	
Interest	42	48	24	28	21	24	
Denominate numbers	21	24	36	41	30	35	

Addition, subtraction, division, and multiplication are used by the entire 87 graduates who had training in business arithmetic. By combining the "much" and "some" columns fractions, percentage, interest, and denominate numbers were reported as being used by more than 50 per cent.

* Total number refers to total in table

CHAPTER IV

SUMMARY AND CONCLUSIONS

The results from the return of the questionnaire show that approximately 70 per cent of the graduates of Salem High School commercial department find employment in Salem. Since this is true, the commercial department and the administration should endeavor to offer training to its graduates along the lines of employment found in the community.

Eighty-eight per cent of the 135 graduates reported in this study are office workers. Of the office workers, stenographers and general clerks, are the most numerous. Typists, bookkeepers, filing clerks, machine operators, and typist-clerks constitute the balance. Approximately one-third of the 124 graduates are employed in the state offices, and 47 per cent are employed by retail stores, small offices, and factories. The average salaries paid to those answering the questionnaire was low. As the results of these figures, it might be profitable to analyze the requirements of these employers to determine further the type of training which is most valuable to the commercial graduate.

More than one-third of the graduates took business courses after graduation. The majority took the additional training from a business college, and only two of the 54

studied through a correspondence school.

Many of the students in the commercial department lack the ability to use the English language effectively. Greater accuracy is needed by the graduates in spelling, paragraphing, punctuation and pronunciation, to say nothing of a better understanding of the grammatical construction of sentences. Fifty-four per cent of those reporting indicated they did not have a vocabulary large enough for their everyday use in business.

The activities listed under the heading "business information" evidently does not function when the graduates are on the job. The teaching of telephone technique has no point of reality when the students are confined to discussing the proper way to make a call or to receive a call and the correct wording for different requests. The ideal situation would be a miniature telephone system with several types of telephones that are in use today and a modern switchboard with telephones connected for actual use.

From the comments written on the questionnaire regarding training in bookkeeping, the conclusion was drawn that much of the detail work varies from office to office to such an extent that the previous training is a disappointment to the new employee. Therefore, the emphasis should be placed upon complete mastery of fundamentals rather than upon a volume of detail work.

For instance, students believe that every business should have four books of original entry. This could be overcome if the objective would be an appreciation of the need for special journals, and an appreciation of the advantages to be gained from their use.

The chief difficulties in typewriting were the abilities to type numbers and legal forms. Accuracy could be emphasized to a greater extent in all typewritten work.

Salesmanship, most authorities agree, is a means of influencing other persons to agree with you; a presentation of ideas in such a manner as to make others act favorably. Everyone, then, is a salesman because everyone sells ideas. This side of salesmanship should be emphasized in a class of high school students since their ideas are that salesmanship is limited to the process of exchanging merchandise for money.

Several comments were added to the effect that the commercial department should have more machines. More training was desired by a large group on the billing machine, multigraph and bookkeeping machine, although a large per cent indicated they did not use the training they did receive.

Skills of every kind are valuable if they can be applied in the solution of actual problems. Business arithmetic was used by all who had received training

in this subject. This should not be broken down into such minute particles that it is lost sight of entirely, since it is so important, so basic in business and so fundamental in life.

In relation to the evaluation of use of training, it should be recognized that use of all such training is dependent upon many factors peculiar to each individual, aside from any amount of efficiency on the part of the school. It also must be remembered that this study covered only the first few years of business experience of these graduates. They still have many years in which to use their training.

The conclusions drawn from this study are as follows:

1. More stress should be put on vocabulary and pronunciation in Business English.
2. A system should be set up whereby the students have an opportunity to actually use the telephone, and become accustomed to the different types of telephones which are in use in offices.
3. More time should be spent on the mailing of letters, the shipping of packages, and other phases of transportation and mailing. The students should have some actual practice in this type of work, as merely reading and discussing the different duties is not sufficient.
4. In typewriting, accuracy should be placed above speed. The students need more drill on the typing of numbers and of legal forms.
5. Speed and phrasing in shorthand should receive more attention.
6. The commercial department should acquire more machines for the use of the students, since there are not enough machines available for the entire group.
7. Geographic filing is not used to such an extent as to warrant time spent in training.
8. Bookkeeping fundamentals and appreciations should be the objectives in place of details.

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APPENDIX

General information: An effort is being made to improve the program of Oregon High Schools. As a graduate of the Salem High School would you be kind enough to assist in this program by filling out this check list? This information is to be used in improving the training of future high school students who are interested in entering various types of commercial positions.

Present position _____

Name of firm _____

What was your beginning monthly salary? _____

What is your present monthly salary? _____

Have you had further commercial training since completion of high school? _____

If you have answered yes to the above question, fill in the following table

Subject	Where	When

List the positions you have held since graduating from high school

Position Held	Type of Work	Length of Service

Directions for filling out check list: Opposite each of the items in the list below place a check mark (x) in one of the columns under the heading TRAINING to indicate whether, while in high school, that phase of the subject was over-emphasized, sufficient or insufficient. Under the heading USE place a check mark to indicate whether you have been able to make much use, some or none of this training. For example, if you believe you would have benefited from further training in punctuation, place a check mark in the column insufficient, opposite punctuation. In like manner, if you have frequently used this training place a check mark in the much column. Under COMMENTS give suggestions or criticisms relative to each of the following fields of training. At the end of each group of items a line is provided for additional topics.

	TRAINING			USE			
	over-emphasis	sufficient	in-sufficient	much	some	none	
<u>English</u>							Comments
Writing letters of application							
Writing business letters							
Punctuation							
Spelling							
Pronunciation							
Grammar							
Vocabulary							
<u>Business Information</u>							
Business and Legal forms							
Message Sending							
Use of telephone							
Transportation and mailing							
Banking procedures							
Business terms							

	TRAINING			USE			
	Check one			Check one			
	over- emphasis	sufficient in- sufficient		much	some	none	Comments
<u>Filing</u>							
Alphabetic							
Direct name							
Geographic							
Numeric							
Cross reference							
<u>Shorthand</u>							
Speech reporting							
Speed							
Brief forms							
Phrasing							
Fundamentals							
<u>Bookkeeping</u>							
General journal							
Purchase journal							
Sales book							
Accounts payable ledger							
Accounts receivable ledger							
Books with special columns							
Income tax							
<u>Commercial law</u>							
<u>Salesmanship</u>							

	TRAINING			USE			
	Check one			Check one			
	over- emphasis	sufficient in- sufficient		much	some	none	Comments
<u>Typewriting</u>							
Transcription							
Letter set-up							
Use of forms							
Rough draft work							
Manuscript work							
Numbers							
Legal forms							
Speed							
Accuracy							
<u>Operation of:</u>							
Adding machine							
Calculator							
Comptometer							
Dictaphone							
Bookkeeping machine							
Billing machine							
Multigraph							
Addressograph							
Mimeograph							
Ditto							
<u>Business Arithmetic</u>							
Addition							
Subtraction							
Division							
Multiplication							
Fractions							
Percentage							
Interest							
Denominate Numbers							