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A FOLLOW-UP STUDY OF BUSINESS EDUCATION IN THE PUBLIC HIGH SCHOOLS IN THE STATE OF WASHINGTON

A Thesis

Presented to

the Graduate Faculty

Central Washington State College

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Education

by
Myrline Widner Billings
December 1967

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APPROVED FOR THE GRADUATE FACULTY	<u>r</u>
Eugene J. Kosy, COMMITTEE CHAIRM	'N
Darwin J. Goodey	-
Daryl Basler	-

ACKNOWLEDGMENT

To my committee, Dr. Eugene J. Kosy, Dr. Daryl Basler, and Mr. Darwin J. Goodey, this writer is indebted.

Acknowledgment is also accorded the school administrators throughout the state who provided the data used in this study. Without their cooperation, this study would not have been possible.

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in 1966

CHAPTER I

THE PROBLEM, DEFINITIONS OF TERMS USED, AND ORGANIZATION

A follow-up study of the business education curriculums, co-curricular activities, and staffing of the business education departments in the secondary schools of the State of Washington has not been undertaken for slightly more than a decade (1953). The information gained from a current status study will add to the total knowledge obtained through research and more specifically to the knowledge of business education in the public schools of Washington.

I. THE PROBLEM

Statement of the problem. The purpose of this study is to provide follow-up information on an earlier study which was directed toward determining "(1) the number of high school commercial teachers employed; (2) commercial courses offered, grade level at which offered, and total semesters offered; (3) the availability of business machines; (4) commercial courses least needed, and (5) commercial course subjects that could be added. This survey reveals the common characteristics of the commercial departments of the high schools at this time" (7).

Additional information obtained in this survey includes statistics on (1) teachers! involvement in

co-curricular activities; (2) specific makes of business machines used in business education instruction; (3) utilization of part-time business teachers; and, (4) business teacher class schedules.

Significance of the study. Business education is a vital part of general and vocational education. Business education adds to the general education of an individual; it provides the student with basic vocational and non-vocational information. More students are enrolled in business education subjects than ever before. Continual research in business education is needed if business education is to provide effectively for the needs of individual students. This research study is undertaken to make a comparison of the current status of business education with previous studies to provide educators with information which they may use in making projections for future business education programs in the secondary schools of Washington.

II. DEFINITIONS OF TERMS USED

This study. This study will refer to this thesis, which is based on the results of 236 questionnaires and a comparison with an earlier thesis.

The Thomas study. This term makes reference to the Central Washington College of Education unpublished master's

thesis by Ralph V. Thomas entitled "A Survey of the Public High School Commercial Departments in the State of Washington." dated December 1954.

<u>Public schools</u>. All three-year and four-year accredited secondary schools in the State of Washington are referred to as public schools. These schools were recognized and listed as accredited by the Washington State Department of Public Instruction in 1964-65 (8).

It is recognized that each individual responding to the survey questionnaire may have had a minor variation in his interpretation of the course titles. Course title interpretation are generally uniform and understood by business educators and school administrators. For example, although there are many specific types of shorthand, there is a general definition of the term which is understood by both laymen and professional business educators. This definition, as taken from Webster's Dictionary, is: "A method of writing rapidly by substituting characters, abbreviations, or symbols for letters, words, or phrases" (9:2013).

III. ORGANIZATION OF THE THESIS

Chapter I is an introduction to the thesis. It states the purpose of the thesis, defines terms, and presents a summary of the organization of the thesis.

Chapter II is a review of the literature pertaining to business education curriculums in the State of Washington. Literature is also reviewed as it pertains to methodology of research.

Chapter III presents a thorough explanation of the methods and procedures used in this study.

Chapter IV describes the survey population and the research instrument.

Chapter V presents the results of the questionnaire and a comparison of data from this study with the Thomas study.

Chapter VI is devoted to a summary, conclusions, and recommendations, and is followed by the bibliography and appendices.

CHAPTER II

REVIEW OF THE LITERATURE

It appears that very little research has been done in the area of business education curriculum studies in the State of Washington. The total area of business education curriculum research is, in fact, extremely limited.

I. LITERATURE ON STUDIES OF BUSINESS EDUCATION
CURRICULUMS OF THE STATE OF WASHINGTON

A review of the literature reveals that the first study of business education curriculums, staffing, and related factors was undertaken in 1948 by Mildred Gibson as a thesis for the master's degree at Washington State College. Prior to this time, the State Department of Public Instruction had set forth guidelines to be used in planning business education programs, but there were no recorded research studies undertaken to evaluate Washington business education programs.

Ralph V. Thomas undertook what appears to be the second study of business education departments in the State of Washington in 1953. The study fulfilled partial requirements for a master's degree at Central Washington College of Education.

Both studies employed a questionnaire survey to obtain the desired information. Information concerning course offerings in the business education departments, co-curricular activities in the business area, and projections for the business education departments were included in both studies.

Each study included a list of recommendations which the investigators had drawn from their respective studies. It is interesting to note that the recommendations were very similar. Both studies recommended the consolidation of small high schools in order to provide for expanded programs. The possibilities of interschool sharing of expensive office machines was also suggested. Another area of recommendation was the proper certification of business teachers. It was recommended that business teachers hold at least a minor in business education.

II. LITERATURE ON THE USE OF THE SURVEYQUESTIONNAIRE APPROACH

Literature indicates that the survey approach to research in business education has been and can be used effectively. The use of the questionnaire to survey a particular population provides, in many cases, the only feasible means of obtaining information.

There are numerous articles providing guidelines to be used in the preparation and execution of the use of a questionnaire. Lowry indicates several guides, including the advisability to determine facts, not opinions; limitation of the questionnaire to essential items; expression of questions clearly and concisely; provision of a pre-test of the questionnaire; and the need for an effective cover letter to accompany the questionnaire.

Hillway (4:190) presents another list for consideration. He states that the questionnaire should be as brief as possible; the need must be important enough to justify time and effort involved; aimed at obtaining factual information; familiar and understandable wording; neat and logical arrangement and appearance; easy to respond to; and, clear and concise instructions.

Many authors emphasize the need for an effective follow-up of all questionnaires. If a questionnaire study is to be of value, it is nearly always necessary that responses be obtained from a large proportion of those to whom questionnaires are distributed.

Porter (6:34) cautions that difficulties may be "encountered as one endeavors to describe the results of the survey study." Other writers support Porter on this point, and Dvorak (2:6) goes further to indicate that studies are "narrow, unparallel in research design. The over-all

picture resulting from numerous highly restricted studies is a confusing maze."

CHAPTER III

METHODS AND PROCEDURES

Method. Information for this study was obtained by means of a questionnaire. The questionnaire approach was selected because of the geographic distribution of the survey population. The five-page questionnaire (Appendix A) was sent to all principals of three-year and four-year accredited high schools in the State of Washington for the 1964-65 school year. The total number of such high schools was 293 as listed in the Washington Education Directory of 1964-65 (8).

Instrument. The pattern for the questionnaire used in this study came from the questionnaire used in the Thomas study. The format of the questionnaire was changed from the Thomas questionnaire and additional items were added.

Pilot study. The test questionnaire (Appendix A) was sent to three high school principals with a cover letter (Appendix A). The researcher met with each principal and asked for suggestions or comments to improve the questionnaire. The conclusion was reached that the questionnaire was seemingly valid.

Procedure. On May 20, 1965, the questionnaire (Appendix A) and a cover letter (Appendix B) was mailed to 290 high school principals in the State of Washington.

On June 8, 1965, a postal card (Appendix C) was mailed to those schools which had not responded to the first mailing. A third and final follow-up letter (Appendix D) containing another copy of the questionnaire (Appendix A) was mailed on July 2, 1965, to all schools not responding to the first two inquiries.

Coding. Each questionnaire was numbered to correspond to the alphabetic listing of schools. As each questionnaire was returned, its number was checked on the list. Those schools which were not checked were contacted in each follow-up.

Treatment of the findings. The possibility of using electronic data processing equipment to tabulate question-naire data was explored. It was concluded that the time involved in using the electronic equipment would be greater than for the researcher to tabulate the data manually.

The questionnaire items which related to school enrollments and number of teachers were tabulated by means of keysort cards. Fields for each category of answers were set up, then questionnaire data was coded onto the

cards. After the information was on cards, the cards were sorted and counted.

All other questionnaire responses were tabulated on summary sheets.

<u>Delimitations of the study</u>. The study was limited to those schools in the State of Washington which were public three-year or four-year accredited high schools and were listed in the 1964-65 edition of the <u>Washington Educational Directory</u>.

The study reports only those responses received from 236 public schools.

CHAPTER IV

I. SURVEY POPULATION

The survey population consisted of the principals of 293 three-year and four-year accredited high schools of the State of Washington. The names of the high school principals were obtained from the 1964-65 edition of the Washington Education Directory. One questionnaire was addressed to the principal of each high school. Only one questionnaire was sent to each high school to avoid duplication of responses. The principal was selected as recipient because his name was listed in the Washington Education Directory.

There were indications on several of the returned questionnaires that the high school principal had apparently directed the Business Education Department Chairman to complete and return the questionnaire.

II. RESEARCH INSTRUMENT

The research instrument for this study was a fivepage questionnaire patterned after the Thomas study questionnaire. The format was changed slightly. Several
questions were expanded to provide additional detail to the
information requested in the Thomas study. Additional items
not covered by the Thomas study were added.

CHAPTER V

ANALYSIS OF DATA AND COMPARISON WITH THE THOMAS STUDY

Chapter V presents questionnaire results in tabulated form and compares the results of this study with the results of the Thomas study.

The Thomas study statistics are tabulated results of 224 returned questionnaires. Of the 248 questionnaires mailed by Thomas in December, 1953, 232 were returned for a return percentage of 93.5. Of those returned, 224 were usable.

The questionnaires for this study were mailed to 293 high school principals and were completed by 244 high schools for a return percentage of 83.3. Eight responses were not used because of incomplete information supplied. The tables for this study are based on the reports from 236 public high schools of Washington State.

The total number of students enrolled in the 236 schools responding to the questionnaire of this study was 132,888. The high school enrollments ranged from a low of six students to a high of 2,500 students. The mean enrollment of the 236 high schools was 563.1 students.

The total number of students enrolled in the 224 reporting schools of the Thomas study was 78,363. The enrollments ranged from a low of 30 students to a high of 2,400 students. The mean enrollment was 178.5 students.

ments between 0-99 and 100-199 occurred most frequently with each group representing 17.4 per cent of the total enrollment. Of the schools reporting, 115 schools, or 48.7 per cent, had enrollments of less than 300 students. Schools with enrollments of more than 300 students made up 51.3 per cent of the total reporting which represents 121 of the schools. Schools with enrollments of less than 500 students made up 62.3 per cent of the total schools reporting.

The Thomas study shows that the high schools with enrollments of 0-99 students constituted 29.5 per cent of the total schools reporting. The 100-199 group contained 24.3 per cent of the total enrollment. The Thomas study also shows that 68.6 per cent of all the schools reporting had an enrollment of less than 300 students. Eighty-two per cent of the schools had an enrollment of less than 500 students.

It is significant to note that schools with enroll-ments of 0-99 have decreased by 41.0 per cent since 1953. In the 100-199 group, the percentage of decrease has been 20.8 per cent. The number of schools with less than 300 students has decreased by 28.8 per cent and schools with less than 500 students decreased 20.9 per cent between 1953 and 1965. The mean enrollment of students has increased from 178.5 in 1953 to 563.1 in 1965.

TABLE I GROUP PERCENTAGE OF CURRENT HIGH SCHOOL ENROLLMENT

Group	schools	Percentage of schools reporting 1953	schools	Percentage of schools reporting 1965
0- 99 100- 199 200- 299 300- 399 400- 499 500- 599 600- 699 700- 799 800- 899 900- 999 1,000-1,099 1,100-1,199 1,200-1,299 1,300-1,399 1,400-1,499 1,500-1,599 1,600-1,699 1,700-1,799 1,800-1,999 2,000-2,099 2,100-2,199 2,200-2,299 2,300-2,399 2,400-2,499 2,500-2,599	6643337366340123123401010010 	53866377380493493804040040 294.571.221.100001.10000000000000000000000000	41 41 318 18 19 72 58 57 33 52 4 2 2 2 2 0 0 1 2 3 6	17.4.06.94.18.08.14.10.33.18.78.88.80.04 23.23.1.20.10.00.00.00.00.00.00.00.00.00.00.00.00
Totals	<i>22</i> 4	99•0	230	33• O

Table II presents the number of three-year high schools grouped according to total school enrollments. Table III presents the same type of information for four-year high schools. The 1953 Thomas study found that 78 per cent of the high schools were four-year high schools. Twenty-two per cent of the schools were three-year high schools according to the questionnaire responses.

This study shows that 61 per cent of the total high schools responding were four-year high schools; 39 per cent are three-year high schools.

In 1953, Thomas found that there were no three-year high schools in the 0-99 enrollment classification (Table II). In 1965, one school of the 236 reporting in the 0-99 classification was a three-year high school.

High schools in the Thomas study with enrollments of 500 or more students made up 61.4 per cent of the total three-year high schools as compared with 81.3 per cent of the same group in this study. High schools with enrollments of less than 300 students account for 40.9 per cent of the total number of schools responding in the 1953 Thomas study. The same classification makes up only 7.7 per cent of the total in 1965.

Table III presents data relating to the number of four-year high schools in the State of Washington as indicated by the schools responding to the questionnaires of 1953 and 1965.

TABLE II
THREE-YEAR HIGH SCHOOLS BY ENROLLMENTS

Group	sch repo	er of ools rting 1965	Perce of sc repor 1953	hools	Numbe 3-y scho 1953	ear ols	Perce of 3- scho 1953	entage year ools 1965
0- 99 100- 199 200- 299 300- 399 400- 499 500- 599 600- 699 700- 799 800- 899 900- 999 1000-1099 1100-1199 1200-1299 1300-1399 1400-1499 1500-1599 1600-1699 1700-1799 1800-1899 1900-1999 2000-2099 2100-2199 2200-2299 2300-2399 2400-2499 2500-2599	643337366340123123401010010	41384829725857335242222001	2944.57.738.04.934.938.04.04.004.0 2241.57.12.21.10.001.001.10.000.000.000.0000.0	17.4.06.94.18.08.14.10.33.1.978.88.80.04 8.14.10.33.1.978.88.80.04	01194623211011102130000010	11546308624657335132212001	0.54231100000000000000000000000000000000000	1.1546398624657335132212001 1.1546.398624657335132212001
Totals	224	236	99.8	99•8	49	91	100.0	100.0

TABLE III
FOUR-YEAR HIGH SCHOOLS BY ENROLLMENTS

Group	sche repo	er of ools rting 1965		ntage hools ting 1965	4- sch	er of year ools 1965	of 4-	entage -year ools 1965
							<u> </u>	<u> </u>
0- 99 100- 199 200- 299 300- 399 400- 499 500- 599 600- 699 700- 799 800- 899 900- 999 1000-1099 1100-1199 1200-1299 1300-1399 1400-1499 1500-1599 1600-1699 1700-1799 1800-1899 2000-2099 2100-2199 2200-2299 2300-2399 2400-2499 2500-2599	643337366340123123401010010 	41 41 31 41 41 41 41 41 41 41 41 41 41 41 41 41	294.3866377380493493804040040 224157.3804934938040400000000000000000000000000	17.4.06.94.18.08.14.10.33.1.97.88.88.00.4 17.53.53.30.23.23.1.20.10.00.00.00.00.00.00.00.00.00.00.00.00	643491134230012102101010000	40 40 28 18 52 11 01 20 00 00 01 10 00 00	37.76 13.76 13.17 10.06 1.60 10.06 1	27.66 27.99.53.100000000000000000000000000000000000
Totals	224	236	99•8	99.8	175	145	100.0	100.0

Seventy-eight per cent of the schools responding to the 1953 questionnaire indicated they were four-year high schools. In 1965, sixty-one per cent of the responding schools were four-year high schools.

Of the total schools responding, 61.4 per cent of the 1953 study were schools with enrollments of under 500 students as compared with 89.5 per cent of the schools in the same classification in 1965.

Of the schools with enrollments of 1,000 or more students, 5.2 per cent of the 1953 study were four-year high schools and 4.2 per cent of the 1965 study were four-year high schools.

Table IV shows the total number of teachers employed in the public high schools of Washington in 1953 and 1965 as indicated by questionnaire responses.

In 1953, there were 3,843 teachers and 78,363 students in the 224 schools responding to the questionnaire. The student-teacher ratio was 20.4 to 1.

In 1965, the reported student enrollment was 132,888 and the number of teachers employed was 6,478. The student-teacher ratio was 20.5 to 1.

In 1953, 79.4 per cent of the school reporting employed less than 25 teachers. In 1965, sixty-one per cent of the schools employed less than 25 teachers. Only .4 per cent of the schools in the Thomas study employed more than

TABLE IV
TOTAL NUMBER OF TEACHERS EMPLOYED

Teachers Employed	19	953	1965		
Per High School	Frequency	Percentage of Schools Reporting	Frequency	Percentage of Schools Reporting	
0 - 4 5 - 14 15 - 19 20 - 24 25 - 34 35 - 39 40 - 49 45 - 54 50 - 64 50 - 79 65 - 69 70 - 84 85 - 89 90 and over	17 86 43 21 18 12 4 4 2 0 6 0 5 2 2 1 0 0	7.6 4.1 4.9 6.4 1.4 9.6 4.8 8.9 9.0 7.0 2.9 9.4 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0	54 42 19 10 15 15 10 15 17 12 13 12	2.1 18.6 22.0 10.2 8.1 4.2 6.4 5.1 2.1 7.1 2.1 3.0 8.1 1.8	
Totals	224	100.0	236	100.0	

80 teachers, while 3.0 per cent of the schools in this study employed more than 80 teachers.

Table V shows the total number of full-time and part-time business teachers in the public high schools of Washington in 1953 and 1965. Thomas did not construct separate tables showing the total number of full-time business teachers and the number of part-time business teachers. He combined all the information and this is shown on Table V, along with totals for this study. The number of full-time business teachers, as determined by this study, is shown in Table VI and the number of part-time business teachers is shown in Table VII.

In the 1953 study, the percentage of schools reporting which employed less than one business teacher was 13.8 per cent as compared with 49.1 per cent in 1965. Those schools reporting in 1953 indicated 59.8 per cent employed at least two business teachers while 26.8 per cent of the high schools of this study indicated they hired two business teachers.

Table V shows that 73.6 per cent of the schools of the Thomas study employed two or less business teachers and that 26.4 per cent of the schools employed more than two business teachers. In 1965, 75.9 per cent of the schools employed less than two business educators while 24.1 per cent of the schools employed more than two business teachers.

TABLE V

TOTAL NUMBER OF FULL-TIME AND PART-TIME BUSINESS EDUCATION TEACHERS

Business Teachers		1953	<u>1965</u>		
Employed Per School	Frequenc	Frequency Percentage		Percentage	
Less than 1	31	13.8	192	49.1	
2	134	59.8	105	26.8	
3	28	12.5	30	7•7	
4	7	3.1	19	4.8	
5	8	3.6	12	3.1	
6	4	1.8	9	2.3	
7	7	3.1	10	2.6	
8	2	•9	5	1.3	
9	1	•5	4	1.0	
10	0	•0	2	•5	
More than 10	_ 2	.9	3	.8	
Totals	224	100.0	391	100.0	

In 1953, 1.4 per cent of the schools employed nine or more business teachers as compared with 2.3 per cent in the 1965 study.

Table VI shows the total number of full-time business education teachers in Washington State public high schools as determined by this study.

In 199 responses, the principals indicated they employed from one to ten business education teachers. The most frequently occurring number of full-time business teachers was one, as indicated by 105 high schools.

Table VII shows the total number of part-time business teachers. One hundred and fifty-seven principals indicated they employed a total of 192 part-time business teachers. Teachers employed for more than four hours a day were considered full-time business teachers and are tabulated as Table VI.

Twenty-eight schools indicated they employed a total of 35 business teachers for four hours of business subject matter instruction each day. Business teachers employed to teach business subjects for three hours per day reported by 42 schools totaled 54 teachers. Thirty-four schools employed 39 teachers to teach business subjects two hours per day, and 53 schools employed 64 teachers to teach business subjects one hour per day.

TABLE VI

TOTAL NUMBER OF FULL-TIME BUSINESS
EDUCATION TEACHERS IN 1965

Business Teachers Employed Per High School	Frequency
Less than 1	192
1	105
2	30
3	19
4	12
5	9
6	10
7	5
8	4
9	2
10	3
Total	391

TABLE VII

TOTAL NUMBER OF PART-TIME BUSINESS
EDUCATION TEACHERS IN 1965

Length of Time Employed Per Day	Number of Schools Reporting	Frequency
Four hours	28	35
Three hours	42	54
Two hours	34	39
One hour	_53	64
Totals	157	192

Reporting schools in this study, tabulated as Table VIII, indicated that business education teachers served as advisors to thirty-eight different clubs or activities. The group which business teachers most often advised was school class. A further breakdown of class advisement showed that 40 of the 122 total business teachers advised the sophomore class. Thirty-nine business teachers advised the senior class, 33 advised the junior class, and 10 advised the freshman class.

The yearbook staff was advised by 56 business teachers as indicated by this study. The newspaper staff was advised by 46 business teachers. Forty-six business teachers were connected with the athletic programs of the high schools reporting.

Sixty-one business teachers served as advisors to clubs directly related to their area of specialization (Future Business Leaders of America, commercial club, future secretaries, business club, business education club, shorthand club, Order of Gregg Artists, distributive education club, merchandising club).

Table IX summarizes the business education subject offerings in the public schools of the state of Washington based on 224 reports in 1953 and 236 reports in 1965.

In 1953 and in 1965, typewriting was offered by more schools than any other business subject. In 1953, 98 per

TABLE VIII

CO-CURRICULAR ACTIVITIES TO WHICH BUSINESS EDUCATION TEACHERS SERVE AS ADVISORS BASED ON 236 REPORTING SCHOOLS IN THIS STUDY

Activity	Frequency
Class Advisor	122
Annual (Yearbook)	56
Newspaper	46
Athletics	46
A. S. B. Bookkeeper and Advisor	46 36 33 26
Girls' Club	33
Distributive Education Club	26
Pep Club and Rally Squad	25
Future Business Leaders of America	21
National Honor Society	18
Ticket Sales	17
Service Club	17
Department Head	16
Student Bookstore	14
Future Teachers of America	13
Commercial Club	11
Drill Team	8
Girls' Athletic Association	7
Boys' Club	7 5 4
Debate	4
Future Secretaries	4
Business Club	4
Library	4
Ski Club	4
Dramatics	3
Future Homemakers of America	3
Lettermen's Club	2
Majorettes	2
Nurses Club	2
Photography Club	2
Business Education Club	4 3 3 2 2 2 1 1 1
Careers Club	1
Merchandising Club	1
Order of Gregg Artists	1
Publicity Club	1
Shorthand Club	1
Tri-Hi-Y	1
Young Republicans	<u>l</u>
Total	280
10001	

TABLE IX
FREQUENCY OF BUSINESS SUBJECT OFFERINGS

Subject	Scho Offe		Percent of Schools Offering 1953 1965			
Typewriting Bookkeeping Shorthand Office Training Economics Business Law	219 217 191 129 80 69	210 205 181 70 111 92	98.0 97.0 85.0 58.0 36.0 31.0	90.0 87.0 76.0 30.0 47.0 39.0		
Business Training or General Business (9th grade) Business Arithmetic Office Machines Work Experience Transcription Business English Commercial Geography Distributive Education Consumer Education	56 50 41 38 37 37 23 20	50 10 65 28 70 39 7 39 13	25.0 22.0 18.0 17.0 17.0 10.0 10.0	21.0 4.0 28.0 12.0 30.0 17.0 3.0 17.0 5.0		
Business Training or General Business (12th grade) Salesmanship Penmanship Business Administration Advertising Secretarian Training (Practice) Consumer Math Business Practice General Clerical Practice Personal Bookkeeping Advanced Typewriting Advanced Bookkeeping Recordkeeping Notehand Filing Data Processing	196 322221 1100000	4 532 2 1 0 0 8 0 1 6 8 5 4 2 1 1 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9.0 1.0 1.0 1.0 1.0 0.0 0.0 0.0	2.0 2.0 1.0 .8 .8 17.0 0.0 0.0 16.0 0.0 68.0 20.0 6.0 2.0		

cent of the schools offered typewriting and in 1965, 90 per cent of the schools offered typewriting. Bookkeeping and Shorthand rank second and third respectively in the two studies. Bookkeeping was offered by 97 per cent of the schools in 1953 and by 87 per cent of the schools in 1965. In 1953, 85 per cent of the schools offered shorthand; and in 1965, 76 per cent offered shorthand.

The business subject which was ranked fourth in offerings in 1953 was Office Training, with 58 per cent of the schools reporting offering the course. In 1965, however, 30 per cent of the schools offered Office Training. The fourth most offered business subject in 1965 was Advanced Typewriting, which was offered by 68 per cent of the schools reporting.

Economics was offered by 36 per cent of the schools in 1953 and by 47 per cent of the schools in 1965.

Business Law was offered by 31 per cent of the Thomas study schools and by 39 per cent of the schools in this study.

Consumer Math, Business Practice, and Personal Bookkeeping were offered by schools in the Thomas study, but were not offered by schools of this study. Courses offered by this study, but not in the Thomas study, included Advanced Typewriting, Advanced Bookkeeping, Recordkeeping, Notehand, Filing, and Data Processing.

Changes in course offerings, which may be considered significant, from 1953 until 1963, are the decrease in offerings of Business Arithmetic. In 1953, 22 per cent of the schools offered Business Arithmetic, but in 1965 only 4 per cent of the schools indicated they offered Business Arithmetic.

In 1953, none of the schools reported offering
Recordkeeping. In 1965, six per cent of the schools
offered the course. The offering of an Office Machines course
has increased from 18 per cent of the schools in 1953 to 28
per cent of the schools in 1965. Secretarial Training or
Secretarial Practice was offered by only one per cent of
the schools reporting in 1953; however, 17 per cent of the
schools reporting offered Secretarial Practice in 1965.

Table X presents data showing the total number of business machines, other than electric and manual type-writers, that were available for use in business education instruction. The total number of business machines available in 1953 was 1,096 as reported by 224 high schools. In 1965, this number had increased to 2,339 business machines as reported by 236 schools. This represents a percentage increase of 113.4 between 1954 and 1965. The Thomas study showed 27.6 per cent of the total business machines available were duplicating machines. In 1965, duplicating machines accounted for 25.1 per cent of the

TABLE X

TOTAL NUMBER OF BUSINESS MACHINES AVAILABLE
IN THE BUSINESS EDUCATION DEPARTMENTS

	Total	Percent	Total	Percent
	Machines		Machines	of Total Machines 1965
Duplicating	303	27.6	586	25.5
Key-Driven Calculators	181	16.4	218	9.3
Ten-Key Adding	178	16.3	590	25.2
Full-Keyboard Adding	175	16.2	282	12.1
Rotary Calculators	132	12.0	314	13.4
Dictating & Transcribin	g 109	9•9	333	14.3
Special:				
Bookkeeping	17	1.5	8	• 34
Key Punch	0	0.0	3	.12
Addressograph	1	.1	0	0.0
Other	0	0.0	5	.21
Totals	1,096	100.0	2,339	100.00
Other	0	0.0	5	.2]

total number of business machines. Key-driven calculators made up 16.4 per cent of the total business machines in 1953, but in 1965 the percentage had decreased to 9.3 per cent. Ten-key adding machines increased from 16.3 per cent in 1953 to 25.2 per cent in 1965; full-keyboard adding machines decreased from 16.2 per cent of the total business machines in 1953 to 12.1 per cent of the total machines in 1965; and rotary calculators increased slightly from 12.0 per cent in 1953 to 13.4 per cent in 1965. The number of dictating and transcribing machines increased from 9.9 per cent of the total business machines in 1953 to 14.3 per cent of the total business machines in 1965. The number of special machines (bookkeeping, key punch, addressographs, and miscellaneous) decreased from 1.6 per cent in 1953 to less than one per cent in 1965.

Table XI presents a summary of the number of electric typewriters in use in the high schools of the 1953 study and of this study. The Thomas study shows that in 1953, 73.4 per cent of the reporting schools did not have any electric typewriters for use in business education instruction. In 1963, however, only 11.9 per cent of the schools did not have any electric typewriters for business education instruction. In 1953, 97 per cent of the schools reporting had three or less electric typewriters in use in business classes, whereas in 1965, 45.4 per cent of the schools reporting had less than three electric typewriters in use.

TABLE XI
ELECTRIC TYPEWRITERS PER HIGH SCHOOL

Electric Typewriters]	1953	19	965
Per Schools Reporting	Frequency	Percentage	Frequency	Percentage
0	164	73.4	28	11.9
1	35	15.6	29	12.3
2	13	5.8	34	14.4
3	5	2.2	16	6.8
4	2	•9	17	7.2
5	0	•0	15	6.4
6	3	1.3	14	5•9
7	0	•0	15	6.4
8	1	• 4	10	4.2
9	1	. 4	6	2.5
10	0	•0	8	3.4
11	0	.0	1	• 4
12	0	•0	4	1.7
13	0	•0	2	.8
14	0	.0	4	1.7
Over 15	0	.0	_33	14.0
Totals	224	100.0	236	100.0

The Thomas study indicates that in 1953 there were no schools with more than nine electric typewriters in use, but in 1965, 22 per cent of the schools had more than nine electric typewriters in use. In the study, one school reported that 70 electric typewriters were available for use by the business classes.

Table XII, which is an expansion of Table XI, presents a summary of the total number of electric typewriters in use in 236 schools reporting in this study according to manufacturer of the machine. The questionnaire did not attempt to obtain reasons for the high school's decision to use a particular make of electric typewriter.

A significant point to note is that almost sixty per cent (59.7%) of the electric typewriters used in the reporting high schools of Washington are produced by the International Business Machines Corporation (IBM). The Royal electric typewriter is the second most frequently used machine. Of the reporting schools, 18.4 per cent indicated use of this make. The Smith-Corona brand made up 10.6 per cent of all electric typewriters used in Washington, and the Underwood electric made up 7.2 per cent of the total. Remington electric typewriters accounted for 3.0 per cent of the total electric typewriters used. Other makes of electric typewriters accounted for 1.1 per cent of the total number.

TABLE XII

MANUFACTURER AND NUMBER OF ELECTRIC TYPEWRITERS

Machine	Frequency	Per Cent of Total Electric Typewriters
IBM	1,044	59 •7
Royal	322	18.4
Smith-Corona	186	10.6
Underwood	126	7.2
Remington	53	3.0
Other	19	1.1
Totals	1,750	100.0

Table XIII shows the number of manual typewriters in use in business education instruction by the schools responding to the 1953 questionnaire and the 1965 questionnaire.

It is significant to note that in 1953, 86.7 per cent of the schools responding to the questionnaire indicated they had between 0 and 59 manual typewriters available for business education. In 1965, this percentage had decreased by 12.5 per cent. Seventy-four and two-tenths per cent of the schools reporting had between 0 and 59 manual typewriters available for instruction.

The most frequently occurring number of manual type-writers per school in 1953 was between 10 and 19 as indicated by 32.6 per cent of the schools. In 1965 the most frequently occurring number of typewriters per school had increased to the 20 to 29 range, accounting for 30.0 per cent of the schools reporting.

Only .4 per cent of the 1953 schools indicated they had more than 159 manual typewriters in use by their business education departments. In 1965, however, 3.0 of the schools indicated use of more than 159 manual typewriters. In .9 per cent of the schools, between 240 and 429 manual typewriters were in use in 1965.

TABLE XIII
MANUAL TYPEWRITERS PER HIGH SCHOOL

Manual Typewriters Per Schools		953		965
Reporting	Frequency	Percentage	Frequency	Percentage
0 - 9 10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 109 110 - 119 120 - 129 130 - 139 140 - 149 150 - 159 160 - 169 170 - 179 180 - 189 190 - 209 210 - 219 220 - 229 230 - 239 240 - 249	3358546314403022000010000	1.36 1.07 1.07 1.07 1.07 1.09 1.00 1.00 1.00 1.00 1.00 1.00 1.00	20312097326154213102101002	5016580895417943409404009 84938335 2 21 1 · · · · · · · · · · · · · · · ·
Totals	224	100.0	236	100.0

Table XIV, which is an expansion of Table XIII, details the total number of manual typewriters used in the 236 reporting schools of this study according to manufacturer of the machine. The questionnaire did not attempt to obtain reasons for the schools! decision to use a particular make of typewriter.

A total of 10,000 manual typewriters were used by the 236 schools reporting. Of the total number of manual typewriters, 4,454 were Royal typewriters. Royal typewriters, therefore, accounted for 44.5 per cent of the total manual typewriters. The Underwood brand was used 2,122 times, or 21.2 per cent of the total. Remington typewriters and Olympia typewriters accounted for 15.7 per cent and 13.0 per cent respectively of the total number of manual typewriters. Smith-Corona accounted for 4.1 per cent of the total, and all other manual typewriters made up 1.5 per cent of the total manual typewriters used by the reporting high schools.

Table XV indicates the number of business clubs sponsored by the business education departments of the reporting high schools of this study. Forty-four schools indicated their business education department sponsored some type of business club. Twenty-two schools, one-half of those reporting, stated they had a Future Business Leaders of America club in their school. A Commercial Club

TABLE XIV

MANUFACTURER AND NUMBER OF MANUAL TYPEWRITERS

Machine	Number of Typewriters	Percent of Total Manual Typewriters
Royal	4,454	44.5
Underwood	2,122	21.2
Remington	1,570	15.7
Olympia	1,297	13.0
Smith-Corona	412	4.1
Other	145	1.5
Totals	10,000	100.0

TABLE XV
BUSINESS CLUBS SPONSORED BY BUSINESS EDUCATION DEPARTMENTS

Club	Frequency
Future Business Leaders of America	22
Commercial Club	8
Distributive Education Club	5
Future Secretaries	3
Administrative Secretaries	1
Business Education Club	1
Certified Prospective Accountants	1
Merchandising Club	1
Order of Gregg Artists	1
Shorthand Club	1
Total	44

was sponsored by the business education department of eight schools. Five schools indicated they had a Distributive Education Club, three schools had a Future Secretaries Club, and one school each reported having an Administrative Secretaries Club, Business Education Club, Certified Prospective Accountants, Merchandising Club, Order of Gregg Artists, and Shorthand Club.

There were a total of 44 business clubs in 236 public high schools of Washington as shown by the returned question-naires. The total membership of the 44 clubs was 1,337, indicating an average club enrollment of 30.4 students.

Eighteen of the clubs met on school time, whereas 26 clubs did not meet during school time. None of the 44 clubs met daily, 3 met bi-weekly, 4 met weekly, 14 met bi-monthly, and 23 met monthly. The average length of meetings for all clubs was 46 minutes.

Thomas indicated in his study that 20 of the 224 reporting schools had some type of business club. Of the 20, 11 did not meet on school time and the majority of the clubs met either monthly or bi-monthly. The average length of meeting time was 41.3 minutes.

Table VI is a summary of subject offerings for the 1964-65 school year. The table shows the subjects offered and also indicates at which grade level the subject may be taken; whether the course is an elective or required subject;

TABLE XVI SUBJECT OFFERINGS IN 1965

Grade	Leve	1				Off	ered					
At Whi Subject Be Tak	lch t Ma		ect1ve	Required	Subjects Offered	Yearly	lter. ears		Tota emest Offer	ers		Total Times Offered
9 10	11	12	B	Re		- X	A N	1	2	3	4	
0 1 38 4 4 15 2 14 35 2 65 1 5 3 0 0 0 0 2 4 1 1 1	1 8 73 64 1 26 2 179 26 11 11 4 0 2 41 39 18 15	2 34 86 38 91 22 174 40 11 10 36 37 56 30 37	28 39 55 44 44 55 66 34 24 11 31 55 66 34 41	0 1 0 2 6 0 2 0 1 0 0 0 0 0 0 0 0	Business Administration Business English Business Law Commercial Geography Economics Penmanship General Business Advanced General Business Bookkeeping Advanced Bookkeeping Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice	2 37 73 85 2 35 172 40 9 9 9 9 9 62 53 33 39	2 20 6 1 4 0 0	0 254 2 69 1 72 1 32 7 0 0 2 14 10 58	2 10 29 3 4 1 6 5 9 1 4 3 2 1 2 4 2 4 2 4	000000000000000000000000000000000000000	1 0 0 0 0 0 0 0 0 0 0 1 0 0 4 0 0 0 2 1 1	2 39 7 113 5 45 45 139 2 550 81 139 650 841

TABLE XVI (Cont.)

Grade Level At Which Subject May Be Taken	ch > 9 t May H		Subjects Offered		ered 	Tot Semes Offe	Total Times Offered		
9 10 11 12	Eleci	Red		Yearly	Alte	1 2	3_	4	
0 0 1 1 3 37 165 152 0 1 22 59 2 0 2 3 63 179 176 174 3 42 134 147 0 2 8 25 1 5 5 6 0 0 0 1	2 181 70 4 200 161 28 9	0 0 0 0 10 0 0	Filing Shorthand Transcription Notehand Typewriting Advanced Typewriting Work Experience Business Math Data Processing	1 155 65 4 187 145 26 7	1 26 2 0 1 5 0 4	1 1 3 117 5 53 3 0 3 156 19 120 1 20 3 7 1 0	001042000	0 41 1 0 12 4 1 0	2 181 70 4 210 161 28 10

whether the course is offered on a yearly or alternate-year basis; and the total number of semesters the course is offered. A special column indicates how often the course was offered in the study.

According to 236 responses obtained in 1965, type-writing was offered in 210 schools in the State of Washington, making it the most often offered course in the business education area. In 200 situations, typewriting was an elective course, but in ten instances typewriting was required, indicating it was the most often required business subject. Typewriting is taken at the ninth grade level in 63 cases. The figures showed that typewriting may be taken in the tenth, eleventh, or twelfth grades in over 170 schools.

The second most offered business course in 1965 was bookkeeping, with 205 schools indicating they offered bookkeeping. The course was required in only one situation, whereas it was an elective in 204 schools. Only three schools offered bookkeeping in the ninth grade, 65 offered it in the tenth grade, but 179 offered it in the eleventh grade and 174 offered bookkeeping in grade twelve. Bookkeeping was offered on an alternate year basis in 20 schools, but on a yearly basis in 172 schools. The bookkeeping course was offered for two semesters in 165 schools as opposed to offerings of one semester by one school, three semesters by no schools, and four semesters by ten schools.

The third most offered business education course in 1965 was shorthand, which was offered by 181 reporting schools. Shorthand was an elective in all schools and was offered yearly in 155 schools with 26 schools offering it on an alternate year basis. Shorthand, as with bookkeeping, may be taken in the ninth and tenth grades in a limited number of schools. However, the course was most frequently offered in the eleventh and twelfth grades. A few more schools (165) offered shorthand in the eleventh grade as compared with 152 offerings in grade twelve. Shorthand was offered for two semesters in 117 schools. No schools offered the course for three semesters, only three schools offered it for one semester, but 41 schools offered shorthand for four semesters.

As shown by Table XVI, page 43, Advanced Typewriting was the fourth most frequently offered business course. No school required the course, but 161 schools offered it on an elective basis. The course was most frequently offered in the senior year, next in the junior year, next in the tenth grade, and finally, the freshman year. Only three schools offered Advanced Typewriting in the freshman year. One semester of Advanced Typewriting was offered in 19 schools, 120 schools offered two semesters, two schools offered three semesters, and four schools offered four semesters.

Of the total of twenty-eight subject offerings in 1965, only nine, or 32.14 per cent, are required by one or more schools. The other nineteen business education courses are offered on an elective basis. All 28 were open to seniors; 26, or 92.86 per cent, were open to juniors; 23, or 82.14 per cent, were open to sophomores; and 16, or 57.14 per cent, were open to freshmen.

Table XVII is taken from the Thomas study and can be used for comparative purposes.

Table XVIII, page 49, presents a summary of business education classes which principals felt should be added and/or were being added to the class offerings of the high schools. Two hundred and forty-three possible course offering additions were indicated with 105 actual class offerings being added to the schedule for the 1966 school year.

The course most often considered for possible addition in 1966 was Business Machines. Thirty-one schools indicated they felt the courst should be offered, while thirteen schools actually planned to offer the course.

Economics and Business Law were considered for possible addition in 1966 in 22 and 21 schools respectively. Economics was actually going to be offered in 12 schools; Business Law was actually going to be offered in 11 schools.

TABLE XVII
SUBJECT OFFERINGS IN 1953

Grade Level At Which Subject May Be Taken	ective	Required	Subjects Offered	Yearly o	Alter. H Years p			Tot emes Offe	ters			Total Times Tfered
9 10 11 12	田	Re		>	A Y	1	2	3	4	5	6	
1 65 97 214 0 1 0 0 18 152 212 202 0 0 2 2 20 25 20 23 2 3 14 34 0 0 2 2 1 9 44 64 4 13 14 14 0 4 47 71 3 1 0 0 43 21 8 5	212 1 212 48 32 66 23 78 48	507025030208	Bookkeeping Personal Bookkeeping Typewriting Consumer Math Business Arithmetic Business English Business Administration Business Law Commercial Geography Economics Penmanship Business Training or General Business	177 1 218 2 42 37 0 54 17 54 3 46	40 0 1 0 8 0 2 15 6 6 10	0 0 1 25 30 2 50 19 71 52	185 153 25 7 0 19 4 9 44	0 0 13 0 0 0 0 0 0	32 0 152 0 0 0 0 0 0	00000000000	0 0 1 0 0 0 0 0 0	217 1 219 2 50 37 2 69 23 80 56
0 2 5 18	19	0	(9th Grade) Business Training or General Business or Senior Business Training (12th Grade)	16	3	4	15	0	0	0	0	19
0 0 0 1 0 0 2 2 0 1 1 5	1 2 6	0 0 0	Business Practice Distributive Education Salesmanship	1 22 6	0 0 0	1 1 4	0 21 2	0 0 0	0 0 0	0 0 0	0 0 0	1 2 6

TABLE XVII (Continued)

Grade Which May E	n S	ubje	ect			Subjects Offered	Offe	red			Tot emes Offe	ters			Total Times Cfered
9]	10	11	12						1	2	3	4	5	6	
_	5001510 15010 3	9 2 0 171 61 12 20 2	16 0 1 181 126 37 40 2	18 2 1 187 125 34 40 1	20044311	Consumer Education Advertising General Clerical Practice Shorthand Office Training Transcription Office Machines Secretarial Training and Science Work Experience	15 2 1 163 125 36 40 2	5 0 28 4 1 0	16 1 1 13 14 21 0	4 0 0 112 107 19 19 2 28	0 1 0 7 0 0 0	0 0 71 8 4 1 0	0 0 0 0 0 0 0	0 0 0 0 1 0 0 0	20 2 1 191 129 37 41 2

TABLE XVIII

BUSINESS EDUCATION SUBJECT OFFERINGS
WHICH COULD BE ADDED

Subject	Number of Schools Indicating Possible Addition 1953	Number of Schools Indicating Possible Addition 1965
Office Machines Business Arithmetic Business English Business Law Office Practice General Business Shorthand Economics Shorthand (Second Year) Consumer Education Transcription Distributive Education Business Geography General Business (9th Grade) Salesmanship Business Training Bookkeeping Work Experience	37 22 20 15 15 11 98 88 75 55 55 53	31 8 20 21 12 20 10 22 58 3 12 0 0 3 6 7
General Business (12th Gradeonly for an intense course) Typing (Second Year)	3 3	0 3
Typing (Personal Usefor a one-semester course) Penmanship Advertising Bookkeeping (Second Year) Filing Business Administration Business Printing Simplified Record Keeping Business Correspondence Clerical Training Boys' Shorthand Speedwriting Introduction to Data Processing	2 2 2 2 1 1 1 1 1 1 0	2 0 7 0 1 0 1 0 6 0

TABLE XVIII (Continued)

Number of Schools Schools Schools Indicating Possible Addition Addition 1953 1965					
Notehand 0 3 Retail Sales 0 2 Stenographic Machines 0 3 Typewriting III 0 2 Advanced General Business 0 1 Briefhand 0 1 Business Speaking 0 1 Key Punch 0 1 Marketing 0 1 Merchandising 0 1	Subject	Schools Indicating Possible Addition	Schools Indicating Possible Addition		
	Notehand Retail Sales Stenographic Machines Typewriting III Advanced General Business Briefhand Business Speaking Key Punch Marketing Merchandising	0 0 0 0 0 0 0 0 0 0	3 2 3 1 1 1 1		

Twenty high schools indicated they felt Business
English and General Business should be a part of their
subject offerings. Nine of the schools planned to offer
Business English in 1966, but none of the schools responding indicated plans to offer General Business.

Table XIX shows a listing of the business education subjects which 224 schools in 1953 felt could be eliminated or were of least value. The list also includes data from 236 schools of this study.

The 1953 study shows twelve subjects which the schools felt could be eliminated from the business education subject offerings. The 1963 study lists thirteen courses which were being considered for possible elimination from offerings.

Shorthand was being considered for elimination by 3.6 per cent of the schools reporting in 1953 and by 1.7 per cent of the schools in 1965. Shorthand II was also being considered for possible elimination by .5 per cent of the schools of the Thomas study and by .4 per cent of the schools in this study. Transcription was being considered for possible elimination by .9 per cent of the schools in this study but by no schools in the Thomas study.

Advanced Typewriting, as indicated by 2.7 per cent of the schools of the Thomas study and by 2.1 per cent of the schools of this study, was under serious consideration for possible elimination.

TABLE XIX

BUSINESS EDUCATION SUBJECT OFFERINGS
WHICH COULD BE ELIMINATED

Subject	Number of	Percent of	Number of	Percent of
	Schools	Schools	Schools	Schools
	Indicating	Indicating	Indicating	Indicating
	Possible	Possible	Possible	Possible
	Elimination	Elimination	Elimination	Elimination
	1953	1953	1965	1965
Shorthand Advanced Typewriting General Business Office Training Bookkeeping (first year) Business Law Business Mathematics Commercial Geography Bookkeeping II Shorthand II Retail Selling Clerical Practice Notehand Transcription Economics Recordkeeping Remedial Typewriting Briefhand Total	865444331111000000 41	3.72.888 1.883.555.5000000000000000000000000000000	4 550 0 1 2 0 3 1 0 0 3 2 1 1 1 1 3 0	1.7 2.1 2.0 0.0 4.9 0.3 4.0 0.0 1.3 9.4 4.4

General Business was another course considered by schools of both studies for possible elimination. In 1953, 2.2 per cent, and in 1965, 2.1 per cent of the schools considered this subject for possible elimination.

Notehand, Transcription, Economics, Recordkeeping, Remedial Typewriting, and Briefhand were the courses in the 1965 study which were being considered for possible elimination. They had not been mentioned in the 1953 study as courses for possible elimination.

Table XX is an extension of Table XIX. Table XX shows the courses which are being considered for possible elimination by 236 high schools reporting for this study. The table also shows the subject offerings which are actually being eliminated by the 236 reporting schools.

Advanced Typewriting and General Business were being considered for possible elimination by five reporting schools. Five reporting schools indicated they actually did plan to eliminate Advanced Typewriting and General Business from their subject offerings.

TABLE XX

BUSINESS EDUCATION SUBJECT OFFERINGS WHICH COULD BE ELIMINATED AND ARE BEING ELIMINATED IN 1966

Advanced Typewriting 5 General Business 5 Shorthand 4 Bookkeeping II 3 Notehand 3 Business Mathematics 2 Transcription 2 Economics 1 Recordkeeping 1 Remedial Typewriting 1 Shorthand II 1 Business Law 1 Briefhand 1	Subject	Number Considering Eliminating Courses	Number Actually Eliminating Courses		
Total 30 14	General Business Shorthand Bookkeeping II Notehand Business Mathematics Transcription Economics Recordkeeping Remedial Typewriting Shorthand II Business Law Briefhand	5 4 3 2 2 1 1 1 1	5 0 0 1 0 0 0 1 0 1		

CHAPTER VI

SUMMARY AND RECOMMENDATIONS

I. SUMMARY

The purpose of this study was to conduct a follow-up study of "A Survey of the Public High School Commercial Departments in the State of Washington" completed in 1954 and to compare the results of both studies. The project was undertaken so that the information would be available for individuals to use in the further study and practical implementation of the business education programs of the State of Washington.

Questionnaires were sent to principals of all threeand four-year accredited high schools of Washington State as listed in the 1964-65 <u>Washington Educational Directory</u>, a total of 293 questionnaires. Of these, 244 or 83.267 per cent were returned. Eight of the returned questionnaires were unsatisfactory and could not be used; therefore, the actual findings were based on 236 questionnaires or 80.55 per cent of those mailed.

In summary, it is significant to note that schools with enrollments of 0-99 have decreased 41.0 per cent since 1953. In the 100-199 group, the percentage of decrease has been 20.8 per cent. The number of schools with less than 300 students has decreased by 28.8 per cent, and schools

with less than 500 students decreased 20.9 per cent between 1953 and 1965. The mean enrollment of students has increased from 178.5 in 1953 to 563.1 in 1965.

High schools with enrollments of less than 300 students accounted for 40.9 per cent of the total number of schools responding in the 1953 Thomas study. The same classification makes up only 7.7 per cent of the total in 1965.

Seventy-eight per cent of the schools responding to the 1953 questionnaire indicated they were four-year high schools. In 1965, 61 per cent of the responding schools were four-year high schools.

In 1953, 79.4 per cent of the schools reporting employed less than 25 teachers. In 1965, 61 per cent of the schools employed less than 25 teachers. Only .4 per cent of the schools in the Thomas study employed more than 80 teachers, while 3.0 per cent of the schools in this study employed more than 80 teachers.

The Thomas study showed that 73.6 per cent of the schools employed two or less business teachers, while 26.4 per cent employed more than two business teachers. In 1965, 75.9 per cent of the schools employed less than two business teachers while 24.1 per cent employed more than two business teachers. In 1965, 157 schools employed 192 part-time business teachers.

Typewriting was offered by more schools than any other business subject in both 1953 and 1965. In 1953, 98 per cent of the schools offered typewriting, and in 1965, 90 per cent of the schools offered typewriting. Bookkeeping and shorthand ranked second and third respectively in the two studies. Bookkeeping was offered by 97 per cent of the schools in 1953 and by 87 per cent of the schools in 1965. In 1953, 85 per cent of the schools offered shorthand; in 1965, 76 per cent offered shorthand.

Changes in course offerings, which may be considered significant when comparing the results of the study, is a decrease in Business Arithmetic offerings. In 1953, 22 per cent of the schools offered Business Arithmetic, but in 1965, only four per cent of the schools indicated they offered Business Arithmetic.

In 1953, none of the schools reporting offered Recordkeeping. In 1963, six per cent of the schools offered Recordkeeping. The offering of an Office Machines course has increased from 18 per cent of the schools in 1953 to 28 per cent of the schools in 1965. Secretarial Training or Secretarial Practice was offered by only one per cent of the schools reporting in 1953; however, 17 per cent of the schools reporting in 1965 offered Secretarial Practice.

The total number of business machines available for instruction in 1953 was 1,096 as reported by 224 high schools.

By 1965, this number had increased to 2,339 business machines. This represents a percentage increase of 113.4 between 1954 and 1965.

The Thomas study showed that in 1953, 73.4 per cent of the reporting schools had no electric typewriters for use in business education instruction. In 1965, only 11.9 per cent of the schools had no electric typewriters for business education instruction. Almost sixty per cent (59.7) of the electric typewriters used in the reporting high schools of Washington were produced by the International Business Machines Corporation.

The most frequently occurring number of manual type-writers per school in 1953 was between 10 and 19 as indicated by 32.6 per cent of the schools. In 1963 the most frequently occurring number of typewriters per school had increased to the 20 to 29 range, accounting for 29.6 per cent of the schools reporting. Royal typewriters made up 44.5 per cent of the total number of manual typewriters in the reporting schools.

Two hundred and eighty business teachers served as co-curricular activity advisors. Future Business Leaders of America was found to be the most popular business club within the reporting high schools of the State of Washington. In the area of co-curricular activities, business teachers served most frequently as class sponsors.

The course most often considered for possible addition to class offerings was Business Machines. Thirty-one schools indicated they felt the course should be offered, while thirteen schools actually planned to offer the course. Economics and Business Law were considered as second and third possible additions.

Possible course elimination as reported by the responding schools indicated no particular pattern.

II. RECOMMENDATIONS

A review of this study results in the following recommendations:

- 1. Consolidation of small schools be explored. More Effective utilization of teachers, equipment, facilities, and curriculum planning would be realized as a result of consolidation.
- 2. A major in business education is desirable for individuals preparing to teach in the business education area.
- 3. Individuals having a major in business education be given first consideration in teaching assignments in the business education area.
- 4. Any assignment to a co-curricular activity sponsorship be carefully considered and an attempt be
 made to assign individuals to an activity related
 to their teaching area.

- 5. Additional activities and club organizations be made available to business education students, preferably under the sponsorship of the business education department.
- 6. Business education curriculum changes be viewed with consideration given to the demands of an ever-changing society.
- 7. The importance of technological change be emphasized in the business education curriculum.
- 8. Business departments plan curriculum changes in view of the employment opportunities for their graduates.
- 9. Consideration be given to the possibilities of combining several business subject offerings to prevent repetition of certain subject matter and to provide a more flexible program for students.
- 10. Businessmen be used in planning business curriculum.
- 11. Rental of equipment for use in the business education departments be explored.
- 12. Additional studies be undertaken to determine:
 - A. The business teacher class loads.
 - B. The qualifications for teachers in the business education area.
 - C. The effectiveness of present programs.

 Suggestions to change existing programs

- should be weighed and a careful evaluation made.
- D. The possibilities of changing the sequence of business courses in order that freshmen and sophomores could take business subjects earlier in their high school program.

APPENDIX A

THE QUESTIONNAIRE

STATE OF WASHINGTON BUSINESS EDUCATION QUESTIONNAIRE

Please complete the following questions completely and accurately, and return the questionnaire in the enclosed envelope. All information will remain confidential.

I.	HIGH	H SCHOOL							
	Α.	Current high	school e	enro	llment	?			
	В.	Three- or for	ır-year l	nigh	school	1?	3-yea	r l	↓-year
II.	TEAC	CHING STAFF							
	A. Total number of high school teachers employed?					ed?			
	В•	Number of bus	siness ed	duca	tion te	eachers	emplo	yed?	
		1. Full-time 2. Part-time 3. Part-time 4. Part-time 5. Part-time	for for for for the for two	ree ho	hours dat	daily _			
	С.	C. What is the teaching schedule for each business teacher?							
		 If copies business enrollmer If teacht the followiness 	teachers nts and a ing sched owing cha	s ar atta dule arts	e avai. ch to d s are n	lable, questio not ava	indica nnaire ilable	te clas • , compl	ss Lete
Tead	cher				Teachei				
Peri	lod	Course Title	Total Enrolled		Period	Cour Titl		Total Enrolle	e d
									_
-	_								

Period	Course Title	Total Enrolled	Period	Course Title	Total Enrolled
reriou	11016	Enforted	reriou	11016	Elifolied
<u> </u>					
				· · · · · · · · · · · · · · · · · · ·	
LL			<u> </u>		
Teacher	5		Teacher	6	
Period	Course Title	Total Enrolled	Period	Course Title	Total Enrolled
reriou	11016	Enforted	reriou	11016	Billotted
				······································	
	3.4.4.		<u></u>	-1	
(For ad	ditional sp	ace, use bac	k of this	sneet.)	
	t co-curric ise?	ular activit	ies do yo	ur busines:	s teachers
Teacher	1	www.			
Teacher	ь				
(For ad	ditional sp	ace, use bac	k of this	sheet.)	

Teacher 4

Teacher 3

III. SUBJECT OFFERINGS

Srade level at which subject may be taken (Specify Grade) Business Administration Business English Business Law Commercial Geography Economics Penmanship General Business Advanced General Business Advanced General Business Bookkeeping Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting Work Experience	•						
Business Administration Business English Business Law Commercial Geography Economics Penmanship General Business Advanced General Business Bookkeeping Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting	at which subject may be taken (Specify	Elective	Required	SUBJECTS OFFERED (Make additions as needed)			Somoatona
Business English Business Law Commercial Geography Economics Penmanship General Business Advanced General Business Bookkeeping Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting				Business Administration			
Business Law Commercial Geography Economics Penmanship General Business Advanced General Business Bookkeeping Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting			Н	Business English	 	1	
Commercial Geography Economics Penmanship General Business Advanced General Business Bookkeeping Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting				Business Law	-	-	
Economics Penmanship General Business Advanced General Business Bookkeeping Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting		-			 	-	
Penmanship General Business Advanced General Business Bookkeeping Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting					 	+	
General Business Advanced General Business Bookkeeping Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting					 	+	
Advanced General Business Bookkeeping Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting				2 Clinician Lp	-	1	
Advanced General Business Bookkeeping Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting			Н	General Business	 	1	
Bookkeeping Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting	 	Н	Н		 	+	
Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting		Н	Н	Navanoca denotal Dabinobb		+	
Recordkeeping Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting			Н	Bookkeening	 	1	
Consumer Education Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting		-		Recordkeening	├	+	
Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting		\vdash	\dashv	neodi dheeping	-	+	
Distributive Education Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting		Н	\vdash	Consumer Education	├─	+-+	
Advertising Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting		\vdash	\vdash	Distributive Education	 	+	
Salesmanship Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting		\vdash	\dashv		 		
Office Machines Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting		\vdash		Calagranghin	├	+	
Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting		-	-	paresmanship	-	+	
Office Training Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting		\dashv		Occion Manhimos	 	+	
Clerical Practice Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting			_	Office Machines	-		
Secretarial Practice Shorthand Transcription Typewriting Advanced Typewriting		\dashv	_	Office Training		 	
Shorthand Transcription Typewriting Advanced Typewriting		_	_		<u> </u>		
Transcription Typewriting Advanced Typewriting		_	_	Secretarial Practice		4	
Transcription Typewriting Advanced Typewriting			_		<u> </u>	├	
Typewriting Advanced Typewriting			_		L	+	
Advanced Typewriting				Transcription	L		
Advanced Typewriting						4	
			\Box	Typewriting			
Work Experience				Advanced Typewriting		1	
Work Experience							
				Work Experience			
			\Box				

IV. MACHINES

Indicate the number of machines available for business instruction

Manual Typewriters Remington Royal Smith-Corona Olympia Underwood Other			ona		Dictating-Transcribing Dictaphone Stenorette Other Duplicating Machines Carbon process, i.e.	Machines —— ——			
I o Re Ro Sn Ur	Electric Typewriters I. B. M. Remington Royal Smith-Corona Underwood Other				Ditto, Azeograph Stencil Process, i.e. A. B. Dick, Gestetner Offset process, i.e. Multilith Copying machines, i.e. Xerox, Thermofax				
Adding Machines Full-Keyboard Ten-Key Other			pard		Special Machines, i.e. key punch, addressograph, etc. (specify))			
Calculators Key-Driven Printing Rotary Other			n						
V. CO-CURRICULAR BUSINESS EDUCATION ACTIVITIES									
	A. Does your Business Education Department sponsor a club (Commercial, Future Secretaries, Future Business Leaders of America, Other)?								
	f Club								
	B. Number of student members? C. Does it meet on school time? Yes No								
	D.	How often does it meet?							
		1. 2.	Daily_ Bi-weekly	3· 4·	Weekly 5. Mor Bi-monthly	nthly			
	E.	Aver	age length o	f meetir	ng in minutes?				

VI. PROJECTIONS

	220120112
Α.	What business education subjects do you feel have a definite need in your curriculum but which you do not now offer?
	1.
	2.
	3.
В•	What courses do you plan to add to your business education curriculum in the next two years?
	1.
	2.
	3.
С.	What business education subjects that you now offer do you feel could be eliminated?
	1.
	2.
	3•
D.	What courses do you plan to drop from your business education curriculum in the next two years?
	1.
	2.
	3•
SUGO	ESTIONS AND COMMENTS?

VII.

I would like to receive a copy of the completed questionnaire results.

APPENDIX B

COVER LETTER

Business Education Department Central Washington State College Ellensburg, Washington 98926 May 20, 1965

Business Education in the State of Washington is in need of more up-to-date information. You can help supply this information by cooperating in a current research project which is a follow-up of a 1953 Central Washington College of Education study.

Please complete the enclosed questionnaire and return it in the stamped, self-addressed envelope so that survey results may be tabulated promptly. If you with to receive a copy of the completed results, please check the last line on page 5.

This research will fulfill a partial requirement for the Master of Education degree at Central Washington State College.

Your assistance as a public school administrator is appreciated.

Sincerely yours,

(Mrs.) Myrline Billings

Enclosures

APPENDIX C

THE FOLIOW-UP POST CARD
MAILED JUNE 8, 1965

Central Washington State College Ellensburg, Washington 98926 June 8, 1966

Dear

On May 20 a questionnaire relating to business education in Washington State was sent to you. As of yet, we have not received your reply. Will you please take a few minutes now, complete the questionnaire, and return it to us.

Thank you for your prompt attention.

(Mrs.) Myrline Billings

APPENDIX D

FINAL FOLLOW-UP LETTER

Business Education Department Central Washington State College Ellensburg, Washington 98926 July 2, 1965.

On May 20, 1965, a questionnaire relating to business education in the State of Washington was sent to you. Apparently you have misplaced your first copy for we have not received your response. So that you will be able to participate in this survey, a second copy of the questionnaire is enclosed.

Please complete the questionnaire and return it to us promptly. A self-addressed, stamped envelope is also enclosed for your convenience.

Thank you for your attention to this matter.

Sincerely yours,

(Mrs.) Myrline Billings

Enclosures

APPENDIX E

A COMPILED LIST OF SUGGESTIONS AND COMMENTS TAKEN FROM QUESTION VII ON THE QUESTIONNAIRE

SUGGESTIONS AND COMMENTS TAKEN FROM THE QUESTIONNAIRE

- l. "We have only a token curriculum for a good business training program. Size and money limit our offerings."
- 2. "Have offered general business and office training in the past. Under typewriting, it is the thinking of the writer that one year of typing should be required. It will be the purpose of the writer to attempt to meet the needs of the student even if it results in individualized instruction in some cases of one or two students."
- 3. "Open shorthand to more students who plan upon going to college. Close the shorthand class to students who are poor in English. Encourage the general students to enter classes in arithmetic to learn more about everyday figuring."
- 4. "Being a small high school it is difficult to say what will be added and what will be eliminated. The major skills must be taught first and then expanding the program comes next."
- 5. "Shorthand and bookkeeping have been alternated, but it would be better if they could be yearly. I don't like to see advanced typing go, but the day is only so long, and we can't afford a part-time teacher, if we could find one."

- 6. "We now offer typing 1 each semester as a general course for personal use and also to lead to advanced typing. Our typing 2 and 3 courses are offered in the first and second semesters as a one-year course. We would like to offer typing 1, 2, and 3 each semester."
 - 7. "At the present time, it looks stable."
- 8. "1. We have one of the best-equipped and well-staffed business education departments in the State. 2. In addition to the school library, we will have a resource center in the business education department next year."
- 9. "We are planning to develop a recordkeeping course for slow learners."
- 10. "We feel we are working towards a reasonably good basic program with very limited funds. It will take us approximately five years to get what we want."
- 11. "We are in need of space. If space available, we would have a large group of all types of machines."
- ness education he must be an A or B student. By the time the students are seniors there are only about 20-25 students who are able to complete all courses—we set extremely high standards in all classes. Most students are placed in some job in the Tacoma area at the end of their senior year.

 Drop out in Shorthand I each year is about 60%. Students going into shorthand must pass a 5-minute 80 with no words

left out and only 10 punctuation errors permitted--they must also pass a 3-minute 90 with two words left out and 8 punctuation errors."

- 13. "We are pleased with our commercial curriculum here at Central Kitsap--school (administration and business teacher) and community."
- 14. "Shorthand II is an honors class in our system--with A having a g.p.a. of 4.5--In order to receive a 4.5 he or she must pass a five-minute 110 at end of 1st semester and a 3-minute 140 at the end of the year."
 - 15. "We should have voice transcription machines."
- 16. "The new D. J. Shorthand is not taught and we hope it will never be used here--we have made studies of the schools who use it and have found very few students ever reach 120 wpm."
- 17. "Our business curriculum depends in large extent on our future building plans."
- 18. "We are in the talking stage on Personal Law and Consumer Economics -- nothing definite."
- 19. "Smaller high schools are limited in their ability to offer extended programs in vocational courses. We strive to maintain a basic program involving the fundamentals and principles of an adequate Business Education program for students who have a desire to continue their training."

- 20. "I have tried to get the businessmen to take the girls out into their offices for practice but have had no success. I have also had more success and interest with my classes since students are counseled and I receive most of the students who do not definitely plan college but want to be prepared for a job."
- 21. "This almost went into the wastebasket. Came too late, and like all questionnaires, could not be answered precisely."
- 22. "I want to put an end to all questionnaires at the end of the school year."
- 23. "Commercial Geography often listed as Economic Geography in many schools. Economics may be either Business Education or Social Studies listing although taught by Business Education teacher. Office Machines and Training combined in Office Practice course."
- 24. "We have been short a business teacher for the past year but are adding one this coming year."
- 25. "We have a limited number of student office girls who work directly under our high school principal's secretary. We use between six and ten per year, and these girls get training in all areas of office work and receptionist ability."
- 26. "Working on Pilot program in Typing I--Team teaching as well."

- 27. "We feel that unless compensation would be commensurate to an additional teacher we could not offer any greater variety of Business Education courses than we now have for the size of our school."
- 28. "We need to expand our program, improve the equipment, and broaden the scope. Results of your question-naire might give us help in doing so."
 - 29. "Have about all we can handle with size of staff."
- 30. "We are building a new high school, scheduled for completion September, 1967. Our whole curriculum is being re-evaluated at this time and will undergo changes. What they will be we cannot say at this time."



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