

A STUDY TO DETERMINE THE BASIS FOR AN OFFICE PRACTICE COURSE
IN NOWATA, OKLAHOMA

By

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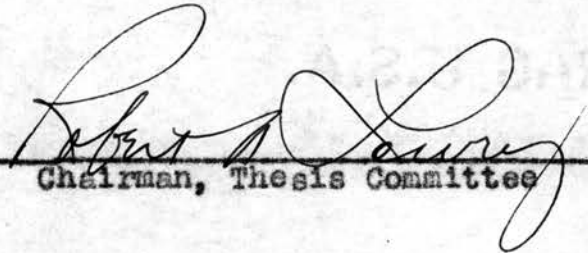
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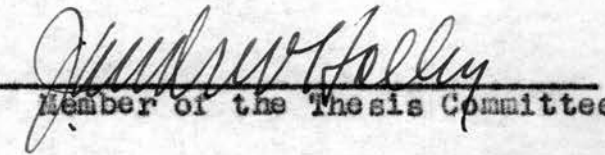
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CHAPTER I
INTRODUCTION

Although there are truths that never change, shifting circumstances require new investigation, new interpretation, and new application of fundamental principles.

It is believed that many pupils enroll in commercial work in high school with the belief that no further training will be necessary; others take commercial work with the idea that it will serve as a basis for further training; others feel that commercial training is a liquid asset that can be used to earn a livelihood later in life should the need arise.

There is a gap between the knowledge of skill subjects such as typewriting, shorthand, and bookkeeping and business itself; and this gap must be bridged. Business often expresses appreciation for the training in the skills of typewriting, shorthand, and bookkeeping which business educators give the youth of our land. On the other hand, business in some instances asserts that students lack knowledge of the fundamentals of English, spelling, arithmetic, and other basic subjects. Also, business sometimes asserts that students lack certain personality traits that are essential for efficiency on the job. According to certain business psychologists, only about 15 per cent of business success can be credited to skill, training and experience, and the other 85 per cent must be checked up to personal qualifications.¹

¹ Frances Meule, She Strives to Conquer, Funk & Wagnalls Company, 1937, p. 81

The term "office practice course" does not have the same connotation to all people. The content of the course varies widely in different schools. These variations indicate that a need is felt for a divergence from the older type of course, which was informational in content and theoretical in nature, to one that will fit the needs of the particular community.

Perhaps the most variable of all changes in the past decade has been the diversity of teaching methods adopted not only by those who profess different philosophies of life and education, but also by those who profess identical concepts.

The Nowata High School offers two years of typewriting, one year of shorthand, and one year of bookkeeping. These subjects may be taken only by students in the eleventh and twelfth grades of high school. The purpose of adding an office practice course to the commercial curriculum is to give the students an opportunity to better prepare themselves for actual job situations.

In this study of the basis for a course in office practice for the Nowata High School, the interests of students and the requirements of business were paramount in importance.

An effort has been made to determine the basis for a practical course of study for high school commercial students that will correlate their training in shorthand, typewriting, and bookkeeping with the requirements of the office situations into which these students will go.

Statement of problem. The purpose of this study is to assemble and interpret the necessary data for the planning of a course in office practice for the Nowata High School. The following questions are considered:

1. How much training should be given in each phase of office work?
2. Which office machines should pupils be trained to operate?
3. Which tasks should be learned "on the job"?
4. How much time, relatively speaking, should be given to each division of office work?
5. What special office abilities should be taught?

Importance of the problem. As public schools of today are striving to prepare boys and girls for life in a world of business, and as a definite interest on the part of high school students has been manifested in an office practice course, it was believed advisable to consider the problem.

Benjamin R. Haynes, professor of business education at the University of Tennessee, says:

In my estimation, the office practice course can be one of the most valuable courses in the entire commercial curriculum. It is one that, in my opinion, is most frequently the most useless one. If we are to continue to prepare initial employees for business, it is imperative that steps should be taken immediately to make the office practice course what it should be.¹

At a meeting of the Commercial Education Association of New

¹Benjamin R. Haynes, "Improving School Office Practice Courses," Review of Business Education, Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma, (May, 1947), p. 9.

York City and vicinity in 1943, which was conducted on the panel discussion plan, a speaker on the panel of the Pitman Commercial Teachers Association said:

We cannot assume that we are going to train a student for a definite job, because we cannot predict where he will be. A good general training should be given and then we can assume that the student will take the needed week or two to adapt himself, provided he has the proper foundation.... More schools should put in the Clerical Practice Course. It can be given local adaptation.²

Benjamin R. Haynes and Clyde W. Humphrey, in their book, Research Applied to Business Education, published in 1939, said that the office practice course is usually given to students immediately before they enter the business world. Continuous research on the requirements of business is vital to its practical effectiveness. The teacher of office practice must know prevailing business customs and must base his knowledge on research -- either that done by himself or that done by others. Through research, the office practice teacher will discover how much training should be given in each phase of office work, which office machines should be taught, which tasks may be learned "on the job", and the relative amount of time that should be given to each division of office work.³

C. Maurice Wieting, of the Curriculum Laboratory at Columbia University says: "The need for making community surveys so that

² "Extending the Business Curriculum in World War II", Thirteenth Yearbook of the Commercial Education Association of the City of New York and Vicinity, p. 58.

³ Benjamin R. Haynes and Clyde W. Humphrey, Research Applied to Business Education, Gregg Publishing Company, Chicago, 1939, p. 43.

the course of study can be adapted to the needs of the students and the entire community is being recognized."⁴ Wieting included this statement in a summary of trends found in courses of study in 1940. He also found that business courses of study are seldom well developed. Often they follow a single text and the unit organization is not used; and when it is used, the materials are seldom complete.⁵

Vernal H. Carmichael in an article on the subject of research needed in the field of office machines says "there is a dire need for both national and local surveys."⁶

Benjamin R. Haynes and Jessie Graham say:

Community and occupational surveys are the means used for gaining a better understanding of the business world for which young people are training -- the kinds of jobs which may be filled by boys and girls just out of high school, the standards demanded by business, and the training prerequisite to the satisfactory filling of each job. . . . Nothing can take the place of the local survey. . . . The local survey furnishes pertinent data upon which to base business courses and also adds to the respect of the community for business education.⁷

Ernest A. Zelliot says:

A feature often overlooked in curriculum-making is more

⁴ C. Maurice Wieting, "Recent Business Education Courses of Study," Sixth Yearbook of the National Commercial Teachers Federation, p. 214.

⁵ Loc. cit.

⁶ Vernal H. Carmichael, "Need for Research In Field of Office Machines and Clerical Practice," National Business Education Quarterly, XIV (December, 1945), 52.

⁷ Benjamin R. Haynes and Jessie Graham, Research in Business Education, University of California, Los Angeles, 1932, pp. 94-95.

cooperation with former students and graduates and particularly those employed in business where they have had an opportunity to try out on the job the efficiency of their high school training, or otherwise. . . . High schools, however, will do well to give more consideration to the suggestions and opinions of graduates and former pupils.⁸

The criteria for evaluating course-of-study materials in the curriculum laboratory of Columbia University consider philosophy, content, activities, and evaluation of pupils' work. In the philosophy section there is a question which reads: "Does the business education curriculum grow out of the needs and interests of children in their environment?"⁹ In the activities section there is a question which reads: "Are activities planned in part on the basis of the type of occupations which will be available to young people when they leave the schools?"¹⁰

Because it will assist the commercial department in Nowata High School to discharge in the best possible manner its obligations to the students and the community, this study was believed desirable.

Scope of study. The limitations of this study are as follows:

- (a) an office occupational and equipment survey of Nowata
- (b) a follow-up of graduates of Nowata High School for the

⁸ Ernest A. Zelliot, "Cooperative Practices in Curriculum Making," Sixth Yearbook of the National Commercial Teachers Federation, p. 188.

⁹ C. Maurice Wieting, "Recent Business Education Courses of Study," Sixth Yearbook of the National Commercial Teachers Federation, pp. 202-204.

¹⁰ Wieting, loc. cit.

(c) literature in selected periodicals, books, bulletins, and research studies in the field of business education

(d) an analysis of courses of study in office practice

Sources of data. Data were obtained from the following sources:

1. Results of an occupational and equipment survey of Nowata, Oklahoma, May, 1947.

2. The course of study in Business Education published by the Department of Education of the State of Oklahoma

3. Other selected state courses of study in business education

4. The opinions of leaders as expressed in the literature of the field

5. Information obtained from the graduates of the High School in the years 1944, 1945, 1946, and 1947, who, with no further training, went to work in offices

6. Selected literature and research studies in the field of business education

Procedure

It was with the idea of assembling concrete suggestions to serve as a basis for the planning of a course in office practice for the Nowata High School that this study was made.

The plan was:

(1) To make a survey of the office occupations and office equipment of Nowata, Oklahoma

(2) To consider the results of surveys in the field of business education which are related, in part at least,

(3) To present the opinions of curriculum experts and leaders in the field of business education that pertain to this study.

(4) To make a follow-up study of the graduates of Nowata High School for the years 1944, 1945, 1946, and 1947 who, with no further training, went to work in offices.

(5) To make an analysis of selected state courses of study in business education as they relate to an office practice course.

(6) To determine the implications of the results of these investigations for a course of study in office practice, embracing significant trends and adapted to the community of Nowata, Oklahoma.

Literature on the subject of research in the field of business education was read, particularly that with reference to the survey method; recently published articles on the subject of follow-up studies and occupational surveys were read and studied; and other theses reporting follow-up studies and community surveys were examined. A list of possible items for the interview guide, to be used in the survey of office occupations and equipment, was made. A tentative interview guide was then constructed and presented to the chairman of the thesis committee for criticism and suggestions. The interview guide was changed to conform to the suggestions and was drafted in its final form.¹¹

¹¹ See Appendix A.

This interview guide was designed to determine (a) how many and what kinds of office positions existed in local business firms, (b) duties performed by the employees, (c) whether or not businesses would employ high school graduates with no post-high school training, (d) experience requirements, (e) age preference for beginning workers, (f) machine equipment used in the business offices, (g) the number of employees who use the machines in the business offices, (h) whether or not the operation of a particular machine can be learned satisfactorily on the job, (i) degree of ability required of the beginning worker to operate the machines, (j) which employers would be interested in a part-time employment program for students of office practice, (k) employers' opinions with reference to desirable and undesirable personality traits of employees, and (l) employers' opinions concerning subject matter weaknesses of employees.

The investigator conducted all the interviews with employers; and, in order that the answers might be as nearly consistent as possible, each employer was approached in the same manner. A complete list of the business firms in the community was compiled. Representatives of sixty of the sixty-seven firms on the list were interviewed. It was found that three of the sixty-seven firms on the list did not employ office help and that four of the sixty-seven offices had only one employee each. The employers in the four offices with one employee each were not available for interviews. It is believed that the omission of data that might have been obtained from these four employers does not

significantly affect the results of this study.

For the purpose of gathering data concerning graduates of Nowata High School now employed in office jobs, a questionnaire, designed to yield the same information as certain parts of the occupational survey, was constructed and presented to the chairman of the thesis committee for criticism and suggested revision. The questionnaire was changed to conform to the suggestions and was presented for further criticism to a committee of graduate students in a seminar in business education. A second revision was made in accordance with the suggestions received, and the card was again presented to the seminar for final criticism. The revised card was then referred to the chairman of the thesis committee for final approval.

A questionnaire¹², together with instructions to the addressee, was typed on a micro-elite typewriter and mimeographed on double postal cards.

A list of the graduates of Nowata High School for the years 1944, 1945, 1946, and 1947 who, with no further training, went to work in office jobs was obtained from the school records. The cards were addressed and coded.

Appropriate tabulation sheets were set up on which to record the data received from the interview guide used in interviewing

¹² See Appendix B.

employers and the questionnaire cards sent to graduates. Data were then classified to fit the needs of the study and appropriate tables were constructed.

The data gathered in the occupational survey by interviewing employers and the responses from the graduates who answered the questionnaire were compared to other surveys and follow-up studies, and these comparisons were considered in determining the basis for a course of study in office practice for Nowata High School.

Data obtained through the occupational survey and follow-up were supplemented through a study of the literature of the field. The data obtained from the literature were considered in determining the basis for a course in office practice for Nowata High School.

Results of the study are presented in the following chapters.

CHAPTER II

SURVEY OF RELATED INFORMATION

Apprenticeship at one time was the only means by which the youthful employee could acquire his knowledge of the principles and practices of his chosen business. Today, however, business looks to the educational institutions of the country for employees who have been not only oriented to its practices but thoroughly trained in the fundamental skill operations. Also, in many instances the prospective employees have had practice experience in the integration of office skills and knowledges.¹

Constant progress in business and industry necessitates a dynamic secondary school program in the field of business education. The success of this program depends upon the ability of the skills to keep abreast with developments, to determine what standards are necessary, and to train pupils to meet these standards.²

Development of the Office Practice Course

Where there is confusion, there is an opportunity for study and planning. As is shown by the related literature, considerable confusion exists in the minds of business education teachers and leaders as to what the course in office practice should include.

¹ Suggestive Curricular Guide in Business Education, Bulletin No. 491, State Department of Education, Louisiana, 1943, pp. 448-449.

² Harold G. Shields, "The Basic Business Subjects," Seventh Yearbook of the National Business Teachers Association, p. 186.

In June, 1947, Russell Cansler,³ in an article in the Journal of Business Education, says:

The development of office practice holds an unusual interest for business educators. . . . While course variances to the particular needs of a community or school are commonplace among most of the business subjects, there seems to be greater variance in this course than any of the others.

Erroneously, we have found little time to direct and develop right attitudes toward employers, fellow employees, and their jobs, which will help to quickly adjust them to working in business.

In hinting that graduates need this training and that it is our responsibility, management has not told us where this type of training is to be carried on. More than likely the place for this type of training is in the office practice course.

Ruth L. Roberts⁴ writes:

Some schools see the principal trend in office employment as a need for fewer but more efficient workers and these schools might interpret the office practice course as one concerned with improving skills. They will have higher standards in dictation rates and transcription speed, standards in grammar, English, and spelling, with perhaps some discussion of office procedures.

Other schools see the office practice course as a course devoted almost entirely to office organization and procedure, one which would apply the knowledges and skills which the student has already acquired in situations simulating office conditions.

Some schools specialize in training on office machines.

Such a course may be a skill course, but if it is combined with office procedure in practical situations, it is an integrated course.

³ Russell Cansler, "Signposts in Office Practice," Journal of Business Education, XXII (June, 1947), pp. 11-12.

⁴ Ruth L. Roberts, "The Need for Office Practice," The National Business Education Quarterly, (December, 1945), p. 7.

⁵ Ibid, p. 8.

Office practice courses should develop thinking and make the best of a situation. It has been said that business is only 51 per cent efficient. If that be the case, there is an opportunity for the schools to do something in order to raise the standards in the office. The secretary should ask herself many questions and weigh them so that larger fields may be open to her.⁶

Objectives of the Office Practice Course

Russell N. Cansler,⁷ has listed eleven objectives for an office practice course:

1. The teaching of business habits
2. Mastery of new situation
3. Development of sense of loyalty to one's own business
4. Improvement of individual as a person
5. Greater intelligence in use of communication systems
6. A thorough acquaintanceship of business forms
7. Ability to find one's own errors
8. A usable knowledge of filing
9. Use of duplication equipment
10. Use of various office machines
11. Development of job intelligence

Charles W. Hamilton,⁸ in an article on the teaching of office practice and office machines, writes:

Such a course should acquaint prospective office workers with much of the information that is important in the proper performance of the various duties for which secretaries are commonly held responsible. It is also felt that studies in

⁶ G. H. Parker, "The Organization of Office Practice Courses; Content," National Business Education Quarterly, XIV (December, 1945), p. 24.

⁷ Russell N. Cansler, "The Present Status of Office Practice Courses," National Business Education Quarterly, XIV (December, 1945), p. 58.

⁸ Charles W. Hamilton, "The Teaching of Office Practice and Office Machines," Sixth Yearbook of the National Commercial Teachers Federation, p. 430.

office procedures should maintain and further develop many of the skills already acquired in other business courses. Such a terminal course purports to organize or consolidate the previous work in shorthand, recordkeeping, typewriting, and related subjects. It also serves as a final polishing up process designed to prepare pupils for immediate entrance into office positions.

Vernal H. Carmichael⁹ says that there are probably three major objectives in the office machines course, as follows:

1. To acquaint the pupils with the machines which are found in modern offices.
2. To acquaint the pupils with the forms, procedures and the practices that are used in modern offices.
3. To furnish the pupils with opportunities to acquire skills in the operation of office machines.

Hubert C. Bowers¹⁰ in an article on the teaching of office practice in the small high school, says that with some teachers skill building, or a "polishing off" process is first; with others, a combination of skill building and application of previously learned principles is paramount. A few office machines may be taught, and the teacher can plan a well-rounded program, even though materials are scarce. Aims in the small schools should be vocational, and specialization beyond the practical application possible in the community should be avoided.

Russell Cansler¹¹ says:

The office practice course must seek to develop desirable personal qualities, traits, and attitudes; develop further

⁹ Vernal H. Carmichael, "Need for Research in Field of Office Machines and Clerical Practice," National Business Education Quarterly, XIV (December, 1945), p. 49.

¹⁰ Hubert C. Bowers, "The Teaching of Office Practice in Small High School." National Business Education Quarterly, XIV (December, 1945), pp. 39-43.

¹¹ Russell Cansler, "Signposts in Office Practice," Journal of Business Education, XXII (June, 1947), pp. 11-12.

skills in dictation and transcription, give a workable acquaintance with some office machines and a passable skill in the use of others; give practice in performing a wide variety of secretarial duties, routines, and procedures; and do a really constructive job in the development of the ability to think on the job. . . . The motivation appeal should always be kept in mind. One illustration is a reception desk at which the student may carry out the attendant jobs and duties.

Content of the Office Practice Course

G. H. Parker¹² gives an outline for the organization of an office practice course. He points out that regardless of whether the training is a part of the regular shorthand course on one extreme, or entirely general in nature on the other extreme, it is probably agreed that content should include:

1. Development of desirable personal qualities, traits, and attitudes.
2. A continual development and refinement of dictation and transcription skills.
3. Occupational skill in the use of the most common and widely used office machines.
4. A workable acquaintance with other less used machines.
5. Practice in performing as wide a variety of secretarial duties, routines, and procedures as possible.
6. The development of the ability to think constructively.
7. The development of one's own growth.
8. A minimum of 100 hours of actual experience.

The following paragraph reports the preference of a group of business men in a small middle-western industrial city as given by Ruth L. Roberts.¹³

¹² G. H. Parker, "The Organization of Office Practice Courses; Content," National Business Education Quarterly, XIV (December, 1945), p. 19.

¹³ Ruth L. Roberts, "The Need for Office Practice," The National Business Education Quarterly, XIV (December, 1945) p. 54.

Some place should be found in the office practice course for an understanding of a desirable office personality and for the development of that personality. American businessmen want typing and shorthand skills, English fundamentals, office machines, but more than these they want students to know what to expect in an office, to know about office organization, business etiquette, qualifications necessary for the job, and standards in the measurement of office work as opposed to training standards in school.

In a speech before the National Office Management Association, at Pittsburgh in 1946, Clem Boling¹⁴ told of the placement director of a private business school in Detroit who enumerated the qualifications specified by the last 12 employers with whom she communicated. Some of the requirements other than the skill subjects were: English, arithmetic, filing, card indexing, penmanship, ability to meet the public, intelligence, and pleasing personality.

Boling states:

Great numbers of students who expect to serve in business enter high school commercial departments and private business schools without being properly grounded in such basic subjects as English fundamentals, arithmetic and penmanship. A tremendous amount of remedial instruction is therefore involved. The major subjects of accounting and typewriting and shorthand, must be emphasized. Personal improvement must be stressed. Other subjects must not be done on the job by the employer.

All of these factors must be taken into account in planning and administering courses. Never was a better understanding and a more cooperative effort between business teachers and business men needed than now. Office efficiency needs to be greatly increased if office salaries are not to go back to pre-war levels.¹⁵

¹⁴ Clem Boling, "What Schools are Doing in Preparing Young People for Business," American Business Education, III (December, 1946), pp. 109-111.

¹⁵ Ibid., 111.

Charles F. Hohwieler,¹⁶ who is Assistant Secretary of the Crown Zellerbach Corporation and teacher of office management in New York University, comments:

I do not consider that a student is being taught secretarial practice if it consists only of typing, shorthand, business English, and other academic subjects along with the use of a textbook in office practice. We should give the student an opportunity to put into practice what he has been taught. . . . In one school the girls work as receptionists and telephone-switchboard operators.

Hohwieler discusses, from the viewpoint of managers, some of the more common faults among beginners who go to work from commercial schools, and gives a few suggestions for elimination of these faults. Some of the more common faults are: lack of an understanding of business, lack of appreciation of the importance of routine tasks, objectives and ambitions too frequently misdirected, lack of ability to think, lack of thoroughness, and the frequent bewilderment and fright of beginners.

Some duties expected of office employees are: to open mail (yet to know when not to open it), to distribute the mail, to know something of postage rates, to use the adding machines, to do some filing, to call Western Union or Postal messengers and sign for telegrams, to act as receptionists, to run errands, to use duplicating equipment, to use a street directory, and to read a railroad timetable and plane schedule.

¹⁶ Charles F. Hohwieler, "Problems Concerning the Teaching of Office Training as Related to Office Procedures," Eastern Commercial Teachers Association, Sixteenth Yearbook, pp. 370-376.

In their book, Research Applied to Business Education, Benjamin R. Haynes and Clyde W. Humphrey¹⁷ say:

Since the high school program of studies is crowded, it does not seem fair to ask those who write well to spend much practice at a skill that has already been mastered. Penmanship in the high school, then, should have a remedial objective. A standard for penmanship that is acceptable in business may be established from one of the penmanship scales -- themselves products of research. It is more difficult to teach remedial penmanship than it is to teach a child to write for the first time, because it involves the establishing of new habits for old ones.

The demand of business men for a better knowledge of English on the part of their employees should not be ignored by the schools. Even though English is usually a required subject for practically every year of the student's school life, it is frequently mentioned by business men as one in which their employees are deficient. . . . Business men realize the value of investigations in the field of business letter writing and have established "better business letters" associations. Teachers may avail themselves of the materials distributed by these associations. . . . Spelling is usually a part of the Business English course. It is a subject that demands the consideration of business teachers. Research in this field has included studies of the frequency of the use of words, with the result that business teachers may secure a list of the most commonly used words.

The problems which are apparent in the teaching of penmanship constitute one area of the problems of business education. Frank N. Freeman,¹⁸ research authority in handwriting says:

The notion that handwriting has lost most of its utility value because the typewriter is so widely used in business is a mistaken one. It is true, of course, that the typewriter is used almost universally for business correspondence and that it is chiefly used for recordkeeping. Let the person who thinks this has displaced handwriting go around for a week without a pen or pencil in his pocket and remove all

¹⁷ Benjamin R. Haynes and Clyde W. Humphrey, Research Applied to Business Education, pp. 41-44.

¹⁸ Frank N. Freeman, as quoted by Virgil C. Graham in "Penmanship and Spelling," Seventh Yearbook of the National Business Teachers Association, p. 305.

the pens and pencils from any business establishment. He will recognize that far from disappearing, handwriting is an absolute essential of modern personnel in business and professional life.

In an article on the status of office practice courses (in 1945), Russell N. Cansler¹⁹ said that the content of most courses includes duplicating processes, both stencil and hectograph, fundamentals of filing, and a certain amount of practice on calculators. Some courses include advanced skill training on both typewriter and machines.

Edward J. Rutan²⁰ has said:

Everyone engaged in training pupils agrees that one of the most perplexing problems educators are faced with is the vocabulary or language handicap of pupils. Too often pupils fail to understand the specific meanings of the terms basic to a full comprehension of the content of the subjects they study in school.

In this same article, Rutan gives a method of word training to help in solving the vocabulary difficulties of pupils.

A study of the teaching of office practice in the high school, made by Delight Mathews Tassin²¹, reveals that courses in office practice have not given adequate training in the use of modern office equipment. The course should include the following:

¹⁹ Russell N. Cansler, "The Present Status of Office Practice Courses," National Business Education quarterly, (December, 1945), p. 14.

²⁰ Edward J. Rutan, "Word Study in Business Education," Journal of Business Education (March, 1946), Vol. 21, No. 7, pp. 29-30.

²¹ Delight Mathews Tassin, Teaching Office Practice in the High School, Master's Thesis, University of Texas, 1937.

business machines, business forms, communications, letter writing, mailing, filing, statistical reports, transportation, finding and applying for positions, and personal qualities necessary to deal effectively with people.

Kermit A. Crawley,²² from the reports of personnel directors in each area of industry where their trainees might go to work, found that some of the common weaknesses are: inability to spell, to compute figures correctly, and to write legibly. Concerning these skills he says:

They are basic to all successful employment and the sooner teachers recognize this fact and make definite provision in the training program to insure proficiency in these areas, the happier will be both employers and employees.

Placement of the Course

From the results obtained in a state-wide survey of office-practice instruction in New Jersey, and an analysis of related studies in the field and modern educational theory as expressed in professional literature for teachers, in the year 1935, F. W. Loso²³ found that although office practice was a relatively new subject in the business curriculum, it was uniformly placed as a senior subject and was required of all business graduates by 74 per cent of the New Jersey schools offering the subject.

²² Kermit A. Crawley, "Practical Training for Office Jobs," Dictaphone Education Forum, (March, 1920), pp. 14-16.

²³ F. W. Loso, "Trends in Office Practice," The Journal of Business Education, X (May, 1935); XI (October, 1935), p. 24.

There was a lack of standardization concerning necessary prerequisites, except possibly typewriting, bookkeeping, and shorthand. Many schools, however, taught these subjects concurrently with office practice.

A study of the teaching of office practice in the high school, made from existing surveys by Delight Tassin, and showing trends in the course, said, "The general agreement is that the course should be offered in the senior year."²⁴

Equipment

Russell N. Cansler²⁵ says:

Many of the machines are too complicated or require too costly materials for classroom practice. On the other hand some are so simple to operate that the learner can use them successfully after one very brief demonstration by an experienced worker. . . . There may be possibilities of borrowing equipment which is used only periodically in offices within the school and in business offices in the community.

Partin and Dial²⁶ say that: equipment depends on the local community and a survey is sometimes necessary. Certain other machines besides the typewriter are found in offices and these should be taken into consideration when setting up an office practice course. Ordinarily, hand-operated machines are all

²⁴ Op. Cit., pp. 179-180.

²⁵ Russell N. Cansler, "Signposts in Office Practice," Journal of Business Education, XXII (June, 1947), p. 12.

²⁶ Willie Curtis Partin and Fred W. Dial, "A course in Business Machines," Balance Sheet, XXVII (November, 1945), p. 85.

right to buy for the school room because the students can easily transfer their knowledge of these machines to the power-driven machine.

G. H. Parker²⁷ suggests that vertical and visible record-keeping equipment, transcribing machines, mailing equipment, adding and calculating machines, and a telephone for communication should be in office practice rooms. He says some companies will send representatives to give demonstrations of their machines.

²⁷ G. H. Parker, "The Organization of Office Practice Courses; Content," National Business Education Quarterly, (December, 1945), p. 20.

CHAPTER III

STUDY OF OFFICE OCCUPATIONS AND EQUIPMENT IN NOWATA, OKLAHOMA

Community opportunities for and requirements of commercially trained high school students who take jobs immediately upon graduation have a definite bearing on the interest and enthusiasm of enrollees in the commercial department. A thoroughly reliable study would of necessity embrace all the positions in the community which students of the commercial department are likely to enter. This study reports facts gathered from the businessmen of the community who employed office help.

Because the average lay citizen does not readily understand modern standards and criteria in selecting curriculum content, his opinions are not too significant. The employer, however, is capable of giving suggestions and information, based on experience, which cannot be ignored.¹

The interview guide used in this study was compiled for the purpose of obtaining information about (a) how many and what kinds of office positions were held by the employees of business firms, (b) whether or not businesses would employ high school graduates with no postgraduate training, (c) experience requirements, (d) duties performed by the office employees, (e) age preference for beginning workers, (f) employers' opinions with reference to desirable and undesirable

¹ L. Thomas Hopkins, Curriculum Principles and Practices, p. 273.

personality traits in employees, (g) employers' opinions concerning subject matter weaknesses of employees, (h) machine equipment used in the business offices, (i) the number of employees who use the machines in the business offices, (j) whether or not the operation of specific office machines can be learned satisfactorily on the job, (k) degree of ability required of the beginning worker to operate the machines, and (l) which employers would be interested in a part-time employment program.

Some sections of the survey have implications for the guidance program of the school; others have implications for improving the teaching of commercial subjects. Although the complete interview guide appears in the appendix, only the sections which apply to the needs of this study will be tabulated and interpreted in this chapter.

The sections used are the ones designed to reveal (d) duties performed by the office employees, (f) the employers' opinions with reference to desirable and undesirable personality traits in employees, (g) the employers' opinions concerning subject matter weaknesses of employees, (h) machine equipment used in the business offices, (i) the number of employees who use the machines in the business offices, (j) whether or not the operation of specific office machines can be learned satisfactorily on the job, (k) degree of ability required of the beginning worker, (l) which employers would be interested in a part-time employment program.

Because of the large percentage of employers interviewed, the survey contains sufficient data from which to draw conclusions concerning an office practice course.

Duties Performed by Office Employees as Indicated by Their Employers. The idea that certain duties of the office employees should occupy an important place in the business education program is substantiated by data secured in this study. It was felt that the duties performed by the office employees rather than the classification of jobs should be considered in this study.

Receptionists' duties are included on 66, or 90 per cent, of the 73 jobs held by women. Also 21, or 84 per cent, of the 25 men employed meet and handle people. Thus a need for personality development is undoubtedly substantiated.

Interesting comments were made by employers on the use of the telephone and its effect on business. Of the 73 women, 69, or 95 per cent, answer the telephone, while of the 25 men, 17, or 68 per cent, answer the telephone. These figures tend to justify thorough training in its use.

Sixty-six, or 90 per cent, of the 73 women employees operate office machines and appliances; 19, or 70 per cent, of the men employees operate office machines and appliances. This would indicate the necessity for knowledge and training on some machines. In a later part of the survey there is a section which reveals the number and kinds of machines in use in the community and indicates the training which should be given in the operation of machines.

Of the 73 women employees, 65, or 89 per cent, handle mail, and of the 25 men employees, 19, or 70 per cent, have this responsibility. Training for both men and women in the handling of mail is essential.

The data in Table I show that of 73 women, 68, or 93 per cent, did filing on the job. The data show also that of 25 men, 14, or 56 per cent, did filing on the job. These figures indicate that filing should be taught in high school.

Only 3 of 73 women do full-time typing; the need for enrichment in the secretarial field is greater than the need for further training in routine typing. Occasional use of typing was listed by 46, or 63 per cent, of 73 women and by 15, or 60 per cent, of 25 men.

Of the 73 women, 36, or 49 per cent, did general clerical work not involving a knowledge of bookkeeping; and of the 25 men, 15, or 60 per cent, did general clerical work not involving a knowledge of bookkeeping. Thus is indicated a need for a review of arithmetic fundamentals for some students, if a pretest shows such weakness to exist.

Composition of letters by 36, or 49.3 per cent, of the 73 women employees, and by 12, or 48 per cent, of the 25 men employees points to the necessity for stressing letter composition, English usage, spelling, and punctuation in the office practice course.

The number who did general bookkeeping does not reveal any significant figures for this study.

Of 73 women employees, 28, or 38 per cent, did a limited amount of shorthand and transcription. The 38 per cent, along with the 20 per cent who did full-time shorthand and transcription, makes a total of 58 per cent, or over one-half, of the employees who use shorthand on their jobs. It is assumed that these employees require thorough secretarial training, and that this training should be accompanied by intensive drill in dictation and transcription.

Of 73 women employees, 18, or 24 per cent, sort, list, and number papers; 6 men out of 25, or 24 per cent, perform this task. Nearly one-fourth of both men and women do some of this kind of work; therefore, some training should be included on routine work of this kind.

Fourteen, or 20 per cent, of the 73 women employees, did full-time shorthand and transcription. No men were listed as performing this task. Therefore, finishing work, including a review and application of the skills of shorthand and typewriting, should be given to the students who have had shorthand.

Only 5 of 73 women, or 7 per cent, do cost figuring, and 5 of 25 men, or 20 per cent, perform this job. This implies that information pertaining to the figuring of costs could be presented, but that there is no need for intensive training in this field.

Only 1 woman out of 73, and 4 men out of 25 did billing. This figure implies that only an understanding of billing is needed.

Four of 73 women cut stencils. The need for training in stencil cutting must not be entirely ignored, however, because all graduates do not work in the home community.

In this survey no dictating machines were found in the business offices in Nowata.

Data pertaining to the duties performed by 98 office employees are summarized in Table I.

Employers' Opinions Concerning Personality Traits in Employees. The employee personality traits listed as satisfactory or unsatisfactory by the employer are shown in Table II. The number of employers who expressed the opinion that the different unsatisfactory traits were noticeable in beginning employees is shown in the same table.

In order for the information obtained to be as reliable as possible, the questions were asked in the same manner to all employers. The questions were: "In your experience, as an employer, have you found your employees to be satisfactory or unsatisfactory with respect to the following traits?" and "Which, if any, of the unsatisfactory traits are noticeable in beginning employees?"

"Initiative" is the trait in which the greatest number of

TABLE I

DUTIES PERFORMED BY 98 OFFICE EMPLOYEES AS INDICATED BY THEIR EMPLOYERS			
Duties	Employees*		
	Women	Men	Total
Meet and handle people	66	21	87
Answer telephone	69	17	86
Operate office machines and appliances	66	19	85
Handle mail	65	19	84
Filing	68	14	82
Some typing	46	15	61
General clerical work not in- volving a knowledge of book- keeping	36	15	51
Compose letters	36	12	48
General bookkeeping	23	7	30
Some shorthand and transcription	28	0	28
Sort, list and number papers	18	6	24
Full-time shorthand and transcrip- tion	14	0	14
Figure costs	5	5	10
Billing	1	4	5
Cut stencils	4	0	4
Full-time typing	3	0	3
Operate dictating machines	0	0	0

*There were 73 women employees and 25 men employees in the 60 offices included in this study.

This table should be read as follows: Sixty-six women employees and 21 men employees meet and handle people.

employers agreed that their employees were unsatisfactory. Thirty-eight of the 60 employers interviewed designated this trait as one in which employees were unsatisfactory. Thirty-four of the 60 employers felt that initiative was lacking in beginning employees. These findings indicate that school training planned to develop initiative would be beneficial.

"Sense of responsibility" ranked second in the unsatisfactory list with 37 of 60 employers signifying that employees were unsatisfactory in this trait. Twenty-three of 60 employers said "sense of responsibility" was noticeably unsatisfactory in beginning employees.

Thirty-three employers, or 55 per cent of the 60 employers, felt that "accuracy" of their employees was unsatisfactory. Thirty expressed the opinion that inaccuracy was noticeable in beginning employees. High school training stressing the development of accuracy should be given to those students who plan to go to work immediately upon graduation.

"Attention to detail" ranked fourth in the list of traits in which employees are unsatisfactory. Thirty-two of the 60 employers indicated that their employees were deficient in this trait. Twenty-eight employers indicated that beginning employees were unsatisfactory in this trait. These figures seem to justify the inclusion of some training in this trait in the office training course.

"Tact" was designated as unsatisfactory in employees by 20 of the 60 employers. Eighteen employers indicated that beginning employees lacked tact. A need for training in tact is apparent.

Eighteen of 60 employers said that employees had insufficient "ability to save time". This trait placed sixth in the list of traits in which employees are unsatisfactory. Thus, training in this trait would be beneficial to the student.

"Ability to follow instructions" was indicated by 12 of 60 employers as being unsatisfactory in employees. Eleven of the 60 indicated that the trait was unsatisfactory in beginning employees. These data appear to justify further training in this trait in some high school course. One logical place is in an office practice course.

"System and orderliness", "neatness", "ability to get along with others", "good personal appearance", "honesty", and "slow on foot", rank in the order in which they are mentioned in Table II.

The personality traits discussed in the preceding paragraphs may be interpreted differently by different employers. However, the figures, which show that deficiencies in these traits are noticeable in beginning employees, are an indication that additional attention should be given to developing satisfactory traits in high school pupils who are preparing to enter office employment.

TABLE II

EMPLOYEE TRAITS THAT ARE REGARDED BY 60 EMPLOYERS AS SATISFACTORY AND UNSATISFACTORY, AND TRAITS REGARDED BY EMPLOYERS AS UNSATISFACTORY IN BEGINNING EMPLOYEES

Traits	Satis- factory	Unsatis- factory	Unsatisfactory in beginning employees
Initiative	22	38	34
Sense of responsibility	3	37	23
Accuracy	27	33	30
Attention to details	28	32	28
Tact	40	20	18
Ability to save time	41	19	19
Ability to follow in- structions	48	12	11
Systematic and orderly	53	7	6
Neatness	54	6	6
Ability to get along with others	55	5	5
Good personal appearance	58	2	2
Honesty	58	2	0
Others -- Slow on foot		1	1

This table should be read as follows: Thirty-eight of the 60 employers felt that employees lacked "initiative". Thirty-four of the 60 employers indicated that lack of initiative was noticeable in beginning employees.

Employers' Opinions Concerning Subject Matter Deficiencies of Employees.

Table III shows that the subject matter weaknesses in employees are noticeable. The data indicate that a place in the commercial curriculum should be made for review and retraining in certain subject matter courses. One place for such training in the Nowata High School is in the office practice course.

Employers were asked the question, "What is the subject matter, if any, in which your employees are deficient?" The following question was, "Which, if any, of these weaknesses are particularly noticeable in beginning employees?"

Twenty-five of 60 employers said English and spelling were subjects in which employees were deficient. The same number said that poor English and spelling were particularly noticeable in beginning workers. A definite place should be provided in the office practice course for remedial work and drill in English and spelling for those who are in need of such training.

The interview guide divided speech into manner, tone, and enunciation. Eighteen of the 60 employers indicated that the manner in which the employees spoke was objectionable; 17 of these 18 indicated the deficiency as particularly noticeable in beginning workers. Four employers designated a weakness in tone of voice, and these four employers designated the weakness

as particularly noticeable in beginning employees. Enunciation was indicated by 4 employers as a weakness, and the same number indicated this weakness as particularly noticeable in beginning employees. Consideration should be given to providing a place in an office practice course for some training in all three phases of speech, if such training is not otherwise provided.

Arithmetic and penmanship were each designated as subject matter deficiencies by 8 of the 60 employers interviewed, and the same number indicated that these subject matter weaknesses were particularly noticeable in beginning workers. A thorough review of arithmetic fundamentals for those who need the review and a requirement in penmanship equivalent to 70 on the Ayres scale are suggested requirements for an office practice course.

Data concerning subject deficiencies of employees, as indicated by employers, are shown in detail in Table III.

Comparison with Findings of Other Community Surveys.

Not all of the students go to work in the local community; therefore, a comparison with other occupational surveys, representing different-sized communities, was deemed advisable. Because communities over the country have more similar situations than they have different ones, the curricular activities and course content which are suitable for one locality often are suitable for many localities.

It is in the approach to basic aspects of subjects, in the enrichment and application, and in the recognition of local

TABLE III

SUBJECT MATTER IN WHICH 60 EMPLOYERS INDICATE
THAT THEIR EMPLOYEES ARE DEFICIENT

Subject matter in which employee was deficient	Number of employers who mentioned deficiencies	Number of employers who mentioned defi- ciencies in beginning workers
English	25	25
Spelling	25	25
Speech:		
Manner	18	17
Tone	4	4
Enunciation	4	4
Arithmetic	8	8
Penmanship	8	8
Organization	0	0
Others	0	0

This table should be read as follows: Twenty-five of 60 employers mentioned that employees were deficient in English and spelling. Twenty-five of 60 employers mentioned that beginning workers were deficient in English and spelling.

situations, that important differences in curricula occur. Emphasis upon the similarities among communities stabilizes courses of study and makes the findings of investigators in one place applicable in many other places. Facts gathered from three other communities -- Pasadena,² California, with an estimated response to a questionnaire of 90 per cent of 380 business men; San Jose,³ California, with an estimated response to a questionnaire of 52 per cent of 467 business houses; Ponca City,⁴ Oklahoma, with a response of 86 per cent of 302 firms -- signify findings that can be compared with findings in this survey to strengthen its value.

The results of the Pasadena and San Jose studies as given by Edith Black show the employer's point of view regarding subject matter. This section will be discussed in connection with a similar section of the local survey.

Significant findings in the Ponca City survey of office machines substantiate and supplement the findings in the local survey of office machines.

Similarity of Employers' Opinions Concerning Subject Matter

² Edith V. Black, The Commerce Curriculum and Community Needs, Master's Thesis, Stanford University, p. 11.

³ Ibid., p. 13.

⁴ Silverthorn, James Edwin, A Business Occupational Survey of Ponca City, Master's Thesis, Oklahoma Agricultural and Mechanical College, 1941, p. 8.

in Pasadena, San Jose, and Nowata Studies

In Table IV are tabulated the opinions of employers as to high school subjects which should receive greater emphasis, as given in the Pasadena and San Jose studies.⁵ For purposes of comparison, the number of employers indicating their employees as being deficient in certain of these same subjects in the Nowata survey is included.

English ranked first in importance and spelling ranked second in importance on both California surveys. In the local survey, English and spelling were indicated equally as subjects in which students need additional training.

Business arithmetic ranked third in the two California surveys, and it ranked in 4.5 place with penmanship in the local survey. Speech ranked second in the local survey, but speech was not listed in either of the California questionnaires.

Office Equipment Survey of Sixty Offices.

Data giving the kinds of machines, number of machines, number of employees who use the machines, number of employers who think the operation can be learned satisfactorily on the job, and the degree of ability the beginning worker should have are tabulated in Table V.

There are 87 typewriters and 86 people use these typewriters.

⁵ As given by Edith V. Black in making a comparison with her San Diego study, The Commerce Curriculum and Community Needs, Master's Thesis, Stanford University, 1931, p. 43.

TABLE IV

COMPARISON OF PASADENA, SAN JOSE, AND NOWATA STUDIES

Employers' Opinions as to High School Subjects
That Should Receive Greater Emphasis⁸

Subject	Pasadena		San Jose		Nowata	
	Rank	Times Checked	Rank	Times Checked	Rank	Times Checked
English	1	150	1	120	1.5	25
Spelling	2	136	2	115	1.5	25
Bus. Arithmetic	3	134	3	109	4.5	8
Penmanship	4	100	5	81	4.5	8
Salesmanship	5	91	4	67		
Bookkeeping	6	51	7	46		
Office Practice	7	39	6	40		
Typewriting	8	31	8	35		
Commercial Law	9	28	10	27		
Shorthand	10	26	9	22		
Phy. Education	11	23	12	17		
Economics	12	20	11	5		
Speech					3	
Manner						18
Tone						4
Enunciation						4

⁸ As given by Edith V. Black in comparison with her San Diego study, The Commerce Curriculum and Community Needs, Master's Thesis, Stanford University, 1931, p. 43.

Fifty-one employers said the operation could not be learned satisfactorily on the job, and 46 of the 51 employers who had typewriters in their offices said the beginning workers should be skillful typists; 5 of the 51 said a working knowledge of the typewriter would be sufficient.

There are 55 adding machines in the 60 offices of Nowata, and 82 people use these machines. Forty-two employers who had adding machines in their offices thought the operation could be learned satisfactorily on the job; 2 other employers thought that some previous training was necessary. Twelve employers thought beginning workers needed no ability in the use of the adding machine; thirty-one employers felt that beginning workers should have a working knowledge of the adding machine, and 1 employer thought they should be skillful in the use of the adding machine.

These figures indicate the need for at least one adding machine as a part of the equipment for the office practice room. Since 32 of 44 employers who had adding machines in their offices felt that beginning employees should have a working knowledge of the machine, it is evident that some time should be spent training students in its use.

Thirteen calculators were in use in 10 of the 60 offices considered, and 19 people operated these calculators. Nine of the 10 employers felt that the operation of the calculator could

be learned satisfactorily on the job, but five expressed the opinion that a previous working knowledge would be beneficial to the employee. Five employers said that no degree of ability was needed by the beginning worker, and no employer required that beginning employees possess a high degree of skill in the operation of the calculator.

Since, in the opinion of half of the employers who had calculators in their offices, a working knowledge of the machine should be possessed by beginning workers, it seems advisable that the commercial department own a calculator and give some training in its use.

Fourteen check protectors are used by 18 people in the 14 offices where they are located. Twelve employers felt that ability to use the check protector was not needed by the beginning employee. Two employers, however, felt the beginning employee should have a working knowledge of the use of that machine. One notation was made on the interview guide to the effect that employees ruined too many checks when they did not know how to operate a check protector.

There are nine cash registers in use and 20 people operate them. Employers in the eight offices which have cash registers said that the operation could be learned satisfactorily on the job; these eight employers also felt that the beginning worker needed no previous training in their operation. This situation

would not justify the purchase of a cash register for an office practice course.

There were three photostat machines in three offices and 7 people operated these machines. The three employers whose offices were equipped with these machines felt that operation could be learned on the job and that no degree of ability need be possessed by a beginning worker.

Seven change machines were operated by 7 people in two offices, and the two employers expressed the opinion that sufficient skill in the use of these machines could be acquired on the job.

There are four bank machines in the offices, and 5 people operate these machines. The employers in the two offices where bank machines were used felt that their operation could be learned satisfactorily on the job; one felt that no degree of ability was needed by the beginning worker, but he expressed the opinion that a working knowledge would be of help. To give the students a working knowledge of this machine would not necessitate the purchase of a bank machine. Demonstrations by companies or local firms might give the students some knowledge of the machine, but the demand was not sufficient to make the purchase of such a machine as a part of the laboratory equipment advisable.

There are 2 commercial posting machines in the 60 offices, and 3 people use these machines. Both employers thought the

operation could be learned satisfactorily on the job and that the beginning worker needed no previous training in this field. There is no need for a commercial posting machine in the department.

There were two liquid process duplicating machines and three people use the two machines in the two offices where they are located. Two employers said that the operation could be learned satisfactorily on the job, but one employer thought a working knowledge of the machine should be possessed by the beginning worker.

There were 3 mimeographs in three offices and three people operated them. Three employers said the operation could be learned on the job, but they thought that some training in mimeographing would be profitable to the beginning worker.

A stenotype machine was in use in each of two offices and one person in each office used the machine. The two employers said the operation cannot be learned on the job and the degree of ability for its use must be skillful. One employer thought the stenotype machine should be taught in the high school, but the limited number of places in which these machines are in use makes the teaching of this skill in high school impractical.

There is one addressing machine in one office and two people used this machine. The employer thought the operation could be learned on the job and that the beginning worker needed no previous training.

Table IV presents in convenient tabular form the data gathered in this survey of office equipment.

The Ponca City⁶ Survey of Office Equipment as it Relates to the Nowata Survey of Office Equipment.

One of the purposes of the study in Ponca City, Oklahoma, was to determine, to some extent, the importance of giving training in the use of office machines, and the kind of office equipment in general use locally.

Ponca City is a city that has one large company and the ordinary small business offices, similar to many localities.

Silverthorn found:

The one large employer indicated that all of their office employees need to know how to operate the typewriter, adding machine, and calculator. The comment was made that not all of these employees use all three types in their work but that they should know how so that they could fill in for extra work, and so that they would be transferable into positions where they would operate them.⁷

From the information gathered on office machines, Silverthorn states:

In view of the above evidence it would seem advisable for any person who expects to work in a business occupation to learn to operate a typewriter and adding machine. The evidence also indicates that most people who plan to do office work should acquire some knowledge of the operation of calculating machines.⁸

⁶ James E. Silverthorn, Business Occupational Opportunity Survey of Ponca City, Master's Thesis, Oklahoma Agricultural and Mechanical College, Stillwater, 1941, p. 1.

⁷ Ibid., p. 38.

⁸ Ibid.

TABLE V

OFFICE EQUIPMENT SURVEY OF 60 OFFICES IN NOWATA

Kind of machine	Number of machines	Number who use machines	Answers of employers to the question, "Can the operation be learned satisfactorily on the job?"		Answers of Employers to the question, "What degree of ability is required of the beginning worker?"		
			Yes	No	None	Working Knowledge	Skillful
Typewriters	87	86	0	51	0	5	46
Adding Machine	55	82	42	2	12	31	1
Cash Registers	9	20	68		8	0	0
Burroughs Calculators	1	1	1		1	0	0
Marchant Calculators	1	1	1		1	0	0
Check Protectors	14	18	12	2	12	2	0
Photostat	3	7	3		3	0	0
Change Machines	7	7	2		2	0	0
Burroughs Bank Machine	4	5	2		1	1	0
Burroughs Commercial Posting Machine	2	3	2		2	0	0
Liquid Process	2	3	2		1	1	0
Mimeographs	3	3	3		0	3	0
Stenotype	2	2		2	0	0	2
Addressing Machines	1	2	1		1	0	0

This table should be read as follows: Eighty-six employees used 87 typewriters in the 60 offices. Fifty-one employers said the operation of the typewriter could not be learned satisfactorily on the job. Five employers indicated that a working knowledge of the typewriter would be sufficient. Forty-six employers indicated the employee should be skillful in the use of the typewriter.

A survey of Part-Time Employees.

The information in this section of the interview guide was collected to determine whether or not a part-time office training program would be profitable in the local situation. The data tabulated in Table VI show the number of part-time employees, the number of employers who would be interested in part-time office practice trainees, and the number of employers who could use students in part-time work at regular part-time wages.

There were only 8 part-time employees and the number of employers who would be interested in part-time office practice was 5. These 5 employers signified that they could use only one part-time employee each at regular part-time wages. For that reason, it is doubtful that a part-time office training program in the school could be justified at the present time. The information obtained in this section of the survey was a significant factor in determining the type of office practice course to be taught in the local high school.

TABLE VI

A SURVEY OF PART-TIME EMPLOYEES IN 60 OFFICES		
Number of part-time employees	Number of employers who would be interested in part-time office practice	Number of employers who reported that they could use students in part-time work at regular part-time wages
8	5	5

CHAPTER IV

A STUDY OF GRADUATES OF NOWATA HIGH SCHOOL
WHO WENT TO WORK IN OFFICES

Information obtained from graduates of Nowata High School who, without post-high school training, have taken positions in the business world serves as a basis for the modification of present procedures and the organization of an office practice course.

Data presented in this chapter were compiled from the replies of 30 graduates of Nowata High School. Of the 43 graduates for the years 1944, 1945, 1946 and 1947 who, without any further training, went to work in office positions, 30, or 69.7 per cent, answered the questionnaire. Table VII shows, by years in which they graduated, the number and percentage of graduates to whom questionnaires were mailed and the number and percentage of graduates from whom replies were received.

The graduates were instructed: "Check duties you performed on your first office job." Replies revealed the types of work the graduates had done in their initial office jobs and have important implications with reference to the kinds of training graduates should receive in high school.

"Answering the telephone" is one of the most general tasks of the workers. Twenty-six of 30 employees performed this task on the first job and 1 other employee performed

the task on a later job. According to these figures, the giving of training in the use of the telephone should be considered in the planning of an adequate course in office practice.

Twenty-five of the 30 employees did "filing" on the first job. It would seem, therefore, that filing should be taught in the course in office practice.

"Operate office machines and appliances" was indicated by 22 out of 30 as a duty performed on the first office job, and 2 indicated that the duty was performed on a later job. Table V shows the kinds of machines operated by these employees.

Nineteen of the 30 workers reported that they "meet and handle" people. This fact is significant in that the training program should be enriched in the field of personality development.

Twenty of 30 office workers "handled mail" on their first jobs, and 1 other employee handled mail on a later job, making a total of 21 office workers who handled mail on some job. Thus, the need for training in this line of work is established.

"Full-time typing" was checked as a duty by 4 of the 30 employees on the first job and 2 more of the 30 employees on a later job. "Some typing" was checked by 21 of 30 employees. The fact that so large a percentage of office

workers use the typewriter in their first job indicates that students in the office practice class should have access to typewriters and should be required to meet reasonable standards in the production of typewritten materials typical of those encountered in initial jobs.

Sixteen of 30 employees "compose letters", which indicates that training should be given in the composition of letters.

Fourteen of the 30 employees checked general clerical work not involving a knowledge of bookkeeping as a duty which they performed. Since almost 50 per cent of the employees checked this duty, it would seem advisable to include a unit of drill in arithmetic fundamentals for those who need it.

Twelve of the 30 employees did "billing" on the first job. Another employee reported that although his first job did not involve billing, a later job did. Thus, a total of 13, or 43 per cent, of the 30 employees have held jobs which involved some billing. This indicates a need for an understanding of the process of billing.

"Some shorthand" in the first office job was checked by 12 of the 30 employees. "Full-time shorthand" was checked by 2 employees as describing their first jobs and by 2 other employees on later jobs. These figures indicate that opportunity for intensive drill in shorthand and transcription should be provided in the office practice course for those who have had shorthand.

TABLE VII

DISTRIBUTION OVER YEARS 1944, 1945, 1946, and 1947
OF 30 GRADUATES WHO REPLIED TO THE QUESTIONNAIRE

Year of Graduation	Number of graduates who entered office positions without receiving post-graduate training	Graduates replying to questionnaire	
		Number	Per cent
1944	11	6	13.9
1945	15	9	20.9
1946	10	8	18.6
1947	7	7	16.3
Total	43	30	69.7

This table should be read as follows: Eleven of the 1944 graduates entered office positions without receiving post-graduate training. Six of the 11 replied to the questionnaire. The six who replied to the questionnaire represented 13.9 per cent of the total 43 graduates to whom questionnaires were sent.

what does this mean?
↓

One hundred and ten of the 30 employees "cut stencils" on the first job, and 2 others "cut stencils" on a later job, but not on their first job. This figure represents one-third of those replying to the questionnaire, and indicates the need for training in this particular study.

"General bookkeeping" was performed by 8 of 30 employees.

The employees who checked as a duty "sort, list and number papers" totaled 11 out of 30 employees on the first job, and 1 other employee performed this duty on a later job. This figure further emphasizes the need for training in filing.

Out of 30 employees who answered the questionnaire, 4 employees "operated dictating machines" on the first job, and 1 other employee on a later job. This would indicate the need for training on them, if it were possible to have a machine.

Mentioned by two people were: "Ditto work", "wrap mail", and "write news items". Other duties listed were: "figure and fill in fuel tax blanks", "deliveries", "compare papers for accuracy", and "write insurance policies".

These duties performed by those actually on the job give some indication of the training needed.

Table VIII presents in convenient form data relative to duties performed by the 30 employees.

TABLE VIII
DUTIES PERFORMED BY 30 OFFICE EMPLOYEES*

Duty	Number who Performed Duty on the First Job	Number who Performed Duty on Later Job But Did Not Perform it on the First Job	Number Who Have Performed Duty on any Job
Answering telephone	26	1	27
Filing	25		25
Operate office machines and appliances	22	2	24
Meet and handle people	19	2	21
Handle mail	20	1	21
Some typing	21		21
Compose letters	16		16
General clerical work not involving a knowledge of bookkeeping	14		14
Billing	12	1	13
Some shorthand	12		12
Cut stencils	10	2	12
Sort, list and number pages	11	1	12
General bookkeeping	8		8
Full-time typing	4	2	6
Operate dictating machines	4	1	5
Full-time shorthand	2	2	4
Ditto work	2		2
Wrap mail	2		2
Write news items	2		2
Figure and fill in fuel tax blanks	1		1
Deliveries	1		1
Compare papers for accuracy	1		1
Write insurance policies	1		1

*These employees were graduates from Nowata High School in the years 1944, 1945, 1946, and 1947, who went to work in offices without any further training.

This table should be read as follows: Twenty-seven of 30 employees answer the telephone and 26 performed this duty on the first job. One employee who did not perform this duty on the first job did so on a later job. In all, 27 of the 30 office employees have performed this duty on some job.

Machines Operated by the Employee on the First Job And Later Jobs, and Machines on Which the Employee Believes He should Have Received Training in High School.

The second section of the questionnaire to graduates was designed to reveal information as to the kinds of machines used by employees on the first job; machines used on later jobs; and machines on which the graduate feels that he should have received training in high school. The data are recorded in Tables IX and X.

Of the 30 employees, 26 named the typewriter as a machine which they operated on the first job. No one listed the typewriter as a machine on which he should have received training in high school, probably because the school already offers typewriting.

Eighteen of the 30 employees signified that they operated an adding machine on the first job. Two employees signified that they operated an adding machine on later jobs. This makes a total of 20 employees who have operated adding machines on some job. Eight of the employees stated that they believed they should have received training in the use of the adding machine in high school, and 1 other indicated that training should have been given on an electric adding machine. This indicates a need for instruction in the use of an adding machine in the office practice course.

Calculating machines were named by 1 of 30 employees

as being operated on the first job. Calculating machines were named by 4 other employees as being operated on later jobs. Six of the 30 employees believed that training should be given on calculating machines in high school.

The dictaphone was named by 4 of 30 employees as a machine which was operated on the first job. Six of the 30 employees stated that they believed training in the use of these machines should have been given in high school; 4 of the 6 designated the "Dictaphone", and 2 of the 6 designated "dictating machines".

The check writer was operated on the first job by 2 of the 30 employees and by 2 of the remaining 28 employees on later jobs. Four of the 30 indicated a need for training in its use in high school.

Three of the 30 employees operated cash registers on the first job and did not designate the need for previous training in high school.

Two of the 30 people listed teletype as being operated on the first job. No one designated its operation on a later job, and no one suggested that operation of the teletype be taught in school.

The mimeograph was designated by 1 of the 30 employees as a machine which was used on the first office job, and 1

additional employee mentioned its use on a later job. Two believed that training in the operation of the mimeograph should have been received in high school.

One out of the 30 employees used the "Ditto" machine on his first job, and 1 of the remaining 29 used the "Ditto" on a later job. No one named the "Ditto" as a machine on which he should have received training while in high school.

Two of the 30 employees named billing machines as machines that they operated on the first job, and none indicated a need for training on that machine in high school.

The electric stencil machine was operated on the first job by 2 of the 30 people and one other person designated that training should be given on it in high school.

The IBM (key punch) machine was operated by 1 of 30 employees on the first job and by 1 other employee on a later job.

One person of the 30 operated a posting machine, and it was operated on the first job. Need for its being taught in high school was not suggested.

The multilith was operated by one person of the 30 on his first job, and was not listed for school training.

A comptometer was listed by 1 of the 30 employees as a machine that he used on his first job, and none listed the comptometer as being used on later jobs. Five employees

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THE BASIS FOR AN OFFICE PRACTICE COURSE
IN NOWATA, OKLAHOMA

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listed the comptometer as a machine on which they believed that they should have received training in high school. This would indicate that 4 of the 5 did not use the machine, but felt a need for knowledge of its operation.

One of 30 employees used the IBM (interpreter) and the same employee used the IBM (alphabetizer) on a later job.

No suggestions were given that the operation of IBM equipment be taught in high school.

One of the 30 employees designated the addressograph and graphotype as being used on a later job.

Of the 30 employees, one mentioned the electric typewriter as being used on a later job and this person felt that use of the electric typewriter should be taught in high school.

Comparison with Findings of Callarman¹ Study in Ponca City.

Cecil C. Callarman in his study of the post-high school activities of the graduates of Ponca City High School for the years 1934-1938, inclusive, devoted a chapter in his study to initial job, duties and salaries, and the kind of office equipment used on the first job. One hundred fifty-three graduates were found to be commercially employed and 70 answered the questionnaire.

The initial job duties as listed by the 70 employees were tabulated:

Duties such as addressing envelopes, answering the telephone, filing and indexing, and taking inventory were

¹ Cecil Clarence Callarman, A Study of the Post High School Activities of the Graduates of Ponca City High School for the Years 1934-1935, 1936, 1937, and 1938. Master's Thesis, Oklahoma Agricultural and Mechanical College, Stillwater, 1942, p. 39.

listed the greatest number of times. It should be pointed out that 20 of the 70 graduates or more than one-third gave 'keeping the desks and office tidy' as a regular initial office duty. Approximately one-fifth of the group listed such duties as: taking dictation and transcribing, and making out business papers as the regular duties on their first jobs.... It would appear that this list of initial job duties could well serve as a basis upon which to build units of work to be included in the clerical practice course of the Ponca City High School curricula.²

The Callarman study showed that 70 commercially employed graduates of Ponca City High School listed 16 different kinds of office equipment as being used on the first job. The standard typewriter, adding machines, and vertical filing equipment were reported the greatest number of times.

A similarity exists between the Nowata survey and the Ponca City survey in that the typewriter and adding machines are used more extensively on the first job than are any other machines. Other machines listed as being used on the first job in the Callarman study are: ditto, mimeograph, check writer, addressograph, comptometer, Ediphone, multi-graph, PBX board and bookkeeping machines. All of these machines appear on the Nowata survey with the exception of the multigraph, PBX board, and bookkeeping machine. The Ediphone does not appear on the Nowata survey but the graduates list the Dictaphone, another dictating machine.

Subjects in Which Graduates Believe That They Should Have Received Additional Training.

The graduates were asked the following question: "In

² Ibid., p. 37.

TABLE IX
MACHINES OPERATED BY 30 EMPLOYEES*

Machine	Number Operating Machines on First Job	Number Operating Machines on a Later Job, but Not on First Job	Total Number Operating Machines on Any Job
Typewriter	24		24
Adding Machines	18	2	20
Calculating machines	1	4	5
Dictaphone	4		4
Check writer	2	2	4
Cash register	3		3
Teletype	2		2
Mimeograph	1	1	2
Ditto or liquid process duplicator	1	1	2
Billing machine	2		2
Electric stencil machine	2		2
IBM key punch	1	1	2
Posting machines- bank	1		1
Comptometer	1		1
Multilith	1		1
IBM interpreter		1	1
IBM alphabetizer		1	1
Addressograph		1	1
Graphotype		1	1
Electric typewriter with ditto ribbon		1	1

*These employees were graduates from Nowata High School during the years 1944, 1945, 1946, and 1947, who went to work in offices without any further training.

This table should be read as follows: Twenty-four of 30 employees operated a typewriter on the first job. Those who did not operate the typewriter on the first job did not operate it on a later job.

TABLE X

OFFICE MACHINES ON WHICH 30 OFFICE EMPLOYEES BELIEVE
THEY SHOULD HAVE RECEIVED TRAINING IN HIGH SCHOOL

Machine	Number Who Indicated that Training Should Have Been Received in High School
Adding machine (1 indicated electric)	9
Calculator	6
Comptometer	5
Dictaphone, Dictating Machine	6
Check machine	4
Mimeograph	2
Stencil machines	1
Electric typewriter	1
Bookkeeping machine	1

This table should be read as follows: Nine of 30 employees indicated that training in the use of the adding machine should have been received in high school.

which of the following subjects do you believe that you should have received additional training in high school?"

The indications by the graduates are shown in Table XI and their indications are one of the determining factors for constructing the commercial curriculum.

Twenty-one of the 30 employees signified spelling, and 17 employees signified speaking as subjects in which they have felt a need for additional training. Penmanship ranked third with 15 of 30 employees mentioning a need for more penmanship training.

English ranked fourth in the list with 11 of 28 employees indicating a need for additional training.

The fact that 9 of the 30 employees, over one-fourth of the total number, felt a need for additional training in arithmetic is significant. This fact indicates a need for additional remedial work in arithmetic in high school.

Other subjects mentioned one time each were letter writing, second-year shorthand, mathematics, journalism, business law, secretarial studies, personality development, office organization, and shorthand.

Comparison with Other Studies.

Burris³ made a study of the graduates of Healdton High School for the years 1935-41 to determine a need for curriculum revision. Responses were received from 245 graduates out of

³ Maude Lillian Burris, A Follow-up Study of the Graduates of Healdton High School for the Years 1935, 1936, 1937, 1938, 1939, 1940, and 1941. Master's Thesis, Oklahoma Agricultural and Mechanical College, Stillwater, 1942, p. 16.

TABLE XI

SUBJECTS IN WHICH 30 GRADUATES BELIEVE
THEY SHOULD HAVE RECEIVED ADDITIONAL TRAINING IN HIGH SCHOOL

Name of Subject	Number of Students who Believe They Should Have Received Ad- ditional Training in High School
Spelling	21
Speaking	17
Penmanship	15
English	11
Arithmetic	9
Letter Writing	1
Second-year shorthand	1
Mathematics	1
Journalism	1
Business law	1
Secretarial studies	1
Personality development	1
Office organization	1
Shorthand	1

This table should be read as follows: Twenty-one of 30 graduates believe they should have received additional training in spelling in high school.

the 250 graduates in that period. 62.46 per cent of the graduates received no post-high school training. The additional courses needed, as suggested by all high school graduates included in that study, were ranked in the following order: business English, salesmanship, spelling, advanced typing, advanced shorthand, advanced bookkeeping, office machines, vocational guidance, office practice, penmanship, art, filing, and journalism.

There are indications in the Burris survey as to the need for business English, spelling, office machines, office practice, penmanship, and filing. This strengthens the Novata survey in the fact that some intensive review should be given in the office practice course on English, spelling, penmanship, filing, and some training in office machines.

In a similar study of selected graduates of Classen High School, Sittel⁴ endeavored to ascertain if more emphasis should be placed on certain subjects or divisions of subjects, all or some of which are generally considered essential to business jobs. The questionnaire contained a request that graduates check any item listed in which they thought from their business experience and observation that high school pupils should have more training.

⁴ Helen Catherine Sittel, A Follow-Up Study of Selected Graduates of Classen High School, Oklahoma City, Oklahoma, Master's Thesis, Oklahoma Agricultural and Mechanical College, Stillwater, 1943, pp. 76-80.

In the order of frequency of mention, the subjects were ranked by boys as follows: Personality development, spelling, speech, vocabulary, general business training, penmanship, and grammar.⁵ The subjects ranked by girls, in the order of frequency checked, were as follows: Personality development, spelling, vocabulary, general business training, letter writing, and use of telephone.⁶ Both boys and girls were aware of the need for training in personality development. The questionnaire to local graduates did not list personality development as an item, but it did list personality traits in which the graduates felt a need for additional training; therefore, the studies are similar in that respect, and graduates of both schools are aware of a need for additional training in personal traits.

Number of Graduates Who Believe They Should Have Received Additional Training in High School in various Traits.

The last inquiry in the questionnaire was designed to get the graduate's point of view as to the personality traits in which he feels that he should have received additional training in high school. The question asked the graduate was: "In which of the following traits do you believe that you should have received additional training in high school?"

"Accuracy" ranked highest among personal traits in which

⁵ Ibid., p. 76.

⁶ Ibid., p. 80.

the graduates believed that they should have received additional training in high school. Nineteen of the 30 graduates who replied to the questionnaire checked this trait.

Eighteen of the 30 graduates checked "sense of responsibility" and "ability to save time", which made these rank second in the traits in which they believed they should have received additional training in high school.

"Attention to details" and "ability to take criticism" were each mentioned by 16 of the 30 graduates as traits in which additional high school training would have been beneficial.

"Initiative" was checked by 13 of 30 graduates.

Ten of 30 graduates signified "system and orderliness" as a trait to be cultivated in high school.

Of the 30 graduates, 9 indicated "tact" as a necessary trait to be taught in high school.

"Ability to get along with others", "neatness", "honesty", and "good personal appearance" are designated next in order by the graduates. Training to overcome "timidity" was suggested by one graduate.

This section is indicative of a necessity for training in personality traits in the office practice course. Emphasis should be placed on "accuracy", "sense of responsibility", "ability to save time", "attention to details", and "ability to take criticism" as they were mentioned most frequently.

Replies to this section of the questionnaire are tabulated in Table XII.

TABLE XII

PERSONALITY TRAITS IN WHICH 30 GRADUATES BELIEVE
THEY SHOULD HAVE RECEIVED ADDITIONAL TRAINING IN HIGH SCHOOL

Traits	Number of Employees Who Believe They Should Have Received Additional Training in High School
Accuracy	19
Sense of responsibility	18
Ability to save time	18
Attention to details	16
Ability to take criticism	16
Initiative	13
System and orderliness	11
Tact	10
Ability to get along with others	9
Neatness	7
Honesty	2
Good personal appearance	1
Personality development	1
Should be trained to overcome timidity	1

This table should be read as follows: Nineteen of 30 graduates believe they should have received additional training in "accuracy" in high school.

CHAPTER V

COMPARISON OF EXPRESSIONS OF EMPLOYERS AND EMPLOYEES

Some interesting, worthwhile comparisons can be made of the expressions of 60 employers regarding 98 employees in offices of Nowata, Oklahoma, and of the expressions of 30 selected graduates of the Nowata High School for the years 1944, 1945, 1946, and 1947, who went to work in offices with no postgraduate training.

As shown in Table XIII, 88.7 per cent of the 98 employees "meet and handle people" in the 60 offices of Nowata, and 70 per cent of the 30 graduates who replied to the questionnaire checked the duty "meet and handle people".

Ninety per cent of the graduates checked the duty "answer the telephone", while 87.7 per cent of the employees in the Nowata survey "answer the telephone", according to the employers.

"Operate office machines and appliances" was given as a duty by 86.7 per cent of the 98 employees in Nowata and the duty was given by 80 per cent of the 30 graduates who answered the questionnaire.

"Handle mail" was given by a larger per cent, or 85.7 per cent, in the Nowata survey than in the graduate survey, which gave 70 per cent.

"Filing" was given as a duty of 83.6 per cent of the

employees in the Nowata survey and by 83 per cent of the 30 graduates.

"Some typing", "general clerical work", and "letter composition" are the next in order of importance in both surveys.

The strong similarity of the proportion performing some of the duties in the two surveys gives an indication as to the amount of time which should be spent in training in these particular duties.

A comparison, as given in Table XIII, of the expressions of employers in 60 offices in Nowata and of 30 graduates of the Nowata High School who are employed shows that 41.6 per cent of the employers designated "English" as being unsatisfactory in employees and 36.6 per cent of the graduates designated "English" as a subject in which additional training is needed in high school.

Seventy per cent of the graduates designated a need for additional training in spelling and 41.6 per cent of the employers designated a deficiency in spelling in their employees. The graduates may not realize a need for "English" if they are not aware of their deficiency, but they may be made to realize a need for additional training in spelling, as it is called to their attention.

Table XIV presents a comparison of the number and

TABLE XIII

COMPARISON OF THE DUTIES OF 98 OFFICE EMPLOYEES
OF NOWATA, OKLAHOMA, WITH THE DUTIES OF
30 SELECTED GRADUATES OF NOWATA HIGH SCHOOL

Duties	Number and Percentage of Employees Performing Duties			
	98 Office Employees:		30 Graduates	
	Number	Per Cent	Number	Per Cent
Meet and handle people	87	88.7	21	70.0
Answer telephone	86	87.7	27	90.0
Operate office machines and appliances	85	86.7	24	80.0
Handle mail	84	85.7	21	70.0
Filing	82	83.6	25	83.0
Some typing	61	62.0	21	70.0
General clerical work not in- volving a knowledge of book- keeping	51	52.0	14	46.6
Compose letters	48	48.9	16	53.3
General bookkeeping	30	30.6	8	26.6
Some shorthand & transcription	28	28.5	12	40.0
Sort, list and number papers	24	24.4	12	40.0
Full-time shorthand and trans- cription	14	14.3	4	13.3
*Figure cost	10	10.2	(Not on list)	
Billing	6	.05	13	43.3
Cut stencils	4	.04	12	40.0
Full-time typing	3	.03	6	20.0
Operate dictating machines	0	0	5	16.6

*Figure cost was not on the questionnaire sent to graduates.

This table should be read as follows: Eighty-seven, or 88.7 per cent of the 98 office employees in the 60 offices of Nowata "meet and handle people". Twenty-one, or 70 per cent, of the 30 graduates of Nowata High School who answered the questionnaire "meet and handle people".

TABLE XIV

COMPARISON OF OPINIONS OF 60 EMPLOYERS AND 30 EMPLOYEES
REGARDING SUBJECT MATTER DEFICIENCIES OF EMPLOYEES

Subjects	Number and percentage of employers who mentioned deficiencies in employees		Number and percentage of employees who believe they should have received additional training in subjects in high school	
	Number	Per Cent	Number	Per Cent
English	25	41.6	11	36.6
Spelling	25	41.6	21	70.0
Speech	--	--	17	56.6
Manner	18	30.0		
Tone	4	.066		
Enunciation	4	.066		
Arithmetic	8	13	9	30.0
Permanship	8	13	15	50.0

This table should be read as follows: Twenty-five, or 41.6 per cent of the 60 employers mentioned a deficiency in English in employees. Eleven, or 36.6 per cent, of the graduates believe they should have received additional training in English.

percentage of employers who mentioned subject-matter deficiencies in employees and the number and percentage of 30 graduates who believe they should have received additional training in these same subjects in high school.

In making the comparisons as shown in Table XV, it should be noted that one item, "ability to take criticism", was not included in the employer interview guide, while another item, "ability to follow instructions", was not included in the questionnaire sent to graduates.

The expressions of 63.3 per cent of 60 employers indicate "initiative" as a trait in which employees are unsatisfactory and 43.3 per cent of the graduates mentioned "initiative" as a trait in which additional training is needed. This difference may be caused by the graduate's not being aware of his lack of initiative.

"sense of responsibility" is given by 61.6 per cent of the employers as a trait in which employees are unsatisfactory and by 60 per cent of the graduates as a trait in which additional training is needed. This shows a strong similarity in the feelings of both employers and graduates. Sixty-three per cent of the graduates checked "accuracy" and 55 per cent of the employers checked "accuracy".

"Ability to take criticism", which was not included on the employer interview guide, was checked by 53.3 per cent

TABLE XV

COMPARISON OF OPINIONS OF 60 EMPLOYERS AND 30 EMPLOYEES
CONCERNING PERSONALITY TRAITS OF EMPLOYEES

Trait	Number and percent- age of employers who mentioned that employees are de- ficient in trait		Number and percentage of employees who be- lieve they should have received additional training in trait in high school	
	Number	Per Cent	Number	Per Cent
Initiative	38	63.3	13	43.3
Sense of respon- sibility	37	61.6	18	60.0
Accuracy	33	55.0	19	63.3
Attention to detail	32	53.3	16	53.3
Tact	20	33.3	10	33.3
Ability to save time	19	31.6	18	60.0
Ability to follow instructions	12	20.0		
System and order- liness	7	11.6	11	36.6
Neatness	6	10.0	7	23.3
Ability to get along with others	5	8.3	9	30.0
Good personal appear- ance	2	3.3	1	3.3
Honesty	2	3.3	2	6.6
Ability to take criticism			16	53.3

This table should be read as follows: Thirty-eight, or 63.3 per cent, of the employers mentioned that employees were deficient in "initiative"; and 13, or 43.3 per cent, of the 30 employees believe they should have received additional training in "initiative" in high school.

of the graduates and the same per cent checked "attention to details". The figure shows that students do realize a weakness in the ability to take criticism and attend to details. Fifty-three and threetenths per cent of the employers checked "attention to details" as a trait in which employees were deficient. Thirty-three and three tenths per cent of both employers and graduates checked "tact".

An outstanding difference of the two groups was the fact that 60 per cent of the graduates checked "ability to save time", while only 31.6 per cent of employees listed it. This figure indicates that the employee is aware of a need for doing a job in less time.

In 60 offices of Nowata, Oklahoma, 86 of 98 employees operate the typewriter. Of the 30 graduates of Nowata High School who went to work in offices, 24 operate the typewriter. This shows a similarity of expressions of both graduates and local office employers, as shown in Table XVI.

The adding machine, cash register, and calculator were the next three in order of rank as to the number of employees who operate the machines in local offices. The adding machine, calculator, and dictating machine were next in order of rank as to the number of graduates who operate the machines on jobs.

Although 60 employers reported that 86 of 98 office

employees operate typewriters on the job, and although 46 of 60 employers expressed the opinion that beginning employees should possess at least a working knowledge of the typewriter, the data presented in Table XVII show that none of the 30 graduates listed the typewriter as an office machine on which they believe they should have received training in high school. From this situation, it appears evident that the graduates did not list the typewriter because they know that training on this machine has already been provided for high school students and because they had opportunity to learn to type while they were in high school. It is reasonable to assume that the 30 graduates have answered this section of the questionnaire in terms of the office machine training that was not available and that they believe should have been available in high school. However, as 24 of the 30 graduates operate the typewriter, this fact, together with the expression from employers, indicates that acceptable typewriting standards should be required in the office practice course.

The adding machine was the second machine on the list in both surveys. Thirty-two of 60 employers felt that training in the use of the adding machine should be given in high school, and 9 of 30 graduates felt that training in the use of the adding machine should be given in high school.

The calculator was third on the list of both graduates

and employers as a machine on which training should be given in high school. The same number of graduates listed calculators and dictating machines as machines on which high school training would be beneficial.

The comparison of both groups shows that a unit on the use of the adding machine and calculator should have its place in the office practice course.

TABLE XVI

COMPARISON OF THE NUMBER OF EMPLOYEES WHO OPERATE MACHINES
IN 60 OFFICES IN NOWATA, OKLAHOMA
WITH THE NUMBER OF GRADUATES WHO OPERATE THESE SAME MACHINES

Machine	Number of employ- ees who operate machines in 60 offices in Nowata, Oklahoma	Number of graduates who operate machines
Typewriter	86	24
Adding machine	82	20
Cash register	20	3
Calculating machine	19	5
Check protector	18	(not mentioned)
Photostat	7	(not mentioned)
Change machine	7	(not mentioned)
Bank machine	5	1
Posting machine	3	(not mentioned)
Liquid process	3	2
Mimeograph	3	2
Stenotype	2	0
Addressing machine	2	1
Dictaphone	0	4

This table should be read as follows: Eighty-six of the 98 employees in offices of Nowata operate the typewriter; 24 of 30 graduates in offices operate the typewriter.

TABLE XVII

COMPARISON OF OFFICE MACHINES ON WHICH 60 EMPLOYERS BELIEVE BEGINNING OFFICE EMPLOYEES SHOULD HAVE AT LEAST A WORKING KNOWLEDGE, AND OFFICE MACHINES ON WHICH 30 GRADUATES BELIEVE THEY SHOULD HAVE RECEIVED ADDITIONAL TRAINING IN HIGH SCHOOL

Machine	Number of employers who believe beginning office employees should have at least a working knowledge of the machine	Number of employees who believe they should have received training on the machine in high school
Typewriter	46	0
Adding machine	32	9
Calculator	5	6
Comptometer	0	5
Check machine	2	4
Dictating machine	0	6
Mimeograph	3	2
Stencil machine	0	1
Electric typewriter	0	1
Bookkeeping machine	0	1

This table should be read as follows: Thirty-two of 60 employers felt that at least a working knowledge of the adding machine is beneficial, and 9 of 30 office employees who are graduates of Nowata High School felt that training on the adding machine should be given in high school.

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CHAPTER VI

AN ANALYSIS OF SELECTED STATE COURSES OF STUDY
IN OFFICE PRACTICE

From the Oklahoma Course of Study in Business Education and the courses of study in Business Education for South Dakota, Missouri, and Louisiana, a study of objectives, machines, and course content for the office practice course has been made.

A committee, headed by J. D. Delp of the Southwest Missouri State Teachers College, began, in 1937, the preliminary work for the Missouri state course of study, which was completed in 1941.

The different sections of the course of study were prepared by production committees. Their knowledge of business education practices in 707 first-class Missouri high schools in 1937-38 determined the guiding objectives for business education in Missouri.¹

In this Missouri course of study for office practice, an attempt has been made to integrate advanced shorthand and advanced typewriting in a secretarial practice course. The major objective of such a course is the preparation of advanced shorthand and advanced typing pupils for

¹ Practical Arts Business, Department of Education, State of Missouri, Bulletin 7C, pp. 9-15.

secretarial work. It is the aim of such a course to give the pupil a thorough knowledge of the actual work done by a secretary in a general office, and in specific types of offices; and to familiarize him with the traits and qualities every secretary should possess.²

The objectives are summarized below:

1. To offer instruction which will enable the pupil to increase skills in dictation and transcription, typewriting, mechanics of letter writing, kinds of letters, rough draft and tabulations.
2. To provide instruction and training in secretarial traits and duties.
3. To acquaint the pupil with such general knowledge as qualifications and training for a secretary, desirable traits, selecting a job, how to get and keep a job.
4. To acquaint pupils with general secretarial practice in law and insurance offices.

In Missouri the prerequisites for enrollment in the secretarial practice course are one year of shorthand, one year of typewriting, and an M average in English. It is recommended that the secretarial practice course be taught in the twelfth year, two consecutive periods daily, giving two units of credit.

In order that the teacher may choose units applicable to his community,³ more material is given in the suggested outline than can be taught in a two-period course.

In South Dakota an occupational survey made by the Commercial "Curriculum Revision Committee" revealed that a large

² Ibid., p. 79.

³ Ibid., p. 79.

number of commercial graduates in the State of South Dakota were doing general office work, non-stenographic in nature. The survey also showed that no preparation for this type of work was being offered to students. A practical course in office training, therefore, seems to fill a definite need.

The office training course in South Dakota is designed for the senior year and is especially recommended for students who have not had a course in Elementary Business Information. It should also be taught as a follow-up course in larger high schools where shorthand and typewriting are taught in conjunction during the eleventh and twelfth years.⁴

Objectives of the course are:

1. To give students an understanding of those fundamental principles of business which everyone should know.
2. To give students an understanding, efficiency, and marketable skill in the performance of office tasks and duties which are commonly entrusted to general office workers.
3. To develop such personal traits, habits, and characteristics as will make for advancement and success.⁵

The Suggested Curricular Guide in Business Education for the State of Louisiana, is a result of a cooperative effort including the school teachers of the state and specialists in the field of business education.

The Clerical Practice Course outlined in the Louisiana course of study is vocational and can be justified only on an

⁴ Commercial Course of Study for Secondary Schools, Department of Public Instruction, State of South Dakota, Bulletin No. 10, pp. 209-210.

⁵ibid., p. 210.

office job training basis. It is a finishing course; it should be made a part of the curriculum in a given year only after adequate provision has been made for the basic offerings - general business, typewriting, bookkeeping, and probably shorthand. Since a high per cent of office workers do not use shorthand skills, shorthand is not considered essential as pre-training. It is, however, considered desirable.

The objectives are:

1. To develop those personal qualities which are essential to successful living, both in and out of the office.
2. To give basic training in the operation and uses of the more common business machines.
3. To extend the typewriting and shorthand skills of the individual students.
4. To make an intensive study of filing rules and procedures.
5. To provide instruction in the multitudinous other duties of the office worker, such as the handling of office callers, using reference books, and handling telephone and telegraph messages.⁶

The content of the course of study is such that it can be adapted to meet the needs of the students. Some may be working on office machines while others are doing filing or other units of work.⁷

The Course of Study in Business Education⁸ for the State of Oklahoma resulted either directly or indirectly from the work of more than one hundred teachers in schools of different size in that state.

⁶ Suggestive Curricular Guide in Business Education, State Department of Education, Louisiana, Bulletin No. 491, p. 452.⁵²

⁷ Ibid., 453.

A complete discussion of the plan followed in developing the course of study may be found in an article by J. A. Holley, "State Programs of Curriculum Revision" in the Sixth Yearbook, The Business Curriculum, of the National Commercial Teachers Federation.

According to the Oklahoma course of study "The office practice course supplies the need for definite training in routine work and office machine operation." It is planned to

help pupils discover their personal abilities and limitations; to give them a foundation for adjusting themselves to business environment; and, most of all, to furnish opportunity for practice in the duties which are commonly performed by young men and women first entering the employ of business. Opportunity is given for pupil responses to such office conditions as are typical of real office positions. This course centers around the office. Office practice includes assignments in which the pupil is asked to visit commercial houses in his locality and there obtain first-hand information about office detail and practice.

Flexibility is essential to any course of study in Office Practice. The number of units which may be considered desirable depends upon the size of the school, the needs of the community, and the amount of equipment available.⁸

The size of the school and amount of available equipment will largely determine the length of the course. A course built around filing and secretarial duties, with some duplicating machine work, may be given in the small school and one semester would probably suffice.

⁸ Course of Study in Business Education, Bulletin 42-C-4, Department of Education, State of Oklahoma, Oklahoma City, June, 1943, p. 128.

More machine specialization may be given where the equipment is available and where employment opportunities justify it. This machine specialization in conjunction with general office practice may require a two-semester course.

It is desirable that the teacher have some practical experience in office work prior to teaching this course and that the teacher have at least four semester hours of college credit in office practice. Office Practice should be offered in the eleventh and twelfth grades, preferably in the twelfth grade, to pupils who have completed one year of typing.⁹

Objectives of the Oklahoma course of study in office practice are:

1. To gain a knowledge of the vocational opportunities in office work.
2. To gain a knowledge of the more frequently performed duties which a beginner in an office may be called upon to perform, and to realize that advancement is contingent on efficiency in this class of simpler duties.
3. To renew, by practice, the previously developed skills related to business.
4. To become skilled in the use of machines and procedures.
5. To gain a workable knowledge of filing.
6. To learn the various ways in which the agencies of transportation and communication contribute to efficient operation of business and to develop the ability to use these services intelligently through practical learning experiences.
7. To develop habits of neatness, accuracy, responsibility, thoroughness, and systematic procedure through adaptation and practice.
8. To become aware of one's own less pleasing traits and learn how to improve them.
9. To develop a usable business vocabulary through study and application of common business terms.¹⁰

⁹ Loc. cit.

¹⁰ Ibid., p. 130.

A summary of the course of office practice in Oklahoma, the objectives of the course in clerical practice in Louisiana, the objectives of the course of secretarial practice in Missouri, the objectives of the course in office training in South Dakota indicates the following:

Although the course names are different in each state, the purposes of the courses are similar in all cases.

The Missouri course stresses the secretarial angle, including advanced dictation and transcription along with office training.

The South Dakota course is designed to stress general office work.

The Louisiana course does not require shorthand as a prerequisite and emphasizes the general office angle.

The Oklahoma course stresses routine office work and office machine operation and does not include shorthand as a prerequisite.

All of these courses of study agree that the units must be adapted to the needs of the local situation.

Equipment requirements for the office practice course in Louisiana, Missouri, and Oklahoma are shown in Table XIII.

The South Dakota course includes a unit on office machines, but does not list the requirements. The suggestion is made that demonstrations of the different office machines may be secured from different companies.

Oklahoma, Louisiana, and Missouri courses of study agree that typewriters and mimeographs are an essential part of the equipment for an office practice room. Oklahoma and Louisiana list adding machines as necessary equipment. Oklahoma and Louisiana include in their "minimum" list, a liquid process or ditto machine. Louisiana lists, as minimum equipment, typewriters with both pica and elite type, and in addition, a calculating machine.

Check writers are listed as desirable equipment for the office practice room by the courses of study for all three states. Addressing machines and dictating machines are listed by two of the three as desirable equipment. Oklahoma is one of these two.

The Missouri course of study lists the adding machine as desirable, while it is listed as essential by the two other states. This difference may be due to the fact that Missouri stresses the secretarial angle of the office practice course.

Louisiana and Oklahoma list two kinds of calculators, key-driven and crank-driven, as desirable. Louisiana also lists a full-keyboard adding machine and the 10-key type as being desirable equipment for the office practice course. Oklahoma is the only one of the three states that lists a bookkeeping machine as desirable equipment. Oklahoma's course of study also designates a long-carriage typewriter as desirable.

All four states agree on the teaching of the following units: Scope of Secretarial Work, Mechanics of Letter Writing, Business Correspondence, Attending to the Mail, Telephone, Telegraph, Reference Books, Filing, Machines.

Three states out of four agree on teaching the following units: Dictation and Transcription, Meeting Callers, Transportation of Persons, Personal Qualifications, Office Conduct and Organization, Financial Duties of a Secretary.

Two states out of three agree on teaching the following units: Transportation of Goods, How to Get and Hold a Job, Development of Personality Traits.

Only one state included each of the following units: Legal Papers and Business Forms, Review of English Usage, Word and Term Selection, Capitalization and Punctuation.

In consideration of the fact that each state stresses a different angle of study, it is believed that those units which are listed by all four states should be included in the course of study for Nowata High School, and those listed by 3 out of 4 should be considered.

As shown in Table XIX, the following units are included in the courses of study of all four states: Scope of Secretarial Work, Business Correspondence, Attending to Mail, Telephone, Telegraph, Reference Books, Filing, and Machines.

Units included in three of the four courses of study are: Dictation and Transcription, Mechanics of Letter Writing,

Meeting Callers, Transportation of Persons, Financial Duties
of the Secretary, Personal qualifications, Capitalization,
Punctuation, and Office Conduct.

TABLE XVIII

OFFICE PRACTICE MACHINE REQUIREMENTS
MENTIONED IN STATE COURSES OF STUDY

Office Machine Requirements	Minimum	Desirable
Louisiana	Typewriters, Pica and Elite Adding or Cal- culating ma- chine Mimeograph Liquid Process	Full keyboard add- ing machine, ten- key adding machine, Crank-driven calcula- tor, key-driven calculator, check writer
Missouri	Typewriters Mimeograph	Check writer, add- ing machine Optional: Gelatin duplicator, voice writing machines, addressograph
Oklahoma	Mimeograph and Ditto, Adding machines, Typewriters	Dictating machines, Key-driven calcula- tor, crank-driven calculator, book- keeping machine, long-carriage type- writer, Addressing machine, Check writer

This table should be read as follows: Typewriters are listed as minimum equipment in the Louisiana course of study and a full keyboard adding machine is listed as desirable equipment in the Louisiana course of study.

TABLE XIX

UNITS LISTED IN 4 STATE COURSES OF STUDY IN OFFICE PRACTICE

Unit Names*	Louisiana	South Dakota	Missouri	Oklahoma
Scope of Secretarial work	X	X	X	X
Dictation & Transcription	X		X	X
Mechanics of Letter writing	X		X	X
Business Correspondence	X	X	X	X
Attending to the Mail	X	X	X	X
Meeting Callers	X		X	X
Telephone	X	X	X	X
Telegraph	X	X	X	X
Transportation of Goods	X			X
Transportation of Persons	X		X	X
Reference Books	X	X	X	X
Filing	X	X	X	X
Machines	X	X	X	X
Financial Duties of the Secretary	X	X		X
Personal Qualifications	X	X	X	
Review of English usage				
Work and Term selection (Some phases)	X			
Capitalization, punctua- tion, Office conduct	X	X	X	
How to get and hold a Job		X	X	
Legal Papers and forms		X		
Development of Person- ality traits		X		

*Units similar in content are classified under one name.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Survey of Related Information. Leaders in the field of business education have indicated that research is needed in local communities to determine the basic content of a course in office practice.

A study of the related literature in the field indicates that the course in office practice should be offered in the twelfth year of school and that remedial training in English, spelling, speech, penmanship, and arithmetic should constitute a part of the course. Training in personality development, as well as training in the use of office machines, should be given in the course.

Local Survey of Business Office Occupations and Equipment. A local survey of business office occupations and equipment was conducted by the interview method. Information concerning 60 offices with a total of 98 employees, was obtained in interviews with employers, and data obtained were tabulated and interpreted. These data reveal a need for remedial training in English, spelling, speech, arithmetic, and penmanship.

The personality traits that employers believe should be developed in employees are, in order of their frequency of mention: initiative, sense of responsibility, accuracy,

attention to details, tact, ability to save time, ability to follow instructions, system and orderliness, neatness, ability to get along with others, good personal appearance, and honesty.

The duties performed by the employees have implications for some of the units which should be included in an office practice course.

✓ "Meet and handle people" was the duty which was given as being performed by the largest number of employees; eighty-seven of the 98 office employees performed the duty. "Answer the telephone" was a duty performed by 86 of the 98 employees and "operate office machines and appliances" by 85 of the 98 employees. "Handle mail" was given as a duty performed by 84 of 98 employees, and "filing" was performed by 82 of the 98 employees.

Other duties listed in the order of number of employees performing each duty are: some typing; general clerical work not involving a knowledge of bookkeeping; compose letters; general bookkeeping; some shorthand and transcription; sort, list and number papers; full-time shorthand and transcription; figure costs; billing; out stencils; full-time typing.

In the section regarding the equipment survey of the 60 offices in Nowata, Oklahoma, it was revealed that 86 people use 87 typewriters. Fifty-one of the 60 employers said the

operation could not be learned satisfactorily on the job, and 46 of the 51 employers who had typewriters in their offices said the beginning workers should be skillful typists. Five of the 51 said a working knowledge of the typewriter would be sufficient.

Eighty-two of the 98 employees use adding machines in the offices. Thirty-one employers felt that beginning workers should have a working knowledge of the adding machine even though there was general agreement that the operation could be learned satisfactorily on the job.

Thirteen calculators were in use in 10 of the 60 offices considered, and 19 people operated these calculators. Nine of the 10 employers felt that the operation of the calculator could be learned satisfactorily on the job, but five expressed the opinion that a previous working knowledge would be beneficial to the employee.

Only 2 employers of 14 who required employees to use the check protector felt that the beginning employee should have a working knowledge of the use of the check protector. Twelve indicated that the operation of the check protector could be learned satisfactorily on the job.

There are nine cash registers in use in the 60 offices and 20 people operate them. Employers in the eight offices which have cash registers said that the operation could be

learned satisfactorily on the job and that the beginning worker needed no previous training in their operation.

As shown in Table IX, page 59, other machines operated were: photostat, change machines, bank machines, commercial posting machines, liquid process duplicating machines, mimeographs, stenotype, and addressing machines. There were not enough of these machines used to make it necessary for instruction on them to be included in an office practice course.

The Ponca City survey showed a similar situation, in that the typewriter, adding machine, and calculator were the three most-used machines.

There were 8 part-time employees in the 60 offices and 5 employers indicated an interest in part-time office practice in the Nowata survey.

Study of Graduates of Nowata High School. To obtain additional information that would be helpful in determining the basis for the course in office practice, a questionnaire was sent to graduates of the local high school who, without further training, went to work in offices. This questionnaire was developed for use in securing from these graduates certain information similar to that sought in the interviews with employers. The graduates indicated a need for additional training in the following subjects in the order

listed: accuracy, sense of responsibility, attention to details, ability to take criticism, initiative, and tact.

The duties performed by the 30 graduates who were employed in offices, as the graduates indicated, are: 27 of them "answer the telephone", 25 of them do "filing", 24 of them "operate office machines and appliances", 21 of them "meet and handle people", "handle mail", and do "some typing", 16 of them "compose letters", and 14 do "general clerical work not involving a knowledge of bookkeeping".

Other duties performed by 2 or more graduates, in order of number performing each duty, are: billing; some shorthand; cut stencils; sort, list and number papers; general bookkeeping; full-time typing; operate dictating machines; full-time shorthand; ditto work; wrap mail; and write news items.

The second section of the questionnaire to graduates was designed to reveal information as to the kinds of machines used by them on their first jobs; machines used on later jobs but not on the initial job, and machines on which the graduate feels he should have received training in high school. Twenty-four of the 30 graduates used the typewriter on the first job.

Eighteen of the graduates used adding machines on their first job and 2 others used adding machines on later jobs, making a total of 20 who have used the adding machine on a

job. One graduate used a calculator on his first job and 4 used this machine on later jobs, making a total of 5 graduates who have used the calculator on a job. As shown in Table IX, page 59, no other single office machine had been used by more than 4 of the 30 graduates.

Of the 30 graduates, 9 believed they should have received training in high school on the adding machine. Six of the 30 believed they should have received training on the calculator and dictating machine; 5 of the 30 believed that they should have received training in high school on the comptometer. Four of the 30 indicated a need for training on the check writer. As shown in Table X, page 60, each of the other office machines was mentioned by only 1 or 2 graduates as a machine on which they believed they should have received training in high school.

Comparison of Expressions of Employers and Employees.

The 60 employers indicated that 88.7 per cent of their employees "meet and handle people", while 70 per cent of the 30 graduates indicated that they performed this duty.

"Answer the telephone" was a duty performed by 87.7 per cent of the employees, as given by the employers in the Nowata survey, but by 90 per cent of the 30 graduates who were working in offices.

Six other duties, "operate office machines and appliances",

"handle mail", "filing", "some typing", "general clerical work not involving a knowledge of bookkeeping", and "letter composition" were placed in the next 6 ranking places by both the employers and graduates, although the two groups did not list them in identical order.

Seventy per cent of the 30 graduates and 41.6 per cent of the employers indicated that they believed additional training in spelling should have been received in high school. The same per cent of employers expressed the opinion that employees were deficient in English, while 36.6 per cent of the 30 graduates felt that additional training should have been received in English.

Over one-half of the graduates expressed a need for additional training in speech, while only one-third of the employers mentioned a speech deficiency in employees.

Fifty per cent of the graduates expressed a need for more training in penmanship, while only 13 per cent of the employers said employees were deficient in this skill.

Regarding traits in which employees were deficient, as mentioned by employers, and traits in which graduates believed they should have received more training in high school, "initiative" headed the list with employers, while "accuracy" headed the list with employees.

As shown in Table XV, page 71a, other traits mentioned

frequently by both employers and graduates were: "sense of responsibility", "attention to details", "tact", "ability to save time". Fifty-three and three tenths per cent of the employees mentioned "ability to take criticism", but this trait was not listed on the questionnaire for employers, so a comparison cannot be made.

Analysis of Course of Study in Office Practice. An analysis of courses of study in office practice for Oklahoma, Louisiana, Missouri, and South Dakota was made. This analysis revealed certain uniformities and certain differences. The uniformities indicate that there are certain units that should be included in any general course.

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CONCLUSIONS

On the basis of data obtained in this investigation, the following conclusions are drawn:

1. The office practice course should fit the community needs.
2. The course should be open to students who have had one year of typewriting.
3. The course should include an intensive review, for those who need it, in English, spelling, speech, arithmetic, and penmanship, stressing their importance in that order.
4. A unit on office machines should be planned in connection with a general office practice course. The machines to be taught, other than the typewriter, are the adding machine; and, if possible, the calculator.
5. A working knowledge of these machines would be sufficient.
6. A unit on the typewriter and its use should be planned for those who need it.
7. Personality traits which should be emphasized are "initiative", "sense of responsibility", "accuracy", "ability to save time", "ability to take criticism",

"attention to details", "system and orderliness", and "tact".

8. Special abilities to be taught include: filing, using telephone; meeting the public; composing letters; handling mail; and sorting, listing, and numbering papers.
9. The office practice course for Nowata High School should not, at the outset at least, be a part-time cooperative training program.
10. The course should be planned for general office work, primarily, and advanced dictation should be of secondary importance.

BIBLIOGRAPHY

Books

- Haynes, Benjamin R.; Humphrey, Clyde W., Research Applied to Business Education, Chicago: Gregg Publishing Company, 1939.
- Haynes, Benjamin R.; Graham, Jessie, Research in Business Education, Los Angeles: The University of California, 1932.
- Hopkins, L. Thomas, Curriculum Principles and Practices, New York: H. Sanborn and Company, 1929.
- Maule, Frances, She Strives to Conquer, New York: Funk and Wagnalls Company, 1937.

Bulletins

- Commercial Course of Study for Secondary Schools, Bulletin No. 10, Pierre, South Dakota: Department of Public Instruction, 1933.
- Course of Study in Business Education, Bulletin 42-C-4, Oklahoma City: Department of Education, June, 1943.
- Haynes, Benjamin R., "Improving School Office Practice Courses," Review of Business Education, Bulletin, Vol. 44, No. 13, Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma: May, 1947.
- Practical Arts Business, Bulletin 7C, Jefferson City: Midland Printing Company, 1941.
- Suggestive Curricular Guide in Business Education, Bulletin No. 491, Baton Rouge: State Department of Education, 1943.

Periodicals

- Eoling, Clem, "What Schools are Doing in Preparing Young People for Business," American Business Education, III, No. 2 (December, 1946) 109-111. ✓
- Bowers, Hubert C., "The Teaching of Office Practice in the Small High School," National Business Education Quarterly, "XIV, No. 2, (December, 1945), 39-43.

- Carmichael, Vernal H., "Need for Research in Field of Office Machines," The National Business Education Quarterly, XIV, No. 2 (December, 1945) 49-52.
- Cansler, Russell N., "Signposts in Office Practice," Journal of Business Education, XXII, No. 10 (June, 1947), 11-12.
- Cansler, Russell N., "The Present Status of Office Practice Course," The National Business Education Quarterly, XIV, No. 2 (December, 1945) 14-58.
- Crawley, Kermit A., "Practical Training for Office Jobs," Dictaphone Education Forum, (March, 1920), 14-16.
- Haynes, Benjamin R; Parker, G. H., "Integrated Secretarial Office Practice," Balance Sheet, XXV (February, 1944), 248.
- Lozo, F. W., "Trends in Office Practice," The Journal of Business Education, X, (May, 1935) 13-14, XI (October, 1935), 24.
- Parker, G. H., "The Organization of Office Practice Courses: Content." National Business Education Quarterly, XIV, No. 2, (December, 1945).
- Partin, Willie C; Dial, Fred W., "A Course in Business Machines," Balance Sheet, XXVII, No. 3, (November, 1945), 85.
- Roberts, Ruth L., "The Need for Office Practice," The National Business Education Quarterly, XIV, No. 2, (December, 1945), 7-54.
- Rutan, Edward J., "Word Study in Business Education," Journal of Business Education, XXI, No. 7, (March, 1946), 29-30.

Publications

- "Extending the Business Curriculum in World War II," Thirteenth Yearbook of the Commercial Education Association of the City of New York and Vicinity. New York, New York: 1942-43.
- Graham, Virgil C., "In Penmanship and Spelling," Seventh Yearbook of the National Business Teachers Association. Bowling Green, Kentucky: 1941.

Hamilton, Charles W., "The Teaching of Office Practice and Office Machines," Sixth Yearbook of the National Commercial Teachers Federation. Bowling Green, Kentucky: 1940.

Hohwieler, Charles F., "Problems Concerning the Teaching of Office Practice as Related to Office Procedures," Sixteenth Yearbook of the Eastern Commercial Teachers Association. The Norwood Press, 1943.

Shields, Harold G., "The Basic Business Subjects," Seventh Yearbook of the National Business Teachers Association. Bowling Green, Kentucky: 1941.

Zelliot, Ernest A., "Cooperative Practices in Curriculum Making," Sixth Yearbook of the National Commercial Teachers Federation. Bowling Green, Kentucky: 1940.

Unpublished Material

Black, Edith V., The Commerce Curriculum and Community Needs. Unpublished Master's Thesis, Stanford University, Oakland, California: 1931.

Burris, Maud Lillian, A Follow-up Study of the Graduates of Healdton High School for the Years 1935-41. Unpublished Master's Thesis, Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma, 1942.

Callarman, Cecil C., A Study of the Post High School Activities of the Graduates of Ponca City High School for the Years 1934-1938. Unpublished Master's Thesis, Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma, 1932.

Sittel, Helen Catherine, A Follow-up Study of Selected Graduates of Classen High School, Oklahoma City, Oklahoma. Unpublished Master's Thesis, Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma, 1943.

Silverthorn, James Edwin, Business Occupational Opportunity Survey of Ponca City. Unpublished Master's Thesis, Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma, 1941.

Tassin, Delight Mathews, Teaching Office Practice in the High School. Unpublished Master's Thesis, University of Texas, 1937; as abstracted in Benjamin Haynes and Clyde Humphrey, Research Applied to Business Education. Chicago: Gregg Publishing Company, 1939.

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OFFICE EQUIPMENT SURVEY

Office equipment used in offices	Number of machines	Number who use machines	Can the operation be learned satisfactorily on the job?		What degree of ability should be possessed by the beginning worker before he goes on the job?		
			Yes	No	None	Working knowledge	Skillful
Burroughs Adding Machines.....							
Burroughs Commercial Posting Machine							
Burroughs Bank Machine							
Elliott-Fisher Bookkeeping Machine							
Underwood Bookkeeping Machine							
Remington Bookkeeping-Billing Machine							
Moon-Hopkins Booking-Billing Machine.....							
Burroughs Calculators							
Comptometers.....							
Monroe Calculators.....							
Marchant Calculators.....							
Dalton Adding Machines.....							
Sundstrand Adding Machines							
Mimeographs.....							
Multigraphs							
National Cash Registers.....							
Remington Cash Registers.....							
Typewriters							
Other Cash Registers.....							
Dictaphones.....							
Ediphones							
Check Protectors.....							
Addressing Machines							
Other Equipment.....							

How Many part time employees do you have? _____

Would you be interested in development of an office occupations program of part-time office practice? Yes No

Could you use at regular part-time wages, services of one or more students who are taking this type of work? Yes No

NOWATA BUSINESS SURVEY OF OFFICE OCCUPATIONS & EQUIPMENT

Kind of Office _____

Number of Employees: Men _____ Women _____

Occupational Distribution of Employees:

	Number		Education Preferred			Prev. Ex Required
	Men	Women	High School Graduate	Less than High School Graduate	High School plus Business College Plus some college	
Stenographers and Office Secretaries						
Office Clerks primarily bookkeepers						
Full time bookkeepers						
Bookkeepers who are sales clerks or store cashiers						
General Office Clerks (not stenographers or bookkeepers)						
Office boys and girls (mostly untrained)						
Typist and office machine operators						
Others						
Total						

Duties performed by these employees:

	Men		Women			
	1	2	3	1	2	3
Filing						
General bookkeeping						
General clerical work not involving a knowledge of bookkeeping						
Full time shorthand and transcription						
A small amount of shorthand and transcription						
Meeting & Handling people						
Answering telephone						
Handling mail						
Billing						
Cost figuring						
Sort, list and number papers						
Full time typing						
Occasional use of typing						
Operating office machines and appliances						
Cut stencil						
Operate dating machines						
Other Dut						

14

14

Age preference for beginning employees: Men _____ Women _____.

In your experience as an employer, have you found your employees to be satisfactory or unsatisfactory with respect to the following traits: Which, if any, of the unsatisfactory traits are noticeable in beginning employees:

	S	U		
Honesty				
Sense of responsibility.....				
Accuracy				
Initiative				
Attention to details				
Tact				
Neatness.....				
Systematic and orderly.....				
Ability to get along with others...				
Ability to follow instructions.....				
Ability to save time.....				
Good personal appearance.....				
Any others				

What is the subject matter, if any, in which your employees are deficient: Which, if any, of these weaknesses are particularly noticeable in beginning employees:

English.....				
Spelling				
Arithmetic.....				
Penmanship.....				
Speaking:				
Manner				
Tone				
Enunciation				
Organization.....				
Any others				

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STRATHMORE PAPER

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