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A SURVEY OF COMMERCIAL EDUCATION
IN MONTANA PUBLIC HIGH SCHOOLS
FOR THE YEARS 1949-1951

by

Robert G. Langenbach
B.A., Montana State University, 1950

Presented in partial fulfillment of the
requirements for the degree of Mas-
ter of Arts

Montana State University
1951

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CHAPTER I

INTRODUCTION

Beginning as a private enterprise, it {business education} has gradually grown out of this {private} dominance and has entered a period of public control. Beginning with a very limited training in clerical studies, it has developed to include instruction in the several broad fields of commercial activity. Beginning as a special class in the regular classical high schools, it has been segregated into separate departments and schools of commerce. Beginning in opposition to the apprentice system, and hence opposed by commercial enterprise, it has established co-operation between the schools and commerce. Beginning as a phase of the regular work of the public day school, it has extended to include evening classes and part-time work. Beginning, in common with other vocational education, with a laissez faire policy in regard to the lives of those it trained, it is now committed to vocational guidance.¹

The very rapid advancement of business education within the last fifteen years has made keeping abreast of changes in the program exceedingly difficult. Surveys, scientific studies and other methods of gathering information concerning national, state, county, and local problems have been the very basis for the phenomenal growth and development of our education system. Information aids in the solution of problems and the solution of problems is indicative of the progress being made.

¹Cloyd H. Marvin, Commercial Education in Secondary Schools (New York: Appleton-Century-Crofts, Inc., 1943), p. 11.

The Purpose

At present, as in the past, business education is being criticized for various reasons: lack of satisfactory objectives, poorly organized curricula, a vague business education philosophy and inadequately trained personnel. That these criticisms are true in part is not to be denied and no attempt will be made to debate these issues.

The fundamental purpose of this study is to gather, compile, and present data on the present status of business education in Montana public high schools and to make such data available to those endeavoring to improve the business education status.

The next ten years will see many changes and improvements in business education, particularly on the secondary school level. Current trends show that a transformation is taking place which will result in increased enrollments in business subjects, increased financial outlay for equipment and facilities, and significant changes in curriculum and objectives, and a new faith in an emphasis on research.²

Because business itself is dynamic, it is imperative that business education be continually improved and adapted to changing conditions. The content and activities of many of the academic subjects have become comparatively well standardized through many years of refinement and study; however, the needed activities in the department of business education

²John J. Whitcraft, "Criteria for Selecting Equipment," UBEA Forum, 5:20, May, 1950.

are not only of recent origin but in a state of constant change. There has been a growing awareness that the high school should examine the content of its curriculum, review its objectives, and consider its results in evaluating the existing system in relation to subject importance, pupil needs and development, and employment opportunities.

Specifically, the purpose of this study is to present as accurately as possible a delineation of the present status of commercial education in Montana public high schools during the years 1949 to 1951. In order to accomplish this purpose attention will be directed to the following points of interest:

1. Training, experience, salaries, and professional organization membership of commercial teachers.
2. Curriculum offerings and class enrollments of commercial subjects.
3. Analysis of standards, materials, methods used in the teaching of bookkeeping, shorthand, and typewriting.

The Importance

Before a school system can improve the status of its commercial education, the weaknesses and deficiencies within the system must first be detected. Common complacency is often the strongest element contributing to deficiency in a school system. This condition is not necessarily due to the inertia of school personnel but may be due to the lack of

knowledge available to administrators and instructors.

The merits of a survey can be justified on the basis of its revelation of information that ultimately sets in operation positive programs to overcome recognized weaknesses and shortcomings. It is the interest and consideration extended by administrators and instructors after reviewing the disclosed information that yields justification and importance to a survey.

It is fully recognized that much more extensive research is needed before any definite conclusions of the effectiveness and adequacy of the present status of business education may be reached. To learn what is being accomplished under present high school programs is a prerequisite to recommendations for improvement.

The information in the State Department of Public Instruction in Helena, Montana is not in a form suitable for detailed statistical analysis. For all interested persons to locate, tabulate, and analyze State records and reports is hardly feasible.

National surveys render little information to persons interested in local conditions. Seldom can material be found in publications that concerns the very small high schools.

In searching for help in its program of business education, the small school often turns to current literature only to find its problems discussed in terms of the larger school system. Most articles

dealing with business education assume the teacher is serving in a large high school with a considerable number or at least four or five business teachers; with a shorthand, bookkeeping, and possibly a merchandising and clerical curriculum, with a guidance director, and local chamber of commerce and other service organizations which can participate in the development of such a program.)

The Scope

This study is limited to public high schools within Montana. The data presented are of senior high schools with grades nine through twelve or ten through twelve.

All teachers and administrators who were teaching one or more commercial courses during the first semester of the 1950-1951 school year are included in this study. No attempt was made to limit the study to teachers with commercial teaching majors or minors inasmuch as many instructors were teaching commercial courses who did not have any commercial education backgrounds.

Because many of the smaller schools present their commercial course offerings in alternate years, the range of two years, 1949-1950 and 1950-1951, was covered in order that all the commercial offerings could be included.

³Elizabeth T. Van Derveer, "Business Education in the Small High School," The Journal of Business Education, 24:11, May, 1949.

Limitations

When dealing with such a broad subject as business education, a survey cannot be considered complete in all respects. That there is no limit on possible topics of interest which may be included in such a survey becomes apparent after one attempts to organize and evaluate findings; however, the limitations mount when reliable references are sought to support alleged statistics.

The original intent of this study was to include an analysis of teacher preparation for instruction of commercial courses. The author spent several days in the Certification Section of the State Department of Public Instruction attempting to find adequate information to justify summarizing the status of teacher training. When the results were tabulated and reviewed, it became apparent that a true representation of teacher training status was not available. The results obtained concerned only those teachers who had recently entered the teaching profession rather than a representative selection. The earlier the teacher had filed for a certificate, the less chance that the college transcript was enclosed in the portfolio containing personal records.

The current information for this study was extracted from Form A Reports and questionnaires, copies of which are included in the Appendix. Of the two, the reports provided

the most accurate information. As stated by Good, Barr, and Scates, reports have their merits in the fact that the information is usually more objective, responses are similar and periodically submitted through compulsion, and there is a greater coverage of topics.⁴

The questionnaire, as applied to this study, projected many limitations. The greatest limitation was the percentage of returns which, though relatively high as compared to other questionnaire returns, was capable of presenting an inaccurate picture if all the unreturned forms revealed opposite trends from those received. An equally severe limitation was the possibility that upholding school esteem may have been more motivating than supplying accurate information. To encourage truthful replies both the original letter of transmittal and the follow-up letter stated that information received would be kept confidential and in no way attributed to any school system. Another limitation was the subjective nature of some of the questions.

Definition of Terms

Commercial instructor: a secondary school instructor teaching one or more commercial classes with no reference

⁴Carter V. Good, A. S. Barr, and Douglas E. Scates, The Methodology of Educational Research (New York: Appleton-Century-Crofts, Inc., 1939), pp. 333-34.

made to the teaching majors and minors or college credits or degrees held.

High school: that part of the public school system which follows the usual elementary school and composed of grades nine through twelve or ten through twelve.

Subject matter field: refers to one of the twelve divisions of the secondary school subjects such as English, history, or physical education.

Subject: a sub-division of the above definition. In the subject matter field of commerce such subjects as typewriting, shorthand, and bookkeeping are included.

Course offerings: the name of the subject with no reference to its content.

Curriculum: a prescribed course of study; a combination of subjects.

Teaching major in business administration or commerce: forty or more college credits including bookkeeping (accounting) shorthand, typewriting, and methods courses.

Teaching minor in business administration or commerce: thirty or more credits in either stenography alternate requiring shorthand, bookkeeping, and typewriting plus method courses or typewriting alternate requiring typewriting, bookkeeping, and method courses plus eight selected credits.

CHAPTER II

REVIEW OF RELATED RESEARCH

Outstanding studies in the field of commercial education in other states have been conducted by Dr. E. G. Blackstone¹ in the State of Iowa and by Dr. E. J. Weersing² in the State of Minnesota. Although both of these studies were made prior to 1930, they are frequently referred to in writings concerning commercial education.

Commercial education in Montana has received little attention from a research standpoint. The most extensive study was made twenty-two years ago and only limited research has followed. In 1929 Miss Della Young³ made a survey of commercial education in Montana high schools attempting to determine the extent of commercial education in Montana, the administrative and curricula organization of commercial subjects, the qualifications of teachers, and the subjects taught

¹E. G. Blackstone, "Status of Commercial Education in the Secondary Schools of Iowa," University of Iowa Extension Bulletin Number 114, College of Education Series, Iowa City, March 15, 1926.

²F. J. Weersing, "A Study of Certain Aspects of Commercial Education in the Public High Schools of Minnesota," (unpublished Doctor's dissertation, University of Minnesota, Minneapolis, 1927).

³Della A. Young, "A Survey of Commercial Education in Secondary Schools of Montana," (unpublished Master's thesis, Colorado State Teachers College, Greeley, 1929).

by commercial instructors. Her purpose was to gather data which could be used to aid the prospective teachers and administrators in preparing future careers.

The information for her survey was gathered through the distribution of a questionnaire to all high schools throughout the State which taught one or more commercial courses. In addition to the questionnaire which was a rather extensive three-page single spaced mimeographed solicitation, a letter of transmittal and two follow-up letters were sent. A total of eighty-two returns, or about eighty-five percent, of the mailed questionnaires were returned. State Department statistical reports such as Form A Reports utilized in the present study were not a source of data in Miss Young's survey. Only those teachers that were listed in the State Department files as commercial teachers were mailed questionnaires.

Comparative analysis between the two studies is somewhat hindered by the varied methods of classifying the data. The enrollment breakdown in the 1929 study was in sequence of one hundred pupils as compared to the graduated groups as inaugurated by Barnes⁴ and used throughout the present study. As stated on page sixteen, it is believed a clearer and more meaningful picture could be obtained by grouping together

⁴Antrim E. Barnes, Jr., "Educational Offerings in Montana High Schools, 1945-1947," (unpublished Master's thesis, Montana State University, Missoula, 1948), p. 19.

those schools whose enrollments are more nearly equal.

No attempt will be made at this time to summarize the findings of Miss Young's survey but rather pertinent information will be inserted at relevant points throughout the remaining chapters.

A survey of commercial education was made in Wyoming in 1932 by Aebly.⁵ While more recent than the above mentioned study, still nearly a score of years have passed and comparative statistical analysis yields little to accurate summaries. The method, organization, and presentation followed very closely that used by Miss Young. Questionnaires were sent to sixty-six high schools of which approximately seventy-one percent responded. Only those schools offering commercial courses were included in the study.

Colvin⁶ made a study of commercial education in the State of Colorado in the same year as Miss Young. Similarly, a four-page rather complex questionnaire was sent to one hundred forty schools. Of that number, one hundred forty or one hundred percent of the schools returned the forms. Thirty conclusions and recommendations were made in the first portion

⁵Helena F. Aebly, "A Survey of Commercial Education in the Secondary Schools of Wyoming," (unpublished Master's thesis, Colorado State Teachers College, Greeley, 1932).

⁶A. O. Colvin, "Commercial Education in the Secondary Schools of Colorado," (unpublished Master's thesis, Colorado State Teachers College, Greeley, 1929).

of the survey followed in the later chapters by a statistical analysis. The material was not reduced to school sizes but was presented in total figures.

Of a more recent date and pertaining more to this particular survey, a study was made in 1948-1949 of business education in the small Montana high schools under the auspices of the United Business Education Association Research Foundation.⁷ Two hundred ten questionnaires were mailed to business teachers throughout the state and one hundred eight were returned. The large schools with over three hundred pupils were omitted from the tabulations.

⁷Survey by Montana United Business Education Association Research Committee, "Survey of Business Education in the Small Montana High Schools," The National Business Education Quarterly, 18:15-18, Spring, 1950.

CHAPTER III

SURVEY PROCEDURE

Source of Data

The information revealed in this study is the result of an analysis of reports, confidential records, and questionnaires.

Of the two most prominent sources of data, reports and questionnaires, the former yields the wider coverage of commercial education personnel. From Mr. William King's Office in the Montana State Department of Public Instruction, the Form A High School Reports for the school years 1949-1950 and 1950-1951 were canvassed. This source was believed to be the most accurate and authentic of the material used in this study for it is from this form which is of state-wide coverage that school appropriations are made. There is, however, one disadvantage encountered when curriculum or course offerings are analyzed from these reports--only the first semester offerings of the school year are represented and variations from these offerings must be found from other sources.

A questionnaire was prepared with the assistance of Dean Linus Carleton of Montana State University School of Education and Mrs. Brenda Wilson and Miss Alvild Martinson

of the Commercial Department of the School of Business Administration of Montana State University. The questionnaire was in two parts, one to be completed by teachers of commercial courses and dealing with professional status and a second part to be filled out by the high school principal with the assistance of commercial instructors. This later part was comprised of questions concerning bookkeeping, shorthand, typewriting, and basic business courses.

One month after the mailing date of the original questionnaire, a follow-up letter was sent to all high school principals who had not previously returned the questionnaire. Because some of the data revealed on the Form A Reports on the professional status of teachers in one of the largest schools in the state was not in accord with data supplied by the majority of the other schools, a special letter was sent to that high school which employs the largest number of commercial teachers in the state; however, no reply was forthcoming.

Of the one hundred sixty-nine high schools to which questionnaires were mailed, seventy-six percent or one hundred twenty-nine of the schools replied. Of the two hundred eighteen commercial teachers included in this study as taken from the Form A Reports, one hundred fifty-nine of these teachers were represented in the questionnaire returns.

An effort was made to restrict all source material in this study to the most recent publications so that the most

modern trends in commercial education could be reflected.

Recording the Data

Form A Reports. Five sheets of fourteen columnar analysis paper were used in recording the data from Form A Reports for 1950-1951 which were filed in the Office of the High School Supervisor, State Department of Public Instruction, Helena, Montana. In the large itemizing spaces of the analysis paper the names of all instructors teaching one or more commercial classes were listed. The small columns included information concerning the professional status of the instructor--the present degree held, schools attended, years of teaching experience, teaching majors and minors, and salaries received. The remaining small columns included the course offerings, the number of pupils enrolled in classes, and the total hours of teacher training the instructor has received in the field pertaining to the class being taught.

Following exactly the same procedure as described above, the forms for 1949-1950 were examined and tabulated. The primary purpose for recording 1949-1950 data was to evaluate course offerings as compared to 1950-1951 offerings since smaller schools often present different courses in alternate years. Also the authenticity of information on professional status for one year could be checked against that listed for the other year.

Contrary to popular beliefs among administrators, the Form A Reports are not completely standardized. Although the High School Supervisor occasionally returns the form to its original source for corrections or additions, sometimes the material remains omitted. The terminology used in designating course offerings in different schools is subject to interpretation as is the designation of the extent of the course; i.e. what some schools list as Typing I and Typing II, others list similar courses as Typing 11 and Typing 12 or Typing I and Typing III.

Form A Reports for 1949-1950 and 1950-1951 were analyzed to derive course offerings as presented in Chapter V; however, inasmuch as these reports denoted only first semester offerings, the information on returned questionnaires was checked for further offerings although only two additions were made to the course offerings as listed on the Form A Reports.

Organization for Tabulating Material

The first criterion for meaningful presentation of tabulated material was the designation of categories in which information could be arranged. While it appears that the majority of studies in Montana have accepted the groupings designated by Montana school laws which classify schools according to district population into first, second, and

third class and county schools,¹ this procedure did not merit usage in the present study. Fundamentally, the determining factor designating categories would appear to be school size rather than district size and population. For example, under second class schools both Havre High School with an enrollment of three hundred ninety-one students and Geraldine High School with forty-five students would be in the same category. Similarly, in the case of county high schools, both Missoula County High School with an enrollment of 1,310 students and Jefferson County High School with an enrollment of sixty-one students would be included in the same category.

After due consideration, the procedure followed by Barnes was selected and followed throughout this study.² The classification of school groups was determined on a basis of school enrollment in the following categories:

Group I	Over 350 pupils
Group II	151 to 350 pupils
Group III	...	76 to 150 pupils
Group IV	41 to 75 pupils
Group V	Under 41 pupils

Most of the tables presented throughout the remainder of this study will be divided into the school groups as listed above.

In addition to the breakdown of schools according to

¹School Law of the State of Montana, 1941, Chapter 95, Sections 1020 and 1021.

²Barnes, loc. cit.

enrollments, it was deemed advisable that a further division should be made regarding instructors since this study includes all instructors teaching one or more commercial classes without discrimination to teaching majors or minors. This problem was met by tabulating some findings in terms of instructors teaching two or less commercial classes which were probably fill-in or supplemental teachers in the commercial departments, and those teachers teaching three or more classes who are recognized as regular commercial teachers trained in that field.

The data presented in the tables throughout this study represent tabulations from Form A Reports, questionnaires, and, in some instances, a combination of information from the reports and questionnaires. The number of schools represented in the tables vary according to the number of schools replying to specific questions in the questionnaire. In several tables the total frequencies do not correspond to the number of schools included in the table due to multiple replies to some questions. For the same reason the totals of percentages often exceed one hundred percent.

Table I based upon information from 1950-1951 Form A Reports shows the division of schools according to the grouping procedure as presented on the preceding page. Table II presents additional information regarding teachers included in this study.

TABLE I
 FREQUENCIES AND PERCENTAGES OF ENROLLMENTS
 IN 176 MONTANA PUBLIC HIGH SCHOOLS
 1950 - 1951

S C H O O L G R O U P S						
	I	II	III	IV	V	Total
Range of Enrollment	Over 350	151-350	76-150	41-75	Under 41	
Schools in Groups	14	25	45	42	50	176
Percent of Schools	8.0	14.2	25.6	23.8	28.4	100
Total Enrollment	10,952	5,454	4,807	2,308	1,273	24,794
Average Enrollment	782.3	218.0	106.8	55.0	25.5	135
Percent of Enrollment	44.2	22.0	19.4	9.3	5.1	100

TABLE II
FREQUENCIES AND PERCENTAGES OF TEACHERS
IN 176 MONTANA PUBLIC HIGH SCHOOLS
1950 - 1951

	<u>SCHOOL GROUPS</u>					Total
	I	II	III	IV	V	
Number of Teachers in School Group	480	333	361	231	188	1,593
Average Number of Teachers Per School	34.3	13.3	8.0	5.5	3.8	9.0
Number of Teachers Teaching Commercial Classes	48	31	49	44	44	218
Percentage of Total Number of Teachers Teaching Commercial Classes	10.0	9.3	13.6	19.1	24.5	14.2
Number of Commercial Teachers Teaching More Than Two Com- mercial Classes Per Day	46	29	43	39	32	189
Percentage of Teachers Teaching More Than Two Commercial Classes Per Day	9.6	8.7	11.9	16.9	17.0	11.9
Number of Commercial Teachers Teaching Less Than Three Com- mercial Classes Per Day	2	2	6	5	14	29

Group I, containing the largest high schools in Montana, is comprised of fourteen high schools with enrollments over three hundred fifty pupils. The fourteen high schools in this group, or eight percent of the one hundred seventy-six schools included in this survey, enroll 10,792 pupils or about forty-four percent of the total enrollment of all five groups. Christman found the enrollment of the same fourteen high schools in 1949-1950 to have 11,075 students³ or one hundred twenty-three more than the present enrollment.

While it is possible to total the number of students in various commercial classes from Form A Report enrollment figures, it is not possible to state the total number of the 10,952 students enrolled in Group I schools that were taking commercial classes because of the possibility of some students being enrolled in two or more commercial classes.

Group II includes schools enrolling from one hundred fifty-one to three hundred fifty pupils. Twenty-five schools or twenty-two percent of the schools in this survey are included within this group. The average number of teachers employed by the twenty-five schools was thirteen. Twenty-nine of the commercial teachers in this group taught three

³Charles Christman, "Subjects Taught in Combination with Mathematics by Montana Public Secondary School Teachers During the 1949-1950 School Year with a Partial Analysis of the Qualifications of These Teachers," (unpublished Master's thesis, Montana State University, Missoula, 1950), p. 14.

or more classes while only two teachers taught less than three classes in commercial work.

Group III with enrollments ranging from seventy-six to one hundred fifty-one students, totaled 4,807 students or about nineteen percent of the total survey coverage. The average enrollment of forty-five schools was about one hundred six students. Teaching these students were three hundred sixty-one teachers, forty-nine of which were teaching commercial classes. Of the forty-nine teachers, forty-three taught more than two commercial classes per day and six instructors taught two or less classes in commerce.

Group IV, having an enrollment of 2,308 students or about nine percent of all students in this survey, was designated as that group whose enrollments ranged from forty-one to seventy-six students. The forty-two schools in this group with an average enrollment of fifty-five students comprise approximately twenty-four percent of all high schools in Montana covered in this study. Of the two hundred thirty-one teachers in this group, forty-four taught at least one commercial class. Thirty-nine taught more than two commercial classes and five taught two or less commercial classes.

Group V, having the largest number of schools of the five designated groups, contained fifty schools with enrollments under forty-one students. Only 1,273 students or five percent of the total enrollment of schools in this study attend

these fifty schools which had an average enrollment of about twenty-six pupils. The average number of teachers per school in this group was four. Twenty-five percent of the instructors taught at least one commercial course, the highest percentage of all designated school groups.

Teacher Training

As previously stated, one of the original objectives of this survey was that of analyzing the preparation and qualifications of commercial teachers. However, as evidenced in the following discussion, available information did not warrant presentation of the limited findings. Other survey studies reveal that similar problems were encountered⁴ and it is believed that only a study limited to teacher training rather than an attempt to cover other problems in a selected field of study would merit the time and research required for a meaningful analysis.

The most authentic method of obtaining necessary information regarding teacher preparation appeared to be through records located in the certification files in the State Department of Public Instruction. Two major problems were encountered during the attempt to gather the information required to review teacher training.

⁴Ibid., pp. 18-21.

First, the locating of personal "pockets" or portfolios containing information relevant to teacher certification posed a major problem. After a conference with Mrs. E. Schmidt, Certification Clerk, permission was obtained to go into the large vault containing the "pockets" and inspect the confidential records. The locating of the "pockets" proved extremely difficult. To locate the name in the card index that indicated where the personal records could be found in the vault proved somewhat challenging. Many of the women teachers had married since obtaining their original certificate and thus the names on the Form A Reports which provided the list of commercial teachers to be investigated did not conform with the names listed in the card index. After the card was located, often personal data had to be traced through two or more "pockets", each having to be opened to see if the college transcript was enclosed.

Secondly, after locating the "pockets", the problem of not finding a transcript projected another barrier to the analysis of teacher training. While approximately one hundred fifty "pockets" were found, only ninety-six transcripts were enclosed, the large majority representing the graduates of Montana state institutions in very recent years. Records for instructors with many years of experience were seldom found and thus a true representation of teacher preparation could not be tabulated. Of the records found, some were

recorded on a semester basis and some on a quarterly basis. After reviewing the information gathered from the four day search, the problem of analyzing the preparation and training of commercial instructors was abandoned.

CHAPTER IV

PROFESSIONAL STATUS OF COMMERCIAL TEACHERS

The upgrading of business teaching personnel has been hampered by dissimilarity in state certification requirements, by low salaries, by lack of close association with business men, by curricula strongly influenced by academic traditions, and by lack of occupational experience.¹

The material presented in this chapter is not conclusive nor is it intended to deal with all the major points of interest in the status of commercial teachers. It is hoped, however, that what findings are presented will aid administrators and instructors in evaluating the present status of commercial education in the system in which they are employed.

The discussion of the material to be presented in this chapter will be presented in the following sequence:

Teacher Experience

- Teaching Experience in Secondary Schools
- Teaching Experience of Commercial Classes in Secondary Schools
- Occupational Experience of Commercial Teachers

Teacher Qualifications

- Teaching Majors of Commercial Teachers
- Teaching Minors of Commercial Teachers
- Field in Which Degrees are Held
- Type of Degrees Held by Commercial Teachers
- Location of Colleges Which Granted Degree Held by Commercial Teachers

¹Effective Business Education, Ninth Yearbook of the National Business Teachers Association, McKee Fisk, Chairman and Editor, 1943, p. 94.

Professional Organization Membership
Salaries

Teacher Experience

Teaching Experience in Secondary Schools. Form A Reports provided the source from which the information concerning teacher experience was tabulated. By using only the teachers from whom questionnaire replies were received, a comparison was made of the length of time teachers have taught commercial courses as revealed in the questionnaire as against the total number of years of teaching experience recorded in the Form A Reports.

The above method of comparison was adopted after it became apparent that the total teaching experience and the total commercial teaching experience must be based on the same group of instructors. The average of the two hundred eighteen teachers listed on the Form A Reports would not be the same as the average of the one hundred fifty-nine teachers on the same report that were selected because of their response to the questionnaire. For example, to include the years of service of the teachers in the previously mentioned large high school which did not respond to the questionnaire would have a tendency to raise the average number of years of experience since the average length of service of the eight teachers in that school was approximately thirty-two years. Thus an

erroneous analysis would be obtained if the averages of all teachers were compared with just those who returned the questionnaire.

As a miscellaneous notation to this study, it was found that the teachers with the longest teaching experience tended to be more reluctant to respond to the mailed questionnaire than were teachers who were relatively new in the profession. Approximately eighty-three percent of the teachers with less than eight years service responded to the questionnaire while only sixty-nine percent of the teachers having eight or more years of teaching experience returned the forms.

From the information presented in Table III, it may be noted that over fifty percent of the one hundred fifty-five teachers have less than five years experience. The interval containing the largest number of commercial teachers is made up of teachers who entered the profession during the present school year. That the majority of commercial teachers are found in the categories representing little or no teaching experience may be the result of several factors: (1) an enlarged demand for business teachers in the past few years to teach commercial courses in the schools inaugurating commercial programs, (2) the offering of more acceptable salaries, and (3) the eventual withdrawal from the profession to marry or accept more favorable positions.

Teaching Experience in Commercial Classes in Secondary

TABLE III

YEARS OF TEACHING EXPERIENCE OF 155 MONTANA
PUBLIC HIGH SCHOOL COMMERCIAL TEACHERS
1950 - 1951

Years of Experience	S C H O O L G R O U P S					Total	Per- cent
	I	II	III	IV	V		
0	3	3	11	7	11	35	22.58
1	3	2	3	5	3	16	10.32
2	2	1	4	4	2	13	8.39
3	0	1	2	4	2	10	6.45
4	2	0	6	2	0	8	5.16
5	1	1	0	0	0	2	1.29
6	0	1	0	0	2	3	1.93
7	1	3	2	2	2	8	5.16
8	1	1	0	0	2	4	2.58
9	1	1	0	3	2	6	3.87
10	2	0	2	0	1	5	3.22
11	0	1	1	1	0	3	1.93
12	0	1	0	1	0	2	1.29
13	4	1	0	1	0	6	3.87
14	0	1	1	1	1	4	2.58
15	1	2	2	1	0	6	3.87
16	1	1	1	0	0	3	1.93
17	0	1	1	0	0	2	1.29
18	0	0	1	0	0	1	0.65
19	0	0	0	0	0	0	0.00
20	2	0	0	0	2	4	2.58
21	2	0	1	0	0	3	1.93
22	0	0	0	1	0	1	0.65
23	0	0	0	0	0	0	0.00
24	0	1	0	0	0	1	0.65
25	0	0	0	0	0	0	0.00
26	0	0	0	0	1	1	0.65
27	0	0	0	0	0	0	0.00
28	0	0	0	0	0	0	0.00
29	1	0	0	0	0	1	0.65
30	1	0	0	0	0	1	0.65
31	1	0	0	0	0	1	0.65
32	0	1	0	0	0	1	0.65
33	0	0	0	0	0	0	0.00
34	1	0	0	0	0	1	0.65
35	1	0	0	1	0	2	1.29
36	1	0	0	0	0	1	0.65
	<u>36</u>	<u>22</u>	<u>36</u>	<u>32</u>	<u>29</u>	<u>155</u>	<u>100.02</u>

Schools. Attention is invited to the fact that the material presented in Table IV deals with the number of years of teaching experience in a commercial course of study while Table III covers all courses of study and is not limited to the commercial field. As stated in the foregoing discussion on procedure, the information for this part of the study was tabulated from that portion of the questionnaire which the instructor, not the administrator, answered.

In Table III which did not limit the findings to the teaching of commercial courses, it was found that over one-half the teachers had less than five years of experience. This analysis reveals that about fifty percent of the teachers have less than four years of teaching experience in commercial courses. Therefore it may be stated that the majority of teachers in the commercial field are relatively new in the business education profession.

Another comparison between the two studies indicated many teachers did not originally enter the teaching profession qualified to teach commercial courses but have since shifted to that field of study. The mean or average of the number of years spent teaching all courses is seven and two-thirds years as compared to only six years for commercial courses. The median or midpoint of the distribution of total teaching experience is 4.4 years but drops to 4.1 years of experience in commercial courses only.

TABLE IV

YEARS OF TEACHING EXPERIENCE IN COMMERCIAL COURSES
OF 159 MONTANA PUBLIC HIGH SCHOOL TEACHERS
PRIOR TO SEPTEMBER, 1950

Years of Com- mercial Course Teaching Ex- perience	S C H O O L G R O U P S					Total	Per- cent
	I	II	III	IV	V		
0	3	3	12	7	11	36	22.64
1	4	2	4	5	3	18	11.32
2	2	1	3	6	2	14	8.81
3	0	1	4	3	3	11	6.92
4	1	0	3	2	0	6	3.77
5	2	2	1	0	2	7	4.40
6	1	2	0	3	1	7	4.40
7	3	2	2	0	1	8	5.03
8	2	3	1	0	1	5	3.14
9	2	1	1	2	3	9	5.66
10	2	1	5	2	1	11	6.92
11	0	0	0	1	0	1	0.63
12	0	0	0	0	0	0	0.00
13	0	0	0	0	0	0	0.00
14	2	0	0	0	0	2	1.26
15	1	1	1	0	1	4	2.51
16	1	2	1	2	0	6	3.77
17	0	1	0	0	0	1	0.63
18	0	0	0	1	0	1	0.63
19	2	0	0	0	0	2	1.26
20	1	0	0	0	0	1	0.63
21	1	0	0	0	0	1	0.63
22	1	0	0	1	0	2	1.26
23	0	0	0	0	0	0	0.00
24	0	0	0	0	0	0	0.00
25	0	0	0	0	0	0	0.00
26	0	0	0	0	0	0	0.00
27	2	0	0	0	0	2	1.26
28	2	0	0	0	0	2	1.26
29	0	0	0	0	0	0	0.00
30	1	0	0	0	0	1	0.63
31	0	0	0	0	0	0	0.00
32	0	0	0	0	0	0	0.00
33	1	0	0	0	0	1	0.63
36	22	38	34	29	159	99.99	

As indicated by the total column in Table IV, thirty-six teachers began their first year of teaching commercial courses in September, 1950. Approximately eighty-three percent of the thirty-six beginning commercial teachers were placed in schools with enrollments under one hundred fifty-one students. Although Group I schools, those with three hundred fifty-one or more pupils, employ the teachers with the longest service in the teaching of commercial courses, Groups II, III, IV, and V appear to be about equal in length of experience ranges with the exception of beginning instructors as noted above.

Occupational Experience of Commercial Teachers. There is an abundance of material in periodicals, books, and monographs concerning the need for practical experience as a prerequisite for successful commercial teaching. The general consensus of opinion is that commercial instructors have not had adequate on-the-job experience--experience that, in many cases, is more beneficial to some commercial teachers than the teacher training offered in colleges.

Our business teachers have attended college, studied subject matter, and have completed the necessary methods courses; but how many of them, before, during, or after their formal education have received actual experience in the business world? If business experience is beneficial to and required of the students, it would also be beneficial to and should be required of business teachers.²

²Alfred W. Flowers and Thomas J. Fox, "Business Experience--A Must for Business Teachers," The Balance Sheet, 31:100, November 1949.

That commercial teachers should have practical experience is seldom, if ever, disputed; however, the amount or the type of practical commercial work desired of each instructor is open to discussion. Some educators believe that it is truly a mistake to appoint a teacher who has had no work experience.³ Others believe that it is not so much a question of the amount of work experience but rather the kind or variety that is important.⁴

The subject of confidence, both teacher and pupil, must not be overlooked in this discussion. Teacher self-confidence is increased when presentation of commercial subjects to students is based on teaching theory plus on-the-job training. The students also increase their confidence and respect for a teacher whose instruction reflects book knowledge and first-hand information from actual business experience.

Through on-the-job experiences the instructor is able to summarize just what employers are seeking such as the standards they desire and the kind of training most needed by student

Relationship with business--with those who use the products of business education--has been slight and ineffective. There have been no effective media through which the real occupational needs of business institutions who used the product of business education could

³Watkins C. Smith, "Let's Take Another Look at the Small High School," The Journal of Business Education, 25:13, September, 1948.

⁴Evelyn Hatfield, "Office Experience--Yes--But Make It Varied," The Balance Sheet, 30:18, September, 1948.

be determined. About the only contact business education has had in seeking the advice of employers of our students has been the individual teacher or research worker.

The information presented in Tables V, VI, and VII is not completely accurate due to the fact that many of the returns were only estimates of the total amount of time employed; however, it is believed that the information satisfactorily indicates trends among commercial instructors in Montana.

Table V indicates that approximately one-fourth or about twenty-three percent of the one hundred fifty-nine teachers had no previous on-the-job experience. This unfortunate situation cannot be attributed only to the teachers who began commercial teaching in September, 1950. As brought out in Table VI, twenty-three or sixty percent of the beginning commercial teachers had some occupational experience. For relatively young teachers, this is a favorable condition that will undoubtedly improve as the teachers seek employment during future summer vacations.

Further investigation of teachers with no practical commercial experience certainly is in order when, as revealed in Table VII, teachers with many years of teaching experience have not actively participated in the field in which they are supposedly well acquainted. Approximately one-third of the

⁵Fisk, ed., op. cit., p. 13.

TABLE V
 YEARS OF COMMERCIAL OCCUPATION EXPERIENCE OF 159
 MONTANA PUBLIC HIGH SCHOOL COMMERCIAL TEACHERS
 PRIOR TO SEPTEMBER, 1950

Years of Commercial Occupation Experience	SCHOOL GROUPS					Total	Per- cent
	I	II	III	IV	V		
0	7	4	6	9	11	37	23.27
1	4	3	10	9	1	27	16.98
2	2	2	7	8	9	28	17.91
3	8	6	4	2	2	22	13.84
4	4	2	2	0	5	13	8.18
5	3	1	4	4	0	12	7.55
6	2	2	2	0	0	6	3.77
7	1	0	1	2	0	4	2.51
8	2	0	0	0	0	2	1.26
9	0	0	0	0	0	0	0.00
10	2	0	0	0	1	3	1.89
11	0	0	0	0	0	0	0.00
12	0	1	1	0	0	2	1.26
13	0	0	0	0	0	0	0.00
14	0	0	1	0	0	1	.63
15	0	1	0	0	0	1	.63
16	0	0	0	0	0	0	0.00
17	1	0	0	0	0	1	.63
	<u>36</u>	<u>22</u>	<u>38</u>	<u>34</u>	<u>29</u>	<u>159</u>	<u>100.01</u>

TABLE VI
 OCCUPATIONAL EXPERIENCE OF 35 COMMERCIAL
 TEACHERS BEGINNING FIRST YEAR
 OF TEACHING, SEPTEMBER 1950

Years of Commer- cial Occupation Experience	SCHOOL GROUPS					Total
	I	II	III	IV	V	
0	1	1	4	4	4	14
1	0	0	2	2	1	5
2	0	1	1	1	4	7
3	1	1	2	0	1	5
4	1	0	1	0	1	3
14	0	0	1	0	0	1
	<u>3</u>	<u>3</u>	<u>11</u>	<u>7</u>	<u>11</u>	<u>35</u>

TABLE VII
 YEARS OF TEACHING EXPERIENCE OF 37 COMMERCIAL
 TEACHERS HAVING NO OCCUPATIONAL
 EXPERIENCE, SEPTEMBER 1950

Years of Teaching Experience	SCHOOL GROUPS					Total
	I	II	III	IV	V	
0	1	1	4	4	4	14
1	1	0	0	0	0	1
2	1	1	0	3	0	5
3	0	0	0	0	1	1
4	1	0	0	0	0	1
5	0	0	0	0	2	2
6	0	0	0	1	0	1
7	0	1	0	0	1	2
8	0	0	1	0	0	1
9	0	0	0	1	1	2
10	1	0	1	0	1	3
14	1	0	0	0	1	2
15	0	1	0	0	0	1
28	1	0	0	0	0	1
	<u>7</u>	<u>4</u>	<u>6</u>	<u>9</u>	<u>11</u>	<u>37</u>

thirty-seven teachers included in this table have had over six years of commercial teaching experience but have not had vocational experience. There is undoubtedly a sound basis for the general alarm of business education leaders regarding the lack of teacher vocational experience.

Teacher Qualifications

Teaching Majors of Commercial Instructors. The data presented in Table VIII were gathered from the one hundred fifty-nine returned questionnaires filled out by commercial instructors. The percentages of each teaching major to the total number of teaching majors recorded were omitted due to the fact that many instructors reported more than one teaching major. Before recording the findings in the analysis pad to be later totaled, a check was made with both the Form A Reports and with the limited information gathered from the "pockets" in the Certification Section of the State Department of Public Instruction. If a discrepancy was noted, the major as indicated in college transcripts in the "pockets" was used. If the transcript was not available, the Form A Reports were reviewed and the information from these forms accepted in preference to that on the questionnaire. In the case two or more majors were listed on the questionnaire, the transcript was not valid for both majors because additional schooling may have yielded a second major after the time of filing for

a certificate. It then became necessary to scrutinize the Form A Reports and if they did not afford the necessary information, the questionnaire reply was accepted.

Of the one hundred fifty-nine commercial instructors returning questionnaires, one hundred twenty-six or about seventy-nine percent listed commerce or business administration as their teaching major as compared to fifty percent in 1929.⁶ Following commercial courses, teaching majors in English, history, and social science were most frequently named. Table VIII includes all the teaching majors of the teachers who returned questionnaires; i. e., if one instructor listed three majors, all three are represented in the tallies.

That many instructors had more than one teaching major is revealed in Table IX which indicates forty-six instructors of the one hundred fifty-nine had two teaching majors and twelve had three teaching majors. The double or triple majors do not necessarily imply that one of the majors was that of commercial courses since such is not the case in some instances.

Table X lists the teaching majors in addition to a commercial major. For example, as may be seen from the table, two teachers had biology majors in addition to their commercial major. The most popular companion major of commercial courses was that of English in which sixteen teachers possessed English

⁶Young, op. cit., p. 98.

TABLE VIII
TEACHING MAJORS HELD BY 159 COMMERCIAL
TEACHERS IN MONTANA PUBLIC HIGH
SCHOOLS, SEPTEMBER 1950

Teaching Majors Held by Commer- cial Teachers	S C H O O L G R O U P S					Total
	I	II	III	IV	V	
Commercial	31	19	33	26	17	126
English	9	2	4	5	4	24
History	5	1	2	3	3	14
Economics & Sociology	6	2	1	1	4	14
Economics	3	3	1	2	1	10
Education	3	1	2	1	2	9
Music	1	0	4	2	2	9
Home Economics	0	1	0	1	2	4
Physical Education	2	0	0	0	1	3
Physical Science	1	0	0	2	0	3
Speech	1	1	1	0	0	3
Biology	2	0	0	0	0	2
Chemistry	0	0	0	0	1	1
Fine Art	0	0	0	0	1	1
Industrial Arts	0	0	0	1	0	1
Mathematics	0	0	0	0	1	1
Psychology	0	0	0	0	1	1
Spanish	0	0	1	0	0	1
Vocational Guidance	0	0	0	1	0	1

TABLE IX
NUMBER OF TEACHING MAJORS HELD BY 159 COMMERCIAL
TEACHERS IN MONTANA PUBLIC HIGH
SCHOOLS, SEPTEMBER 1950

Number of Teaching Majors Held	SCHOOL GROUPS					Total
	I	II	III	IV	V	
1	16	17	29	22	17	101
2	15	4	7	11	9	46
3	5	1	2	1	3	12

TABLE X
TEACHING MAJORS HELD IN ADDITION TO COMMERCIAL
TEACHING MAJORS BY 159 COMMERCIAL TEACHERS IN
MONTANA PUBLIC HIGH SCHOOLS, SEPTEMBER 1950

Additional Teaching Majors	SCHOOL GROUPS					Total
	I	II	III	IV	V	
English	6	2	4	3	1	16
Economics & Sociology	6	2	1	2	3	14
History	3	0	1	1	1	6
Education	2	0	1	1	0	4
Music	1	0	1	1	0	3
Physical Education	2	0	0	0	1	3
Speech	1	1	1	0	0	3
Biology	2	0	0	0	0	2
Economics	1	0	0	1	0	2
Classical Languages	0	1	0	0	0	1
Home Economics	0	0	0	1	0	1
Psychology	0	0	0	1	0	1
Spanish	0	0	1	0	0	1

teaching majors along with their commercial major.

Teaching Minors of Commercial Teachers. As in the preceding discussion on teaching majors, the information for the analysis of teaching minors of commercial instructors involves only those teachers who returned questionnaires. Exactly the same procedure for the analysis and tabulation of data was employed in dealing with teaching minors.

English, listed by forty-two teachers or about twenty-six percent of the one hundred fifty-nine teachers, was the most common teaching minor followed by history, economics, and social science. Table XI indicates that thirteen teachers had mathematics minors which is a substantial increase in number over the one teacher with a mathematics major as indicated in Table VIII. Similarly, teaching minors were much more prevalent in the fields of Spanish and home economics than were teaching majors.

Table XII summarizes both teaching majors and minors and indicates the percentages of the totals to the one hundred fifty-nine instructors that are included in Tables VIII and XI. It is interesting to note that the totals in Tables VIII and XI had the same five courses ranking as the most common majors and minors among commercial teachers--commercial courses, English, history, economics, and social science.

One hundred forty-seven of the one hundred fifty-nine instructors or about ninety-two percent had either a teaching

TABLE XI
TEACHING MINORS HELD BY 159 COMMERCIAL
TEACHERS IN MONTANA PUBLIC HIGH
SCHOOLS, SEPTEMBER 1950

Teaching Minors Held by Commer- cial Teachers	SCHOOL GROUPS					Total
	I	II	III	IV	V	
English	7	8	12	6	7	42
History	9	4	8	5	6	32
Economics	8	3	8	4	3	26
Economics & Sociology	6	3	4	7	3	25
Commercial	4	1	5	4	7	21
Spanish	3	1	3	2	7	16
Home Economics	3	3	3	2	3	14
Mathematics	3	1	3	1	3	13
Education	1	1	1	4	0	7
Music	0	2	1	3	1	7
French	2	1	2	0	1	6
Physical Education	2	0	0	2	0	4
Psychology	1	0	0	3	0	4
Chemistry	0	1	0	1	1	3
Physical Science	0	1	0	1	1	3
Geography	0	1	1	0	0	2
Biology	0	0	1	0	0	1
Botany	0	0	1	0	0	1
German	1	0	0	0	0	1
Philosophy	0	1	0	0	0	1

TEACHING MAJORS AND MINORS OF 159 COMMERCIAL
TEACHERS IN MONTANA PUBLIC HIGH SCHOOLS
SEPTEMBER 1950

TABLE XII

Teaching Majors and Minors Held by Com- mercial Teachers	SCHOOL GROUPS					Total	%
	I	II	III	IV	V		
Commercial	35	20	38	30	34	147	92.45
English	16	10	16	11	11	66	41.51
History	14	5	10	8	9	46	28.93
Economics & Sociology	12	5	5	8	9	39	24.53
Education	11	6	9	6	4	36	22.64
Home Economics	3	4	3	3	5	18	11.32
Spanish	3	1	4	2	7	17	10.89
Education	4	2	3	5	2	16	10.06
Maths	1	2	5	5	3	16	10.06
Mathematics	5	1	3	1	4	14	8.81
Physical Education	4	0	0	2	1	7	4.40
French	2	1	2	0	1	6	3.77
Physical Science	1	1	0	3	1	6	3.77
Psychology	1	0	0	3	1	5	3.14
Chemistry	0	1	0	1	2	4	2.52
Biology	2	0	1	0	0	3	1.89
Speech	1	1	1	0	0	3	1.89
Geography	0	1	1	0	0	2	1.26
Botany	0	0	1	0	0	1	.63
Paint Arts	0	0	0	1	0	1	.63
Industrial Arts	0	0	0	1	0	1	.63
German	1	0	0	0	0	1	.63
Philosophy	0	1	0	0	0	1	.63
Vocational Guidance	0	0	0	1	0	1	.63

major or minor in commerce.

To arrive at the figures in Table XIII, both the questionnaire returns as presented in the preceding two sub-topics and the Form A Reports were analyzed. Of the twenty-six teachers or about twelve percent of the total two hundred eighteen teachers, Table XII accounts for twelve teachers having no commercial teaching major or minor. The remaining fourteen teachers are teaching in schools which did not respond to the mailed questionnaire. Table XIII indicates the distribution of the twenty-six teachers not having commercial teaching majors or minors according to the school groups.

TABLE XIII

NUMBER OF COMMERCIAL TEACHERS WITH NO COMMERCIAL TEACHING MAJOR OR MINOR, SEPTEMBER 1950*

Group I No.	%	Group II No.	%	Group III No.	%	Group IV No.	%	Group V No.	%	Total	%
1	.5	3	1.4	5	2.3	5	2.3	12	5.5	26	11.9

*Percentage of teachers to 218 teachers, not to group totals

Field in Which Degrees are Held. The field in which degrees are received does not necessarily reflect information on teacher qualifications. The previously discussed topics, teaching majors and minors, present a much more accurate representation of commercial teacher qualifications in that they directly reflect the amount of training received in various

courses of study. In contrast, the field in which the degree is received may not reveal any information as to the subject a person is qualified to teach. For instance, a degree in education indicates training only in teaching procedures, not in specific subject matter.

The justification for including this topic within this survey is twofold: one, to show what fields of training were pursued by commercial teachers, and second, to reveal the number of teachers in the study who have not yet received a degree.

A break-down of degree fields is shown in Table XIV. Of the one hundred fifty-nine questionnaires returned, one hundred forty-eight instructors listed the field or fields in which their degree was granted. Eighty-eight or about sixty percent of the teachers received their degree in secretarial science, business administration, or business education. Education accounted for thirty-six teachers or twenty-five percent of the one hundred forty-eight teachers. Table XIV represents more than one hundred forty-eight listings in major fields due to the fact that degrees were received in more than one major field by several of the instructors.

Type of Degrees Held by Commercial Teachers. Like degree fields, the type of degrees held does not yield much information in regard to teacher qualifications. Since there is a national trend toward requiring a Master of Arts or a Master of Education degree for high school instruction, the

TABLE XIV
DEGREE FIELDS OF 148 COMMERCIAL TEACHERS
IN MONTANA PUBLIC HIGH SCHOOLS, SEPTEMBER 1950

Field in Which Degree Received	SCHOOL GROUPS					Total
	I	II	III	IV	V	
Commercial	20	13	24	18	13	88
Education	8	6	7	8	7	36
English	5	0	1	1	1	8
Music	0	0	4	0	2	6
Economics	2	1	0	1	1	5
History	3	0	1	0	1	5
Social Science	2	1	1	0	1	5
Home Economics	0	1	0	1	2	4
Fine Arts	0	0	1	0	1	2
Biology	1	0	0	0	0	1
Chemistry	0	0	0	0	1	1
Law	0	0	0	1	0	1
Mathematics	0	0	0	0	1	1
Pharmacy	1	0	0	0	0	1
Physical Education	1	0	0	0	0	1
Speech	1	0	0	0	0	1

TABLE XV
NUMBER OF FIELDS IN WHICH DEGREES RECEIVED
BY 151 COMMERCIAL TEACHERS IN MONTANA
PUBLIC HIGH SCHOOLS, SEPTEMBER 1950

Number of Fields in Which Degrees Received	SCHOOL GROUPS					Total
	I	II	III	IV	V	
No Degree Held	0	0	1	2	0	3
1	27	22	33	26	25	133
2	4	0	3	2	3	12
3	3	0	0	0	0	3

information in Table XVI is presented for the analysis of the status of Montana commercial teachers. It must be recognized that the pressure for requiring a higher degree than that of a Bachelor's degree is not being accepted without some question.

The question is often raised as to whether or not the teacher should possess the master's degree before beginning his teaching experience or after he begins teaching. Graduate study--so planned as to cause a person to be a better teacher--is important. The advanced degree, except that it is required by the school system, is of little consequence. The principle that learning is achieved to a higher degree when related to experience applies to the teacher as well as to the pupil. This constitutes strong evidence that advanced work may well be taken at the same time teaching experiences are being gained and that school administrators need not require the master's degree of the beginning teacher.⁷

Table XVI reveals that nine teachers did not possess a degree. This is not an alarming situation when additional facts are considered. Three of the nine teachers are working toward Bachelor degrees. Four teachers have over nine years of practical experience and three of these four teachers are teaching on special permits. It must be remembered that it is possible to have teaching majors and minors without having received a degree.

Only sixteen teachers or about seven percent of the two hundred eighteen commercial teachers represented in Table XVI have received a higher degree than a Bachelor's degree. This present percentage of teachers with a Master's degree is

⁷Fisk, ed., op. cit., pp. 77-78.

TABLE XVI
 HIGHEST DEGREES HELD BY 218 COMMERCIAL TEACHERS
 IN MONTANA PUBLIC HIGH SCHOOLS, SEPTEMBER 1950

Degree Held	S C H O O L G R O U P					Total	Per- cent
	I	II	III	IV	V		
No Degree Held	0	2	2	2	3	9	4.13
Bachelor of Arts	27	18	26	23	21	115	52.75
Bachelor of Science	16	9	15	14	16	70	32.11
Bachelor of Education	0	0	1	0	3	4	1.83
Bachelor of Business Administration	1	0	1	0	0	2	.92
Bachelor of Music	0	0	1	0	0	1	.46
Bachelor of Law	0	0	0	1	0	1	.46
Master of Arts	2	1	0	3	1	7	3.21
Master of Education	1	1	2	1	2	7	3.21
Master of Science	1	0	1	0	0	2	.92
						<u>218</u>	<u>100.00</u>

higher than the one and a half percent found by Young in 1929.⁸ Colvin reported in 1929 that forty-four percent of the commercial teachers in Colorado secondary schools held Bachelor's degrees and five percent held Master's degrees.⁹

Group I, as shown in Table III, has nineteen teachers with service longer than ten years; yet, only three teachers of the total of thirty-five in Group I had advanced degrees.

Of the fourteen teachers possessing Master's degrees, the average number of years of teaching experience is sixteen years with a range of two to thirty-five years.

Location of Colleges Which Granted Degrees Held by Commercial Teachers. The following information is based upon data extracted from the Form A Reports and deals with the schools from which the teacher's highest degree was obtained. As shown in Table XVII, commercial teachers represent a wide dispersion of colleges. Twenty-three of the forty-eight states are represented in public high schools in Montana plus one graduate of a Canadian college.

Montana institutes placed one hundred fourteen students in commercial teaching positions in Montana. North Dakota educational institutions, led by Minot State Teachers College, placed thirty-five teachers in commercial positions in Montana.

The data in Table XVIII taken from the same source as

⁸Young, op. cit., p. 94.

⁹Colvin, op. cit., p. 43.

TABLE XVII

LOCATION OF SCHOOLS FROM WHICH 218 MONTANA PUBLIC
HIGH SCHOOL COMMERCIAL TEACHERS
OBTAINED THEIR HIGHEST DEGREE

Name of School and Location	SCHOOL GROUPS					Total
	I	II	III	IV	V	
Canada						
Ottawa College	0	0	1	0	0	1
Colorado						
Colorado State College	0	0	0	1	2	3
Colorado St. Col. of Ed.	0	0	0	0	1	1
University of Colorado	0	1	0	0	0	1
Western State	0	0	0	0	1	1
Idaho						
University of Idaho	0	0	1	0	0	1
Illinois						
University of Chicago	1	0	0	0	0	1
Northwestern University	0	0	1	0	0	1
Peru St. Teachers College	0	0	1	0	0	1
Indiana						
Indiana St. Teachers Col.	0	0	0	0	1	1
Ellettsdale Normal	0	0	0	1	1	2
Iowa						
Coe College	0	0	0	0	1	1
Iowa St. Teachers College	2	0	0	0	1	3
Kletzing College	0	0	1	0	0	1
Luther College	0	0	0	1	0	1
St. Ambrose	0	0	1	0	0	1
Kansas						
Kansas St. Teachers Col.	0	0	1	1	1	3
Massachusetts						
Boston University	0	0	0	0	1	1

TABLE XVIII

DATA CONCERNING MONTANA PUBLIC HIGH SCHOOL COMMERCIAL
TEACHERS WHO RECEIVED DEGREES FROM MONTANA INSTITUTIONS*

	SCHOOL GROUPS					Total
	I	II	III	IV	V	
Percentage of Montana Public High School Commercial Teachers Who Received Their Highest Degree From Montana Institutions	50.00	58.06	59.18	52.28	43.48	52.29
Percentage of Montana Public High School Commercial Teachers Who Received Their Highest Degree From Montana State University	29.17	41.94	42.86	34.09	24.35	33.94
Percentage of Montana State Institution Graduates Teaching Commercial Subjects Who Received Their Highest Degree From Montana State University	58.33	72.22	72.41	65.22	55.00	64.91

*From data recorded on 1950-1951 Form A Reports.

Table XVII, deals exclusively with those teachers who attended Montana institutions. Of the two hundred eighteen instructors covered in this study, seventy-four or about thirty four per cent were graduates of Montana State University.

Professional Organization Membership

The banding together of persons interested in business education serves many purposes. DeYoung summarizes some of the purposes of professional organizations--

...professional improvement of the members, the advancement of teacher and pupil welfare, service to the schools and communities in the state, particularly through legislation, and active cooperation with the associations of other states and national associations.¹⁰

The data presented in Table XIX was tabulated from one hundred fifty-nine questionnaire returns. One hundred forty-five or about ninety-one percent of the one hundred fifty-nine commercial teachers are members of the Montana Education Association. The Montana Education Association is not specifically related to any subject field. The Montana Business Teachers Association representing the commercial education field in Montana does not appear to be adequately supported by Montana business teachers. Only thirty-four teachers of the one hundred fifty-nine included in Table XIX are members of the Montana Business Teachers Association.

¹⁰Chris A. DeYoung, Introduction to American Public Education, (New York: McGraw-Hill Book Company, 1942), p. 403.

PROFESSIONAL ORGANIZATION MEMBERSHIP OF 157
MONTANA COMMERCIAL TEACHERS, 1950-1951

TABLE XIX

PROFESSIONAL ORGANIZATION	SCHOOL GROUPS				
	I	II	III	IV	V
Montana Education Association	34	19	35	31	26
National Business Teachers Federation	2	0	3	0	0
United Business Education Association	14	11	18	7	4
Montana Business Teachers Association	15	7	8	4	0
Total	65	37	64	42	30

On a national basis, the United Business Education Association is supported by fifty-four teachers or thirty-four percent of the one hundred fifty-nine teachers. On January 1, 1951, eighty five Montana commercial teachers were members of the United Business Education Association as compared with sixty-five members on January 1, 1950.¹¹

Salaries

The data presented in Tables XXI, XXII, XXIV, and Figure 1 includes one hundred seventy-two instructors teaching three or more commercial classes as indicated on 1950-1951 Form A Reports filed with the State Department of Public Instruction. Because high school administrators receive higher salaries than regular commercial instructors, all administrators were omitted from the above mentioned tables.

The measures of central tendencies used in the analysis of data depended upon the spread and number of cases. When a sufficient number of cases comprised a smooth distribution, the median was the measure of central tendency employed. When very few cases were recorded, the mean was used.

Table XXI expresses the salaries received by commercial teachers in 1950-1951 in terms of means and medians. A median

¹¹United Business Education Association, Comparative Membership Report, January 1, 1951, UBEA Forum, February, 1951, 5:7.

of \$3,100 for one hundred seventy-two commercial teachers as compared to a mean of \$3,214.29 indicates that there are a few high salaries which tend to raise the mean. As the size of the schools decrease, the means and medians of salaries also decrease.

Because of the few frequencies in the higher experience intervals in Table XXII, the central tendencies were expressed in means.

Table XX presents the 1946 Montana Education Association salary recommendations as adjusted on the basis of the 1950 cost of living index. A more detailed presentation of the Montana Education Association salary schedule may be found in the Appendix. The median salary for the thirty-five inexperienced teachers as shown in Table XXIII is \$2,882.50. Thus it may be concluded that beginning commercial teachers are not receiving the salaries recommended by the Montana Education Association.

TABLE XX

MONTANA EDUCATION ASSOCIATION SUGGESTED MINIMUM SALARY
SCHEDULE ADJUSTED TO 1950 COST OF LIVING INDEX

Years of Experience	4 Years BA Degree	Years of Experience	4 Year BA Degree
0	\$2,900	7	\$3,530
1	2,990	8	3,620
2	3,080	9	3,710
3	3,170	10	3,800
4	3,260	11	3,890
5	3,350	12	3,980
6	3,440		

TABLE XXI
 AVERAGE SALARIES OF COMMERCIAL TEACHERS IN
 MONTANA PUBLIC HIGH SCHOOLS, 1950-1951

	S C H O O L G R O U P S					Total
	I	II	III	IV	V	
Number of Teachers Teaching Three or More Commercial Classes Daily	44	26	38	36	28	172
Median Salary of Teachers Teaching Three or More Commercial Classes Daily	\$3,600.00	\$3,260.00	\$3,000.00	\$3,000.00	\$2,950.00	\$3,100.00
Mean Salary of Teachers Teaching Three or More Commercial Classes Daily	\$3,638.30	\$3,212.12	\$3,005.98	\$3,116.34	\$2,950.79	\$3,214.29

TABLE XXII

MEAN SALARIES OF 172 MONTANA PUBLIC HIGH SCHOOL
COMMERCIAL TEACHERS IN RELATION TO
TEACHING EXPERIENCE, SEPTEMBER 1950

Years Experience	Cases	Mean Salary	Years Experience	Cases	Mean Salary
0	35	\$2,866.94	23	1	\$3,600.00
1	21	2,935.05	24	1	3,540.00
2	15	2,980.00	25	0	-
3	11	3,060.91	26	0	-
4	4	3,090.50	27	0	-
5	3	3,189.66	28	1	4,525.00
6	7	3,233.57	29	2	4,062.50
7	6	3,347.50	30	2	3,780.00
8	4	3,120.00	31	1	3,370.00
9	5	3,260.00	32	2	3,715.00
10	6	3,270.00	33	0	-
11	0	-	34	2	3,880.00
12	5	3,134.00	35	1	3,960.00
13	7	3,638.57	36	0	-
14	4	3,450.00	37	1	4,525.00
15	5	3,435.00	38	0	-
16	3	3,193.33	39	0	-
17	2	3,137.50	40	0	-
18	1	3,200.00	41	0	-
19	5	3,880.00	42	0	-
20	3	3,530.00	43	1	3,600.00
21	1	3,590.00	44	0	-
22	3	3,840.00	45	1	3,600.00

That Montana commercial teachers are not receiving Montana Education Association recommended salaries is apparent when the adjusted salary standards for a Bachelor of Arts degree is compared to the present mean or median salary distribution as indicated in Table XXIII. A comparison between the salary standard and present salaries being received by commercial teachers indicates that the deficiency of present salaries to the adjusted salary standard increases as the length of teaching experience increases. This is a rather conservative comparison for undoubtedly many of the instructors included in the first twelve years of experience have had additional training beyond their Bachelor of Arts degree and thus would be placed higher on the Montana Education Association salary schedule. This analysis, it must be remembered, is based on adjusted salary recommendations and is not to be confused with the original data published in 1946. No justification can be found for comparing standards derived five years ago to those of the present unless the cost of living index is taken into consideration.

Table XXIII also reveals the wide range of salaries received by various teachers having the same length of teaching experience. While there is undoubtedly a variation in training received, a range difference of \$1,200 found in several experience intervals is conclusive evidence of the lack of state-wide salary standards.

TABLE XXIII
 CENTRAL TENDENCIES AND RANGES OF SALARIES
 RECEIVED BY 152 COMMERCIAL TEACHERS IN
 RELATION TO TEACHING EXPERIENCE
 SEPTEMBER 1950

Years of Teaching Experience	Number of Cases	Mean	Median	Range
0	35	\$2,866.94	\$2,882.50	\$2,500 to 3,200
1	21	2,935.05	2,900.00	2,500 to 3,475
2	15	2,988.00	2,995.00	2,630 to 3,800
3	11	3,060.91	3,030.00	2,500 to 3,500
4	4	3,090.50	3,101.00	2,900 to 3,200
5	3	3,189.66	3,219.00	3,100 to 3,250
6	7	3,233.57	3,250.00	3,000 to 3,540
7	6	3,347.50	3,330.00	2,900 to 4,000
8	4	3,120.00	3,095.00	2,800 to 3,490
9	5	3,260.00	3,415.00	2,900 to 3,600
10	6	3,270.00	3,225.00	2,900 to 3,650
11	0	-	-	-
12	5	3,134.00	3,140.00	2,800 to 3,500
13	7	3,638.57	3,510.00	3,300 to 4,525
14	4	3,450.00	3,350.00	3,250 to 3,850
15	5	3,435.00	3,500.00	3,000 to 3,825
16	3	3,193.33	3,200.00	3,100 to 3,280
17	2	3,127.50	3,127.50	3,050 to 3,205
18	1	3,200.00	3,200.00	-
19	5	3,880.00	3,640.00	3,400 to 4,600
20	3	3,530.00	3,440.00	3,140 to 4,000

TABLE XXIV
 SALARY DISTRIBUTION OF 172 COMMERCIAL TEACHERS IN
 MONTANA PUBLIC HIGH SCHOOLS, SEPTEMBER 1950

Salary Class Limits	SCHOOL GROUPS					Total
	I	II	III	IV	V	
2,500 - 2,599	0	0	1	2	1	4
2,600 - 2,699	2	2	0	0	0	4
2,700 - 2,799	0	1	6	0	3	10
2,800 - 2,899	1	0	5	7	5	18
2,900 - 2,999	3	2	4	8	6	23
3,000 - 3,099	3	2	9	4	7	25
3,100 - 3,199	1	4	5	3	4	17
3,200 - 3,299	4	2	6	1	1	15
3,300 - 3,399	1	4	0	1	0	6
3,400 - 3,499	5	2	0	4	0	11
3,500 - 3,599	1	3	1	1	0	6
3,600 - 3,699	1	0	0	1	0	2
3,700 - 3,799	2	0	0	1	0	3
3,800 - 3,899	1	1	0	1	1	4
3,900 - 3,999	1	0	0	1	0	2
4,000 - 4,099	0	0	1	1	0	2
4,100 - 4,199	2	0	0	0	0	2
4,200 - 4,299	0	0	0	0	0	0
4,300 - 4,399	0	0	0	0	0	0
4,400 - 4,499	0	0	0	0	0	0
4,500 - 4,599	4	0	0	0	0	4

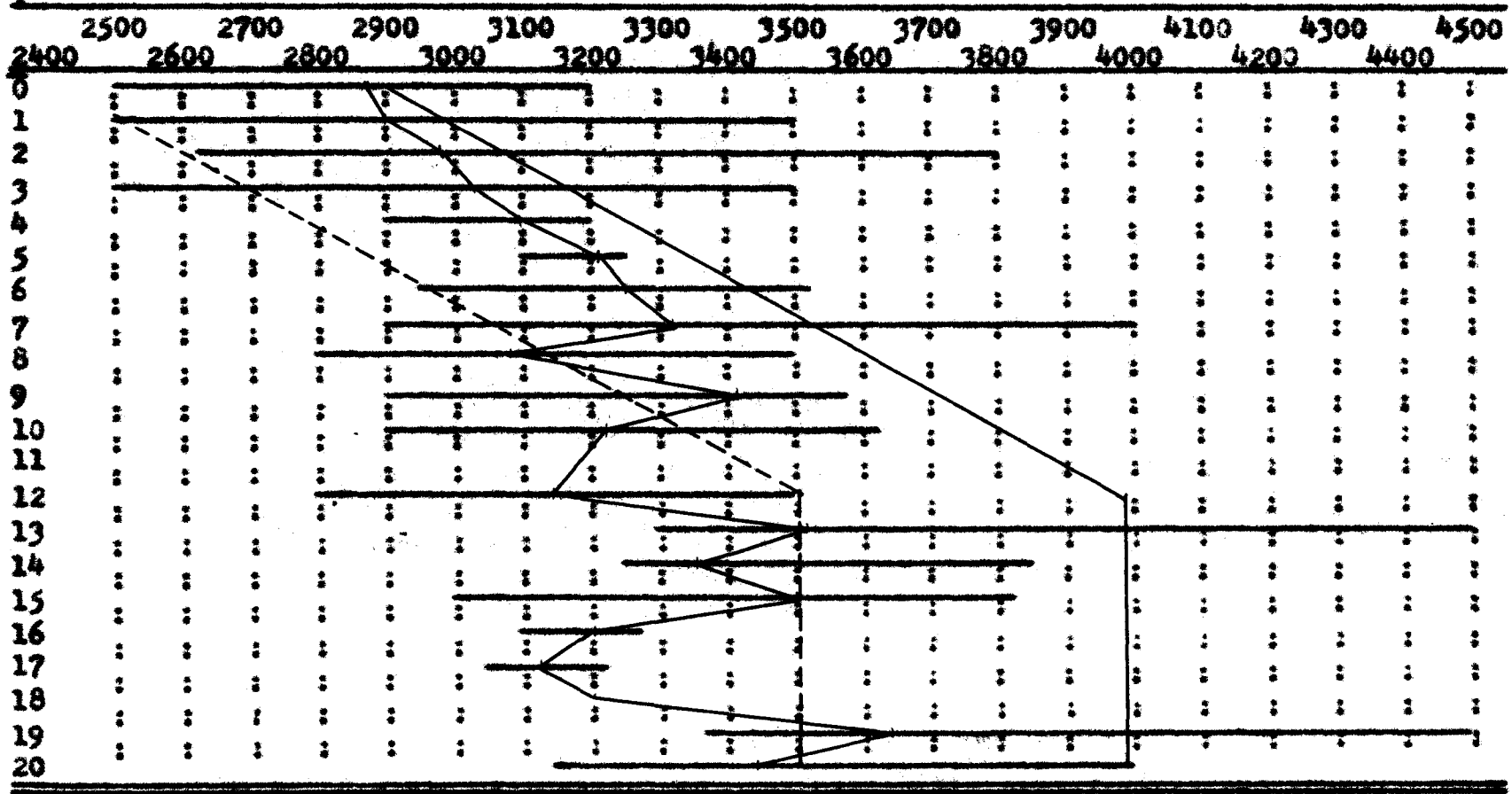
The purpose of Figure 1 is to present a more clear and meaningful picture of the salary status of commercial instructors in Montana. The broken line representing the salary median in groups graduated according to teaching experience indicates that there is a greater deficiency in salaries as teaching experience increases. However, the line becomes more irregular as the number of cases in the experience intervals decrease.

The dotted line indicates the 1946 salary recommendation of the Montana Education Association and does not reflect present cost of living adjustments. As the years of teaching experience increase, the salaries approach and finally go below the recommendations of 1946. The solid line paralleling the 1946 recommendation shows the 1946 Montana Education Association salary standard adjusted to the present cost of living index. From this line it may be seen that while a few salary extremes exceed this recommendation, the medians in all experience intervals lie below the standard.

The study shows the average commercial teacher to be underpaid as judged by Montana Education Association adjusted recommendations. Many teachers are not even receiving 1946 recommended salaries. Those with little or no experience come closer to meeting Montana Education Association standards as adjusted to the 1950 cost of living index. The explanation

Experience

B A L A N C E R A N G E



- Montana Education Association 1946 Salary Standard (Recommended)
- Montana Education Association 1950 Adjusted Standard (Recommended)
- Present Median of Salaries of Montana Commercial Teachers

FIGURE 1

GRAPHICAL ANALYSIS OF SALARIES OF 172 COMMERCIAL
TEACHERS IN MONTANA PUBLIC HIGH SCHOOLS, 1950-1951

for higher salaries for beginning teachers may be found in the teacher shortage prevalent in post-war years.

CHAPTER V

CURRICULA OFFERINGS

Introduction

The problems that are attracting the greatest interest at any one time are indicated by the titles of articles appearing in yearbooks and professional magazines and by the topics discussed at professional meetings. An examination of such titles and topics will show that there has been an increasing interest in business curriculum making during the past ten years and that, at the present time no one problem is attracting more attention than this curriculum problem.¹

The wide array of literature concerning commercial education indicates that commercial education still remains in a state of theory and thus it is not possible or feasible to make direct statements from the gathered data of a survey without some qualifications.

Today, in contrast with the situation of twenty-five years ago, there is much uncertainty in the minds of school officials, business teachers, and employers as to what high school business education should accomplish. Instead of simplicity of aims, there is complexity; instead of the aims being logical, they seem to be illogical and inconsistent; instead of their being understandable, they are very confusing to many people.²

The remaining chapters in this study are devoted to commercial subject curricula in Montana public high schools.

¹R. G. Walters, "The Business Curriculum," Monograph 55, (South-Western Publishing Co., Cincinnati), March, 1942, p. 3.

²Ibid. p. 6.

Because shorthand, typewriting, and bookkeeping are still the primary subject of the business program just as they were in the eighteen-nineties, separate chapters will be assigned to each of these commercial specialities. The chapter arrangement for the presentation of curricular findings is as follows:

Chapter V - Curricula Offerings

Chapter VI - Typewriting

Chapter VII - Shorthand

Chapter VIII - Bookkeeping and Basic Business

General Subject Offerings

The young woman who was just beginning to find her place in business life usually found stenographic work her best means of securing a business occupation. Therefore, the secondary school, to the extent to which it was aiding young men and women in entering business occupations, was quite justified in putting its major emphasis upon training for bookkeeping and stenographic occupations....

Within the last decade this situation has changed. Bookkeeping and shorthand are no longer the primary means of entry into business life. This is especially true for boys. In fact, some careful observers now believe that such courses are not as satisfactory as a good general education. As a consequence about two-thirds of the students enrolled in high school business work are girls. Even for girls it is now doubtful whether stenography and bookkeeping are in most cases the paths to a satisfactory business occupational life. Skill in office machine work, filing, general clerical ability and a certain amount of executive skill are often quite as helpful, and in some cases more worth while as a basis for success in business life.³

³McKee Fisk, ed., "The Business Curriculum," Sixth Yearbook of the National Commercial Teachers Federation, New York, 1940, p. 70-71.

To formulate one and only one standard of curricular offering and judge from it the good and the bad commercial offerings in Montana schools is certainly impractical and not the aim of this study. Curricular offerings in Montana are usually the result of many involved factors and the analysis of curricular standards must consider all contributing factors. The development of a satisfactory curriculum capable of meeting community needs is the task of the persons within the specific community and surveys and other forms of literature serve only as a media to inform, not to direct.

The available supply of qualified teachers is one of the major factors to be considered in curriculum construction. The number of teachers employed in a system naturally affects the subject offerings. When only one or two business teachers are employed, all subjects cannot be offered every term nor every year.

Of the ten schools which did not offer any commercial courses for the 1950-1951 school year as indicated on the Form A Reports, four schools employed only two teachers as may be noted in Table XXV. Although such a situation may be an argument favoring school consolidations, certainly the school administrators and instructors cannot be condemned for being unable to offer various commercial courses.

TABLE XXV
NUMBER OF TEACHERS IN MONTANA HIGH SCHOOL SYSTEMS
OFFERING NO COMMERCIAL COURSES, 1950-1951

Number of Teachers	SCHOOL GROUPS					Total
	I	II	III	IV	V	
2	0	0	0	0	4	4
3	0	0	0	0	1	1
4	0	0	0	1	0	1
5	0	0	0	1	1	2
6	0	0	0	1	0	1
10	0	0	1	0	0	1

Commercial Subject Offerings

The material presented in Table XXVI was gathered from the 1949-1950 and 1950-1951 Form A Reports filed in the Office of the High School Supervisor, State Department of Public Instruction, Helena, Montana. Because smaller high schools often alternate course offerings, a two year coverage was used. Additional course offerings mentioned in the returned questionnaires were added to Form A Report listings which consisted only of first semester offerings. The data in the following tables represent all but two of the public high schools in Montana at the time of this study.

The variety of courses in commerce offered at the present time is somewhat limited as compared to 1928-1929 offerings. However, titles of courses as well as departments offering the courses are often different although the subject matter may be identical.

Even if a special course in consumer education is offered, it is not always offered by the business department. In fact, a recent investigation regarding the departments in which consumer education courses are taught, showed that the business department stood third in this regard. Schools that returned the questionnaire reported that consumer education was handled in various departments as follows:

Social-Science Department . . .	77	Schools
Home-Economics Department . . .	63	Schools
Business Department	49	Schools
Agricultural Department	11	Schools
Science Department	8	Schools

⁴Joseph DeBrum and Harmon W. Wilson, "The Status and Future of Consumer Education," Monograph 51, (South-Western Publishing Co., Cincinnati), May, 1941, p. 14.

Table XXV shows only ten of the one hundred seventy-four schools listed on the 1950-1951 Form A Reports did not offer a commercial course. Of these schools, eight had offered some commercial courses in the previous year. Thus in one hundred seventy-six schools included in this study, only two schools or about one percent did not have some commercial course of study within a two year period. The percentage of high schools throughout the state that offered commercial courses shows a marked increase from the 1928-1929 offerings when only ninety-seven of one hundred ninety-six schools or forty-nine percent offered commercial courses.⁵ A similar study by Aebly indicated approximately ninety-eight percent of Wyoming schools offered some business courses in 1931-1932.⁶

Bookkeeping, while presented to students in three-fourths of Montana high schools, reaches its greatest popularity in the schools with enrollments over three hundred fifty pupils. Slightly more than half of the school with enrollments under forty-one students offer courses in bookkeeping. Bookkeeping II, however, is not well established in Montana high schools. Only nine schools or approximately five percent of the schools offered second year bookkeeping, seven of the schools being among the fourteen largest public high schools. As recognized

⁵Young, op. cit., p. 7.

⁶Aebly, op. cit., p. 85.

by the Virginia State Board of Education, "Second-year bookkeeping is primarily a vocational subject which is intended to prepare the pupil for ordinary duties of a bookkeeper."⁷ Thus it may be concluded that bookkeeping as offered in Montana high schools is primarily personal rather than vocational which coincides with the opinion expressed by Enterline that less emphasis should be placed upon bookkeeping from a strictly vocational point of view.⁸

Shorthand, like bookkeeping, gains its greatest prominence in the group containing the largest schools. All schools with enrollments exceeding one hundred fifty pupils include shorthand in their curricula. In 1928-1929 all schools with enrollments over two hundred pupils offered shorthand.⁹ The relatively high percentage of second-year shorthand students indicates Montana supports the general belief that shorthand is a vocational subject and hence should only be required of those students interested in becoming stenographers or secretaries.

Included in the subdivision of typewriting in Table XXVI is personal typewriting. Undoubtedly, as seen in Table XXXIII

⁷Tentative Course of Study in Business Education, Virginia State Board of Education, 1938, p. 69.

⁸H. G. Enterline, "Trends of Thought in Business Education," Monography 72, (South-Western Publishing Co., Cincinnati), March 1949, p. 19.

⁹Young, op. cit., p. 16.

in Chapter VI, many of the courses listed merely as "typing I" are of a personal typing nature. Of the one hundred seventy-six schools included in this study, one hundred seventy-four or about ninety-nine percent of the schools included typewriting in their curriculum in 1949-1950 or 1950-1951. The second year of typewriting was offered by more Montana high schools than was the first year of shorthand or the first year of bookkeeping.

A tally of the "big three" in commercial education, bookkeeping, shorthand, and typewriting, shows typewriting as the most universally offered commercial course in Montana followed by shorthand and then bookkeeping. Eighty-four percent of the schools offered shorthand and seventy-eight percent offered bookkeeping.

Colvin stated in his study in 1929 that the commercial program in Colorado high schools was almost wholly restricted to the purpose of training highly specialized workers to become bookkeepers, stenographers, or typists.¹⁰ Today in Montana a somewhat similar situation exists. Only one of every four high schools offer a course of a general business nature. The remainder of the business courses offered are somewhat insignificant. Business English was offered by only two large schools. Business mathematics, found mostly in the

¹⁰Colvin, op. cit., p. 39.

TABLE XXVI

COMMERCIAL COURSE OFFERINGS IN 176 MONTANA PUBLIC HIGH SCHOOLS
1949-1950 and 1950-1951

Course Offerings	S C H O O L G R O U P S					Totals
	I	II	III	IV	V	
<u>Bookkeeping</u>						
Bookkeeping I	No. 14 \$ 100.00	21 84.0	43 95.1	33 78.6	26 52.0	138 78.41
Bookkeeping II	No. 7 \$ 50.0	0 0.0	0 0.0	2 4.8	0 0.0	9 5.11
<u>Secretarial Studies</u>						
Shorthand I	No. 14 \$ 100.0	25 100.0	42 93.5	35 83.5	33 66.2	149 84.09
Shorthand II	No. 8 \$ 57.1	23 92.0	24 43.7	11 26.2	8 16.0	74 42.53
Transcription	No. 1 \$ 7.2	1 4.0	0 0.0	0 0.0	0 0.0	2 1.14
Office Practice (Clerical Training)	No. 4 \$ 28.6	0 0.0	0 0.0	0 0.0	1 2.0	5 2.85
Office Management	No. 1 \$ 7.2	0 0.0	0 0.0	0 0.0	0 0.0	1 0.56

TABLE XXVI (continued)

COMMERCIAL COURSE OFFERINGS IN 176 MONTANA PUBLIC HIGH SCHOOLS
1949-1950 AND 1950-1951

Course Offerings	SCHOOL GROUPS					Totals
	I	II	III	IV	V	
Typewriting						
Typewriting I	No. 14 % 100.0	25 100.0	45 100.0	42 100.0	48 96.0	174 98.90
Typewriting II	No. 13 % 93.0	21 84.0	42 93.4	37 88.1	40 80.0	152 86.93
Personal, General or Utility Typing	No. 7 % 50.0	0 0.0	0 0.0	1 2.4	1 2.0	9 5.12
Basic Business						
General Business						
General Business	No. 2	2	7	10	8	29
Business Science	No. 0	0	0	1	0	1
Con. Geography (Econ. Geography)	No. 3	0	0	1	0	4
Jr. Business Train.	No. 3	1	1	5	0	10
Total General Business	No. 8 % 57.1	3 12.0	8 17.8	17 41.0	8 16.0	44 25.00

TABLE XXVI (continued)
 COMMERCIAL COURSE OFFERINGS IN 176 MONTANA PUBLIC HIGH SCHOOLS
 1949-1950 AND 1950-1951

Course Offerings	SCHOOL GROUPS					Totals
	I	II	III	IV	V	
<u>Basic Business (continued)</u>						
Business English	No. 2	0	0	0	0	2
	% 14.3	0.0	0.0	0.0	0.0	1.14
Business Mathematics	No. 1	2	6	1	7	17
	% 7.2	8.0	17.1	2.4	14.00	9.66
Business Law	No. 5	2	1	7	3	18
	% 35.7	8.0	2.2	16.7	6.0	10.23
Sales (Retailing)	No. 2	0	0	0	0	2
	% 14.3	0.0	0.0	0.0	0.0	1.14

curriculum of small high schools, was offered in about ten percent of the schools. Sales and retailing was taught by only two schools. Business law received attention by ten percent of Montana public high schools.

Table XXVII is presented to reveal the changes in commercial curriculum in Montana public high schools during the past twenty-two years. As previously stated, Montana has made great strides in presenting commercial courses in a larger number of high schools; however, this table presents a more unfavorable picture. Caution must be taken when analyzing Table XXVII inasmuch as the figures in the 1929 study include only those schools that had commercial offerings while the present figures include one hundred seventy-six schools irregardless of course offerings. While more schools are offering commercial courses than previously, the variety has been sharply reduced since 1929. Of the nine course offerings listed in Table XXVII, only the percentage of schools presently offering typewriting exceeds a corresponding 1929 percentage.

That commercial curricula were much broader in 1929 is shown in Tables XXVIII and XXIX. Of the schools teaching commercial courses in 1929, only one-fifth did not offer at least one course each in bookkeeping, shorthand, and typewriting. At present, one-fourth of the schools teaching commercial courses (with the exception of two schools in the study which do not have commercial offerings) do not present students with

TABLE XXVII
 COMMERCIAL OFFERINGS IN MONTANA PUBLIC HIGH SCHOOLS
 IN 1949-1950 AND 1950-1951 AS COMPARED
 TO 1928-1929 OFFERINGS

Course Offerings	Percentage of 82 Schools 1928-1929 ¹¹	Percentage of 176 Schools 1949-1951
Typewriting	94.00	98.86
Bookkeeping	91.50	78.41
Shorthand	84.26	84.09
Business Management (General Business)	43.92	19.32
Business Geography	36.67	2.27
Business Law	31.67	10.23
Business English	12.20	1.14
Jr. Business Training	9.53	5.68
Sales	9.53	1.14
Other Courses	30.48	14.78

*Figures include only schools offering one or more commercial courses

¹¹Young, *op. cit.*, p. 15.

TABLE XXVIII
 COMMERCIAL COMBINATIONS OFFERED IN 176
 MONTANA PUBLIC HIGH SCHOOLS
 1949-1950 AND 1950-1951

Combinations Offered	SCHOOL GROUPS					Total
	I	II	III	IV	V	
Schools Not Offering All Courses of Big Three Combination*	0	1	4	15	27	47
Schools Offering Only Big Three Combination	3	18	28	15	17	81
Schools Offering Big Three Combination Plus One Additional Commercial Course	6	4	10	10	5	35
Schools Offering Big Three Combination Plus Two Additional Commercial Courses	1	2	3	2	1	9
Schools Offering Big Three Combination Plus Three Additional Commercial Courses	2	0	0	0	0	2
Schools Offering Big Three Combination Plus Four Additional Commercial Courses	1	0	0	0	0	1
Schools Offering Big Three Combination Plus Five Additional Commercial Courses	1	0	0	0	0	1

*Big Three Combination: Typewriting, shorthand, Bookkeeping

TABLE XXIX
PERCENTAGE OF COMMERCIAL COMBINATIONS OFFERED IN
MONTANA PUBLIC HIGH SCHOOLS IN 1949-1950 AND 1950-1951
AS COMPARED TO 1928-1929 OFFERINGS

Course Offerings	Percentage of 82 Schools 1928-1929*	Percentage of 176 Schools 1949-1951
Schools Not Offering Big Three Combination**	20.73	26.70
Schools Offering Big Three Combination Only	20.73	46.02
Schools Offering Big Three Combination Plus One Addi- tional Commercial Course	8.54	19.89
Schools Offering Big Three Combination Plus Two Addi- tional Commercial Courses	25.61	5.11
Schools Offering Big Three Combination Plus Three Addi- tional Commercial Courses	9.76	1.14
Schools Offering Big Three Combination Plus Four Addi- tional Commercial Courses	4.88	.57
Schools Offering Big Three Combination Plus More Than Four Additional Commercial Courses	9.76	.57
	<u>100.01</u>	<u>100.00</u>

*Includes only schools offering one or more commercial courses
 **Big Three Combination - Typewriting, Shorthand & Bookkeeping

the opportunity of becoming acquainted with the three major fields of commercial work.

Over fifty percent of the schools in 1929 offered at least two commercial courses in addition to the "big three" combination. Comparing this percentage with the seven percent of schools offering two additional courses in the present study, it becomes clear that within the twenty-two year span between studies the commercial curricula in high schools in Montana have been limited rather than expanded.

Class Enrollments

Another major factor in curriculum construction closely related with teacher employment is that of school enrollment. It has been stated that only one percent of the high schools in the United States enroll over 2,500 pupils, six percent enroll from 1,001 to 2,500 pupils, seventeen percent from 301 to 1,000, thirty-five percent from one hundred to three hundred, and forty percent enroll less than one hundred pupils.¹² Corresponding figures for 1937-1938 indicate that seventy-five percent of the high schools at that time enrolled less than three hundred pupils. In Montana, approximately ninety percent of the secondary schools have less than three hundred students and thus it may be seen that Montana deals with a

¹²Van Derveer, op. cit., p. 11.

much higher percentage of small schools than the national average.

On a national basis, Strong points out there has been a rapid growth in commercial education with approximately twenty percent of secondary school pupils enrolled in commercial curricula. Sixty-six percent of the pupils enrolled in commercial education are girls and their enrollment percentage is increasing.¹³

More classes are offered in typewriting than in any other commercial class. Table XXX indicates the range of class enrollments varied from forty-seven pupils in a Group I school to only two pupils in a school in Group V. In second-year typewriting, less than one-half of the number of first-year classes were in operation and the median of students enrolled also fell to about one-half that of the first-year typewriting classes.

Most classes in shorthand enroll fewer students than in corresponding typewriting classes. The range for shorthand classes was found to be from one to thirty-eight pupils for first-year shorthand and from one to thirty-six for second-year. Some classes comprised of only one student were found in schools with enrollments as high as one hundred fifty pupils.

¹³Earl P. Strong, The Organization, Administration and Supervision of Business Education, (New York: Gregg Publishing Company, 1944), p. 59.

Bookkeeping I ranks closely with the first year of shorthand in regards to the number of classes and the enrollment range. The second year of bookkeeping, however, is much more limited. Of the six classes of second-year bookkeeping offered in Montana public high schools in 1950-1951, four are in the group containing the largest high schools and have a median enrollment of about nineteen students while the two remaining classes in small schools each have but two students.

There appears to be a trend among larger schools in the state to offer a class called "Junior Business Training" in place of "General Business" as adopted by the small schools. The enrollments of the thirty-eight general business classes ranged from nine to thirty students with a median enrollment of twenty-one.

The range of all commercial classes was from one to forty-seven pupils with a median of thirteen. In 1929 Young found a range of eight to twenty-eight pupils in commercial classes with a median around twenty.¹⁴ Aebly found the range of commercial classes in Wyoming high schools in 1932 to be from three to thirty-two with a median of nineteen pupils.¹⁵

It may then be concluded that Montana has reduced the size of its commercial classes during the past twenty-two

¹⁴Young, op. cit., p. 112.

¹⁵Aebly, op. cit., p. 86.

TABLE XXX
 NUMBER OF COMMERCIAL CLASSES TAUGHT AND CLASS ENROLLMENTS
 IN 166 MINNAPVA PUBLIC HIGH SCHOOLS, 1950-1951

COURSE OFFERING	SCHOOL GROUPS					Totals
	I	II	III	IV	V	
Bookkeeping						
Bookkeeping I	Classes 36	Classes 24	Classes 35	Classes 24	Classes 19	138
	Range 15 to 38	Range 5 to 33	Range 3 to 31	Range 4 to 16	Range 3 to 19	3 to 38
	Median 30	Median 17.5	Median 14	Median 10	Median 7	15
Bookkeeping II	Classes 4	Classes 0	Classes 1	Classes 1	Classes 0	6
	Range 9 to 25	Range -	Range -	Range 2	Range -	2 to 25
	Median 18.5	Median -	Median 2	Median 2	Median -	11.5
General Studies						
Shortland I	Classes 34	Classes 23	Classes 45	Classes 24	Classes 23	149
	Range 5 to 38	Range 4 to 38	Range 2 to 30	Range 3 to 13	Range 1 to 10	1 to 38
	Median 24	Median 17	Median 8	Median 6	Median 4	9
Shortland II	Classes 15	Classes 20	Classes 16	Classes 10	Classes 7	68
	Range 6 to 36	Range 5 to 31	Range 1 to 8	Range 1 to 14	Range 1 to 5	1 to 36
	Median 17	Median 10.5	Median 3.5	Median 4	Median 2	6
Transcription	Classes 0	Classes 2	Classes 0	Classes 0	Classes 0	2
	Range -	Range 14 to 15	Range -	Range -	Range -	14 to 15
	Median -	Median 14.5	Median -	Median -	Median -	14.5

TABLE XXX (continued)

NUMBER OF COMMERCIAL CLASSES TAUGHT AND CLASS ENROLLMENTS
IN 166 MONTANA PUBLIC HIGH SCHOOLS, 1950-1951

Course Offerings	SCHOOL GROUPS					Totals
	I	II	III	IV	V	
<u>Secretarial Studies (continued)</u>						
Office Practice	Classes 5	0	0	0	0	5
	Range 7 to 24	-	-	-	-	7 to 24
	Median 16	-	-	-	-	16
Office Management	Classes 1	0	0	0	0	1
	Range -	-	-	-	-	-
	Median 5	-	-	-	-	5
<u>Typewriting</u>						
Typewriting I	Classes 56	59	78	57	48	298
	Range 7 to 47	5 to 30	4 to 28	4 to 19	2 to 16	2 to 47
	Median 31	20	14	10	6.5	14
Typewriting II	Classes 17	24	32	35	30	138
	Range 11 to 31	5 to 24	5 to 22	3 to 15	2 to 23	2 to 31
	Median 26	15	8	6	5	8
Personal Typing	Classes 13	0	0	1	0	14
	Range 18 to 35	-	-	-	-	18 to 35
	Median 25	-	-	9	-	25

NUMBER OF COMMERCIAL CLASSES TAUGHT AND CLASS ENROLLMENTS
IN 166 MONTANA PUBLIC HIGH SCHOOLS, 1950-1951

TABLE XXX (continued)

COURSE OFFERINGS		SCHOOL GROUPS				Totals
		I	II	III	IV	V
Basic Business						
General Bus.	Classes 1 Range - Median 25	4	4	4	5	4
Com. Geography	Classes 3 Range 21 to 30 Median 28	0	-	0	1	0
Jr. Bus. Ing.	Classes 11 Range 11 to 30 Median 24	1	1	3	0	0
Total Gen. Bus.	Classes 15 Range 11 to 30 Median 23.5	5	5	9	4	4
Business English	Classes 2 Range 9 to 22 Median 15.5	0	0	0	0	2
Business Math.	Classes 4 Range 33 to 35 Median 33.5	0	0	3	1	2
Other						
General Bus.	Classes 1 Range - Median 20	4	4	5	4	4
Com. Geography	Classes 3 Range 21 to 30 Median 28	0	-	0	1	0
Jr. Bus. Ing.	Classes 11 Range 11 to 30 Median 24	1	1	3	0	0
Total Gen. Bus.	Classes 15 Range 11 to 30 Median 23.5	5	5	9	4	4
Business English	Classes 2 Range 9 to 22 Median 15.5	0	0	0	0	2
Business Math.	Classes 4 Range 33 to 35 Median 33.5	0	0	3	1	2
Totals						

TABLE XXX (continued)
 NUMBER OF COMMERCIAL CLASSES TAUGHT AND CLASS ENROLLMENTS
 IN 166 MONTANA PUBLIC HIGH SCHOOLS, 1950-1951

Course Offerings	SCHOOL GROUPS					Totals	
	I	II	III	IV	V		
Basic Business (continued)							
Business Law	Classes Range Median	3 15 to 29 16	0 - -	0 - -	5 3 to 14 11	2 6 to 11 8.5	10 3 to 29 11
Sales (Retailing)	Classes Range Median	4 23 to 32 33.5	0 - -	0 - -	0 - -	0 - -	4 23 to 32 33.5

years even though the school enrollments have become somewhat larger as a result of the consolidation of one hundred ninety-six high schools in 1929 into one hundred seventy-eight high schools.

While Table XXX deals with the number of commercial classes in Montana public high schools, Table XXXI shows a breakdown of the classes into the number of students in the classes. These two tables are based upon 1950-1951 findings and do not include those figures of the previous year as does Table XXVI; therefore, there will be some discrepancy between the course offerings in Table XXVI and the enrollment and class figures in Tables XXX and XXXI.

The first year of typewriting was included by twenty percent of the students enrolled in Montana high schools as part of their course of study. It will be noted that as the size of the schools decrease, the percentage of students taking typewriting increase. A similar trend was also found in the second year of typewriting in which the percentage of three and a half in the largest schools rose to about thirteen percent in the smallest schools. In comparison with all the other courses offered in commercial education, almost as many students were enrolled in typewriting classes as all the other commercial courses combined. Over twice as many students chose Typing I as Bookkeeping I, and almost three times as many students chose Typing I as Shorthand I.

Bookkeeping, which follows typewriting with respect to enrollment totals, also is taken by a larger percentage of students in the smaller schools than in the larger schools. However, this is true only of the first-year offering. Bookkeeping II, taken by only seventy-five students in the state high schools, totals less than one-half of one percent and was offered almost exclusively by the schools in the school group containing the largest enrollments.

Thus in popularity among students, the sequence is typewriting, bookkeeping, and then shorthand--the same sequence found by Young in 1929¹⁶ and by Aebly in Wyoming schools in 1932.¹⁷ It will be noted then that while more schools offered shorthand than bookkeeping as revealed in Table XXVI and more shorthand classes than bookkeeping classes were offered as seen in Table XXX, the total enrollment in bookkeeping exceeds that of shorthand.

Table XXXII is presented for a comparison between 1928-1929 offerings of the "big three" to the present offerings in respect to pupil enrollment in the respective courses. The conclusion is that while more students are presently enrolled in all of the "big three" courses than in 1928, only in typewriting is the percentage of commercial students enrollment to total students enrolled greater than in 1928.

¹⁶Young, op. cit., p. 112.

¹⁷Aebly, op. cit., p. 86.

TABLE XXXI

TOTAL PUPIL ENROLLMENT IN MONTANA PUBLIC HIGH SCHOOL
COMMERCIAL COURSES, SEPTEMBER 1950

Course Offerings	SCHOOL GROUPS					Totals
	I	II	III	IV	V	
Bookkeeping						
Bookkeeping I	No. 1,001 % 9.14	465 8.53	470 9.78	235 10.18	147 11.55	2,318 9.35
Bookkeeping II	No. 71 % 0.65	0 0	2 0.04	2 0.09	0 0	75 0.30
Secretarial Studies						
Shorthand I	No. 776 % 7.09	445 8.16	381 7.93	150 6.50	101 7.93	1,853 7.47
Shorthand II	No. 254 % 2.32	216 3.96	65 1.35	56 2.43	16 1.11	607 2.45
Transcription	No. 0 % 0	30 0.55	0 0	0 0	0 0	30 0.12
Office Practice (Clerical Tng)	No. 73 % 0.67	0 0	0 0	0 0	0 0	73 0.29
Office Management	No. 5 % 0.05	0 0	0 0	0 0	0 0	5 0.02

TABLE XXXI (continued)

TOTAL PUPIL ENROLLMENT IN MONTANA PUBLIC HIGH SCHOOL
COMMERCIAL COURSES, SEPTEMBER 1950

Course Offerings	SCHOOL GROUPS					Totals
	I	II	III	IV	V	
Typewriting						
Typewriting I	No. 1,775	1,183	1,064	604	352	4,978
	% 16.21	21.69	22.13	26.17	27.65	20.08
Typewriting II	No. 432	364	329	224	162	1,511
	% 3.94	6.67	6.84	9.71	12.72	6.09
Personal, General or Utility Typing	No. 420	0	0	9	0	429
	% 3.83	0	0	0.39	0	1.73
Basic Business						
General Business						
General Business	No. 25	95	78	78	61	337
	% 0.123	1.74	1.62	3.38	4.79	1.36
Business Science	No. 0	0	0	11	0	11
	% 0	0	0	0.46	0	0.05
Com. Geography	No. 82	0	0	16	0	98
	% 0.75	0	0	0.69	0	0.39

TABLE XXXI (continued)

TOTAL PUPIL ENROLLMENT IN MONTANA PUBLIC HIGH SCHOOL COMMERCIAL COURSES, SEPTEMBER 1950

Course Offerings	SCHOOL GROUPS					Totals
	I	II	III	IV	V	
Basic Business (continued)						
Jr. Business Eng	No. 268 % 2.45	33 0.61	15 0.31	38 1.69	0 0	354 1.43
Total General Bus.	No. 375 % 3.42	128 2.35	93 1.93	143 6.20	61 4.79	800 3.23
Business English	No. 31 % 0.28	0 0	0 0	0 0	0 0	31 0.13
Business Math.	No. 136 % 1.24	0 0	58 1.21	7 0.30	13 1.02	214 0.86
Business Law	No. 58 % 0.53	0 0	0 0	48 2.08	17 1.34	123 0.50
Sales (Retailing)	No. 116 % 1.06	0 0	0 0	0 0	0 0	116 0.47

Enrollment in Commercial Courses		Percentage of Total Students	
1928	1950	1928	1950
1,836	6,918	26.9	27.9
1,120	2,394	16.4	10.1
1,014	2,460	15.7	10.0

*Includes only 92 schools offering one or more commercial subjects
 **Includes total of commercial courses offered in that field

ENROLLMENT IN TYPENITING, BOOKKEEPING AND SHORTHAND IN MONTANA HIGH SCHOOLS IN 1950-1951 AS COMPARED TO 1928-1929 ENROLLMENT

TABLE XXII

CHAPTER VI

TYPEWRITING

In the early history of commercial education, book-keeping was believed to be the very foundation of all business training. Since 1922 the total number of students enrolled in typewriting classes has exceeded the enrollments of all other commercial subjects. In eight years, 1928 to 1939, the national enrollment in typewriting classes has more than doubled.

1928	439,379 pupils
1934	749,315 pupils
1936	995,358 pupils
1938	1,037,407 pupils ¹
1940	1,115,538 pupils ¹

In Montana, as revealed in Table XXXII, the typewriting enrollment of 1,836 pupils in 1928 rose to 6,918 in 1950. With the exception of two very small high schools, all Montana high schools provided students an opportunity to learn to type.

Course Offerings

While only nine of the one hundred seventy-six high schools included in Table XXVI referred to a "personal" typewriting course, thirteen of one hundred twenty-nine high schools indicated on returned questionnaires that a personal typewriting course was offered. As shown in Table XXXIII, a

¹Strong, op. cit., p. 444.

combination of personal and vocational typewriting courses seems to dominate in the majority of schools. Thus it is probably true that while typewriting courses are not called "personal", "general" or "utility", the designation of "Typing I" does not denote a separate personal or vocational aspect but a combination of both. The second year of typewriting is definitely a vocational subject and no school, according to Form A Reports for 1950-1951, offered a second year of personal typewriting.

Approximately twenty percent of the schools offering personal typewriting offered the course in the first year of the four year high schools and no school postponed the offering until the senior year. One-half of the high schools permitted student enrollments in their second year of high school.

Vocational typewriting is offered later than personal typewriting as indicated in Table XXXIV. As stated above, vocational typewriting is usually a two year course; however, ten schools did not present an opportunity to students interested in vocational typewriting to have two years of training since enrollment was restricted to the senior year.

Combinations of personal and vocational typewriting are offered almost exclusively in the second and third year, the later being more prevalent. Generally speaking, typewriting in Montana high schools is offered in the junior or senior

TABLE XXXIII
 NATURE OF TYPEWRITING COURSES OFFERED IN
 129 MONTANA PUBLIC HIGH SCHOOLS
 1950-1951

Nature of Typewriting Course Offered	S C H O O L G R O U P S					Total
	I	II	III	IV	V	
Personal	6	1	1	2	3	13
Vocational	5	3	5	2	1	17
Combination of Per- sonal & Vocational	7	17	33	30	26	113

TABLE XXXIV
 SCHOOL YEAR IN WHICH STUDENTS MAY TAKE TYPEWRITING
 IN 129 MONTANA PUBLIC HIGH SCHOOLS
 1950-1951

Subject and Year of Offering	SCHOOL GROUPS					Total
	I	II	III	IV	V	
<u>Personal Typewriting</u>						
Freshman	2	1	2	0	2	7
Sophomore	5	1	4	2	6	18
Junior	1	2	2	4	2	11
<u>Vocational Typewriting</u>						
Freshman	0	0	0	0	1	1
Sophomore	5	2	4	1	1	13
Junior	3	2	5	4	4	18
Senior	0	3	3	2	2	10
<u>Combination of Personal & Vocational Typewriting</u>						
Freshman	0	0	0	3	2	5
Sophomore	0	2	2	5	5	14
Junior	2	10	20	11	8	51
Senior	1	1	0	0	0	2

years by the majority of schools.

Equipment

Typewriters. There is no reliable evidence that one machine is actually better than another. "Perhaps the matter of which machine to use has been given more attention than it deserves, because the actual superiority of any one make has not been proven."² The following figures are not presented with the intent of influencing future purchasers. Many variables such as dealer location, maintenance, trade-in allowances, and other factors influence the number of machines used in classes and thus the quality of the make of typewriters cannot be concluded from the findings in this survey.

Of the typewriters used in one hundred four schools included in Table XXXV, approximately eighty-three percent were either Royals or Underwoods, the former having a slight numerical advantage. The electric typewriter has not been introduced on any extensive scale. It is interesting to note that three of the four electric typewriters used in classes in 1950-1951 were in schools enrolling less than one hundred fifty pupils.

That there has been a change in preference of typewriters

²E. G. Blackstone and Sofrona L. Smith, Improvement of Instruction in Typewriting, (New York: Prentice-Hall, Inc., 1949), p. 66.

TABLE XXXV

MAKE AND NUMBER OF TYPEWRITERS USED IN 104
MONTANA PUBLIC HIGH SCHOOLS
1950-1951

Make of Typewriter	SCHOOL GROUPS					Total
	I	II	III	IV	V	
Underwood	247	134	178	106	90	755
Royal	190	170	247	93	99	799
L.G. Smith (Gorona)	21	42	22	39	30	154
Remington	84	24	28	9	9	154
Woodstock	0	0	0	0	2	2
IBM Electric	1	0	1	0	0	2
Royal Electric	0	0	1	0	0	1
Underwood Electric	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>
	<u>343</u>	<u>370</u>	<u>477</u>	<u>247</u>	<u>231</u>	<u>1,868</u>

TABLE XXXVI

FREQUENCIES AND PERCENTAGES OF MAKES OF TYPEWRITERS
 USED IN 104 MONTANA PUBLIC HIGH SCHOOLS IN 1950-1951
 AS COMPARED TO 80 SCHOOLS IN 1928-1929

Make of Typewriter	Total Typewriters Used		Percentage Of Typewriters Used	
	1928	1950	1928	1950
Underwood	783	755	69.5	40.4
Royal	74	799	6.6	42.8
L.G. Smith (Corona)	61	154	5.4	8.2
Remington	209	154	18.5	8.2
Others	0	6	0.0	0.3
	<u>1,127</u>	<u>1,868</u>	<u>100.0</u>	<u>99.9</u>

³Young, op. cit., p. 36.

in Montana for classroom use is revealed in Table XXXVI. Underwoods, which in 1928 held a wide margin over all other makes, dropped to second place in number in 1950 and similarly Remington typewriters have dropped from second to third place. The Royal machine in 1929 comprised about seven percent of the typewriters in high school classes but in twenty-two years has become the most popular typewriter in Montana high schools.

Typewriting Tables. In 1945 the United States Navy studied the relation of sitting height to typewriter height and recommended that the sitting height be such that, with the arms held normally at the sides and the hands extended to the keyboard, the slant of the forearms would be approximately the same as the slant of the typewriter keyboard.⁴ "As a general rule, typewriting tables have been too low. A height of at least twenty-nine to thirty-one inches is now generally considered a minimum."⁵ As shown in Table XXXVII, the range of the heights of tables used in Montana high schools vary from twenty-five to thirty inches. In view of the general opinion that typewriter tables should average approximately thirty inches in height, it would appear that the majority

⁴Training of Office and Clerical Employees of the Naval Establishments, Division of Shore Establishments and Civilian Personnel, Training Branch, Washington, D.C., March 1945, p. 3.

⁵John J. Rowe, "How Does the Principal Evaluate the Effectiveness of the Teaching of Typewriting?" The National Business Education Quarterly, 18:142, Winter, 1949.

TABLE XXXVII

STYLE AND HEIGHTS OF TYPEWRITING TABLES USED
IN 129 MONTANA PUBLIC HIGH SCHOOLS
1950-1951

	SCHOOL GROUPS					Total
	I	II	III	IV	V	
<u>Style of Tables</u>						
Individual	5	12	29	22	20	88
Multiple	3	7	7	6	7	30
Combination of Multiple and Individual	4	1	2	3	1	11
<u>Height of Tables</u>						
25 Inches	0	0	0	0	3	3
26 Inches	1	3	5	2	6	17
26½ Inches	0	1	2	1	2	6
27 Inches	2	1	7	6	2	18
27½ Inches	1	0	0	0	1	2
28 Inches	3	1	6	3	1	14
28½ Inches	0	0	1	0	0	1
29 Inches	3	1	0	0	2	6
29½ Inches	1	0	0	0	0	1
30 Inches	2	2	1	3	2	10
Variable Height 26 to 30 Inches	2	7	10	10	5	34

of tables used in Montana commercial classes are too low. The modal height of typewriter tables in Montana high schools was found to be twenty-seven inches. Eighty-eight schools or sixty-eight percent of the one hundred twenty-nine schools responding to the question concerning styles of typewriter tables reported that individual tables were being used.

Typewriting Textbooks. The most commonly used typewriting text in Montana high schools was Twentieth Century Typing by Lessenberry. Of the one hundred twenty-six schools responding to the question concerning texts, Table XXXVIII indicates that one hundred twenty schools used the Lessenberry text. Typing for Business by Blanchard and Smith was next in popularity with five schools reporting using it for their text.

Typewriting Aids

Although blank keys are widely used in Montana high schools, much material has been distributed which discredits the theory involved. As stated by Rowe,

The modern trend is to use open keyboards (with the letters showing). Teachers who get the best results believe the pupil actually acquires touch typing more easily if he is permitted to look at the typewriter during initial keyboard presentation.⁶

Blackstone and Smith,⁷ co-authors of a text on teaching

⁶Rowe, loc. cit.

⁷Blackstone and Smith, op. cit., pp. 125-28.

TABLE XXXVIII

**NAME AND AUTHORS OF TEXTBOOKS USED IN THE TEACHING
OF TYPEWRITING IN 126 MONTANA PUBLIC HIGH SCHOOLS
1950-1951**

Textbook and Author	SCHOOL GROUPS					Total
	I	II	III	IV	V	
Twentieth Century Typing (4th and 5th Editions) Lessenberry	10	17	39	28	26	120
Gregg Typing Gregg	1	0	0	0	1	2
Typing for Business and Personal Use Blanchard and Smith	1	0	0	0	0	1
Typing for Business Blanchard and Smith	1	1	2	1	0	5
Personal Typing Lloyd	1	0	1	0	0	2
Stuart Typing Stuart	0	0	1	0	0	1
Advanced Speed Typing Tidwell	0	0	1	0	1	2

procedures, presented many points favoring open rather than blank keys and strongly recommended the discontinuance of blank keys. As revealed in Table XXXIX, this trend of thought has not yet found a place in Montana schools. However, some instructors indicated that new machines ordered for classroom use arrived with blank keys although they were not so ordered and the additional expenditure required for the changing of the keys exceeded budget allowances.

In recent years business educators have questioned the use of wall charts but have not as yet formed any positive opinions. Montana high schools, in almost all cases, use wall charts as an instructional aid.

The use of demonstration stands is generally recommended for classroom instruction. Demonstration stands are probably more important in the schools having large typewriting classes; however, Table XXXIX indicates that less than fifty percent of the three groups containing the largest schools in the state use demonstration stands in typewriting classes.

The use of metronomic aids in typewriting classes is being questioned by many commercial educators. As pointed out by Rowe,⁸ research studies have revealed that typewriting is not done metronomically but by letter groupings with many speed variations. The use of such aids have all but vanished

⁸Rowe, op. cit., p. 144.

TABLE XXXIX
 FREQUENCIES AND PERCENTAGES OF TYPING AIDS
 USED IN 129 MONTANA PUBLIC HIGH SCHOOLS
 1950-1951

Typing Aids	SCHOOL GROUPS					Total	Per- cent
	I	II	III	IV	V		
Blank Keys	12	20	38	30	27	127	98.4
Wall Charts	12	16	35	30	27	120	93.0
Standardized Tests	9	15	39	28	15	106	82.2
Published Forms	2	8	16	18	9	53	41.1
Demonstration Stands	8	10	14	9	7	48	37.2
Phonographs	6	4	14	13	9	46	35.7
Metronomes	0	0	2	1	2	5	3.9
Type Pacers	3	1	0	1	0	5	3.9

from Montana high schools with less than four percent of the schools indorsing their usage.

Standards

A glance at Tables XL and XLI will provide evidence that typewriting standards in Montana are highly variable in the length of timed writings and the number of errors permitted. The results of studies concerning typewriting standards are amply interpreted by Rahe.

Much is said and written about school and office standards in typewriting, but only a limited amount of study has been conducted which can supply us with significant norms and standards of performance.⁹

The emphasis placed on typewriting accuracy rather than speed has drawn criticism from many modern educators in the commercial field. Dotson states the modern position clearly.

Standards for grading first semester typing students have not been changed to meet the needs of modern methods of teaching typewriting. Leaders of teaching methodology for typewriting advocate speed of stroking from the beginning with the emphasis placed on proper technique and good habits.¹⁰

That error standards still play a major role in typewriting instruction can be seen in Table XL. However, twenty-seven of the one hundred seventeen schools responding to the

⁹Harves C. Rahe, "Performance Standards in Typewriting," UBEA Forum, 3:38, November, 1948.

¹⁰Verner L. Dotson, "Standards of Grading Typing," UBEA Forum, 4:19, November, 1949.

questionnaire indicated that error standards had been discarded.

Of the schools setting standards in first-semester typewriting, eighty-one or sixty-nine percent set the minimum time on test writings as five minutes. Of this group, the allowance of five errors or one error per minute was most generally permitted. When a rate of speed was required, twenty net words per minute appeared to be the most widely approved rate followed by twenty-five net words per minute. Therefore, the modal minimum standard in first-semester typewriting classes was a five minute test requiring twenty or twenty-five net words per minute and allowing five errors for the five minute test.

Of the second-semester typewriting courses, the ten minute test was used by about seventy-two percent of reporting schools. The most common number of errors permitted was one error per minute. The speed generally required for a passing mark was thirty-five net words per minute followed closely by a minimum allowance of thirty words per minute. Thus the modal minimum standards for the second semester of typewriting are ten minute timed writings of thirty or thirty-five net words per minute with an allowance of ten errors or one error per minute.

TABLE XL
 FIRST SEMESTER TYPEWRITING STANDARDS
 OF 117 MONTANA PUBLIC HIGH SCHOOLS
 1950-1951

Length of Timed Writing and Errors Allowed	No Set Stand- ard	Net Words Per Minute						
		15	20	25	30	35	40	45
One Minute Writing								
9 Errors	1	0	0	0	0	0	0	0
Two Minute Writing								
1 Error	0	0	1	0	0	0	0	0
2 Errors	0	0	0	1	0	0	0	0
Three Minute Writing								
No Error Standard	2	0	0	3	0	0	0	0
3 Errors	1	0	2	2	0	0	0	0
6 Errors	0	0	0	1	0	0	0	0
9 Errors	1	2	1	0	0	0	0	0
Five Minute Writing								
No Error Standard	5	1	5	3	2	1	0	0
3 Errors	0	0	2	2	1	0	0	0
5 Errors	2	0	17	10	4	0	2	1
8 Errors	0	0	1	0	1	0	0	0
10 Errors	0	6	5	2	1	0	0	1
15 Errors	0	1	1	1	0	0	2	1
Ten Minute Writing								
No Error Standard	2	0	0	1	1	0	0	0
5 Errors	0	0	0	1	2	1	1	0
10 Errors	0	0	2	1	1	0	1	0
15 Errors	0	0	0	0	0	1	0	0
20 Errors	0	0	0	0	1	0	0	0
Fifteen Minute Writing								
5 Errors	0	0	0	1	0	0	0	0
20 Errors	0	1	0	0	0	0	0	0

TABLE XLI
 SECOND SEMESTER TYPEWRITING STANDARDS
 IN 116 MONTANA PUBLIC HIGH SCHOOLS
 1950-1951

Length of Timed Writing and Errors Allowed	No Set Standard	Net Words Per Minute							
		25	30	35	40	45	50	55	60
Five Minute Writing									
No Error Standard	2	0	2	0	1	0	0	0	0
0 Errors	0	0	0	1	0	0	0	0	0
3 Errors	0	0	1	0	1	0	1	0	0
4 Errors	0	0	0	0	1	0	0	0	0
5 Errors	0	1	5	9	1	1	1	1	1
10 Errors	0	0	1	0	2	0	0	0	1
Ten Minute Writing									
No Error Standard	2	0	3	2	5	0	1	0	0
5 Errors	1	0	8	7	3	1	2	0	1
6 Errors	0	0	1	0	1	1	0	0	0
7 Errors	0	0	1	0	0	0	0	0	0
10 Errors	0	0	8	12	4	0	1	1	1
15 Errors	0	1	0	0	0	0	0	1	0
20 Errors	0	0	0	4	0	0	0	0	0
25 Errors	0	0	0	0	0	0	0	1	0
Fifteen Minute Writing									
No Error Standard	0	0	0	0	1	0	0	0	0
5 Errors	0	0	0	1	1	0	0	0	0
8 Errors	0	0	0	1	0	0	0	0	0
15 Errors	0	0	1	0	0	0	0	0	0
20 Errors	0	0	1	0	0	0	0	0	0
22 Errors	0	0	0	0	0	1	0	0	0
30 Errors	0	0	0	1	0	0	0	0	0

CHAPTER VII

SHORTHAND

Shorthand has an established place in the high school curriculum. During the next ten years well over a million students will be studying this subject every year if present ratios of enrollment continue. In spite of the pressure exerted by some academic teachers to persuade some students not to take this subject; in spite of the strong efforts of some commercial teachers to discourage certain types of students; and in spite of the sometimes superficial evidence given by guidance teachers about the excessive number of stenographers--students evidently feel that the subject has great utility and continue to insist, usually with the support of their parents, upon enrolling in shorthand and typewriting.¹

As shown in Table XXVI, shorthand is found in eighty-four percent of Montana high schools and has an enrollment of 1,853 pupils. In small high schools in Illinois, (enrollments of one hundred fifty students or less) about eighty-two percent of the schools offered shorthand in 1950.² In the same year eighty percent of similar sized schools in Montana offered shorthand. Approximately twenty-three percent of the small Illinois high schools offered two years of shorthand.³ In Montana about thirty-one percent of similar sized schools

¹Herbert A. Tonne, Principles of Business Education, (New York: Gregg Publishing Co., 1947), p. 299.

²Helena Hinkson Green, "Shorthand in the Small High Schools of Illinois," The Journal of Business Education, 26:154, December 1950.

³Loc. cit.

offered two years of shorthand. As in Montana schools, transcription as a separate course was almost non-existent with only one of the one hundred fifty Illinois schools reporting such an offering.

Shorthand Systems

Gregg Shorthand is almost exclusively taught in Montana high schools as revealed in Table XLII. The only other system noted was the Thomas system which was taught in three high schools. On the basis of five hundred sixty returned questionnaires out of 1,003 distributed to all sections of the United States in 1936, Anderson reports that ninety-nine percent of the schools taught the Gregg system of shorthand.⁴ This figure corresponds to the ninety-nine percent of the one hundred twelve reporting high schools in Montana.

Shorthand Methods

Although of very recent origin, the simplified instruction method of Gregg Shorthand has been widely accepted. Of the one hundred thirteen schools responding to the question concerning shorthand methods, ninety schools or eighty percent offered the simplified system as shown in Table XLIII. Thirty-eight schools used the anniversary method while one school

⁴Ruth I. Anderson, "The Status of Shorthand Instruction," The Business Education World, 29:217, December 1948.

TABLE XLII

SYSTEMS OF SHORTHAND OFFERED IN 112 MONTANA
PUBLIC HIGH SCHOOLS, 1950-1951

Shorthand System Offered	S C H O O L G R O U P S					Total
	I	II	III	IV	V	
Gregg	12	19	36	28	16	111
Thomas	1	1	0	0	1	3
Others	0	0	0	0	0	0

TABLE XLIII

METHODS OF SHORTHAND TAUGHT IN 113 MONTANA
PUBLIC HIGH SCHOOLS, 1950-1951

Method of Short- hand Taught	S C H O O L G R O U P S					Total
	I	II	III	IV	V	
Manual Gregg Anniversary	2	1	1	6	0	10
Functional Gregg Anniversary	0	4	11	10	3	28
Manual Gregg Simplified	6	9	13	5	5	38
Functional Gregg Simplified	5	8	16	16	7	52
Thomas Natural	0	1	0	0	0	1

reported using the Thomas method. Many schools offered both the simplified and anniversary methods although the simplified method was used almost exclusively in beginning classes.

A comparison between simplified and anniversary methods is shown in Table XLIV. Opinions on this subject were expressed on only sixty-nine percent of the returned questionnaires. This low percentage of responses may be due to the recent adaption of the simplified method.

Of the sixty-nine schools reporting, the majority of the responses favored the use of the simplified method. Sixty-eight percent reported noticeable increases in dictation speeds when using the simplified method and fifty-nine percent agreed that transcription speed was also increased. An increase in accuracy was noted by forty-eight percent of the reporting schools. Leslie and Zoubek, authorities on the simplified method, support the writing facility by stating:

The learner using Gregg Shorthand Simplified will reach a certain speed--100 or 120 words a minute--sooner than he did in the past. Outlines that are longer visually and manually are shorter mentally and, therefore, they will be written more rapidly.⁵

Shorthand Textbooks Used

Unlike the typewriting textbooks, shorthand is not dominated by any one text but is taught in Montana high schools

⁵Louis Leslie and Charles E. Zoubek, "Writing Speed of Gregg Shorthand Simplified," UBEA Forum, 4:24, Oct., 1949.

TABLE XLIV
 COMPARISON BETWEEN SIMPLIFIED AND ANNIVERSARY
 SHORTHAND METHODS BY 69 MONTANA PUBLIC HIGH SCHOOLS
 1950-1951

Comparison of Methods	SCHOOL GROUPS					Total
	I	II	III	IV	V	
Increase in Accuracy with Simplified Method	6	9	11	11	6	33
Increase in Dictation Speed with Simplified Method	5	9	15	14	4	47
Increase in Transcrip- tion Speed with Simplified Method	4	5	11	14	7	41
No Change Noted	1	1	1	0	0	3
Uncertain	2	3	0	0	0	5

from a wide variety of texts. In first-year shorthand classes Gregg Shorthand Manual Simplified is used by fifty-eight percent of the schools and Gregg Dictation Simplified is used by about thirty-eight percent. Because one hundred twenty-one schools are represented in the table for first-year classes and one hundred sixty-seven textbooks are represented, it may be concluded that many schools are using several supplemental textbooks.

In the second-year shorthand classes the most common textbooks were Gregg Transcription Simplified and Gregg Speed Building Simplified, both of which were used in twenty-three high schools. The texts listed in Table XLVI are in addition to first-year tabulations in Table XLV. Many of the texts used in the first year are also used for second-year instruction.

Time of Offerings

One hundred four of the one hundred twelve schools responding to the questionnaire reported offering shorthand in the third year. Three schools did not offer shorthand until the fourth year and thus denied students the opportunity of the two years of training usually needed to become proficient in vocational fields.

TABLE XLV

NAME AND AUTHORS OF TEXTBOOKS USED IN THE TEACHING OF
FIRST-SEMESTER SHORTHAND IN 121 MONTANA
PUBLIC HIGH SCHOOLS, 1950-1951

Textbook and Authors	SCHOOL GROUPS					Total
	I	II	III	IV	V	
Gregg Shorthand Manual Simplified Leslie and Zoubek	9	15	25	12	9	70
Gregg Dictation Simplified Leslie and Zoubek	6	8	20	5	6	45
Gregg Functional Method Simplified Leslie and Zoubek	0	5	11	13	5	34
Gregg Shorthand - Anniver- sary Edition Gregg	1	1	2	2	0	6
Functional Method Dictation Leslie	0	1	0	1	0	2
Gregg Transcription Simplified Leslie and Zoubek	1	2	0	0	0	3
Thomas Shorthand Manual Thomas	1	1	0	0	0	2
Thomas Complete Dictation Study Thomas	0	1	0	0	1	2
Most Used Words and Phrases Gregg, Leslie and Zoubek	0	1	0	0	0	1
Thomas Introductory Reading Thomas	0	1	0	0	0	1
Thomas Natural Shorthand Thomas	0	0	0	0	1	1

TABLE XLVI

**NAME AND AUTHORS OF TEXTBOOKS USED IN THE TEACHING OF
SECOND-SEMESTER SHORTHAND IN 59 MONTANA
PUBLIC HIGH SCHOOLS, 1950-1951***

Textbook and Authors	SCHOOL GROUPS					Total
	I	II	III	IV	V	
Gregg Transcription Simplified Gregg, Leslie and Zoubek	3	6	10	3	1	23
Gregg Speed Building Simplified Gregg, Leslie and Zoubek	5	4	9	5	0	23
Shorthand Dictation Studies Bowman	0	5	2	0	0	7
Functional Method Dictation Leslie	1	0	1	2	0	4
Gregg Advanced Dictation Simplified Leslie and Zoubek	0	1	3	0	0	4
Gregg Speed Studies Gregg	0	1	0	1	1	3
Gregg Shorthand Dictation Studies Leslie and Zoubek	1	1	0	0	0	2
Most Used Words and Phrases Gregg, Leslie and Zoubek	0	0	1	0	1	2
Correlated Dictation and Transcription Forkner	0	0	1	0	1	2
Transcription Studies Thomas and Fox	0	1	0	0	0	1
Gregg Dictation and Transcrip- tion Renshaw and Leslie	0	0	1	0	0	1

*In addition to first-semester textbooks

TABLE XLVII
 SCHOOL YEAR IN WHICH STUDENTS MAY TAKE SHORTHAND
 IN 112 MONTANA PUBLIC HIGH SCHOOLS
 1950-1951

Year of Offering in High School	SCHOOL GROUPS					Total
	I	II	III	IV	V	
Freshman	0	0	0	1	0	1
Sophomore	0	0	1	0	3	4
Junior	11	20	34	28	11	104
Senior	1	1	1	0	0	3

Shorthand Standards

As in typewriting, shorthand standards are highly variable. Of the eighty-six schools responding to the question concerning shorthand standards, six reported that no error or speed standards were set. As indicated in Table XLVIII twenty-three schools set some speed standard but did not have an error standard for first-semester shorthand. Two-minute tests were most often used but the one and five minute tests approached so closely that it is deemed inadvisable to state any modal time writing standard. Within the timed writing groups, no one speed or error listing was sufficiently prominent to determine a pattern. In the first semester of shorthand it may be concluded that no timed writing with a corresponding dictation speed and error allowance may be designated as a modal standard.

The standards set in second-semester shorthand are much more pronounced. Only two instructors set no error or speed standard and fifteen set a dictation speed with no corresponding error standard. Approximately seventy-seven percent of the questionnaire returns listed five minute dictation tests. Table XLIX indicates a dictation speed of sixty words per minute allowing fifteen errors during the five minute writing was the modal standard for the second-semester shorthand classes in Montana high schools. The next most popular standard was a

TABLE XLVIII
 FIRST-SEMESTER SHORTHAND STANDARDS
 OF 86 MONTANA PUBLIC HIGH SCHOOLS
 1950-1951

Length of Dictation Test and Errors Allowed	No Set Dictation Speed Per Minute Standard							
	20	30	35	40	50	60	65	
One Minute Test								
No Error Standard	2	0	0	0	4	0	4	0
2 Errors	0	0	0	0	2	1	0	1
3 Errors	0	0	0	0	0	1	1	0
5 Errors	0	0	1	0	1	0	1	0
8 Errors	0	0	0	0	1	0	0	0
Two Minute Test								
No Error Standard	1	0	0	0	3	2	1	0
3 Errors	0	0	0	0	0	0	1	0
5 Errors	0	0	0	0	0	3	1	0
6 Errors	0	0	0	0	0	0	1	0
7 Errors	0	0	0	0	0	0	2	0
8 Errors	0	0	0	0	2	1	3	1
10 Errors	0	0	0	0	2	2	1	0
Three Minute Test								
No Error Standard	1	0	0	1	1	0	2	0
5 Errors	0	0	0	0	2	1	0	0
6 Errors	0	0	0	0	2	1	0	0
8 Errors	0	0	0	0	1	0	0	0
10 Errors	0	0	0	0	1	0	0	0
15 Errors	0	0	0	0	0	0	1	0
Five Minute Test								
No Error Standard	2	0	0	0	0	0	0	0
0 Errors	0	0	0	0	0	1	1	0
3 Errors	0	1	0	0	0	0	0	0
4 Errors	0	0	0	0	0	0	1	0
5 Errors	0	0	0	0	1	1	0	0
8 Errors	0	0	0	0	0	1	0	0
10 Errors	0	0	1	0	0	2	1	1

TABLE XLVIII (continued)

**FIRST-SEMESTER SHORTHAND STANDARDS
OF 86 MONTANA PUBLIC HIGH SCHOOLS
1950-1951**

Length of Dictation Test and Errors Allowed	No Set Dictation Speed Per Minute Standard							
	20	30	35	40	50	60	65	
Ten Minute Test								
No Error Standard	0	0	0	0	0	1	0	
5 Errors	0	0	0	1	0	0	0	
10 Errors	0	0	0	0	0	1	0	
15 Errors	0	0	0	0	1	3	0	
16 Errors	0	0	0	0	1	0	0	
20 Errors	0	0	0	3	0	0	0	

TABLE XLIX
 SECOND-SEMESTER SHORTHAND STANDARDS
 IN 95 MONTANA PUBLIC HIGH SCHOOLS
 1950-1951

Length of Dictation Test and Errors Allowed	No Set Standard	Dictation Speed Per Minute					
		50	60	70	80	90	100
Two Minute Test							
No Error Standard	0	1	1	0	1	0	0
0 Errors	0	0	0	0	1	0	0
2 Errors	0	0	1	0	1	0	0
5 Errors	0	1	0	0	0	0	0
15 Errors	0	0	0	0	1	0	0
Three Minute Test							
No Error Standard	1	0	1	1	2	0	0
3 Errors	0	0	0	0	1	0	0
6 Errors	0	0	0	0	1	0	0
10 Errors	0	0	1	0	1	0	0
15 Errors	0	0	0	0	0	0	1
20 Errors	0	0	0	0	1	0	0
Five Minute Test							
No Error Standard	1	0	2	0	3	1	0
0 Errors	0	0	0	0	1	0	0
3 Errors	0	0	2	0	1	0	0
5 Errors	0	0	2	0	0	0	0
8 Errors	0	1	0	0	2	0	0
10 Errors	0	1	3	1	1	0	1
11 Errors	0	0	1	0	0	0	0
12 Errors	0	0	1	0	0	0	0
15 Errors	0	0	32	0	1	0	0
20 Errors	0	0	1	0	9	0	1
25 Errors	0	1	1	0	1	0	1
Ten Minute Test							
No Error Standard	0	0	0	0	1	0	0
5 Errors	0	0	0	1	1	0	0
Fifteen Minute Test							
No Error Standard	0	0	0	0	1	0	0
5 Errors	0	0	1	0	0	0	0

five minute writing at eighty words per minute with an allowance of four errors per minute or a total of twenty errors. In a survey conducted in Illinois, the standard in fifty-five percent of the courses in small high schools at the end of the first year was set at sixty words per minute with variable allowances for errors.⁶

⁶Green, op. cit., p. 153.

CHAPTER VIII

BOOKKEEPING AND BASIC BUSINESS

Bookkeeping

From the printed material published in the past few years, it would appear that somewhat of a chaotic condition exists in regards to bookkeeping objectives as taught in the nation's high schools. There does, however, seem to be a socio-development trend in most proposed theories.

Among the objectives of bookkeeping mentioned in prefaces of several current textbooks are:

1. To learn how to make better records for personal and home use.
2. To be able to interpret and analyze business papers and records in the capacity of a consumer.
3. To study bookkeeping records and reports as an aid in the management of business enterprise.
4. To train students for positions in bookkeeping occupations.¹

The fourth point in the preceding quotation has brought about the greatest change. While bookkeeping was previously accepted as strictly a vocational course, the growth of complex business structures and systems have set new demands for personal rather than vocational knowledge.

The high schools today are probably teaching bookkeeping to over half a million students. If all these students succeeded in obtaining jobs, there would have to be a complete turnover every two years in bookkeeping

¹Tonne, op. cit., p. 275.

positions. Moreover, some bookkeeping positions are filled by persons who have had no formal instruction. Obviously, then, only a small proportion of the boys and girls receiving bookkeeping instruction will ever be able to use their knowledge vocationally as bookkeepers.²

That Montana high schools have adopted this personalized theory is shown in Table XXVI. Only nine of the one hundred seventy-six schools offered bookkeeping for two years as a vocational course.

Data concerning the teaching of bookkeeping is presented in Table L. No discussion of the findings is necessary since all material is believed self-explanatory. Unlike typewriting and shorthand, comparative studies in standards and methods have been extremely limited and little meaningful information is available.

Of textbooks used in Montana public high schools, ninety-six percent of the schools reported using the nineteenth edition of Twentieth Century Bookkeeping and Accounting. Only four of the one hundred twelve schools reported the use of texts by authors other than Carlson, Prickett and Forkner.

²Tonne, loc. cit.

TABLE L
 DATA CONCERNING THE TEACHING OF BOOKKEEPING
 IN MONTANA PUBLIC HIGH SCHOOLS
 1950-1951*

	S C H O O L G R O U P S					Total
	I	II	III	IV	V	
<u>Method of Approach in First-Year Classes</u>						
Journal	2	4	5	9	2	22
Account	2	1	4	5	2	14
Balance Sheet	7	13	26	16	11	73
Equation	3	2	13	4	6	28
Cycle Plan	0	0	0	0	1	1
<u>Type of Teacher Tests Used</u>						
Problem	0	4	4	1	3	12
Theory	0	1	2	0	0	3
Both	12	13	32	24	15	96
<u>Standardized Tests Used in Testing</u>						
Yes	12	18	35	26	15	106
No	0	0	5	0	0	5
<u>Outside Work Permitted on Practice Sets</u>						
Yes	6	15	30	20	15	86
No	6	3	6	7	3	25

*Data from 111 returned questionnaires.

TABLE LI

NAME AND AUTHORS OF TEXTBOOKS USED IN THE TEACHING
OF BOOKKEEPING IN 112 MONTANA PUBLIC HIGH SCHOOLS
1950-1951

Textbook and Authors	SCHOOL GROUPS					Total
	I	II	III	IV	V	
Twentieth Century Bookkeeping and Accounting (19th Edition) Carlson, Prickett & Forkner	11	17	38	27	15	108
Twentieth Century Bookkeeping and Accounting - Advanced Carlson, Prickett & Forkner	1	0	1	2	1	5
Bookkeeping and Accounting Elwell	0	0	0	0	1	1
Introductory Bookkeeping Zelliot	0	0	0	0	1	1
Bookkeeping for Personal and Business Use Kirk	0	0	0	0	1	1
Bookkeeping for Immediate Use Kirk	0	0	0	0	1	1

Basic Business

...we share the widespread conviction that there are certain economic understandings and certain business knowledge and skills that should be required of all secondary students just as learning in English, civics, and health education are now required and for reasons equally defensible. Moreover, business and economic training of a nonvocational nature should be made available to adults for whom wrong business methods, poor judgements, and unwise decisions of an economic nature may be disastrous and tragic.³

Basic business education has drawn a great deal of comment from persons in the commercial field. Generally speaking, available literature indicates a deficiency not only in the course offerings but also in the manner of presentation. In 1948 the United States Office of Education with the cooperation of teachers on all levels of instruction sponsored a general business research project in business instruction. The conclusions reached in regards to the failure of not accomplishing as much as desired in general business curricula were:

- (a) The methods we use are entirely different than those needed in the skill subjects, and we are trained to teach skills.
- (b) General Business is difficult to teach.
- (c) We have left the teaching of general business subjects to the inexperienced teachers in our schools.
- (d) Selected materials are not available to the

³Frank B. Eyker and Galen Jones, "The U. S. Office of Education Looks at Business Education," UREA Forum, 2:34, March, 1947.

teacher and he does not have time to go through all materials and select them.⁴

Montana appears to be in a similar position as are other states in regards to basic business subject offerings. Basic business courses are not being offered by a sufficient number of Montana public high schools. Why? Beattie states some of the reasons which may be involved in deficient curricula.

(1) The methods used in teaching basic business subjects are different from those used in teaching the skill subjects.

(2) The basic business subjects have become a dumping ground for poorer students in the schools.

(3) The business teachers have a full teaching load with just the skill subjects.

Superintendents are now hard pressed by demands for the addition of new courses in agriculture, social studies, industrial arts, etc. When it comes time to eliminate, they turn to what they consider the weakest course. According to superintendents and principals, this invariably seems to be a basic business subject.⁵

Of the reasons stated above, probably the third is most valid in Montana since the smaller high schools in the state demand such a wide variety of teaching abilities that specialization in all fields is impossible.

The portion of the questionnaire concerning basic business yielded such a few responses that the material was

⁴Herbert F. Freeman, "Basic Business Education Research Study," American Business Education, 5:228, March, 1949.

⁵Donald Beattie, "Who Should Teach the Basic Business Subjects," UBEA Forum, 4:34, February, 1950.

not considered for presentation in this study. The offerings of basic business have not maintained their position during the past years. Table LII presents the offerings listed in 1928 compared to the present offerings in Montana public high schools. The percentages of schools offering six basic business courses in 1951 is lower in all six courses than the 1929 percentage. Business mathematics, taught by almost one-half of the schools in 1929, is now being presented in only ten percent of the schools. Business geography, a common course in 1929, has all but vanished from present curricula as has business English. It must also be noted that ten of the basic business courses presented twenty-two years ago have been discarded. Thus it may be concluded that basic business courses are on the decrease in Montana school curricula, a consequence in adverse position to modern advocations.

TABLE LII

NUMBER OF SCHOOLS OFFERING BASIC BUSINESS COURSES IN
176 MONTANA PUBLIC HIGH SCHOOLS IN 1949-1950 AND 1950-1951
AS COMPARED TO 1928-1929 OFFERINGS IN 62 HIGH SCHOOLS

Course Offerings	Number of Schools Offering Courses 1929*	1951	Percentage Of Schools 1929*	1951
Business Arithmetic	36	17	44.9	9.9
Economics	31	-	37.8	-
Business Geography	30	4	36.6	2.3
Business Law	26	16	31.7	10.2
Business English	10	2	12.2	1.1
Business Practice	8	-	9.8	-
Spelling	7	-	8.6	-
Junior Business Training	6	10	7.3	5.7
Salesmanship	6	2	7.3	1.1
Accounting	2	-	2.4	-
Cost Accounting	2	-	2.4	-
Marketing	1	-	1.2	-
Vocations	1	-	1.2	-
Advertising	1	-	1.2	-
Banking	1	-	1.2	-
Filing	1	-	1.2	-
Income Tax	1	-	1.2	-

*Includes only schools offering one or more commercial subjects.

CHAPTER IX

CONCLUSIONS AND RECOMMENDATIONS

As stated in the beginning of this report, the findings and conclusions derived from this study are presented to instructors, administrators, and all other interested persons in an effort to acquaint them with existing conditions in commercial education programs in Montana public high schools. All of the following conclusions are derived from presented statistical data and more detailed information may be found under the pertinent chapter topics.

Professional Status Conclusions

1. Fifty percent of the total number of commercial teachers in this study have less than five years teaching experience, the median number of years approaching four and one-half years.
2. Over twice as many commercial teachers are found in the group having no teaching experience than in any other group graduated according to years of teaching experience. Thirty-six teachers or about twenty-three percent of one hundred fifty-nine commercial teachers returning questionnaires began teaching in September 1950
3. Larger schools do not employ as many beginning commercial teachers as do the smaller schools. Eighty-five

percent of inexperienced teachers were placed in schools having enrollments under one hundred fifty pupils.

4. Commercial teachers with the longest teaching experience tend to be located in the largest school systems in the state.

5. Approximately one-fourth of the commercial teachers have had no previous on-the-job commercial experience although sixty percent of the beginning teachers had previous occupational experience.

6. Approximately ninety-three percent of one hundred fifty-nine instructors teaching commercial courses have either a teaching major or teaching minor in commercial subjects.

7. Teacher training attainments have improved over previous standards. At present, commercial teaching majors are held by seventy-nine percent of commercial teachers as compared with fifty percent in 1929.

8. Following commercial subjects, English and history and social science were the most common teaching majors. Of teaching majors received in addition to commerce, English and social science were the most often named fields.

9. Of all teaching minors held by teachers of commercial subjects, English and social science were the most commonly mentioned fields.

10. Approximately sixty percent of the instructors teaching commercial subjects received their degree in the

field of secretarial science, business administration, or business education.

11. Only nine of two hundred eighteen commercial teachers have not received a Bachelor's degree.

12. Of two hundred eighteen teachers of commercial courses, fourteen or six percent have degrees higher than that of a Bachelor's degree.

13. Degrees bestowed on two hundred eighteen teachers in Montana were granted from institutions representing twenty-three states and Canada. Montana institutions accounted for one hundred fourteen degrees or about fifty-two percent followed by North Dakota and Minnesota who were also second and third respectively in 1929.

14. Montana State University is the main source of supply for commercial teachers with seventy-four or about thirty-four percent of two hundred eighteen commercial teacher placements.

15. There is no apparent statewide salary standard among commercial teachers.

16. There is a notable positive correlation between salary distribution and teaching experience up to seven years of service after which there is little correlation.

17. No medians of any groups graduated according to years of teaching experience meet the Montana Education Association adjusted salary recommendations for 1950. The group with

no previous teaching experience comes closest to meeting the standard.

18. Many teachers are still receiving salaries below 1946 Montana Education Association recommended standards.

Curriculum Status Conclusions

19. Ten of one hundred seventy-six schools in September 1950 did not include any commercial courses in their curriculum. Over a two year span, 1949-1951, only two schools or about one percent did not have a commercial offering as compared to ninety-nine of one hundred ninety-six schools in 1929 that did not have at least one commercial course included in their curriculum.

20. Typewriting leads all other commercial courses in the number of schools offering commercial subjects. First-year typewriting was taught by about ninety-nine percent of one hundred seventy-six schools and about eighty-seven percent taught second-year typewriting.

21. Of a total of two hundred ninety-eight typewriting classes offered in September 1951, twice as many students were enrolled than in all other commercial courses combined.

22. Twenty percent of the students enrolled in school in September 1951 were enrolled in typewriting classes.

23. As the enrollment of the school decreases, the percentage of students in the school taking typewriting in-

creases.

24. Vocational typewriting is offered later in high school than is personal typewriting.

25. The combination of personal and vocational typewriting is offered almost exclusively in the second and third years of high school, the later being the more prominent.

26. Approximately eighty-three percent of all typewriters used are Royals and Underwoods of which the former is slightly favored. In 1929, the Underwood was not challenged for the top spot and the Royal comprised about seven percent of the machines in use.

27. Electric typewriters have not yet been introduced on an extensive scale since only four of one hundred seventy-six high schools report using electric machines.

28. The modal height of typewriting tables is twenty-seven inches, three inches below the recommended height of thirty inches.

29. Of typewriting aids used, blank keys and wall charts are the most commonly mentioned aids while only thirty-seven percent of the schools have demonstration stands. Metronomic aids are being discarded from typewriting instruction in Montana high schools.

30. The modal minimum standard for first-semester typewriting was twenty-five net words per minute for five minutes allowing one error per minute. For the second-semester,

a writing of thirty-five net words per minute for ten minutes with one error allowed per minute was most commonly reported.

31. Twentieth Century Typewriting by Lessenberry is used almost exclusively by typewriting classes in Montana.

32. Shorthand, while being offered by more schools than bookkeeping, does not have as many students enrolled as bookkeeping.

33. Approximately eighty-four percent of the schools offer first-year shorthand as compared to forty-three percent for second-year shorthand.

34. Transcription is not being offered as a separate course in Montana high schools.

35. Gregg shorthand system is almost exclusively taught with eighty percent of the high schools offering the simplified system. A greater percentage of first-year shorthand classes are using the simplified system than second-year classes.

36. The majority of schools reporting preferences of shorthand methods found the simplified method preferable because of increases in dictation speed and transcription speed.

37. Most schools offer beginning shorthand in the third year of high school.

38. In the first semester of shorthand, standards are so varied that a modal group is not designated. In the second-semester offerings, a dictation speed of sixty words per minute

for five minutes allowing a total of fifteen errors was most often reported as the standard required by commercial teachers.

39. Gregg Shorthand Manual Simplified and Gregg Dictation Simplified were found as the texts most often used.

40. First-year bookkeeping is offered by seventy-eight percent of the schools; however, second-year bookkeeping is offered by only nine schools, seven of which are in the school group comprised of the largest schools in the state.

41. Twentieth Century Bookkeeping and Accounting was used in ninety-six percent of the schools teaching bookkeeping.

42. Only one of every four schools offered a course of a general business nature. Since 1929 more high schools are offering commercial courses but the variety of commercial subjects has been sharply reduced which indicates a trend from a broad commercial offering to a more limited curriculum.

43. Commercial class enrollments have been reduced from a median of twenty students in 1929 to thirteen in 1950-1951.

44. The median number of students enrolled in the "big three" courses for the first year offerings was found to be fifteen students in bookkeeping classes, fourteen in typewriting, and nine in shorthand classes.

45. While more students are presently enrolled in all of the "big three" courses than in 1929, only in typewriting is the present percentage of commercial students to total

student enrollment of schools in the study greater than in 1929.

Recommendations

A study similar to this survey and that made by Miss Young in 1929 should be conducted within the next decade.

A study related specifically to shorthand methods should be conducted within the next two years.

Community surveys and follow-up studies of business graduates are needed to determine whether high school programs are training pupils for actual business opportunities.

A study should be made of the commercial cooperative training programs in high schools.

The subject of commercial teacher training should be more thoroughly investigated since the subject is too involved to be adequately treated in a survey of a subject field.

Set standards for commercial teaching majors and minors should be formulated.

Teacher salaries should be increased to Montana Education Association recommendations as adjusted to cost of living index.

More Montana commercial teachers should become members of professional commercial organizations.

Research by professional organizations such as the

United Business Education Association, Western Business Teachers Association, and Montana Business Teachers Association should be increased for only a very limited amount of material concerning commercial education in Montana public high schools is available.

More basic business courses should be included in high school curricula and the trend to discontinue some commercial courses in favor of courses in other subject fields should be curtailed.

The heights of typewriter tables should be raised to approach acceptable standards.

In typewriting instruction, more schools should make use of demonstration stands.

Blank typewriter keys as an aid to typewriting instruction should be abandoned.

A course in transcription should be included in the curricula whenever possible.

Typewriting should be offered not later than the second year of high school.

A set standard of typewriting and shorthand requirements should be formulated to be used in all Montana high schools.

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*Examined through courtesy of interlibrary loan service.

APPENDICES

Corbin Hall
Montana State University
Missoula, Montana
February 5, 1951

In order to ascertain the general status of commercial education in Montana public high schools, a questionnaire is being sent to high school principals throughout the state. This study, which will be used by the undersigned as a partial fulfillment of the requirements for a Masters of Arts Degree, will be of special interest to teachers in the commercial field and high school administrators. It is being made under the direction of Mrs. Brenda Wilson of the School of Business Administration and Dean Linus Carleton of the School of Education at Montana State University. No similar study has been made for a score of years. If a generous response to this effort can be secured, facts and opinions will be made available which will help you to make decisions as to the direction commercial education should take in the future.

The professional questionnaire on the half-sized sheet is to be filled out by each teacher of commercial courses in your system. The curriculum questionnaire is to be filled out by the administrator with the assistance of the commercial teachers. The data revealed by these questionnaires will be generalized into school groups according to size of enrollments and no identification of particular schools will be made in the paper.

I earnestly solicit your cooperation in this study and ask that you fill out the questionnaire as accurately, completely and promptly as possible. The questionnaire may be returned in the enclosed self-addressed stamped envelope. Please inform me if an adequate number of forms has not been received by you and I will mail additional forms to you immediately.

I wish to thank you in advance for your time and cooperation.

Yours very truly,

Robert G. Langenbach

Corbin Hall
Montana State University
Missoula, Montana
March 5, 1951

On February 5, 1951, a letter with an enclosed questionnaire concerning commercial instructors and courses was mailed to you. To date no response to this questionnaire has been received from your school. If your returns have already been mailed, please disregard this letter; however, if you have not sent them, may I respectfully urge that you do so.

Upon completion of this study in June 1951, I plan to submit to the editors of the Montana Education Association Journal a summary of results obtained from this study in which questionnaires on the status of commercial education in Montana public high schools were sent to 169 high schools.

As mentioned in the original letter of transmittal, no reference will be made to any school system but rather all data will be consolidated into five groups divided according to size of enrollment.

I will sincerely appreciate your returning the questionnaire previously mailed to you so that it will be possible to make a truly thorough and complete study. If the questionnaire has been misplaced or additional forms are needed, I will forward them to you immediately upon your request.

Very truly yours,

Robert G. Langenbach

Name of commercial instructor _____

PROFESSIONAL

How many years of experience have you had in teaching commercial courses? _____

How many years of experience have you had in commercial occupations other than teaching? _____

What are your teaching majors? _____

What are your teaching minors? _____

In what field did you receive your degree? _____

Are you a member of the following professional organizations?

_____ MEA (Montana Education Association)

_____ MBTF (National Business Teachers Federation)

_____ UBKA (United Business Education Association)

_____ MBTA (Montana Business Teachers Association)

What system of shorthand is being taught?

___ GREGG ___ Thomas ___ Other system

What method of shorthand is being taught?

___ Manual GREGG Anniversary ___ Functional GREGG Anniversary

___ Manual GREGG Simplified ___ Functional GREGG Simplified

___ Other method

If GREGG Simplified Method is being used, how does it compare to the Anniversary Method?

___ Increase in accuracy ___ Increase in shorthand speed

___ Increase in transcription speed

What standards are set for first semester shorthand?

___ Usual length of dictation test

___ Minimum dictation speed per minute

___ Maximum errors allowed

What standards are set for second semester shorthand?

___ Usual length of dictation test

___ Minimum dictation speed per minute

___ Maximum errors allowed

What is the minimum transcription speed required per minute?

___ First year ___ Second year

In what years of high school is shorthand offered? ___

What is the title and author of the shorthand texts used?

___ First year

___ Second year

What type of typewriting course is offered?

Personal Vocational Combination

How many of the following typewriters are available for instruction?

Underwood Royal L. C. Smith
 Remington _____ Other makes

Are the following used in typewriting instruction:

Blank keys Wall Charts Demonstration stand
 Metronome Type pacer Standardized tests
 Phonograph Published forms or workbooks

What is the height of typewriting tables used? _____

What style of table is used? Individual Multiple

What standards are set for first semester typewriting?

_____ Usual length of timed writing
_____ Minimum net words per minute
_____ Maximum errors allowed per minute

What standards are set for second semester typewriting?

_____ Usual length of timed writing
_____ Minimum net words per minute
_____ Maximum errors allowed per minute

In what years of high school are the following courses offered?

_____ Personal typing _____ Vocation typing

What is the title and author of the typewriting text used?

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What method of approach is used in first year classes?

Journal Account Balance sheet
 Equation _____ Other method

What type of teacher test is given?

Problem Theory Both

Are standardized tests used? Yes No

Are students permitted to work on practice sets outside of
classrooms? Yes No

How many practice sets are used?

First semester Second semester Second year

In what years of high school is bookkeeping offered? _____

What is the title and author of the bookkeeping texts used?

_____ First year
_____ Second year

GENERAL INFORMATION

What is the title and author of basic business texts used?

Is basic business content of an exploratory nature for other
business courses? Yes No

Are the following aids used in basic general business?

Outside lecturers Field trips Scrapbooks
 Visual aids _____ Other aids

What type of cooperative part-time training has been established
for business students?

Office practice Retailing and selling
 None _____ Other

NAME AND LOCATION OF MONTANA PUBLIC HIGH
SCHOOLS THAT RETURNED QUESTIONNAIRES

GROUP I SCHOOLS

Billings High School
Billings, Montana
Custer County High School
Miles City, Montana
Dawson County High School
Glendive, Montana
Flathead County High School
Kalispell, Montana
Gallatin County High School
Bozeman, Montana
Great Falls High School
Great Falls, Montana
Glasgow High School
Glasgow, Montana
Helena High School
Helena, Montana
Havre High School
Havre, Montana
Missoula County High School
Missoula, Montana
Park County High School
Livingston, Montana
Sidney High School
Sidney, Montana

GROUP II SCHOOLS

Anaconda High School
Anaconda, Montana
Beaverhead County High School
Dillon, Montana
Chinook High School
Chinook, Montana
Columbia Falls High School
Columbia Falls, Montana
Cut Bank High School
Cut Bank, Montana
Fairfield High School
Fairfield, Montana

GROUP II SCHOOLS (contd)

Fairview High School
Fairview, Montana
Hamilton High School
Hamilton, Montana
Hardin High School
Hardin, Montana
Laurel High School
Laurel, Montana
Libby High School
Libby, Montana
Malta High School
Malta, Montana
Plentywood High School
Plentywood, Montana
Polson High School
Polson, Montana
Powell County High School
Deer Lodge, Montana
Ronan High School
Ronan, Montana
Scobey High School
Scobey, Montana
Shelby High School
Shelby, Montana
Whitefish High School
Whitefish, Montana
Wolf Point High School
Wolf Point, Montana

GROUP III SCHOOLS

Absarokee High School
Absarokee, Montana
Baker High School
Baker, Montana
Belfry High School
Belfry, Montana
Belgrade High School
Belgrade, Montana

NAME AND LOCATION OF MONTANA PUBLIC HIGH
SCHOOLS THAT RETURNED QUESTIONNAIRES

GROUP III SCHOOLS (contd)

Belt Valley High School
Belt Valley, Montana
Bigfork High School
Bigfork, Montana
Big Sandy High School
Big Sandy, Montana
Bridger High School
Bridger, Montana
Broadus High School
Broadus, Montana
Broadwater County High School
Townsend, Montana
Browning High School
Browning, Montana
Carter County High School
Ekalaka, Montana
Choteau High School
Choteau, Montana
Circle High School
Circle, Montana
Columbus High School
Columbus, Montana
Darby High School
Darby, Montana
Ennis High School
Ennis, Montana
Forsyth High School
Forsyth, Montana
Garfield County High School
Jordan, Montana
Harlem High School
Harlem, Montana
Harlowtown High School
Harlowtown, Montana
Hot Springs High School
Hot Springs, Montana
Hysam High School
Hysam, Montana
Lodge Grass High School
Lodge Grass, Montana
Plains High School
Plains, Montana

GROUP III SCHOOLS (contd)

Poplar High School
Poplar, Montana
Roundup High School
Roundup, Montana
St. Ignatius High School
St. Ignatius, Montana
Stanford High School
Stanford, Montana
Terry High School
Terry, Montana
Thompson Falls High School
Thompson Falls, Montana
Three Forks High School
Three Forks, Montana
Troy High School
Troy, Montana
Twin Bridges High School
Twin Bridges, Montana
White Sulphur Springs High School
White Sulphur Springs, Montana
Whitehall High School
Whitehall, Montana
Wibaux County High School
Wibaux, Montana
Worden High School
Worden, Montana

GROUP IV SCHOOLS

Alberton High School
Alberton, Montana
Chester High School
Chester, Montana
Colstrip High School
Colstrip, Montana
Culbertson High School
Culbertson, Montana
Denton High School
Denton, Montana
Dodson High School
Dodson, Montana

NAME AND LOCATION OF MONTANA PUBLIC HIGH
SCHOOLS THAT RETURNED QUESTIONNAIRES

GROUP IV SCHOOLS (contd)

Edgar High School
Edgar, Montana
Florence High School
Florence, Montana
Froid High School
Froid, Montana
Fromberg High School
Fromberg, Montana
Geraldine High School
Geraldine, Montana
Granite County High School
Phillipsburg, Montana
Hobson High School
Hobson, Montana
Jefferson County High School
Boulder, Montana
Joliet High School
Joliet, Montana
Noxon High School
Noxon, Montana
Opheim High School
Opheim, Montana
Park City High School
Park City, Montana
Power High School
Power, Montana
Richey High School
Richey, Montana
Rudyard High School
Rudyard, Montana
Ryegate High School
Ryegate, Montana
Sand Coulee High School
Sand Coulee, Montana
Savage High School
Savage, Montana
Shepherd High School
Shepherd, Montana
Sheridan High School
Sheridan, Montana

GROUP IV SCHOOLS (contd)

Superior High School
Superior, Montana
Victor High School
Victor, Montana
Westby High School
Westby, Montana

GROUP V SCHOOLS

Antelope High School
Antelope, Montana
Box Elder High School
Box Elder, Montana
Brady High School
Brady, Montana
Broadview High School
Broadview, Montana
Buffalo High School
Buffalo, Montana
Custer High School
Custer, Montana
Dixon High School
Dixon, Montana
Frazer High School
Frazer, Montana
Frenchtown High School
Frenchtown, Montana
Geyser High School
Geyser, Montana
Harrison High School
Harrison, Montana
Highwood High School
Highwood, Montana
Hingham High School
Hingham, Montana
Ismay High School
Ismay, Montana
Joplin High School
Joplin, Montana

NAME AND LOCATION OF MONTANA PUBLIC HIGH
SCHOOLS THAT RETURNED QUESTIONNAIRES

GROUP V SCHOOLS (cont'd)

Lambert High School
Lambert, Montana
Lavina High School
Lavina, Montana
Welsonts High School
Melstone, Montana
Mocassin High School
Mocassin, Montana
Moore High School
Moore, Montana
Musselshell High School
Musselshell, Montana
Oilmont High School
Oilmont, Montana
Rapelje High School
Rapelje, Montana
Reedpoint High School
Reedpoint, Montana
Roberts High School
Roberts, Montana
Roy High School
Roy, Montana
St. Regis High School
St. Regis, Montana
Turner High School
Turner, Montana
Virginia City High School
Virginia City, Montana
Winnett High School
Winnett, Montana

EXAMPLE OF MEA MINIMUM SALARY SCHEDULE ADJUSTED TO COST-OF-LIVING INDEX

The following schedule is an example of adjusting the MEA schedule to cost-of-living (CLI) index. The index is 175, as of Nov. 15, 1950, released Dec. 1950 by the Bureau of Labor Statistics is used in this example. The 1946 MEA schedule was based on an index of 145. This represents an increase of 30 points or an increase of approximately 21%. An increase of \$100 was allowed for each 6 points increase on the CLI. This means an increase of \$500 at the base point on the MEA schedule.

Consequently an increase, for example, of six points on the Index (to 181) would mean another \$100 increase and a decrease of 6 points would result in a decrease of \$100 in the example schedule.

The index figure preceeding March 1st released by the Bureau of Labor Statistics each year should be used to adjust each year's salary schedule.

T R A I N I N G

Yrs. Exp.	<u>2 yr</u>		1 q.		2 q.		<u>3 yr</u>		1 q.		2 q.		<u>4 yr</u>		1 q.		2 q.	
	MEA '46	2100	2150	2200	2250	2300	2350	2400	2450	2500	E.A.							
0	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	3100	3150	3200	3250	3300	3350	3400	3450
1	2660	2710	2760	2825	2875	2925	2990	3040	3090	3140	3190	3240	3290	3340	3390	3440	3490	3540
2	2720	2770	2820	2900	2950	3000	3080	3130	3180	3230	3280	3330	3380	3430	3480	3530	3580	3630
3	2780	2830	2880	2975	3025	3075	3170	3220	3270	3320	3370	3420	3470	3520	3570	3620	3670	3720
4	2840	2890	2940	3050	3100	3150	3260	3310	3360	3410	3460	3510	3560	3610	3660	3710	3760	3810
5	2900	2950	3000	3125	3175	3225	3350	3400	3450	3500	3550	3600	3650	3700	3750	3800	3850	3900
6	2960	3010	3060	3200	3250	3300	3440	3490	3540	3590	3640	3690	3740	3790	3840	3890	3940	3990
7	3020	3070	3120	3275	3325	3375	3540	3580	3630	3680	3730	3780	3830	3880	3930	3980	4030	4080
8	3080	3130	3180	3350	3400	3450	3620	3670	3720	3770	3820	3870	3920	3970	4020	4070	4120	4170
9	3140	3190	3240	3425	3475	3525	3710	3760	3810	3860	3910	3960	4010	4060	4110	4160	4210	4260
10	3200	3250	3300	3500	3550	3600	3800	3850	3900	3950	4000	4050	4100	4150	4200	4250	4300	4350
11							3890	3940	3990	4040	4090	4140	4190	4240	4290	4340	4390	4440
12							3980	4030	4080	4130	4180	4230	4280	4330	4380	4430	4480	4530

Schedule continued on following page.

