

AN APPRAISAL OF CURRICULAR AND PERSONAL COMPONENTS
OF THE STENOGRAPHIC TRAINING OF THE DETROIT
HIGH SCHOOL OF COMMERCE

A DISSERTATION

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CHAPTER I

INTRODUCTION

In recent years the demand for qualified stenographers and secretaries has become increasingly greater than the number trained by the public schools. Not only is there a need for more stenographers, but there is also a need for better training.

Never have there been so many opportunities for those adept in business knowledge as at the present time. According to the Associated Press,¹ the most sought-after and desperately needed person in the United States is the secretary. There is also a need for skilled stenographers and other office workers. In a news release from the Office of the Secretary of Labor, Maurice Tobin,² a 10 per cent nationwide increase in the shortage of clerical help since 1950 is noted.

Large industrial firms and companies (like the Metropolitan Life Insurance Company) are, it is observed, using persuasive methods in offering health benefits, bonuses, lucrative salaries,

¹Sylvia Berns, "Orchids Go to America's Secretaries," American Vocational Journal, XXVIII (February, 1953), 22-23.

²Ibid.

and long vacations to attract office personnel. Many of the major industries are offering in-service training in order to provide the needed skilled personnel. The Dartnell Corporation, of Chicago,¹ offered a course one night a week for five weeks to five hundred white-collar girls. Such subjects as good grooming, health, and letter writing were included in the lectures.

The young people leaving our schools today, and for the past few years, it is claimed,² have come into a period of lush economy where there has been no particular problem of finding a job. Business has been competing for employees, regardless of their qualifications, rather than applicants competing for the jobs. Businessmen of today claim that graduates are not adequately trained; that they are poor in the four simple arithmetic functions; that they do not know how to use the dictionary; and that their training in English grammar and spelling is inadequate.³ They complain further that their attitudes toward their jobs are not satisfactory, that too many graduates resent authority, that they cannot get along with their fellow workers, and that their only interest in their jobs is to collect the pay checks.⁴

¹Marilyn French, "How to Develop Better Business Women," American Business, XX (July, 1950), 18-19.

²S. E. Nelson, "Personal Trait Development, the Joint Responsibility of School and Business," The Balance Sheet, XXXIII (February, 1952), 253.

³Saul Bloch, "Business' Appraisal of Our High School Graduates," High Points, XXXV (March, 1953), 46-50.

⁴H. Jeannette Winter, "An Investigation of the Speeds of Dictation in Business Offices," National Business Education Quarterly, XIV (May, 1946), 60.

Criticisms by employers of the high school graduate indicate that an examination should be made of the business curriculum of the public schools to determine its effectiveness in the preparation of young people for position in business.

The Problem

This study will attempt to determine the effectiveness of the training offered by the High School of Commerce in preparing shorthand majors for their place in business and industry as stenographers and secretaries. The problem is concerned with special skills and with personal traits and efficiency factors necessary for the employee's success on the job.

The crucial test of a training program in any area is pragmatic; that is, the effectiveness of the program is best demonstrated by the degree to which it meets the needs of those individuals who have followed it in the actual situations for which it was designed. Evidence upon which to evaluate the effectiveness of the business education program may be secured by means of a census of opinions of stenographers and secretaries concerning their school training with reference to duties performed on the job. It is believed that recent graduates of Commerce who are experiencing the demands of their positions during the first five years subsequent to their graduation are in a strategic position to evaluate critically and reliably the strengths and weaknesses of their preparation for the effective discharge of the responsibilities of their positions.

In addition to securing an evaluation of the school curriculum, valuable data may be secured from the graduates as to their present-day duties. This information may be used in the revision of the curriculum in the future.

Purpose of the Study

In instances where similar follow-up studies have been made in other institutions, two sets of contrasted aims appear to have been examined before arriving at a statement of purposes. According to Wrenn,¹ these contrasted aims are embodied in two questions:

- (1) Will the study be concerned with securing data upon the present status of former students that are significant in themselves, or will it emphasize that whatever information about students is secured is to serve as a means to an end in evaluating educational procedures?
- (2) Is the follow-up of former students for the purpose of assisting them in making adjustments to their new environment, or is the aim that of securing evaluation information so that educational procedures can be improved and future students benefited?

Madsen² emphasizes the need for follow-up studies and assistance in job placement, in addition to teaching subject matter. Of special concern to this study are the following phases of investigation:

¹C. Gilbert Wrenn, "A Critique of Methods Used in Follow-Up Studies of Students," Harvard Educational Review, X (May, 1950), 358.

²Norman D. Madsen, "Have We Missed the Boat?" The Balance Sheet, XXXII (January, 1951), 227.

I. The Shorthand Curriculum. It is the purpose of the study to secure an evaluation of the stenographic curriculum of the High School of Commerce as reflected by the opinions of former students and graduates who are employed in business as secretaries, stenographers, and typists or clerical workers.

II. The Office Cooperative Program. Another important phase of the school program to be investigated is that of the office cooperative program. Some educators feel that oftentimes the health of the student is jeopardized by his participation in the cooperative work experience program, and that his academic work must necessarily suffer when he is employed. It would be interesting to know how the students felt their health and school work were affected by employment while still in school.

III. Personal Traits and Efficiency Factors. The third important phase with which the problem is concerned is that of related personal traits and efficiency factors which are important to success in business.

At one of the regular meetings of the St. Louis Area Business Education Association in St. Louis, representatives of business and of education participated in a panel discussion on the topic "Personal Trait Development - the Joint Responsibility of School and Business." Mr. Charles H. Rinehart,¹ membership secretary of the St. Louis Chamber of Commerce and a former business teacher, emphasized the importance of good personal traits in business,

¹Nelson, loc. cit.

and referred to a recent study which indicated that poor character traits resulted in the discharge of 90 per cent of the cases studied. The following statement by him is pertinent:

It is certainly necessary for your graduates to possess professional competency in the manipulative skills: shorthand, typing, bookkeeping, and so forth. It is necessary for them to have professional competency in the use of grammar and other basic knowledges—these are tangible skills. It is important, too, that while not neglecting these, attention be concentrated on the development of the same level of professional competency in personal traits. This is tougher because they are not so easily taught; they don't stay taught, particularly when you are dealing with adolescents.

The difficulty of developing desirable personalities and attitudes acceptable to business is recognized by both industry and education, as is indicated in the above statement.

The school, however, cannot solve all the problems of the business office. In addition to proficiency in skills and knowledge, many demands are made upon the present-day stenographer and secretary. Her working conditions are frequently far from the ideal. Oftentimes her work is repetitious; she spends much of her time with monotonous clerical jobs, and frequently there is but little, if any, chance for advancement. The secretary of today, however, if she is to exemplify desirable attitudes and personality, must feel that her work is important and that what she is doing is appreciated. She must feel that the merit-rating system is fair; and for her to be happy, her surroundings must be pleasant and her working conditions, good.

Oftentimes poor attitudes could be improved through a minimum of effort on the part of the office manager. The alert businessman

is becoming more and more aware of his responsibility in this respect, as is indicated by the following statement:

If office recruits were pounding at the door, management could afford to be indifferent to these white-collar dilemmas. But the same manpower shortage that plagues the production manager is stalking between the files. The key to the problem is not pay, not special privileges, but a satisfactory work relationship in management's own backyard.¹

In the plant, the beginner is the recipient of all the training at the command of management. The factory workers, regardless of the deficiency of his work, is not dismissed but instead he receives instruction and assistance in acquiring job proficiency. The stenographer, however, is supposed to be skilled when she is hired and is also expected to be in possession of a personality always pleasing to her superiors, her co-workers, and to the public.

Although it is true that there are many situations over which the school has no control, the fact remains that the school still has a responsibility in attempting to aid in the development of desirable attitudes and standards of conduct in business. At the joint meeting of businessmen and educators in St. Louis, mentioned above, Rosalie Knief, representing the public schools as a counselor and a teacher of business at Beaumont High School, St. Louis, Missouri, made the following suggestion for the improvement of desirable personality traits:

One of the most effective ways to develop good personality traits in the high school is through

¹Arthur C. Croft, "Where White Collar Meets Blue," The Management Review, XLII (April, 1953), 452-53.

organizations, such as the student council, clubs and so forth. Each advisory group elects one representative to the student council for a period of a year, and the officers are elected in a school-wide election each semester. Here each representative is responsible for his group, and in a sense, I think, to the school body as a whole for what goes on in the council.¹

IV. Other Pertinent Information. In order to secure a critical evaluation of the stenographic curriculum, an examination should be made of the graduates themselves and of their activities since graduation. Therefore, pertinent data in the following respects are included in the study.

A. Education Since Graduation. An analysis of the data secured from the graduates relative to additional training received since their graduation would indicate whether or not it has been necessary for them to continue their high school training in order to fill successfully jobs in business and to secure promotions.

It would be of interest to know whether or not the employers have through increments in pay or other benefits offered incentives for continued study. Information as to the number of former graduates now working toward college degrees, or continuing their study without working toward degrees, will reflect their aspirations and felt needs for further education.

B. Social Activities. One's social adjustment to life has an important bearing upon his attitude toward his work

¹Nelson, op. cit., p. 254.

and his happiness on the job. The importance of hobbies and pleasant leisure-time activities are stressed by the alert businessman; and, for this reason, it is felt desirable to examine the leisure-time activities of Commerce graduates.

- C. Vocational Information. It is desirable to know whether or not the graduates have found it necessary to go from place to place to find the desired salary and job satisfactions essential to success and happiness on the job, the way the respondent feels about his future with his present employer, and his chief duties on his job.

Importance of the Study

A survey of current literature in the business field indicates that there is widespread dissatisfaction with the qualifications of beginning office workers. Business and industry, in many instances are forced to give in-service training to supplement the training given in public schools. In view of these facts, it seems expedient that an effort be made to determine in exactly what areas schools are failing (if they are) in their efforts to train prospective employees for successful performance on the job.

It is axiomatic that no institution can know the true measure of success of its program, or how well it is accomplishing what it purports to accomplish, unless the product of that institution is taken into account. The importance of follow-up research in business and industry has long been recognized. Research departments

and programs have been instituted to determine the quality of the products offered to the public and the acceptance by the public of those products.

Public opinion research is becoming more and more important in politics, as well as in business, in an attempt to determine the attitudes and opinions of the public. In education, however, there has been a tendency to continue to teach those principles and practices handed down by teachers and theorists, many of whom have been isolated from actual business situations. Forward-looking educators at the present, however, are recognizing the importance of the opinions, attitudes, and performance of the direct recipients of educational training and are willing to accept some criticisms and suggestions from them for improvement in the future.

Business educators are realizing more and more that the profession must justify its program and that the basis for evaluation in the past are inadequate for the present. They realize further that they are unable to succeed in their programs if they do not have the wholehearted support of their area businessmen; neither can businessmen get the most out of the educational facilities available to them, if they do not cooperate with school personnel.

Troyer and Pace make a pertinent comment regarding the techniques for evaluation on the college level, which may be also applicable to business education on the secondary level:

The most meaningful follow-up evaluation of a college's program will come from an analysis of the behavior and opinions of the direct consumers of that education . . . We may hope that some day a college will dare to

evaluate its program not only through extensive questionnaires, interviews, and observational probing into the activities and thinking of its former students, but will add to these techniques some well prepared tests designed to measure the understanding of important facts and principles and ideas.¹

Haynes and Humphrey² state that the survey as a method of research is of potential value, especially to those interested in functional and terminal education and that follow-up studies of graduates and drop-outs are practical means for solving many of the problems of business education.

Business education teachers, according to Beckley,³ are continually attending conventions, reading professional journals, and talking with business executives in order to improve their programs, but very often they overlook one extremely important source of suggestions--the graduates of the program.

Follow-up studies such as this dissertation, then, in view of the foregoing evidence are significant in a social and practical sense. Although it is true that a single study is limited in scope and is of optimum significance only if extended continuously over a period of years, it is, nevertheless, significant when intelligent people--now successfully placed in business--offer criticisms and judgments concerning their preparation for their business

¹Maurice E. Troyer and C. Robert Pace, Evaluation in Teacher Education (Washington, D. C.: American Council on Education, 1944), p. 247.

²Benjamin R. Haynes and Clyde W. Humphrey, Research Applied to Business Education (Chicago: Gregg Publishing Co., 1939), p. 55.

³Donald K. Beckley, "Why Not Ask Your Graduates?" The Balance Sheet, XXVIII (September, 1946), 8.

careers. Such criticisms and judgments should provide insight into the strengths and weaknesses of their program and should offer a basis for improvement in the future.

Sources of Data

Essential data upon which this study is based are drawn from the following major sources:

1. Cumulative records of the Detroit High School of Commerce.
2. Questionnaires submitted to 223 former graduates of the High School of Commerce who majored in shorthand-- 67 in the graduating class of June, 1950; 71 from the graduating class of June, 1952; and 85 from the graduating class of June, 1954.

The techniques utilized for gathering and processing the data derived from these sources will be explained in detail in Chapter III, which includes a discussion of the methods used in the investigation.

Plan of Presentation

This introductory chapter has dealt with the purpose and significance of an evaluation of the shorthand curriculum of the High School of Commerce based upon the responses of former graduates. It has outlined the sources from which the essential data were gathered. Chapter II presents a review of related research. Chapter III gives information about the techniques used in the investigation, including the selection of the personnel, the construction of the instruments used in securing the data, mailing

the questionnaire, and the statistical treatment of the returns. Chapters IV, V, VI, and VII give the significant findings of the study. Chapter IV includes descriptive data related to the population--information about their activities since graduation--socially, educationally, and professionally. Chapters V and VI are chiefly concerned with the findings related to the shorthand curriculum of the High School of Commerce with respect to specific skills, with courses and course contents, and with the office cooperative program. Chapter VII is concerned with the related personality traits and efficiency factors necessary for successful performance in business and industry. Chapter VIII summarizes the study and presents conclusions and implications for further research.

CHAPTER II

REVIEW OF RELATED LITERATURE

The following review of relevant literature attempts to present synopses of studies and articles related to the secretarial field.

The Charters and Whitley Study

In 1923, a study conducted by Charters and Whitley¹ and sponsored by the National Junior Personnel Service proposed to determine the duties performed by secretaries to businessmen and administrators, and to determine conspicuous qualities which are present in successful secretaries, but absent in unsuccessful secretaries.

Of the 47 traits conspicuously present in the good secretary and likewise absent in the poor secretary, the ten most frequently listed traits were: accuracy, responsibility, dependability, intelligence, courtesy, initiative, judgment, tact, personal pleasantness, and personal appearance.

From the lengthy list of 871 duties, it is evident that the secretary in this study is in no sense the secretary of today. However, ten of the most frequently listed duties were: type-

¹W. W. Charters and I. A. Whitley, A Study of Secretarial Duties and Traits (Baltimore: Williams and Wilkins, 1923), pp. 1-183.

writing letters, answering the telephone, taking dictation, transcription of letters, using the telephone, addressing envelopes, packages, etc., inserting letters in envelopes, folding letters, ordering various kinds of office supplies, and placing memorandum where the employer would see it.

The Nichols Study

Although similar studies had been made, the first study confined to that type of worker known as a "private secretary" was sponsored by the American Institute for Secretaries and directed by Frederick G. Nichols in 1934.¹

The results of this survey consisted of responses from 213 secretaries from 63 cities in sixteen states, and 82 employers from 37 cities in 21 states. Traits listed most frequently by employers as being of special importance were: accuracy, intelligence, judgment, efficiency, personality, loyalty, and initiative. The ten duties mentioned most frequently were: taking dictation, transcribing notes, handling callers, writing original letters, answering letters, reading and sorting mail, noting information on letters, making appointments, and organizing filing systems.

The Place Study

In the Irene Place study of the personal secretary, which was confined to sixteen Michigan communities, the ten duties listed

¹Frederick G. Nichols, The Personal Secretary, Harvard Studies in Education, XXIII (Cambridge: Harvard University Press, 1934), pp. 1-105.

most frequently were:¹ taking dictation and transcribing, general filing, making appointments, alphabetical filing, answering the telephone and routing callers, reading and sorting mail, placing and making long distance telephone calls, operating adding or calculating machines. keeping records of appointments, and assisting with preparation of written reports.

The Toner Study

A paper entitled "The Executive Views Business Education." resulting from replies received from circular letters sent to executives in twenty well-known business concerns, was presented before the Eastern Business Teachers Association of Philadelphia by Mr. James Toner, president of the Boston Edison Company.²

In answer to the question "What are the five most important qualifications which you consider in selecting employees?" character was placed first followed by work habits, health, personality, basic education, and attitudes. Attitudes included the following subdivisions: respect for parents and superiors, enthusiasm, eagerness, imagination, initiative, versatility, tolerance, self-confidence without appearing to know all the answers, and self-discipline. The majority of responding executives states that, while they believed the schools have much responsibility in the

¹Irene Place, The Personal Secretary, Report Number 12 (Ann Arbor: School of Business Administration, University of Michigan, 1946), pp. 20-24.

²James V. Toner, "The Executive Views Business Education," American Business Education, V (October, 1948). 21-28.

molding of character, the major responsibility rests on the homes and churches.

The replies were almost unanimous relative to the importance of subjects taught and their usefulness in business. English--including spelling, penmanship, and the ability to write and talk--ranked first; mathematics--including arithmetic, rapid calculation, algebra, and geometry--ranked second; specific skills--including typing, shorthand, bookkeeping, filing and general knowledge of business machines--ranked third; and general science and history ranked fourth.

The Aamot Study

A follow-up study of Fairmont (Minnesota) High School graduates with stenographic majors for the period 1941 through 1948 was conducted in 1949 by Frances Lyla Aamot.¹ The study sought to learn, among other things, the type of work each graduate was doing, length of employment, method by which and place where initial employment was obtained, additional training received, and adequateness of training for initial employment.

Seventy per cent of the total number of 165 graduates responded to the inquiry. Eighty-nine per cent, or 103 of the respondents, stated that they were well pleased with the training they had received while in high school, and that they would take the same

¹Frances Lyla Aamot, "A Follow-up Study of the Fairmont (Minnesota) High School Graduates with Stenographic Majors, 1941-1948" (Unpublished Master's thesis, University of Iowa, 1949).

major again if they were back in school. Even though 11 per cent, or 13 of the respondents, stated that they would not take the same major again if they were back in school, they agreed that typing had been of special value to them.

The respondents recommended that specific directions be given to students on how to conduct themselves during an employment interview, and that the development of personality traits be considered a function of both curricular and extra-curricular activities.

The Aamot study is significant to the present study because in purpose, methodology, and findings the two are similar.

The Cook Study

In 1953, Fred C. Cook conducted a study of 194 cooperative office training students in the eleventh and twelfth grades from the Detroit High School of Commerce, East Commerce High School, and Denby High School, to determine the predictive value of the Detroit Clerical Aptitudes Examination.¹

Of special significance to the present study is the conclusion drawn by Cook that those students who received the highest ratings from their supervisors did not necessarily receive the highest ratings from their counselors and vice versa. The implication is that there are factors entering into a student's success on a job that were evidently not considered or were even over-emphasized by the counselors.

¹Fred C. Cook, "A Study to Determine the Predictive Value of Detroit Clerical Aptitudes Examination," Unpublished Doctoral dissertation, (Ann Arbor: University of Michigan, Education Department, 1953).

Cook concluded further that the predictive value of either general grades or vocational grades for success on a clerical job are almost valueless. He indicated, however, that there is a very close similarity between students' general grades and their commercial grades.

As a result of this study, serious question was raised concerning the predictive efficiency of the Detroit Clerical Aptitudes Examination, which all students entering the specialized schools, the High School of Commerce and East Commerce High School, are required to pass.

The Cook study is of further significance to the present study because it is concerned with the success of clerical workers, many of whom later became stenographers or secretaries.

The Wolfe Study

Charles J. Wolfe in 1954, attempted to describe the cooperative work experience program in the Detroit public high schools and to evaluate the program as related to the student by submitting questionnaires to 742 students enrolled in the program and to principals and employers of the students, and by securing pertinent data from the students' cumulative records.¹

Evidence indicated that advantages outweighed disadvantages resulting from participation in the cooperative work experience

¹Charles J. Wolfe, "A Study of the Cooperative Work Experience Program in the Detroit Public High Schools," Unpublished Doctoral dissertation (Detroit: Wayne State University, Department of Education, 1954).

program. Three major advantages of the program as indicated by students were "money, experience, and human relations."¹ Principals, counselors, parents, and employers all gave favorable appraisals of the program. Students while employed maintained satisfactory records in punctuality, attendance, and citizenship. Holding power of the program was evidenced in that one out of eight students admitted entertaining the idea of quitting school prior to enrollment in the program.

More students improved than declined in scholarship during the first semester of participation in the program, with improvement occurring especially among students previously rated as only fair or passing; 70 per cent of the students previously rated excellent dropped in scholastic attainment and remained lower during the entire period of participation in the program.

Disadvantages of the program -- as indicated by 15 per cent of the students -- included lack of time for school activities and sports, and difficulty in maintaining good scholarship.

The Glamour Survey

"Glamour's Secretarial Survey"² presents a summary of the findings of a survey which polled 13,899 different individuals to secure pertinent information relative to the secretarial field.

¹Ibid., p. 201.

²"Glamour's Secretarial Survey," Glamour, Glamour's Job Department (New York: The Conde Nast Publications, Inc., 1950), pp. 1-12.

A 33 per cent response was received from three different questionnaires sent out -- one type to the secretaries, one type to employers, and the third type to the schools where the secretaries received their training.

The largest percentage of contacted secretaries worked for executives or administrative personnel within their companies, and the next largest percentage worked in professional offices. The survey represents the returns of highly selected business people, covering groups of such caliber as the Seraphic Secretaries of America, the National Secretaries Association, and the American Management Association.

The purpose of the survey was to secure data relative to the preparation of the secretary for her work, preferences in hiring a secretary, the qualifications of the secretary, the attitude of the secretary toward her work, the duties of the secretary, and the salary of the modern secretary.

A summation of the findings indicates that the greatest number of the secretaries had received their preparation in high school. However, many had attended evening classes, or college secretarial courses, indicating that the majority of the women answering had found it desirable to acquire further specialized training than that received in high school. Among the employers, a majority indicated that they preferred to hire secretaries with a college or junior college background.

The secretaries were quite unanimous in their judgments as to the specific courses that had been of most help to them during

their training period. Stenography, typing, and business English were listed as the three most important. They placed business mathematics and office or secretarial practice quite high on the list. They indicated, further, the need for more thorough courses in English, office or secretarial practice, and mathematics. They indicated that they would have liked courses in psychology or human relations, personality development, business law, and business machines. Other courses mentioned as being of value were investments, specialized or technical vocabulary, social studies, foreign languages, library science, statistics, economics, principles of business administration, and bookkeeping. It may be concluded from these answers that the secretaries found the basic skills of their profession their most valuable preparation, and that it would have been helpful if they had pursued these subjects more extensively than the opportunity provided. They felt that it would have been advantageous for them if they could have taken additional courses not so rigidly vocational, yet appropriate for their work.

The replies from the various types of secretarial schools indicated that quite consistently the schools have brought into their curricula those courses which the secretaries had indicated were of most value to them, and those they wished they had had the opportunity to study.

The five most important duties of a secretary as listed by each of the three groups were similar, even though some differences in the emphasis were given one duty over another. The duties listed were: opening and sorting mail, taking dictation and typing, office

detail work, filing and indexing, and acting as receptionist for the employer or meeting visitors and introducing them to him.

Employers and secretaries listed basic good judgment and intelligence as most important for success as a secretary, while the schools rated personality as the most important factor for success.

The following most prominent factors contributing to failure, as indicated by the employers as cause for dismissing secretaries were: inoompetence, carelessness, laziness, poor attitude, difficult disposition, and lack of intelligence.

Other Related Studies

Bloch,¹ as a result of a survey to determine what businessmen expect from the high school graduates and what they find lacking in them, reported that businessmen made the following complaints against the training or lack of training of graduates: that most graduates are very poor in the four simple arithmetic functions; that many do not know how to use the dictionary because they are not sufficiently familiar with the order of the letters in the alphabet, and that many do not know how to spell; that telephone manners are inadequate; that the average commercial teacher did not have sufficient business experience to enable her to impart enough practical business knowledge to the students; that students

¹Bloch, loc. cit.

did not know how to write or compose simple business letters; and that many lacked interest in their work.

They complained further regarding the lack of desirable personal traits, stating that it is a rare exception to find a boy or girl who is willing to give a dollar plus for every dollar received; that too many high school graduates cannot get along with their fellow workers; that too many resent authority; that they cannot be trusted with detail work; and that the average high school graduate cannot be relied upon to represent the firm to the public because he or she has never been taught the need for good public relations.

Dr. Elizabeth Lanham¹ states that there is criticism directed at the graduates' lack of general information and at the general unwillingness of graduates to be responsible citizens. She states that courses designed to promote good citizenship and integrity have a definite place in the high school curriculum. She emphasizes the importance of English -- as well as history, economics, and civics -- as a student's knowledge of history may enable him to appreciate current affairs, and his study of English may lead him to read extensively and intelligently.

Llynola A. Curtis,² in reporting the findings of a survey conducted in cooperation with businessmen of Stratford, Connecticut,

¹Elizabeth Lanham, "What Business Needs in the High School Graduate," The Balance Sheet, XXXIII (February, 1952), 251-56.

²Llynola A. Curtis, "Curriculum Building Based on Community Resources," The Journal of Business Education, XXVI (February, 1951), 246-48.

verified the findings of other surveys that graduates are weak in spelling, punctuation, capitalization, and sentence structure. Personality traits were also stressed as being of primary importance to the success or failure of the office worker. Day-dreaming, clock-watching, frequent trips to the rest room, lack of good judgment, and lack of initiative and dependability were mentioned as common faults of the office worker.

Dorothy H. Abell,¹ in defense of the correct grammar rather than the less formal "shirt-sleeve English," emphasizes the appearance of the business letter, the preciseness of the words, the punctuation, and grammar as part of the total picture representing the individual or firm who wrote it. She reasons that if a business is meticulous in its accounting, in its promptness in handling correspondence, in its ethics and fair play, it should be meticulous in its letters by saying exactly what is meant and by using a vocabulary that is simple but dignified.

Eleanor Dodkin² stresses the importance of correct English and attributes to the business teacher the teaching of English, while teaching dictation and transcription, in the responsibility of training students to become expert stenographers and secretaries.

¹Dorothy H. Abell, "Who Approves of Shirt Sleeve English?" The Balance Sheet, XXXIII (October, 1951), 54-59.

²Eleanor Dodkin, "The Transcription Teacher Must Also Teach English," The Balance Sheet, XXXIII (October, 1951), 52-53.

Jordan Hale¹ emphasizes the importance of teaching students how to spell as one of the major problems facing teachers of transcription and shorthand today. Although it is difficult to allocate the time to the teaching of English and spelling in the shorthand classes--where one of the primary objectives is the building of shorthand speed--it is, nevertheless, essential to the second primary objective, which is the development of transcription proficiency. Hale, therefore, suggests that a systematic method of teaching spelling be devised, and suggests the assignment of ten spelling words daily as part of assigned homework in shorthand classes.

To aid in the teaching of spelling, Reva² emphasizes the use of the dictionary--even on examinations--and suggests that students keep a check list of the words they look up when in doubt as to their spelling, and refer to this list as frequently as they need to until the correct spelling of the words is mastered.

Ryan³ makes three recommendations for the improvement of the curriculum: making use of the survey, interviewing or calling on the employer or asking him to call on the school, and work experience on the part of the teacher. She states further that employers

¹Jordan Hale, "Teaching Spelling in Shorthand Transcription Classes," High Points, XXXVI (September, 1954), 21-38.

²Virginia Reva, "Teach Spelling Too," Business Education World, XXXIII (November, 1952), 129-46.

³Mary A. Ryan, "Utilizing Community Resources in Teaching Stenography," American Business Education, VII (December, 1950), 113-15.

in the large industrial offices feel strongly that teachers should not try to spread the content of their training courses too thin by attempting to train students in a variety of office activities in which they might engage, but rather that emphasis be placed on teaching fewer things and teaching them well. Businessmen, she states further, are willing to do the "breaking in" and, in most cases, prefer to do so if teachers will concentrate on developing the basic skills to their highest possible point. Schools, it is recommended, should concentrate on developing fast and accurate typists who can spell, punctuate, and conform to the principles of good English usage in written work.

Mary Yocum¹ reported the results of a study conducted at the Austin (Texas) High School, in an effort to find out whether or not the needs of the students and community were being met. Some of the general suggestions by both employers and employees were concerned with such things as vocabulary, spelling, punctuation, decimals, figuring of interest, percentages, and handwriting. The concensus of opinion was that all these areas needed improvement. The importance of personal appearance and proper employee attitude toward his work were stressed. One employer advised the prospective employee, "Do not be afraid to give a little service over and above the minimum required for the pay check. The person who does that is the one who will receive promotions and advance-

¹Mary Yocum, "Former Students Advise Teachers," The Balance Sheet, XXXIII (December, 1951), 166-67.

ments in salary." Many of the former students suggested that students be impressed with the idea that the employer has a right to expect loyalty from his employees and that his business affairs should be considered confidential.

In 1943, a survey was made by Sister Mary Diebold¹ to determine what qualities the employers were seeking in the graduates of St. Mary's Academy, of Dunkirk, New York. Among other things, she was concerned with the traits considered by employers as essential to success. As a result of this survey, the twelve traits listed in the order of rank assigned, were as follows: intelligence, accuracy, honesty, dependability, initiative, judgment, courtesy, loyalty, health, appearance, speed, and ambition.

In a similar study, Sister Eleanor Johnson,² as the result of a survey made in a north-central Texas city, which included the replies of ninety businessmen, reports that the ten traits considered of most importance to the success of a secretary are intelligence, dependability, honesty, accuracy, initiative, interest in work, loyalty, secretiveness, courtesy, and adaptability. The ten traits that the businessmen stated that they hoped most that their secretaries did not possess were: lack of interest in work,

¹Sister Mary Joseph Diebold, "Objectives of the Secretarial Course as Suggested by Selected Employers," Unpublished Master's thesis (Washington, D. C.: The Catholic University of America, 1944).

²Sister Eleanor Johnston, "The Secretary's Traits and Duties as Suggested by Selected Employers," Unpublished Master's dissertation (Washington, D. C.: The Catholic University of America, 1951).

talking too much, improper office clothes, disorder in work and appearance, lack of courtesy, chewing gum, smoking while in the office, gossiping, personal calls while on duty, and tardiness and absenteeism.

In the study by A. B. Parker Liles,¹ desirable work habits were identified and suggestions made for teaching them. Mildred Howard² stresses the importance of teachers' considering attitudes that should be taught and then, through repeated suggestions to the students, helping to develop those attitudes and qualities necessary for success in an office. She stresses also the use of reward rather than punishment in the development of these traits, and emphasizes the need for understanding on the part of the teachers as to how the human being functions. In the study by Phelma Newton Moore³ it was indicated that training for the purpose of meeting students' needs for improvement of personalities and attitudes can be successful.

Van Buskirk,⁴ too, emphasizes the need for such training and

¹A. B. Parker Liles, Some Factors in the Training of Clerical Workers, Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma, 1949.

²Mildred Howard, "Can Attitudes Be Taught?" The Balance Sheet, XXXIII (November, 1951), 112-16.

³Phelma Newton Moore, "Personality Development," The Balance Sheet, XXXI (February, 1950), 255-57.

⁴K. Van Buskirk, "All-Round Student Development," American Business Education, VIII (October, 1951), 59-61.

suggests group participation in planning and solving a problem and then in the sharing of the success or failure as a result of the solution. Ruth Temple¹ stresses the importance of the teachers' being examples in the development of social competence--for example, presenteeism rather than absenteeism, respect for others and for public property, and the conservation of supplies and time.

Dorothy Binger² suggests two main points of direction for the training of character. Like Temple, she stresses the setting of an example by the teacher, stating that the teacher must be--in actuality and in demonstration--the type of person she desires her students to be. The second point of direction lies in the utilization of each small or large opportunity as it comes, and in the making of other opportunities for the development of desirable personal traits.

Dimmers³ recognizes the importance of desirable personality traits for success in business. However, he calls attention to the fact that the personality development of an individual is a lifetime process and that educators are limited in what they can do because of the brevity of their opportunity to work with the individual.

¹Ruth Temple, "The Big Little Things," Teacher's College Journal, XXII (May, 1951), 135.

²Dorothy N. Binger, "Building Character in the Skill Courses," Journal of Business Education, XXIX (November, 1953), 73-74.

³P. E. Dimmers, "Personality and Character Development," Journal of Business Education, XXVIII (February, 1953), 201-02.

H. Chandler Hunt,¹ assistant principal of the Meriden (Connecticut) High School, conducted a nation-wide survey to determine how the high school should train students to meet the needs of business firms to which the schools were sending them. He found that the most common causes for discharge were character traits, rather than specific skills.

Esther Sandry,² looking toward the future, emphasizes the need for aiding the student in developing adaptability in applying fundamental basic knowledge acquired in business subjects to the mechanism and automatization of the ever-encroaching machine. J. D. Elliott,³ of the Detroit Edison Company, speaking of automation and its effect upon the training offered by the public schools, states that graduates will need what they have always needed--the ability to spell, read and write, and type letters; that they need to have a desire to do a good job and the ability to get along with other people; and that to be successful, they must have proper attitudes toward their work and be proficient in the necessary basic skills.

Summary

From perusal of the literature related to the present study

¹H. Chandler Hunt, "Why They Couldn't Hold Their Jobs.", Personnel Journal, XIV (December, 1935), 227.

²Esther Sandry, "Secretarial Studies in the Machine Age," High Points, XXXV (January, 1953), p. 33-37.

³J. D. Elliott, The Detroit Edison Company, Detroit, Michigan. Personal conversation and letter of July 10, 1956.

it becomes apparent that there is prevalent a consensus of opinion among businessmen that in the stenographic training offered by the public schools more emphasis should be placed on basic skills including correct English usage, spelling, and mathematics. There is a further expression of feeling that more emphasis should also be placed upon the development of desirable personal traits necessary to success in business.

In those studies directed toward determining the duties common to secretaries and stenographers employed in business there appeared to be a similarity in the duties performed as reported by the various studies, as well as a similarity as to the relative importance of personal traits and attitudes that should be stressed as necessary to success in business, although they were not ranked in exactly the same order of importance in all of the studies.

There is evidence that the secretaries and stenographers currently employed in business placed a high value upon the training they had received in high school, especially upon stenography, typing, and business English, and other related subjects; and they indicated that they felt they would have benefited from even more intensive training in English, office or secretarial practice, and mathematics.

It is the purpose of the present study to secure an evaluation of the stenographic training offered by the High School of Commerce from the graduates themselves and to obtain from them suggestions for possible improvement of the program in the future.

CHAPTER III

RESEARCH METHODS USED IN THE COLLECTION, ANALYSIS, AND INTERPRETATION OF DATA

The High School of Commerce, operating under the authority of the Board of Education of the city of Detroit, Michigan, specializes in business education. It has a normal enrollment of slightly over one thousand students and has been in operation as a specialized high school since 1918. The students are required to have a scholastic average of C or above in order to be admitted.

Since they are particularly interested in securing the type of training offered by the school, they have chosen to attend it rather than the comprehensive high schools nearer their homes. Many of them come a great distance from various parts of the city, riding two or three different buses.

Commerce has made a great deal of progress in recent years in developing the social atmosphere and extra-curricular activities of the school. The Student Council, organized first in 1951 under the supervision of the principal, Mr. Harry L. Davis, has as one of its chief aims the provision of additional social activities.

Several of the clubs have also done much to add to the social life of the school. The Business Teens, a club organized for students participating in the cooperative work experience program,

has sponsored many varied and desirable social activities. The Y-Teen Club has sponsored skating and swimming parties at the Downtown Y.W.C.A., which is but a short distance from the school. The Retailing Club, the Biology Club, and the Girls' Athletic Association have been active in promoting similar activities.

Another forward move in the direction of increasing social activities has been the organization of a square dance group, as well as a modern dance group. The square dance group works in cooperation with the Wilbur Wright Vocational High School, a school made up entirely of boys and located only a short distance away. Social activities have been sponsored jointly by these two schools.

The High School of Commerce, made up almost entirely of girls,¹ is just across the street from Cass Technical High School, which is predominately made up of boys. Cass students share their lunchroom and auditorium with the High School of Commerce students, and Cass students have been invited to some of the social activities.

The High School of Commerce has an office cooperative program which has been in operation for several years and is well established. Students participating in the program go to school for half a day and work the other half in downtown retail stores and industrial and business offices. The strategic position in downtown Detroit, near the center of the business and industry of the

¹Many of the boys who do come to Commerce major in bookkeeping, and there are so few boys included in this study that the respondents are hereafter referred to in the feminine gender.

city, adds to its importance in its cooperation with business and industry in the training and placement of part-time and, upon graduation, full-time employees.

For many years the High School of Commerce has worked closely with Wayne State University in the preparation and training of business teachers. Many student teachers, especially in the field of business education, have received their directed teaching experience at this high school, and for many years it has been considered a pioneer and leader in business education -- especially in the field of research and in the establishment of definite standards and practices within the field.

Teacher Personnel. Within the four years included in the study there was practically no turnover in the teacher personnel of the school. Many of the teachers in 1950 were still teaching the same courses in 1954. This is particularly true of the courses considered especially important to this study -- Business English, and the advanced courses in shorthand and transcription. Because of this fact, the conclusions drawn from the data are less likely to be influenced by turnover in teacher personnel.

Selection of the Population

The selection of the population to be investigated in this study involved two major problems. They were: (1) the selection of an aggregate of graduates large enough to provide an adequate sample, and (2) the selection of a population whose graduation was recent enough to insure that the various aspects of the high school curriculum could be recalled with reasonable clarity and

evaluated in terms of present-day business standards and practices.

The High School of Commerce offers four different fields of specialization that may be elected by the students. They are:

1. The Shorthand Curriculum .
2. The Bookkeeping Curriculum .
3. The Office Machine Curriculum .
4. The Retail Curriculum .

In addition to these four specialized business fields, students who desire to do so may elect a college preparatory course by taking college requirement courses offered at Cass Technical High School. It is not unusual to have students going across the street to Cass Technical High School for College preparatory courses or for courses in home economics, art, and other specialized fields, or for Cass students to cross the bridge to the High School of Commerce to take business subjects offered there.

Because of the unusually great demand for more stenographers in the business world, the shorthand curriculum was chosen as the specific field of investigation, and the study is limited to majors from this field. It was decided to use for the study the June graduates, since the graduating classes of June are usually larger than the January classes. The years of 1950, 1952, and 1954 were selected. Responses of the 1954 graduates would reflect the difficulties, progress, and criticisms of recent graduates and their initial progress on the job. The 1952 graduates would indicate the difficulties graduates were encountering as they were beginning to make some progress toward their ambitions of becoming senior stenographers and secretaries in business. It is hoped that the responses of the 1950 graduates would reveal the mature judg-

ments and criticisms of stenographers and secretaries successfully employed in business for a period of five years.

For the three graduating classes included in the study, as indicated in Table I, there were 223 cases. This number was approximately 7.1 per cent of the total enrollment during the three semesters included in the study. Although this percentage seems relatively small when compared to the total school group, the findings are significant to the entire group, since approximately one third of the respondents employed in business and industry were classified as typists and clerical workers and all were performing some duties for which all students are trained.

TABLE I
DISTRIBUTION OF SHORTHAND MAJORS BY YEAR OF GRADUATION

Year	No. of Shorthand Majors	Aggregate	Per Cent
1954	85	1019	8.3
1952	71	1080	6.6
1950	67	1045	6.4
Total	223	3144	7.1

In other words, all students of the school are required to take four semesters of typewriting, two semesters of bookkeeping, and one semester of office machines. Most students take a course in clerical practice, and many students take two semesters of shorthand even if they are not shorthand majors. Therefore the group included in this study are probably performing many of the duties performed by the graduates with other majors.

It is believed that the sample included in this study is large enough to provide data that are practical and statistically significant and that the five-year period is sufficiently long enough for graduates to appraise their training in terms of the demands of their present positions in business. The respondents have, on the other hand, not been out of school for so long that they have forgotten significant experiences and training received while they were in school. To extend the period to an earlier date would increase the possibility of bias in the responses. Wrenn describes this danger in the following paragraph:

...the danger of bias in those experiences which are remembered and the possibility that the subjects may not be able to remember certain of their school experiences even though these were significant at the time. (the repression of the unpleasant, the "Old-Oaken-Bucket" delusion, etc.) lay a heavy cloud of uncertainty over all results.¹

Construction of the Questionnaire

The graduates of the High School of Commerce who are now employed in business are employed in various offices throughout the city. It was felt that a questionnaire would provide the best method of securing objective data and that it would be more practical than the personal interview. Since the questionnaire would need to include a great many items if it was to cover the high school curriculum of the respondents, it was felt that a check list of significant items would be the best means of insuring that the respondents would take time to fill it out, as such an instrument would require the least

¹Wrenn, op. cit., p. 360.

expenditure of time and energy.

The questionnaire was developed after consultation with the writer's doctoral committee and with other university professors and public school teachers, and with some personnel directors in business. During the process of trial and consultation, the questionnaire was rewritten several times with many items shortened or clarified and some dropped. The questionnaire was submitted to a group of students enrolled at the High School of Commerce and also to a group of former graduates employed in business. It was revised according to their suggestions and was then submitted to a class of thirty-nine graduating seniors in Business English, some of whom were shorthand majors and were already employed in business on a part-time basis. It was submitted to them on their last day in school, and they were asked to evaluate their school program conscientiously and critically.

A detailed questionnaire of seven pages was involved.¹ Although the questionnaire was considered rather long by some of those who were asked to criticize it, it was printed on paper of a good quality in order to make reading easy, and it was so constructed as to take only approximately twenty minutes for the respondent to read and check unless she chose to write detailed responses to some of the items.

To enhance the appearance of the questionnaire and to insure a higher percentage of returns, it was decided to have the instrument and the accompanying letter vari-typed on multilith mats and then

¹See Appendix A, page 151.

reproduced on the off-set printing press. This method of printing gave to each copy the appearance of an original copy. The cover letter bore the signature of the principal of the High School of Commerce,¹ as it was felt that a personal letter from him would elicit more responses, and the absence of the signature of the investigator might help to eliminate bias in the responses, as some of the graduates were former students of the investigator. Where follow-up, however, was necessary, a personal note was written at the bottom of some of the letters by the investigator, requesting that the questionnaire be returned.

Part I of the questionnaire deals with the education of the respondents since graduation from high school, the type of training, the institution where the training was secured, the incentives offered by employers for further training, and other information relative to the education of the graduates.

Part II deals with vocational information and the work history of the respondents, as well as the salary, duties and probable future status with the present employer.

Part III deals with the courses offered by the High School of Commerce and the course content included in those courses—those that have been of most and least value on the job and the areas in which more training should be offered in school.

Part IV deals with personal traits and efficiency factors—

¹His signature was copied, with his permission, by the investigator with her accompanying initials.

those that are considered most important for success in business and that should be stressed in school.

Part V deals with the extra-curricular activities offered by the high school.

Part VI deals with social and leisure-time activities -- radio and television programs enjoyed by the respondents, attendance of church and social activities, and the newspapers and magazines read regularly.

Part VII deals with the cooperative work experience program of the High School of Commerce.¹ Part VIII is less specific, but is intended to secure an over-all evaluation of the high school program and suggestions for improving it.

The questionnaire is designed to elicit a cross section of thought and opinion from which inferences may be drawn in order to improve the school curriculum in the future. In research, there is, of course, a distinction between the type of subjective responses elicited by the questionnaire and data which are considered as objective facts. The following statement by Good, Barr, and Scates along this line seems pertinent:

. . . The opinions and attitudes represented are facts in so far as the responses are typical responses of the individuals, but they are facts of opinion. They represent the leanings of the group -- tendencies which may be right or wrong, helpful or detrimental to society, generally good or generally bad. These facts of opinion are different from opinions about facts, which are normally untrustworthy.²

¹In this study the term office cooperative Program is also used, as this study is concerned with only those employed as office cooperative students.

²Carter V. Good, A. S. Barr, and Douglas E. Scates, The Methodology of Educational Research (New York: Appleton-Century-Crofts, Inc., 1941), p. 332.

Methodology

The methods of research employed in this dissertation may be classified as descriptive research, combined with curriculum research. Descriptive research is defined as "fact-finding with adequate interpretation."¹ Curriculum research deals with "those rather generally agreed upon procedures and techniques which lead to a better selection of socially valuable content material, its functional organization, and its validation and verification in actual use."²

The normative survey is selected as the best method adapted for securing the needed data. Good makes the following statement regarding this technique:

...normative-survey research is designed to secure information on conditions or practices as they exist. The type of information which this kind of research yields is in wide demand, particularly, by persons who have practical problems to solve.³

The following excerpt from Whitney is also pertinent:

The survey, according to recent social science terminology, is an organized attempt to analyze, interpret, and report the present status of a social institution, group, or area. It deals with a cross-section of the present, of duration sufficient for examination--that is, present time, not the present moment. Its purpose is to get groups of classified,

¹Frederick Lamson Whitney, The Elements of Research (New York: Prentice-Hall, Inc., 1946), p. 153.

²Ibid., pp. 340-41.

³Good, op. cit., p. 373.

generalized, and interpreted data for the guidance of practice in the immediate future.¹

The importance of curriculum research is emphasized by Whitney in the following statement:

Research in curriculum-making is needed because of the lag of tradition in content and method, as well as because of a rather general disregard for actual activity objectives, overemphasis of factual information [sic] and survival of an attitude of dependence on formal discipline alone.²

Procedure in Mailing, Follow-up, Coding and Tabulation

From the permanent records of the office the names and addresses of shorthand majors were secured for the June graduating classes of 1950, 1952, and 1954 respectively. A record was also made of the telephone numbers of the respondents, academic marks in advanced courses in shorthand and typewriting and in Business English, as well as the ratings the students received on the intelligence test administered by the school. Information was also secured regarding the students' attendance and citizenship records.

The actual mailing of the questionnaires was timed so that they would reach the respondents toward the latter part of the week, preferably Friday, so that they would have time to fill them out during the week-end. They were dated July 20 and were mailed out on Wednesday. This precaution was taken at the suggestion of Troops who concluded that questionnaires "tend to be filled out

¹Whitney, op. cit., p. 155.

²Ibid., p. 374.

during the week ends."¹

It was considered desirable to send the questionnaires by first-class mail, as it was felt that a better response would be secured. The envelope used was a size No. 11. The return envelope, a No. 10, enclosed in each letter, was self-addressed to the principal of the school, but a post office box number was used, so as not to have the letters mixed with the personal or regular school mail of the principal. Stamps were placed on each return envelope. It was felt that the anticipated better response and the promptness in replying would warrant the additional expense of first-class mail. Then, too, the population sample was not so large as to make doing so prohibitive.

Since the letters were sent first-class, they were forwarded by the post office, in case of change in address of the addressee; and in event it was not possible to deliver the letters, they were returned to the sender. As a result, it was unnecessary to mail out many follow-up letters, since the initial response was high. More than 60 per cent of the total responses received were mailed during the first week-end and were received during the first two days of the following week. Where follow-up was necessary, in most cases, telephone calls were made. It was found that some of the graduates were out of town on vacation, most of whom returned the forms immediately upon their return from vacation.

¹H. A. Toops, "Validating the Questionnaire Method," Journal of Personnel Research, II (1923), 158.

Two hundred and twenty-three questionnaires were mailed out. Fifty of the letters probably never reached the addressees as most of them were returned as "dead letters." A further check of the permanent records and of the telephone directory revealed no clues as to their present addresses. The population therefore who had an opportunity to check the questionnaire was reduced to 173 cases. Responses were received from 124 of these cases, or 71.7 per cent of those who probably received the questionnaire. According to Stanton,¹ "Returns to the majority of mail surveys range from 5 to 20 per cent of the sample." Using his statement as a criterion, therefore, the number received constituted a good return.

When the questionnaires were mailed out, they were numbered consecutively, and a different questionnaire number was assigned to each respondent included in the study. The use of numbered questionnaires gave the investigator an accurate record of all questionnaires returned in the event a respondent failed to write in his name. Some blank questionnaires were received, and when, upon further investigation, no response was secured, it was believed that the first letter was opened by mistake by the person living at the address where the addressee had lived while in school. Had the questionnaires not been numbered, the investigator would have had no way of knowing to whom they had been addressed. The numbers were also of value in tabulating the responses.

¹Frank Stanton, "Notes on the Validity of Mail Questionnaire Returns," Journal of Applied Psychology, XXIII (1939), 102.

To insure promptness in filling out the questionnaire, in the body of the letter attention was called to the fact that most of the questions could be answered by making a simple check mark and that it would take the recipient only a few minutes to check it. A request was made in the letter that the form be returned by June 30. The reason for including this date was that such a definite commitment date might encourage promptness on the part of the respondents.

Coding. As the responses were received, a tally of the answers was begun. It was found, however, before the completion of the tally, that the data were too unwieldy to handle by means of the tally, and it was decided to make arrangements with the Computation Laboratory of Wayne State University to transpose the returns to Hollerith cards. A coding technique was agreed upon after consultation with the chairman of the writer's doctoral committee.

Validation

In an attempt to determine whether or not the responses received are representative of the entire population,¹ an examination was made of the entire population, dividing it into two groups -- the first group including those who returned the questionnaires and the second group including those who did not. A comparison was then made of the two groups on the basis of available information. Data, taken from their past records, were gathered on the basis of three known criteria: (1) their scores on the

¹George A. Lundberg, Social Research (New York: Longmans, Green and Company, 1942), p. 206.

intelligence test taken during their senior year in high school,¹ (2) their citizenship marks during the last two semesters in high school, and (3) final marks on important courses in their major field. These courses included their final high school English course, Business English; the last two semesters of shorthand--Shorthand(4) taken during the last semester and Shorthand(3) taken the previous semester--and the two courses in transcript. Transcript(2) is taken their last semester in high school in connection with Shorthand(4) and Transcript(1), the preceding semester in connection with Shorthand(3). The transcript courses include the transcribing of dictation taken in the shorthand classes and the typing of other assignments. The last semester in high school is referred to as the 12A semester and the preceding one as 12B.

This technique of drawing inferences about the nature of the population on the basis of past knowledge is suggested by Wallace.²

Frequency distributions were made of the information about the two groups and comparisons were made of the medians of each group. On these criteria, as may be seen by referring to Table II, the

¹This score represents the mark received on the Detroit Advanced Intelligence Test, administered during the twelfth grade. The test was developed by Dr. Harry J. Baker and has been in use in the Detroit Public Schools for approximately thirty years. It consists of two forms, V and W, which are comparable and are administered interchangeably--one semester on the east side of Woodward and the next semester on the west side. It is a test on general intelligence, including verbal ability, numerical ability, and visual imagery. The raw score of the student is converted into a letter rating with the use of a table of norms developed during a period of years.

²David Wallace, "Mail Questionnaires Can Produce Good Samples of Homogeneous Groups," Journal of Marketing, XII (1947), pp. 53-60.

TABLE II

COMPARISON OF GRADUATES WHO RESPONDED AND THOSE WHO DID NOT
RESPOND AS TO INTELLIGENCE SCORES, FINAL MARKS ON
SIGNIFICANT COURSES, AND CITIZENSHIP MARKS

Medians of Scores, Final Marks, and Ratings								
	Intelligence	English	Shorthand		Transcript		Citizenship	
			(4)	(3)	(2)	(1)	12A	12B
<u>Year of 1954</u>								
Group 1*	C†	B	C	C	B	B	2	2
Group 2	C	B	C	C	B	C	2	2
<u>Year of 1952</u>								
Group 1	C†	B	B	C	B	B	1	2
Group 2	C†	B	C	C	B	B	1	2
<u>Year of 1950</u>								
Group 1	C†	B	B	C	B	B	1	1
Group 2	C†	C	B-	C	B	C	1	1

*Number of Group 1 (who responded) was 124.
Number of Group 2 (who did not respond) was 99.

two groups are apparently very similar. There is a slight difference in some respects in favor of Group 1, or those who did respond. For 1952, only one median is different -- that of Shorthand 4. The median for Group 1 is B and for Group 2 the median is C. A comparison of the medians of the two groups for 1954 shows that the median score on Intelligence of Group 1 is C† and of the group that did not respond is C. On Transcript 1, the median for Group 1 is B and of Group 2, C. The greatest difference in the two groups is for the year of 1950. The intelligence scores for the two groups is the same; however, on Business English and Transcript (1); Group 1 had median scores of B and Group 2 had scores of C. In Shorthand (4), Group 1 had a median of B and Group 2 a median of between B and C or B_r. The medians of the citizenship marks¹ for the two groups for each year is exactly the same.

The technique of drawing inferences about the nature of the population on the basis of past knowledge was applied in another way as follows: The total population of 224 cases was divided into two groups -- Group 1 consisting of 125 who responded to the questionnaire,² and Group 2 consisting of 99 who did not respond.

¹The apparent difference in the citizenship marks in 1952 reflects a change in the philosophy of the School as to citizenship marks as the result of a committee appointed by the Principal to study citizenship marks. Up until this time, it had been the philosophy of the School that all Commerce students were good students and therefore deserved 1's in citizenship, except for misbehavior. The committee recommended, however, that 2 be the standard mark of good citizenships, and that 1's be given only to those students who distinguished themselves in some way in school activities. Only a very unsatisfactory student might receive a 3.

²It is observed that there were 125 cases in this portion of the study; however, one case was omitted elsewhere in the study because the record was incomplete.

The criteria selected for validation in this respect are limited to: (1) final marks in shorthand; (2) final marks in transcription; (3) final marks in English; and (4) the intelligence scores. The statistical procedures used in the following calculations are those recommended by Smith.¹

In the evaluation of the critical ratio of each pair in terms of probability, a null hypothesis was set up. The hypothesis is that there are no differences between the true means of the samples being compared. On this basis, the probability that a value of t as large as, or larger than, the difference between the means of the two samples could occur on the basis of chance variations and selection of samples is determined. A 1 per cent level of confidence was set for determining significant differences of the criteria.

The results of comparisons of the two samples using final grades in shorthand, transcription, English, and the intelligence scores are shown in Tables III, IV, V, AND VI. A letter grade of A received a weighted score of four points; B, three points; C, two points; D, one point; and E, no points. The weighted scores were arranged in frequencies, and the means and standard deviations for each group computed.

Upon examination of the data regarding the final marks on shorthand and transcript and on the intelligence scores, it is observed that the null hypothesis is accepted at the 1 per cent

¹G. Milton Smith, A Simplified Guide to Statistics for Psychology and Education, (New York: Rinehart & Company, Inc., 1946), pp. 56-58.

TABLE III

COMPARISON OF INTELLIGENCE SCORES ON TEST GIVEN DURING SENIOR YEAR
OF TWO SAMPLES: 125 WHO RESPONDED TO QUESTIONNAIRE;
99 WHO DID NOT RESPOND

Intelligence Scores	Weighted Scores	F_1	F_2	M_1	M_2	σ_1	σ_2	t
A	4	18	14	2.42	2.44	.81	.81	.19 ^a
B	3	22	21					
C	2	80	60					
D	1	4	3					
E	0	1	0					
Total		125	99					

^aThe null hypothesis tested is that there is no statistically significant difference between the means of intelligence scores of the two samples of the respondents and non-respondents to the questionnaire. Since the critical ratio is less than 2.58, the hypothesis is accepted at the 1 per cent level of confidence.

TABLE IV

COMPARISON OF FINAL ENGLISH MARKS OF TWO SAMPLES: 125 WHO RESPONDED TO QUESTIONNAIRES; 99 WHO DID NOT RESPOND

Average Grades	Weighted Scores	F ₁	F ₂	M ₁	M ₂	σ_1	σ_2	t
A	4	18	12	2.83	2.58	.67	.75	2.63*
B	3	69	38					
C	2	37	45					
D	1	1	4					
E	0	0	0					
Total		125	99					

*The null hypothesis tested is that there is no statistically significant difference between the mean scores on final English grades of the two samples of the respondents and non-respondents to the questionnaire. Since the critical ratio is greater than 2.58, the hypothesis is rejected at the 1 per cent level of confidence. The difference between the means is statistically significant in favor of the group that responded.

TABLE V

COMPARISON OF FINAL SHORTHAND MARKS OF TWO SAMPLES: 125 WHO RESPONDED TO QUESTIONNAIRES; 99 WHO DID NOT RESPOND

Grade Average	Weighted Score	F ₁	F ₂	M ₁	M ₂	σ_1	σ_2	t
A	4	19	13	2.66	2.52	.80	.78	1.29*
B	3	51	31					
C	2	49	50					
D	1	6	5					
E	0	0	0					
Total		125	99					

*The null hypothesis tested is that there is no statistically significant difference between the mean scores on final shorthand marks of the two samples of the respondents and non-respondents to the questionnaire. Since the critical ratio is less than 2.58, the hypothesis is accepted at the 1 per cent level of confidence.

TABLE VI

COMPARISON OF FINAL TRANSCRIPT MARKS OF TWO SAMPLES: 125 WHO RESPONDED TO QUESTIONNAIRES; 99 WHO DID NOT RESPOND

Grade Average	Weighted Score	F ₁	F ₂	M ₁	M ₂	σ_1	σ_2	t
A	4	36	15	2.90	2.63	.90	.92	2.25*
B	3	49	46					
C	2	31	25					
D	1	9	12					
E	0	0	1					
Total		125	99					

*The null hypothesis tested is that there is no statistically significant difference between the mean scores on final transcript marks of the two samples of the respondents and non-respondents to the questionnaire. Since the critical ratio is less than 2.58, the hypothesis is accepted at the 1 per cent level of confidence.

level of confidence. On the comparison of the final marks on business English, however, the null hypothesis is rejected at the 1 per cent level of confidence, since the difference between the means of the groups is statistically significant in favor of the group that responded.

Thus, the techniques of drawing inferences about the nature of the population on the basis of past knowledge reveal that the group that responded to the questionnaire and the group that did not respond are apparently very similar, but that there is a slight difference in some respects in favor of the group that responded.

CHAPTER IV

THE GRADUATES--THEIR ACTIVITIES AND PROGRESS SINCE GRADUATION

In attempting to secure a critical appraisal of the training offered by the High School of Commerce to the stenographic majors, it seems logical that a study be made of the graduates themselves --of their activities since graduation, their education since they left high school, their use of leisure time, and information regarding their vocational progress and present employment status. It would be interesting to know whether or not their employers have found it necessary or desirable to encourage their further study and have for that reason offered incentives to them to further their education.

Information relative to their use of leisure time would reflect to some extent their social adjustment, which is important also to their professional success. Data concerning the means by which they secured employment, the places where they are employed, and their progress in the business world would reflect, to a great extent, the adequacy of the training and services offered by the school. Other information concerning the duties they are currently performing in business could be used in evaluating the course content of the business courses offered by the school.

Education Since Graduation

A total of 35 graduates indicated they were attending or had attended college, and 21 of this group, 16.9 per cent, indicated that they were working toward degrees. However, a total of 53.6 per cent were taking or had taken some type of training after their high school graduation, either for business or personal reasons. It may be noted that this percentage closely corresponds with the findings of the Glamour Secretarial Survey,¹ in which it was reported that approximately 50 per cent of that group had taken some college work following their graduation from high school.

There were 9 graduates who indicated intentions of entering the teaching profession, and 2 others were contemplating doing so. One indicated an interest in an entirely different field--that of the medical technician. Of those students who were attending college but did not indicate a specific desire to go into the field of teaching, there were some who did not indicate definite goals toward which they were working, but were taking courses in a variety of fields including English, business administration, sociology, psychology, and speech. Ten of the respondents had taken courses for the improvement or enrichment of their personal or leisure-time activities--such as sewing, music, and dancing.

Although the graduates indicated that most of their training following graduation was taken at colleges or universities, 7 indicated that they were taking or had taken work at the public night

¹"Glamour's Secretarial Survey," op. cit., p. 2.

schools and others had training offered on the job by the employers.

Incentives Offered by Employers. A study of the responses indicated that 10 of the employers offered no incentive to further study. One employer paid part or all of the tuition; 4 allowed time off for training; 10 of the employers made a record of the training on the employees' personnel records; and 14 took the training into consideration when promotions were available. Twelve respondents indicated that their employers offered training on the job or courses at night for those who were interested. Other incentives offered by the employers were the lending of helpful books and time off to study for examinations. The respondents indicated that a total of 30 employers offered at least some inducement for further study upon graduation from high school or training on the job, either on their time or on company time.¹ Since a large number of the respondents did not check this item, it appears that there was evidently no incentive offered by many of the employers to encourage further study. This might reveal their satisfaction with the training their employees had received during high school.

An examination of the data relative to training following graduation from high school indicates that the graduates are, for the most part, an ambitious group and were striving for self-improvement. Some were using their business training and experience as a background for further training to become business

¹Employees of 55 different employers were represented in the study.

teachers. Others were taking work for self-improvement and for better use of personal or leisure-time activities.

Social Activities and Use of Leisure Time

The responses to the section of the questionnaire pertaining to the social activities, hobbies, church attendance, and other uses of leisure time indicate that the graduates are busy socially. A summary of their interests with respect to radio and television programs is shown below:

<u>Type of Program</u>	<u>Number</u>
Modern music - - - - -	102
Variety shows - - - - -	100
Drama - - - - -	95
News commentators - - - - -	62
Classical music - - - - -	54
Religious programs † † † - - - - -	31
Educational lectures - - - - -	26
Political discussions - - - - -	14
Serial drama - - - - -	13
Quiz programs - - - - -	8

An examination of the hobbies listed by the group and the numbers pursuing the hobbies indicate that their interests are varied:

<u>Hobby</u>	<u>Number</u>
Dancing - - - - -	92
Bowling - - - - -	76
Swimming - - - - -	37
Photography - - - - -	30
Social groups--lodges, fraternities, and others - - - - -	29
Sports--tennis, basket ball, baseball - - - - -	28
Skating - - - - -	21
Bridge and other card games - - - - -	10
Reading and writing - - - - -	10
Sewing and cooking - - - - -	10

Out of the entire group, 95 had one or more hobbies listed. All read some part of the newspaper frequently, and all read some publication regularly. There were 78 who stated that they attended church regularly, and 40 occasionally.

Vocational Information

Present Employment Status. Responses to questions regarding the vocational status of the respondents indicated that almost all of them were currently employed either part time or full time. Twenty-two indicated that they were married, but 11 of them were working full time. Only 5 of the respondents indicated that they were not working at all. Three stated that they were full-time college students. Eight stated that they were employed part time.

Chief Factors in Securing Employment. There were several means by which the respondents located and secured initial employment after graduation from high school. The number who secured employment by each of these means is indicated below.

Was a co-op, remained with company - - - - -	51
Was placed by the school other than co-op - - -	15
Secured position through personal contact - - -	15
Answered an advertisement - - - - -	11
Took Civil Service examination - - - - -	8
Contacted employment agency - - - - -	6
Worked before graduation, but was not a co-op -	5
Secured position through family influence - - -	1
Secured position by other means - - - - -	8
Total number employed following graduation - - -	<u>120</u>

As is indicated above, 51 of the respondents indicated that they secured their first job by remaining after graduation with

the company where they had been employed as a cooperative training student. The school was of aid to 15 other students in helping to place them on their initial jobs. In other words, 66 graduates or approximately 55 per cent, secured their first positions with the aid of the school. In view of these facts, the school is apparently doing a good job in helping to place the graduates.

The table below shows the classifications of the positions held by the graduates.

TABLE VII
POSITIONS HELD BY GRADUATES OF THE HIGH SCHOOL OF COMMERCE

Job Classification	Number Employed	Per Cent
Stenographer	50	40.3
Secretary	27	21.8
Typist	19	15.3
Clerk	6	4.8
General Office Worker	5	4.0
Bookkeeper	4	3.2
Others	8	6.5
No Response	<u>5</u>	<u>4.0</u>
Total	124	99.9

A study of the above table shows that the shorthand majors of the school are, for the most part, filling the types of positions for which they were trained. Out of the 124 graduates responding, 50 persons or about 40 per cent are filling stenographic positions, with 27 more having been promoted to secretarial positions—or 62.1 per cent of the total filling secretarial and stenographic positions, and 19 more filling positions as typists. The other

37.9 per cent (including those not presently employed because of domestic responsibilities following marriage or because of attending college) includes, also, those graduates of 1954 who have been employed in business for only one year, classified chiefly as typists.

It is recognized that there is a lack of uniformity in job classifications in various departments and within various industries. Those who indicated that they were employed as general office workers and those as miscellaneous workers might, for all practical purposes, be included under the classification of clerical workers, since there is much overlapping of these duties and sometimes two or three jobs are combined, especially in smaller offices. For use in this study hereafter the responses are grouped according to secretaries, stenographers, and typists and others. In the Occupational Wage Survey,¹ the job classification of clerk has many subdivisions including that of accounting clerk, file clerk, order clerk, and payroll clerk. Other answers to the question as to what their chief duties were included the duties of the key-punch operator, posting-machine operator, and International Business Machine operator.

This information shows that the shorthand majors are filling positions of responsibility even though they have been out of

¹"Occupational Wage Survey, Detroit, Michigan," Bulletin No. 1188-2 (U. S. Department of Labor, U. S. Government Printing Office, Washington, D. C., January, 1956), p. 6.

school for a relatively short time, especially in view of the fact that most companies prefer to promote from within the company employees who are working as clerks, typists, and other positions of less responsibility to the higher positions as stenographers and secretaries. Only four of the shorthand majors are working as bookkeepers. It is not unusual for a Commerce student to major in both shorthand and bookkeeping. The two skills make a very desirable combination, especially in smaller offices where one girl may be asked to take care of both the bookkeeping and stenographic work.

The table below indicates the progress that the graduates have made on their present jobs, as indicated by raises and promotions, as shown below.

TABLE VIII
PROGRESS ON THE JOB

Status	Number of Responses by Year of Graduation			
	1950	1952	1954	Total
No raise, no promotion	2	4	11	17
Raise, no promotion	5	13	17	35
Promotion, no raise	0	0	1	1
Raise and promotion	14	21	21	56
Total Reporting	21	38	50	109

An examination of these responses reveals that on their present positions more than 51.4 per cent of those reporting, or 56 persons, have received both raises and promotions, and 35 persons had received

raises without promotions, and 35 persons had received raises without promotions. These data are based upon their present positions and a close examination reveals that some of these persons have not been with their present employers for more than six months. The longest that any one of the respondents could have remained on the job after graduation from high school would have been five years, since the study began with the June graduates of 1950 and the questionnaire was mailed out in July of 1955. Only 4 respondents had been with their present employer for a period of between four and five years, and 39 had been with their present employers for one year or less. Two indicated that they had been with their present employers for more than five and a half years-- in other words, prior to their graduation. There were 16 who indicated that they had been with the same employers for more than three years. Of this number 11 of the graduates of 1950 had remained with their employers for that length of time.

Therefore, although upon first glance at the data, it might seem that a generalization could be made to the effect that the graduates were moving around from job to job a great deal and not staying on any job very long, actually the picture presented is a fairly stable one, considering the stenographic field, where it is observed that there is usually a higher turnover in personnel than in the higher professional fields, or in the unskilled or skilled fields that are unionized and where seniority is tremendously important to the employee.

The turnover is of sufficient significance, however, to warrant an investigation to see whether or not better counseling of the students especially in the selection of their positions on the co-operative training work experience program would not result in an advantage to them.

Salaries of Commerce-trained Stenographers. A schedule of the monthly salaries earned by the respondents is shown below:

<u>Amount</u>	<u>Number</u>
\$375 or above	1
350 to 374	1
325 to 349	5
300 to 324	8
275 to 299	31
250 to 274	8
225 to 249	29
200 to 224	16
199 or below	8
No response	<u>17</u>
Total	124

An examination of the above chart shows that the majority, or 63.5 per cent of the respondents employed, are receiving from \$225 to \$299 per month. However, 15 are receiving more than \$300 per month. Only 24 stated that they received less than \$225 per month, and 17 gave no response to this question. Part of these are unemployed and some are employed on a part-time basis. The median monthly salaries of the respondents grouped according to year of graduation are as follows:

<u>Year of Graduation</u>	<u>Monthly Salary</u>
1950	\$294.70
1952	275.00
1954	236.00

The median salary of all the salaries reported by the group is \$254. These salaries compare favorably with the findings revealed in a survey made of the salaries of stenographers and secretaries in Detroit in 1955, in which the following information was given:¹

Weekly Salary

<u>Stenographers</u>	<u>Secretaries</u>
High \$94	\$129
Low 45	59
Median 70	84

A true comparison could not be made between the two surveys, without additional data regarding the age, length of employment tenure, and other pertinent factors affecting the salaries of those included in the "Clerical Salaries Survey," as these salaries may represent those of secretaries and stenographers of more maturity and experience than the Commerce graduates, who have a relatively short work experience record.

The following quotation from the Glamour survey provides further evidence that the graduates are receiving salaries favorably comparable to the findings revealed by another survey:

The average salary earned by all those secretaries answering is \$55 per week, and the average number of years of job experience is eleven. When these averages are estimated according to the size of the area, those working in smaller cities and communities earn an average of \$53 per week and have an average number of twelve years' experience. Those working in larger cities earn

¹"Clerical Salaries Survey," Study in Labor Statistics, No. 16, National Industrial Conference Board, Inc., (New York, 1955), p. 14.

an average of \$57 per week and have been working an average of eleven years.¹

The responses of the graduates revealed that 80 persons or about 64 per cent are paid on a twelve-month basis; 5 are paid on a ten-month basis (those probably represent those employed by the Board of Education and do not wish summer employment); 10 are paid on the weekly basis; and 8 on the bi-weekly basis. One is paid monthly and the others by a part-time arrangement.

Places Where Commerce Graduates Are Employed. A study of the responses indicated that the largest single employer of the graduates is the Detroit Board of Education, where 8 of the respondents were employed. Ten others were employed by the city or some other government agency. General Motors employed 6, and 8 others were employed in various automobile industries, besides other related manufacturing concerns. Four were employed by retail stores. Ten were employed in some type of insurance business. Only 3 indicated that they were employed by law firms. Most of the others were employed singly in various companies. There was a total of approximately 55 different employers of the 124 respondents. Thus, the graduates are scattered all over the city and employed in many various types of businesses, but especially in the municipal and automotive fields. Other types of manufacturing and insurance fields were next highest in areas of employment.

Attitudes of Respondents Toward Their Jobs. Reference to Table IX shows that there were 74 respondents who stated that they

¹"Glamour's Secretarial Survey," op. cit., p. 11.

TABLE IX
COMPARISON OF SALARIES WITH ATTITUDE TOWARD JOB

Attitude Toward Job	Monthly Salary Expressed in Dollars							Total*
	199 or below	200 to 224	225 to 249	250 to 274	275 to 299	300 to 324	325 to 375	
Like my job. Plan to continue with company.	2	7	24	5	25	8	6	74
Hope to get a promotion.	0	3	2	2	0	1	0	8
Expect an increase in pay.	0	3	4	2	10	1	0	20
To get a better job, must go to another company.	2	5	1	1	4	0	0	13
Want to quit to get into another field of work.	3	2	5	0	4	0	0	14

*These totals do not equal the number of respondents, as it was possible for the respondents to check more than one item relative to attitudes.

liked their jobs and planned to continue with the company. They had a range in salary of from \$199 or below to \$375 per month, with half of the group earning over \$275 per month. Of the 8 respondents stating that they hoped to get a promotion, the range in salary was from \$220 to \$274 per month.

Of the 20 employees who stated that they hoped for an increase in pay, 50 per cent were receiving from \$275 to \$299 per month with only one employee receiving more than \$299 per month.

Of the 13 respondents stating that they would need to go to another company to get a better job, the salary range was from \$199 to \$299 per month with more than 50 per cent of the group earning \$224 or less.

There were 14 who stated that they wanted to quit to go into another field of work. Of this group, 10 ranged in salary from \$199 to \$249, with 4 in the salary bracket of \$275 to \$299.

The median salary was higher for the group who stated that they liked their jobs and planned to continue with their present employers than for the group who stated that they must go to other companies to get better jobs or the group who stated that they wanted to go into other fields of work. There seemed to be no other relationship evident between salary and attitude toward job.

Duties Performed by Respondents. To a question asking that the respondents describe briefly the duties that they now perform that they did not perform on their previous positions, the duty most frequently mentioned was that of taking and transcribing dictation. This seems an indication that they are being promoted to

positions of greater responsibility. The 1950 graduates mentioned, in addition to taking dictation, taking minutes at the meeting of corporation officials, composing letters, supervising the department, and doing statistical and analytical work. The 1952 graduates mentioned, in addition to taking dictation and answering the telephone, taking care of the mail, filing, preparing more intricate reports, handling more responsible clerical work, and keeping records. The 1954 graduates mentioned taking inventory, verifying the work of a key punch operator, cutting stencils, and typing documents.

In other words, the 1954 graduates are, for the most part performing the work of clerk-typists, but the 1952 and 1950 graduates are performing the duties of stenographers and secretaries. Table X shows the frequency expressed in percentages of the duties performed by the respondents grouped according to job classifications. Table XI is a comparative table of the twelve most frequent duties performed by secretaries, stenographers, and other clerical workers as reported in three other major studies.¹ An examination of these tables reveals that there is a great deal of similarity between the duties performed by the graduates and those reported in the other studies.

¹Frederick G. Nichols, The Personal Secretary, Differentiating Duties and Essential Personal Traits, (Cambridge: Harvard University Press, 1934), p. 51.

TABLE X
CHIEF DUTIES OF GRADUATES GROUPED ACCORDING TO JOB CLASSIFICATIONS

Duty	Job Classification			
	Secretary	Stenographer	Typist and Others	Total*
	N = 27	N = 50	N = 42	N = 119
Answering telephone	92.6	76.0	45.2	68.9
Taking Dictation	85.2	80.0	119.0	59.7
Filing	55.6	72.0	45.2	58.8
Typing invoices and other forms	48.1	56.0	38.1	47.9
Receiving callers	66.7	42.0	19.0	39.5
Typing from copy	18.5	26.0	52.4	33.6
Keeping records	7.4	6.0	14.3	9.2
Performing miscel- laneous duties	44.4	30.0	54.8	42.0

*There were 5 respondents who did not fill out this part of the questionnaire. The responses therefore represent replies from only 119 graduates.

TABLE XI
COMPARATIVE TABLE OF TWELVE MOST FREQUENT DUTIES

<u>Three Investigations</u>		
Charters ¹ Study	This Study*	Clerical Study
1. Typewrite letters	1. Take dictation	1. Use telephone
2. Answer telephone	2. Transcribe notes	2. Do filing and indexing
3. Dictate letters	3. Handle callers	3. Type from copy
4. Transcribe letters	4. Write original letters	4. Operate adding and listing machine
5. Use telephone-- local	5. Answer letters	5. Post original entries
6. Address envelopes, packages, etc.	6. Read and sort mail	6. Operate calculating machine
7. Insert letters in envelopes	7. Read and release mail	7. Do checking and verifying
8. Fold letters	8. Note information on letters	8. Write or dictate letters
9. Order office supplies	9. Make appointments	9. Check postings
10. Place telephone memo where employer will see it	10. Organize filing systems	10. Figure costs
11. Write letters not dictated (compose letters)	11. Organize office routine	11. Write orders
12. Send telegrams	12. Keep personal accounts	12. Work at information desk

*This Study refers to the Nichols Study. Nichols, Ibid.

Summary

An examination of the responses of the graduates reveals that since graduation they have been active socially, with a variety of personal interests, including church and club activities, hobbies and sports. They indicated an interest in current national and world affairs and stated that they read regularly newspapers and other periodicals. Their responses indicated further that more than half of them had taken some type of additional educational training since their graduation from high school.

Data revealed that more than 60 per cent are employed as stenographers and secretaries--positions for which they were trained--and a study of their salary schedule showed that they are receiving relatively high salaries for employees of their age and work experience. There are implications that they are happy socially and successful vocationally.

In view of the facts presented above, it appears that the respondents are qualified to evaluate critically and reliably the training which they received in high school.

CHAPTER V

THE SCHOOL CURRICULUM--EVALUATION BY GRADUATES

Too often business educators present courses as they are arranged by so-called authorities in the field--who in reality oftentimes have had but little, if any, practical experience in the world of business and industry. It is the purpose of this study, however, to gather information from graduates themselves as to the courses and the content of those courses that have been of most and least value to them, and the areas wherein more training should be given.

Shorthand majors of the High School of Commerce are required to take six semesters of English, including three courses in literature, two in composition, and one in Business English. They are required to take two courses each in bookkeeping, business arithmetic, and American history, and they usually take two courses in health or physical education. One course in both economics and civics is required. The required business courses include one semester in office appliances, which includes training on a variety of office machines; clerical practice (which is required of those participating in the cooperative work experience program; four semesters of shorthand, and five semesters of typewriting (which is combined with two courses in transcription which they take in connection with their last two semesters of shorthand).

Electives include training in the use of the calculator and other business machines; English courses, in addition to the required ones, including speech and journalism; a course in personal problems, which is a course in human relations and personality development; and many other academic and vocational courses, some of which are offered at the Cass Technical High School, which is just across the street from the High School of Commerce.

General Summary of Responses of Graduates
Concerning Significant Aspects of Their
Training

An examination of the responses of the graduates reveals that typewriting was rated by the majority of graduates as being the course of most value to them in their work. Next to typewriting in importance was shorthand; English was third. Other courses listed as being of special value to many of the graduates were office machines, mathematics, bookkeeping, and filing. The courses indicated of least value were chiefly academic subjects--namely, biology, history, and literature.

The judgments of the graduates regarding the value of the courses they took in high school is not surprising, considering the fact that they were very much interested in the business curriculum--otherwise, they would not have attended the High School of Commerce. Many of the students came from homes on the lower economic level. Many of them, through their part-time employment while in school, were contributing to the support of their families--toward the purchasing of homes and furniture. They were

serious in their objectives of securing optimum training that would insure their success in business, and they especially appreciated their training in this respect. Many of them, however, did express an appreciation for the cultural aspects of life.

When the judgments of the graduates are considered relative to the value of the course content of the business courses they were required to take as part of their major, they indicated those aspects that seemed essential to them in their work. Table XII shows the areas rated by 50 per cent or more as being of most value to them in their work. Table XIII indicates the areas rated by 50 per cent or more as being of least value, and Table XIV shows areas in which the graduates stated more training in school would have been beneficial. Table XV shows a detailed summary of the responses to each item included in the study.

An observation of these tables reveals that in the opinion of the graduates special emphasis should continue to be placed upon spelling, penmanship, and the fundamentals of English grammar, including capitalization, punctuation, and knowledge of sentence structure. To a somewhat lesser degree, but still important in their judgment, is the training in the use of the dictionary (including pronunciation and syllabication) and in alphabetizing. There was a feeling prevalent among many that it would have been advantageous if more work had been done in vocabulary building and in the composing of original letters and notices. These two aspects were considered especially important by those who were performing the more responsible secretarial duties. It was

TABLE XII
 COURSE CONTENT RATED BY 50 PER CENT OR MORE OF
 119 GRADUATES AS BEING OF MOST VALUE

Course Content	Responses Per Cent
Capitalization	91.6
Spelling	88.2
Punctuation	88.2
Speed and accuracy in transcribing letters for mailability	84.9
Knowledge of grammar and sentence structure	80.7
Making carbon copies, typing envelopes, etc.	79.8
Making erasures on typewritten copy and carbons	78.2
Typing tabulations	73.1
Care of typewriter, changing ribbons, etc.	69.7
Training in typing figures, special characters, etc.	69.7
Use of the dictionary	68.9
Knowledge of letter styles	69.7
Copying from rough drafts	66.4
Pronunciation and syllabication	63.0
Proofreading and editing	61.3
Alphabetizing	61.3
Penmanship	56.3
Composing original letters and notices	56.3
Drills in addition, multiplication, and other fundamentals	57.1
Cutting of stencils and use of mimeograph	54.6
Knowledge of office forms, telegrams, postal cards, index cards, invoices, etc.	52.9
Fundamentals of simple arithmetic such as fractions	52.9
Simple arithmetic problems such as computing interest	50.4

TABLE XIII

COURSE CONTENT RATED BY 50 PER CENT OR MORE OF
119 GRADUATES AS BEING OF LEAST VALUE

Course Content	Responses Per Cent
Making out payrolls	68.9
Arranging itineraries	63.2
Bookkeeping principles	62.2
Reconciling the bank statement	61.3
Computing extensions	58.8
Making train reservations	58.0
Writing letters of application	56.3
Typing legal documents	56.3

TABLE XIV

AREAS IN WHICH 119 GRADUATES STATED MORE TRAINING
SHOULD BE GIVEN

Area	Responses Per Cent
Word usage and vocabulary building	51.3
Figuring income tax	35.3
Composing original letters and notices	31.1
Pronunciation and syllabication	26.9
Knowledge of grammar and sentence structure	25.2
Penmanship	24.4
Drills in addition, multiplication, and other fundamentals	20.2
Spelling	19.3
Simple arithmetic problems such as computing interest	19.3
Punctuation	18.5
Care of typewriter, changing ribbons, etc.	18.5
Making train reservations, etc.	18.5

TABLE XV
SUMMARY OF EVALUATION OF GRADUATES OF COURSE
CONTENT IN REQUIRED COURSES

Item	Description	Responses Weighted Per Cent*
1.	Making erasures on typewritten copy and carbons	
	Most Value	78.2
	Least Value	10.9
	More Training Needed	12.6
2.	Knowledge of office forms, telegrams, postal cards, index cards, invoices, etc.	
	Most Value	52.9
	Least Value	34.5
	More Training Needed	13.4
3.	Cutting of stencils and use of mimeograph.	
	Most Value	54.6
	Least Value	34.5
	More Training Needed	10.1
4.	Training in typing figures, special characters, etc.	
	Most Value	69.7
	Least Value	17.6
	More Training Needed	16.8
5.	Making carbon copies, typing envelopes, etc.	
	Most Value	79.8
	Least Value	13.4
	More Training Needed	3.4
6.	Typing legal documents.	
	Most Value	30.3
	Least Value	56.3
	More Training Needed	15.1

*The percentages are based on the total number of replies. Since five of the respondents were unemployed and their replies to this part of the questionnaire were incomplete, they were not included. The summary is therefore based on 119 responses.

The responses to each item need not equal 100 per cent, as it was possible for the respondent to check more than one response to each item. For instance, an item could be checked as being of most value and also as an area in which more training was needed.

TABLE XV (continued)

Item	Description	Responses Weighted Per Cent
7.	Copying from rough drafts	
	Most Value	66.4
	Least Value	20.2
	More Training Needed	10.9
8.	Writing letters of application	
	Most Value	29.4
	Least Value	56.3
	More Training Needed	14.3
9.	Typing tabulations	
	Most Value	73.1
	Least Value	17.6
	More Training Needed	10.9
10.	Knowledge of letter styles	
	Most Value	69.7
	Least Value	23.5
	More Training Needed	5.0
11.	Proofreading and editing	
	Most Value	61.3
	Least Value	27.7
	More Training Needed	10.1
12.	Care of typewriter, changing ribbons, etc.	
	Most Value	69.7
	Least Value	10.1
	More Training Needed	18.5
13.	Arranging itineraries	
	Most Value	20.2
	Least Value	63.2
	More Training Needed	11.8
14.	Making train reservations, etc.	
	Most Value	21.8
	Least Value	58.0
	More Training Needed	18.5

TABLE XV (continued)

Item	Description	Responses Weighted Per Cent
15.	Speed and accuracy in transcribing letters for mailability.	
	Most Value	84.9
	Least Value	7.6
	More Training Needed	11.8
16.	Penmanship	
	Most Value	56.3
	Least Value	21.0
	More Training Needed	24.4
17.	Composing original letters and notices	
	Most Value	56.3
	Least Value	18.5
	More Training Needed	31.1
18.	Spelling	
	Most Value	88.2
	Least Value	.0
	More Training Needed	19.3
19.	Punctuation	
	Most Value	88.2
	Least Value	.8
	More Training Needed	18.5
20.	Capitalization	
	Most Value	91.6
	Least Value	2.5
	More Training Needed	8.4
21.	Pronunciation and syllabication	
	Most Value	63.0
	Least Value	10.1
	More Training Needed	26.9
22.	Knowledge of grammar and sentence structure	
	Most Value	80.7
	Least Value	1.7
	More Training Needed	25.2

TABLE XV (continued)

Item	Description	Responses Weighted Per Cent
23.	Alphabetizing	
	Most Value	61.3
	Least Value	32.8
	More Training Needed	4.2
24.	Word usage and vocabulary building	
	Most value	49.6
	Least Value	6.7
	More Training Needed	51.3
25.	Reconciling bank statement	
	Most Value	20.2
	Least Value	61.3
	More Training Needed	16.0
26.	More emphasis on bookkeeping principles	
	Most Value	16.8
	Least Value	62.2
	More Training Needed	17.6
27.	Making up payrolls	
	Most Value	13.4
	Least Value	68.9
	More Training Needed	16.8
28.	Computing extensions and postage	
	Most Value	19.3
	Least Value	58.8
	More Training Needed	17.6
29.	Simple arithmetic problems such as computing interest	
	Most Value	50.4
	Least Value	35.3
	More Training Needed	19.3
30.	Figuring income tax	
	Most Value	26.1
	Least Value	40.3
	More Training Needed	35.3

TABLE XV (continued)

Item	Description	Responses Weighted Per Cent
31.	Fundamentals of simple arithmetic such as fractions	
	Most Value	52.9
	Least Value	36.8
	More Training Needed	12.6
32.	Drills in addition, multiplication, and other fundamentals	
	Most Value	57.1
	Least Value	24.4
	More Training Needed	20.2
33.	Use of the dictionary	
	Most Value	68.9
	Least Value	13.4
	More Training Needed	12.6

surprising, however to notice that in the opinion of many of the graduates the training received in the writing of an application letter was of less importance, especially by the more recent graduates. This judgment is no doubt a result of the present trend toward the use of the application blank and the personal interview, especially while there has been a great demand for more stenographers and secretaries.

In the transcription courses, the importance of developing proficiency in the transcribing of mailable letters was emphasized; and in the typewriting courses the value of training in the care of the typewriter, knowledge of letter styles, making erasures and carbon copies, typing of rough drafts, tabulations,

and stencils were considered especially important. It is surprising to note that less emphasis was placed upon the typing of legal documents, and it was suggested by the graduates that less time be spent on this phase of their training. This suggestion seems logical, since such a comparatively few are employed in legal offices, as was shown in Chapter IV.¹

There was a cluster of similar responses regarding the business arithmetic and bookkeeping courses. It is observed that the emphasis of the graduates was upon the fundamentals of arithmetic, including fractions and the computation of interest, whereas there was less emphasis on the rigidly vocational aspects of the courses, such as making up payrolls, computing extensions, and the reconciliation of the bank statement. They perhaps felt that this type of training could be received on the job. There was a similar response to such aspects of their training as making itineraries and train reservations. It is likely that very few of the respondents were ever called upon to perform these duties except those who might be filling higher positions as secretaries.

Another phase of training which should be mentioned is the use of the telephone, which is of special significance, inasmuch as it was not mentioned in the questionnaire form. Several graduates, however, indicated that there was need for training in this area. After the graduation from high school of these respondents,

¹See page 67 of Chapter IV.

training in the use of the telephone was initiated at the High School of Commerce, and offered in the 12A English classes; and, beginning with the 1956 school term, training was given in the clerical practice classes--a course required of all students preceding their initiation into the cooperative work experience program.

Evaluation of Courses and Course Content by
Graduates Grouped According to Job Classification

In the section of the questionnaire asking the respondents to indicate those subjects taken in high school which had been of most value to them, the course rated highest was typewriting, which is checked by 92.4 per cent of the respondents. Shorthand and transcription were ranked second by 74.8 per cent, and English was rated third by 60.5 per cent.

Observation of Table XVI reveals that the group rates high in value those skills directly related to stenographic and secretarial work. However, those employed as typists and clerks are finding of special value other skills not so strictly secretarial --office machines, mathematics, and bookkeeping. In other words, their duties are of a more general nature, and they therefore find the background training in clerical practice and bookkeeping of special value to them.

To the inquiry as to the courses that were of least value, the group was quite unanimous in their listing of academic subjects as of least value. Biology was checked with the highest frequency,

or 26.9 per cent. Next was history by 24.4 per cent, and literature with 16.9 per cent. Bookkeeping was indicated by 15.1 per cent as being of least value. It is unfortunate that they have not seen the value of these courses, which although they are not rigidly vocational, may be considered important to their understanding and appreciation of world events and to their leisure-time activities.

TABLE XVI
COURSES CONSIDERED OF MOST VALUE BY GRADUATES
GROUPED ACCORDING TO JOB CLASSIFICATION

Course	Job Classification		
	Secretary	Stenographer	Typist and Others
	<u>N = 27</u> Per Cent	<u>N = 50</u> Per Cent	<u>N = 42</u> Per Cent
Typewriting	96.3	90.0	92.9
Shorthand	88.9	86.0	52.4
English	66.7	68.0	47.6
Office Machines	29.6	22.0	28.6
Mathematics	14.8	12.0	28.6
Bookkeeping	7.4	8.0	19.0
Filing	11.1	4.0	7.1

It is discouraging to note that the secretaries, as may be seen from Table XVII, indicate less appreciation for history and literature than the other groups. All three groups rate biology low in importance. Those employed as typists and clerks indicated, as might be expected, that, up to the time of their evaluation,

their shorthand had not been of much value to them.

TABLE XVII
COURSES CONSIDERED OF LEAST VALUE BY GRADUATES
GROUPED ACCORDING TO JOB CLASSIFICATION

Course	Job Classification		
	Secretary	Stenographer	Typist and Others
	N = 27 Per Cent	N = 50 Per Cent	N = 42 Per Cent
Biology	25.9	30.0	23.8
History	37.0	22.0	19.0
Literature	25.9	18.0	9.5
Bookkeeping	18.5	16.0	11.9
Office Machines	14.8	8.0	14.3
Shorthand	0	2.0	28.6
Economics	7.4	12.0	7.1
Civics	11.1	6.0	4.8
Physical Education	3.7	8.0	2.4

On some of the items, regardless of the job classification of the respondents, there is but little variation in their judgments. On some items, however, there is considerable variation. It is interesting to note from observation of Table XVIII that in those areas where there was most disagreement in their evaluation of the most important aspects of their training, the ratings were higher by the secretaries than by the stenographers, and the stenographers rated them of more importance than did the typists and other workers.

TABLE XVIII

AREAS OF MOST VARIATION IN EVALUATION BY GRADUATES OF
COURSE CONTENT IN REQUIRED COURSES--RESPONSES
GROUPED ACCORDING TO JOB CLASSIFICATION

Item	Description	Job Classification		
		Secretary	Stenographer	Typist and Others
		N = 27 Per Cent	N = 50 Per Cent	N = 42 Per Cent
17.	Composing original letters	74.1	58.0	42.9
15.	Speed and accuracy in transcribing letters	96.3	94.0	66.7
24.	Word usage, vocabulary	66.7	48.0	40.5
6.	Typing legal documents	48.1	26.0	23.8
14.	Making train reservations	33.3	28.0	7.1
16.	Penmanship	70.4	54.0	50.0
1.	Making erasures	88.9	80.0	69.0

Reference to Table XIX indicates that there is not much variation in the judgments of the graduates with respect to these items. The respondents are relatively unanimous in their evaluation of these items as being of special importance or of being of less importance.

Relative to the areas in which more training was considered advantageous, the secretaries emphasized, in general, less need for additional training than did the stenographers and other workers. Perhaps their experience in the business world and further study in evening courses following graduation from high school have helped to diminish their feelings of inadequacy and the felt need for more training in high school. The typists and

other workers emphasized the need for more work in spelling than did the other two groups. They also emphasized more need for vocabulary building than the other two groups; however, this aspect was rated by all three groups as an area in which more training should be given.

TABLE XIX

AREAS OF LEAST VARIATION IN EVALUATION BY GRADUATES
OF COURSE CONTENT IN REQUIRED COURSES--RESPONSES
GROUPED ACCORDING TO JOB CLASSIFICATION

Item	Description	Job Classification		
		Secretary	Stenographer	Typist and Others
		N = 27 Per Cent	N = 50 Per Cent	N = 42 Per Cent
5.	Making carbon copies	81.5	78.0	81.0
31.	Fundamentals of arithmetic	55.6	50.0	54.8
10.	Knowledge of letter styles	70.4	72.0	66.7
20.	Capitalization	96.3	90.0	90.5
21.	Pronunciation, syllabication	63.0	60.0	66.7
12.	Care of typewriter	70.4	66.0	73.8
27.	Making up payrolls	18.5	12.0	11.9

A further study of Table XX reveals that there are some aspects of training that are rated higher by the typists and other workers than by the stenographers or secretaries. Some of these items are copying from rough drafts (Item 7), care of the typewriter (Item 12), reconciliation of the bank statement (Item 25), and knowledge of bookkeeping principles (Item 26). They also rate the typing of tabulations higher in value than do the secretaries.

TABLE XX

EVALUATION BY GRADUATES OF COURSE CONTENT IN REQUIRED
COURSES--RESPONSES GROUPED ACCORDING
TO JOB CLASSIFICATION

Item	Description	Secretary	Stenographer	Typist and Others
		N = 27 Per Cent	N = 50 Per Cent	N = 42 Per Cent
1.	Making erasures on type-written copy and carbons			
	Most Value	88.9	80.0	69.0
	Least Value	10.8	17.0	7.1
	More Training Needed	7.4	10.0	19.0
2.	Knowledge of office forms, telegrams, postal cards, index cards, invoices, etc.			
	Most Value	63.0	50.0	50.0
	Least Value	36.7	32.0	33.3
	More Training Needed	7.4	14.0	16.7
3.	Cutting of stencils and use of mimeograph			
	Most Value	63.0	54.0	50.0
	Least Value	36.7	30.0	33.3
	More Training Needed	7.4	12.0	9.5
4.	Training in typing figures, special characters, etc.			
	Most Value	77.8	66.0	69.0
	Least Value	18.5	20.0	11.9
	More Training Needed	11.1	14.0	23.8

NOTE. The percentages in this table represent the replies of the respondents grouped according to job classification. Since five of the respondents were unemployed and their responses incomplete, they were not included. This table therefore includes the responses of 119 graduates who were currently employed.

The responses to each item need not equal 100 per cent, as it was possible for the respondent to check more than one response to each item. For instance, an item could be checked as being of most value and also as an area in which more training was needed.

TABLE XX (Continued)

Item	Description	Secretary	Stenographer	Typist and Others
		N = 27 Per Cent	N = 50 Per Cent	N = 42 Per Cent
5.	Making carbon copies, typing envelopes, etc.			
	Most Value	81.5	78.0	81.0
	Least Value	18.5	14.0	9.5
	More Training Needed	3.7	2.0	4.8
6.	Typing legal documents			
	Most Value	48.1	26.0	23.8
	Least Value	48.1	56.0	61.9
	More Training Needed	14.8	18.0	11.9
7.	Copying from rough drafts			
	Most Value	59.3	64.0	73.8
	Least Value	33.3	20.0	11.9
	More Training Needed	7.4	12.0	11.9
8.	Writing letters of appli- cation			
	Most Value	25.9	26.0	35.7
	Least Value	63.0	62.0	45.2
	More Training Needed	18.5	10.0	.0
9.	Typing tabulations			
	Most Value	63.0	78.0	73.8
	Least Value	33.3	10.0	16.7
	More Training Needed	7.4	12.0	11.9
10.	Knowledge of letter styles			
	Most Value	70.4	72.0	66.7
	Least Value	25.9	24.0	21.4
	More Training Needed	7.4	2.0	7.1
11.	Proofreading and editing			
	Most Value	70.4	58.0	58.5
	Least Value	29.6	30.0	23.8
	More Training Needed	7.4	8.0	14.3
12.	Care of typewriter, changing ribbons, etc.			
	Most Value	70.4	66.0	73.8
	Least Value	14.8	10.0	7.1
	More Training Needed	18.5	18.0	19.0
13.	Arranging itineraries			
	Most Value	14.8	24.0	19.0
	Least Value	74.1	56.0	64.3
	More Training Needed	11.1	16.0	7.1
14.	Making train reservations, etc.			
	Most Value	33.3	28.0	7.1
	Least Value	48.1	52.0	92.2
	More Training Needed	22.2	18.0	16.7

TABLE XX (Continued)

Item	Description	Secretary	Stenographer	Typist and Others
		<u>N = 27</u> Per Cent	<u>N = 50</u> Per Cent	<u>N = 42</u> Per Cent
15.	Speed and accuracy in transcribing letters for mailability			
	Most Value	96.3	94.0	66.7
	Least Value	3.7	2.0	16.7
	More Training Needed	11.1	6.0	19.0
16.	Penmanship			
	Most Value	70.4	54.0	50.0
	Least Value	25.9	18.0	21.4
	More Training Needed	11.1	26.0	31.0
17.	Composing original letters and notices			
	Most Value	74.1	58.0	42.9
	Least Value	7.4	16.0	28.6
	More Training Needed	37.0	28.0	31.0
18.	Spelling.			
	Most Value	96.2	92.0	81.0
	Least Value	.0	.0	.0
	More Training Needed	18.5	12.0	28.6
19.	Punctuation.			
	Most Value	92.6	90.0	83.3
	Least Value	.0	2.0	.0
	More Training Needed	22.2	12.0	23.8
20.	Capitalization			
	Most Value	96.3	90.0	90.5
	Least Value	3.7	4.0	.0
	More Training Needed	14.8	4.0	9.5
21.	Pronunciation and syllabication			
	Most Value	63.0	60.0	66.7
	Least Value	14.8	8.0	9.5
	More Training Needed	25.9	30.0	23.8
22.	Knowledge of grammar and sentence structure			
	Most Value	88.9	68.0	78.6
	Least Value	.0	2.0	2.4
	More Training Needed	29.6	20.0	28.6
23.	Alphabetizing			
	Most Value	63.0	56.0	66.7
	Least Value	37.0	40.0	21.4
	More Training Needed	.0	.0	11.9

TABLE XX (Continued)

Item	Description	Secretary	Stenographer	Typist and Others
		N = 27 Per Cent	N = 50 Per Cent	N = 42 Per Cent
24.	Word usage and vocabulary building			
	Most Value	66.7	48.0	40.5
	Least Value	7.4	.0	14.3
	More Training Needed	33.3	56.0	57.1
25.	Reconciling bank statement			
	Most Value	14.8	18.0	26.2
	Least Value	66.7	62.0	57.1
	More Training Needed	14.8	16.0	16.7
26.	More emphasis on book-keeping principles			
	Most Value	11.1	16.0	21.4
	Least Value	70.4	64.0	54.8
	More Training Needed	14.8	14.0	23.8
27.	Making up payrolls.			
	Most Value	18.5	12.0	11.9
	Least Value	74.1	60.0	71.4
	More Training Needed	7.4	20.0	19.0
28.	Computing extensions and postage			
	Most Value	25.9	18.0	16.7
	Least Value	55.6	58.0	82.7
	More Training Needed	14.8	18.0	19.0
29.	Simple arithmetic problems such as computing interest			
	Most Value	55.6	42.0	57.1
	Least Value	33.3	34.0	38.1
	More Training Needed	22.2	24.0	11.9
30.	Figuring income tax			
	Most Value	18.5	26.0	31.0
	Least Value	55.6	38.0	33.3
	More Training Needed	18.5	40.0	40.5
31.	Fundamentals of simple arithmetic such as fractions			
	Most Value	55.6	50.0	54.8
	Least Value	37.0	36.0	44.9
	More Training Needed	14.8	12.0	11.9

TABLE XX (Continued)

Item	Description	Secretary	Stenographer	Typist and Others
		<u>N = 27</u> Per Cent	<u>N = 50</u> Per Cent	<u>N = 42</u> Per Cent
32.	Drills in addition, multi- plication, and other fundamentals			
	Most Value	51.9	58.0	59.5
	Least Value	29.6	22.0	23.8
	More Training Needed	25.9	21.0	26.2
33.	Use of the dictionary			
	Most Value	63.0	76.0	64.3
	Least Value	22.2	12.0	9.5
	More Training Needed	14.8	8.0	16.7

**Evaluation of Courses and Course Content by Graduates
Grouped According to Year of Graduation**

There is a great deal of similarity in the responses of the graduated as to the courses that have been of most and least value to them in their work, regardless of the year of their graduation. As may be seen by referring to Tables XXI and XXII, it seems that possibly those who have been out of school longer are somewhat more appreciative of their courses in high school and have evidently found a greater variety of their training advantageous to them than the more recent graduates who seemed to be somewhat more critical of the value of their course work.

Most Variation in Responses Relative to Course Content. It is observed that on many items of course content there is not a great deal of variation in the responses of the graduates, regardless of the year of their graduation. However, on some items there is considerable disagreement. The graduates of 1954 felt that word

TABLE XXI

COURSES INDICATED BY GRADUATES AS BEING OF MOST
VALUE -- GROUPED BY YEAR OF GRADUATION

Course	Year			
	1950	1952	1954	Total
	N = 27	N = 41	N = 56	N = 124
	Per Cent	Per Cent	Per Cent	Weighted Per Cent
Typewriting	88.9	95.1	83.9	88.7
Shorthand	81.5	78.0	62.5	71.8
English	59.3	56.1	58.9	58.1
Office Machines	25.9	22.0	26.8	25.0
Mathematics	22.2	22.0	12.5	17.7
Bookkeeping	11.1	14.6	8.9	11.3
Filing	3.7	7.3	7.1	6.5

TABLE XXII

COURSES INDICATED BY GRADUATES AS BEING OF LEAST
VALUE -- GROUPED BY YEAR OF GRADUATION

Course	Year			
	1950	1952	1954	Total
	N = 27	N = 41	N = 56	N = 124
	Per Cent	Per Cent	Per Cent	Weighted Per Cent
Biology	11.1	29.3	30.4	25.8
History	22.2	24.4	23.2	23.4
Literature	11.1	17.1	17.9	16.1
Bookkeeping	.0	22.0	16.1	14.5
Office Machines	7.4	12.2	12.5	11.3
Shorthand	.0	12.2	14.3	10.5
Economics	11.1	9.8	7.1	8.9
Civics	.0	9.8	7.1	6.5
Physical Education	3.7	7.3	3.6	4.8

usage and vocabulary building (Item 24) was of less value than the other two groups; however, they rated the need for more training in this area higher than the others. The 1952 group found their training in the typing of tabulations (Item 9) of most value, and the 1954 group found this of less value than either of the other two groups. The 1952 group also rated the training in typing figures and special characters (Item 4) and copying from rough drafts (Item 7) of higher value than the others. However, all three groups had found this training of special value. The 1950 graduates found the writing of application letters (Item 8) of much more value than the other two groups. They also had found that the ability to compose original letters and notices of much more value than the other two groups.

Least Variation in Responses. There were so many items on which the evaluation was so nearly identical by the graduates from all three years that reference is made to Table XXIII for a more detailed study.

Areas in Which More Training Was Desirable. The graduates of 1952 who were, at the time of the study, probably beginning to perform the duties of stenographers, felt that more training should have been given in making erasures on typewritten copy and carbon copies (Item 1). The 1950 group would have liked more training in the cutting of stencils and the use of the mimeograph machine (Item 3). They also would have liked more training in the typing of legal

documents (Item 6). The 1954 graduates felt that more training should have been given in word usage and vocabulary building (Item 24). The 1950 group felt that more training in simple arithmetic problems such as the computation of interest (Item 29) would have been of value, and the 1950 and 1952 groups both felt that more training in the computation of income tax returns (Item 30) would have been beneficial. The 1954 graduates felt that further training in the use of the dictionary would have been helpful (Item 33).

TABLE XXIII

EVALUATION BY GRADUATES OF COURSE CONTENT OF REQUIRED COURSES--RESPONSES ARRANGED BY YEAR OF GRADUATION

Item	Description	Graduates	Graduates	Graduates
		of 1950 N = 27 Per Cent*	of 1952 N = 41 Per Cent	of 1954 N = 56 Per Cent
1.	Making erasures on typewritten copy and carbons			
	Most Value	77.8	75.6	73.2
	Least Value	11.1	7.3	12.5
	More Training Needed	3.7	22.0	8.9
2.	Knowledge of office forms, telegrams, postal cards, index cards, invoices, etc.			
	Most Value	48.1	58.5	46.4
	Least Value	33.3	29.3	35.7
	More Training Needed	18.5	12.2	10.7
3.	Cutting of stencils and use of mimeograph			
	Most Value	48.1	53.7	53.6
	Least Value	37.0	31.7	32.1
	More Training Needed	18.5	12.2	3.6

*The responses to each item need not equal 100 per cent, as it was possible for the respondent to check more than one response to each item. For instance, an item could be checked as being of most value and also as an area in which more training was needed.

TABLE XXIII (Continued)

Item	Description	Graduates	Graduates	Graduates
		of 1950 N = 27 Per Cent	of 1952 N = 41 Per Cent	of 1954 N = 56 Per Cent
4.	Training in typing figures, special characters, etc.			
	Most Value	70.4	78.0	57.1
	Least Value	11.1	7.3	26.8
	More Training Needed	18.5	19.5	12.5
5.	Making carbon copies, typing envelopes, etc.			
	Most Value	77.8	80.5	73.2
	Least Value	11.1	9.8	16.1
	More Training Needed	3.7	4.9	1.8
6.	Typing legal documents			
	Most Value	22.2	36.6	26.8
	Least Value	59.3	46.3	57.1
	More Training Needed	22.2	14.6	10.7
7.	Copying from rough drafts.			
	Most Value	51.9	73.2	62.5
	Least Value	29.6	19.5	14.3
	More Training Needed	7.4	9.8	12.5
8.	Writing letters of application			
	Most Value	44.4	22.0	25.0
	Least Value	44.4	65.9	50.0
	More Training Needed	11.1	12.2	16.1
9.	Typing tabulations			
	Most Value	77.8	82.9	57.1
	Least Value	11.1	7.3	26.8
	More Training Needed	7.4	17.1	7.1
10.	Knowledge of letter styles			
	Most Value	70.4	73.2	60.7
	Least Value	22.2	19.5	25.0
	More Training Needed	.0	4.9	7.1
11.	Proofreading and editing			
	Most Value	51.9	63.4	58.9
	Least Value	29.6	29.3	23.2
	More Training Needed	14.8	9.8	7.1
12.	Care of typewriter, changing ribbons, etc.			
	Most Value	70.4	65.9	66.1
	Least Value	14.8	7.3	8.9
	More Training Needed	11.1	24.4	16.1

TABLE XXIII (Continued)

Item	Description	Graduates	Graduates	Graduates
		of 1950 N = 27 Per Cent	of 1952 N = 41 Per Cent	of 1954 N = 56 Per Cent
13.	Arranging itineraries			
	Most Value	25.9	14.6	19.6
	Least Value	44.4	78.0	55.4
	More Training Needed	14.8	7.3	12.5
14.	Making train reservations, etc.			
	Most Value	25.9	19.5	19.6
	Least Value	48.1	61.0	55.4
	More Training Needed	18.5	14.6	19.6
15.	Speed and accuracy in tran- scribing letters for mail- ability			
	Most Value	85.2	82.9	78.6
	Least Value	11.1	7.3	5.4
	More Training Needed	3.7	14.6	12.5
16.	Penmanship			
	Most Value	55.6	48.8	57.1
	Least Value	22.2	26.8	14.3
	More Training Needed	3.7	2.4	3.6
17.	Composing original letters and notices			
	Most Value	66.7	53.7	48.2
	Least Value	11.1	17.1	21.4
	More Training Needed	29.6	36.6	25.0
18.	Spelling			
	Most Value	88.9	85.4	82.1
	Least Value	.0	.0	.0
	More Training Needed	18.5	19.5	17.9
19.	Punctuation			
	Most Value	85.2	85.4	83.9
	Least Value	3.7	.0	.0
	More Training Needed	22.2	22.0	12.5

TABLE XXIII (Continued)

Item	Description	Graduates	Graduates	Graduates
		of 1950 N = 27 Per Cent	of 1952 N = 41 Per Cent	of 1954 N = 56 Per Cent
20.	Capitalization			
	Most Value	92.6	92.7	82.1
	Least Value	.0	2.4	5.4
	More Training Needed	14.8	4.9	7.1
21.	Pronunciation and syllabi- cation			
	Most Value	63.0	63.4	57.1
	Least Value	7.4	12.2	8.9
	More Training Needed	22.2	24.4	30.4
22.	Knowledge of grammar and sentence structure			
	Most Value	81.5	82.9	71.4
	Least Value	.0	.0	3.6
	More Training Needed	29.0	22.0	23.2
23.	Alphabetizing			
	Most Value	63.0	61.0	55.4
	Least Value	33.3	31.7	30.4
	More Training Needed	3.7	2.4	5.4
24.	Word usage and vocabulary building			
	Most Value	59.3	56.1	35.7
	Least Value	7.4	7.3	5.4
	More Training Needed	37.0	46.3	57.1
25.	Reconciling bank statement			
	Most Value	22.2	17.1	19.6
	Least Value	51.9	61.0	60.7
	More Training Needed	11.1	22.0	12.5
26.	More emphasis on bookkeeping principles			
	Most Value	22.2	12.2	16.1
	Least Value	51.9	65.9	58.9
	More Training Needed	14.8	22.0	14.3
27.	Making up payrolls			
	Most Value	11.1	9.8	16.1
	Least Value	59.3	78.0	60.7
	More Training Needed	18.5	12.2	17.9

TABLE XXIII (Continued)

Item	Description	Graduates of 1950	Graduates of 1952	Graduates of 1956
		<u>N = 27</u> Per Cent	<u>N = 41</u> Per Cent	<u>N = 56</u> Per Cent
28.	Computing extensions and postage			
	Most Value	22.2	19.5	16.1
	Least Value	48.1	63.4	55.4
	More Training Needed	14.8	14.6	19.6
29.	Simple arithmetic problems such as computing interest			
	Most Value	51.9	43.9	50.0
	Least Value	22.2	39.0	35.7
	More Training Needed	29.6	19.5	12.5
30.	Figuring income tax			
	Most Value	18.5	24.4	28.6
	Least Value	37.0	39.0	39.3
	More Training Needed	33.3	41.5	10.7
31.	Fundamentals of simple arith- metic such as fractions			
	Most Value	55.6	46.3	51.8
	Least Value	25.9	43.9	33.9
	More Training Needed	11.1	12.2	12.5
32.	Drills in addition, multi- plication, and other fundamentals			
	Most Value	51.9	53.7	57.1
	Least Value	18.5	26.8	23.2
	More Training Needed	25.9	22.0	14.3
33.	Use of the dictionary			
	Most Value	77.8	68.3	58.9
	Least Value	11.1	22.0	7.1
	More Training Needed	3.7	7.3	19.6

Suggested Improvements to the School Program. In the last part of the questionnaire was a section soliciting suggestions for the improvement of the school program. The item ranked highest by the graduates as a means for improving the program was, as may be seen by referring to Table XXIV, more work in personality development and business etiquette. This item was ranked especially high by the 1950 graduates, with 23 out of 27 indicating that it would be desirable to have more work done along this line.

TABLE XXIV

SUGGESTIONS FOR IMPROVEMENT OF SCHOOL PROGRAM —
RESPONSES ARRANGED BY YEARS OF GRADUATION

Suggestion	Percentage by Year of Graduation			
	1950 N = 27	1952 N = 41	1954 N = 56	Weighted Total N = 124
More field trips to industry	18.5	41.5	28.6	30.6
More student participation in planning of activities	11.1	31.7	53.6	37.1
More exacting standards maintained by teachers of skill subjects	63.0	65.9	33.9	50.8
Higher goals of speed in skill subjects	26.0	48.8	25.0	33.1
More exacting standards in English	51.9	80.5	50.0	60.5
More courses offered for wise use of leisure time	29.6	43.9	44.6	41.1
More work in personality development, business etiquette, etc.	85.2	75.6	58.9	70.6

The suggestion ranked next highest was that of demanding more exacting standards in English. This item was checked by about 50 per cent of the 1950 graduates, slightly more than 50 per cent by the 1952 graduates, and 50 per cent by the 1954 graduates. The

maintenance of high standards of accuracy by teachers of skill subjects was likewise stressed by the graduates.

In their comments the students mentioned the need for training on the use of the telephone, and for vocabulary building, including terms peculiar to the automobile industry.

Summary

An examination of the judgments of the graduates regarding the value of the courses and the course contents of required courses in their high school curriculum indicates that the respondents found the basic skills of their profession their more valuable preparation for their business careers. However, there was an expression by many that it would have been advantageous if they could have pursued other courses not so rigidly vocational.

The respondents were unanimous in expressing appreciation for the training they had received in shorthand, typewriting, English, and spelling. Many of them thought that they should have had more thorough courses in English and in the fundamentals of mathematics. According to their judgments, emphasis in school should be on the fundamentals. Consideration should also be given cultural and leisure-time activities.

CHAPTER VI

EVALUATION OF GRADUATES REGARDING THE OFFICE COOPERATIVE PROGRAM

Replies from the respondents indicated that 80 out of the 124 had been employed part time on the office cooperative program. On this program, the student attends school for half a day and works the other half. She may be employed as a morning or afternoon cooperative student. Most of the students who participated in the program had been employed from one to three semesters -- 23.2 per cent, one semester; 29.3 per cent, two semesters; 8.5 per cent, three semesters; 29.3 per cent, four semesters; 6.1 per cent, five semesters; and one person for six semesters.

Most of the students praised the office cooperative program highly, and 89.0 per cent stated that if they were going back to school now, they would "go co-op," whereas only 11.0 per cent stated that they would not. The chief advantages listed by the respondents as derived by participating in the program were: (1) that it was a help to social adjustment and in making friends; (2) that it helped them in developing self-confidence (reference to Table XXV indicates that 87.8 per cent of the graduates stated that it was of value to them in this respect); (3) that, according to 64.6 per cent of the respondents, it made their school work more meaningful; and (4) that, according to 57.3 per cent of the graduates, their

TABLE XXV

EVALUATION OF OFFICE COOPERATIVE PROGRAM BY GRADUATES

Opinion of Graduate	Per Cent N = 82*
Was a help in social adjustment and in making friends. Gave self-confidence	87.8
Training was valuable in preparation for position I now hold	57.3
Was an aid in securing a position after graduation	62.2
Helped in scholastic way -- making good in school or later in college	17.1
Probably could have done better school work if had not gone co-op, but training on job was worth more to me	22.0
Took too much time, could not do adequate school work	.0
Too great a strain on physical stamina, was too tired, nervous	3.7
Was a help financially while in school, but could have got along without it	58.5
Would not have graduated from school without financial aid of co-op job	9.8
Co-op experience made school work more meaningful	64.6
If I were going to school now, I would "go co-op."	89.0
If I were going to school now, I would not "go co-op."	11.0

* Although there were only 80 respondents who had participated in the work experience program, there were evaluations from two other graduates regarding this phase of the school program.

training as a cooperative student had been valuable to them in preparation for the positions they then held. Closely related to this advantage was the feeling that the experience helped them in a scholastic way -- in making good in school or later in college. Another important advantage, indicated by 62.2 per cent of the respondents, was that it had been helpful to them in securing positions after graduation. This information correlates with their responses to another question in the questionnaire as to the chief factor that had helped them in locating and securing positions after graduation from high school. In reply to this question, 51 stated that they had secured their first position as a result of the office cooperative program and that they had remained with the company where they had been employed as a cooperative student.

Important, too, are their responses indicating that it was a financial help to them while they were in school. There were 9.8 per cent who stated that they could not have graduated from high school without the financial aid received from their positions on the program.¹

There were, however, some negative remarks regarding their work as cooperative students. Nine of the respondents indicated that they would not participate in the program if they were going to school again. Three respondents stated that it was too great a strain on their physical stamina, that they were too tired and

¹For a more detailed report on the cooperative work experience program, reference is made to the study by Wolfe, loc. cit.

nervous as a result of going to school part time and working part time. Further study of their remarks indicated that some, although they did not state that it was too great a strain, felt that their assigned home work at the end of the day, after work, had deprived them of the time they needed for "other things" and for social activities.

Some of the criticisms of the graduates and suggestions for improvement are indicated below:

I always felt that I missed a part of high school social life, by being on co-op and being in a business school -- such as football games, dances, etc. Although I did attend some of Cass Tech's activities, it still wasn't my own school.

The counselor should talk with the student more fully who is about to become a "co-op" to see if she is emotionally adapted to the type of work she is going to do. I majored in shorthand and received A's and B's all the way through. However, when the time came for me to apply what I had learned in the business world, I found that I was too nervous a person to do so easily. If I had really stopped to think twice, I believe it would have been smart if I had majored in office machines instead.

Allow more subjects to be carried in first semesters when the student is not a co-op -- e.g., languages, science, music and art. I had mostly all business courses and would have enjoyed and liked to have taken some of the academic courses at Cass Tech that Commerce didn't offer.

Have teachers stop referring to us as "Rich Co-ops".

I think the system is perfect as is, although I find many of my friends are satisfied to stay on the same job they had as a co-op when actually they have the experience and intelligence to get a better-paying job and better working hours. I think the reason for this is probably because most of them are single or have both of their parents to fall back on or if necessary be dependent on. In other words, they don't look ahead very much because they have never known times when they have had to pay rent or help their parents.

Help the students in preparation for the job interview. I was so scared of going down to apply for a job that I did not think the job would ever be worth it. I almost refused to go.

I think the school should give more training on the use of the telephone. When I first went to work, I was afraid for it to ring.

Helping new co-ops make the adjustment -- I know my grades fell during my first semester on the plan.

Since I was on "co-op" for only one year, it didn't interfere with my school work. However, I would not recommend anyone's taking it for more than one year, as I feel they would not be able to take enough subjects per term to make it worth while. I would advise a student to carry as many subjects as possible and learn as much as he can while in school.

Make sure the student has the ability to do the work. I went to work where the position called for typing and shorthand, while I was just in my first term of typing and had no knowledge of shorthand. I lasted four miserable days before I was transferred.

A co-op's course for the semester should be planned in accordance with the type of position she holds.

A better understanding between the teachers and the co-op's. More student activities for the co-op's.

The co-op training helped me get my present job, but I still felt a greater need for knowledge of office procedures.

Suggested Improvements of the Office Cooperative Program. Many of the respondents gave no suggestions for improvements to the program, and 13 stated specifically that it was satisfactory as it was. Some of the comments in their own words are as follows:

I do not see any place where it can be improved.

Start pupils on an earlier basis, as soon as they are old enough to work.

Co-op's are able to put courses taken in school into actual use. They learn to be responsible, and learn to be a bit more independent and sure of themselves.

I was not a co-op, but did have an after-school job. This was quite a help in obtaining for me favorable consideration in several companies where I applied before taking a City job. I would certainly recommend co-op training to any girl or boy in high school.

I very much think that everyone, if possible, should go on co-op.

I think Co-op is fine just the way it is.

Although many of the respondents were complimentary of the co-operative work experience program, as indicated by the comments above, some did make some suggestions for the improvement of the program. Thirteen of the graduates felt that there should be more counseling of the cooperative student and that greater effort should be put forth to see that the applicant was ready for her cooperative job. Five felt that there should be a better understanding between the students and the teachers, and six suggested that an attempt be made to see that the courses taken in school and the work experience be more closely related.

As may be seen by the comments of the respondents, a few expressed the opinion that although the program was worth while for part of their high school training, it would not be desirable to be on the cooperative work experience program for the full three years, and some felt for no longer than a year, as doing so would not permit the student to take as many courses in school as she otherwise could and would deprive her of social activities that she might otherwise participate in. Actually the school does not, except in rare cases and by special consideration,

advise a student's participation in the program until her sophomore year, and then only if she indicates by her marks in school that she is able to work and maintain desirable scholarship marks.

Summary

Eighty-nine per cent of the respondents indicated that they would participate in the office cooperative program if they were in school again, only 11 per cent indicated that they would not. For the most part, those who participated in the program stated that their experience on the job made their school work more meaningful; that it was valuable to them in preparation for the positions that they now hold, and in securing those positions and that it was of financial assistance to them while they were in school.

There were 24 respondents who felt that some improvement could be made, chiefly in counseling of the co-ops, thereby helping them in their adjustment and making sure that they were ready for their jobs, and that they were placed on the right jobs. Several expressed the desire for a better relationship between the teachers and the cooperative students, and for a closer relationship between course work and the work of the cooperative student on the job.

It was recommended that some instruction be given to the students in preparation for the job interview and on the use of the telephone. This training should be given sometime previous

to their initial introduction into the cooperative program. Additional guidance should be given the students, particularly during their initial period of employment, since the emotional strain of adjusting to an employment situation and attempting to maintain desirable scholarship in school is especially great at this time.

CHAPTER VII

PUPIL JUDGMENT RELATIVE TO VALUE OF PERSONAL TRAITS AND EFFICIENCY FACTORS AS TAUGHT IN SCHOOL

How important is it for teachers and counselors to stress personal traits and efficiency factors in the secondary school? Should teachers concentrate their efforts toward teaching course content and aiding students in developing a high rate of proficiency in their skill subjects and in acquiring knowledge that will be needful to them on the job? Or, should the teacher be concerned to any great extent in developing desirable personal traits, work habits, and efficiency factors in school? Businessmen say that such things are important, and it has been the philosophy of the High School of Commerce that the best of training in general education and skills does not guarantee success and happiness in the business world, but that it is necessary for the prospective employee to have a pleasing personality, wholesome attitudes, pride in personal appearance, and good work habits. The need for these attributes is emphasized during the homeroom period and in every class period; and some classes, including the Personal Problems Class, have as one of their chief objectives the development of desirable personal traits. Students are further encouraged through participation in student activities to acquire and practice desirable civic behavior and to develop personalities that are socially acceptable.

An important method, however, of securing significant answers to the questions raised is to consult the consumers -- the pupils themselves -- and find out from them whether or not it is important that such things be stressed in school. In this study, therefore, in addition to securing an evaluation of the course content of the subjects taken in school, each graduate was asked to indicate the degree of importance of various personal traits and efficiency factors. She was asked to check in Column A of the questionnaire those traits that she considered very important, and that should be stressed in school; under Column B those that, while desirable, could be learned incidentally in school or on the job; and under Column C those that could be learned more effectively outside school or on the job.

General Summary of Responses of Graduates Concerning Significant Aspects of Their Training

A convenient summary score of the responses for each of the twenty-two aspects studied is presented in Table XXVI. The "Percentage of Possible Score" may be used as an index of graduates' judgments as to the value of these traits with reference to training received in high school. The composite judgment of the graduates concerning the importance of personal traits and efficiency factors, as exhibited in the table, indicates a 73.2 per cent level of importance. Table XXVII shows the items as they are ranked in importance from high to low.

The answers of the 119 graduates, indicate that in their judgments the most important item on the list is accuracy in work,

TABLE XXVI

SUMMARY OF RESPONSES OF GRADUATES CONCERNING THE IMPORTANCE
OF PERSONAL TRAITS AND EFFICIENCY SCORES

Personal Trait or Efficiency Factor	Very Important	Desirable	Could be learned outside school	Percentage of possible score*
Regular attendance	106	11	0	95.3
Being on time	105	12	1	94.0
Accuracy in work	109	7	1	96.1
Speed in work	53	49	11	68.6
Responsibility, dependability	75	21	17	75.7
Initiative	60	29	22	67.1
Ability to make decisions	49	34	32	57.4
Ability to take criticism	70	20	24	70.2
Ability to work under pressure	65	29	23	67.9
Appropriate dress and grooming	76	30	13	76.5
Cooperation with fellow em- ployees	51	42	22	62.6
Cheerfulness	52	43	18	65.0
Personal hygiene	88	16	13	82.1
Interest in work	41	45	30	54.7
Ability to follow instructions	99	10	7	89.7
Neatness and order in desk, etc.	66	34	18	70.3
Good appearance of work	102	10	6	90.7
Patience in checking details	57	47	13	68.8
Organization of work	58	36	21	66.1
Business-like habits, industry	57	36	21	65.2
Strict observance of recess periods	57	31	30	61.0
Social and business etiquette	56	31	27	62.7
Total	1552	623	370	73.2

*For information regarding computation of the scores, see Appendix D.

The formula used in the computation of the scores is similar to the one used in the Cooperative Study of Secondary School Standards reported by Walter Crosby Eells in "The Cooperative Study of Secondary School Standards," Educational Record, XVII (April, 1936), 273-289.

TABLE XXVII

**SUMMARY OF RESPONSES OF 119 GRADUATES RELATIVE TO PERSONAL
TRAITS AND EFFICIENCY FACTORS RANKED IN ORDER OF IMPORTANCE**

Rank	Percentage Weighted Scale	Item No.	Description of Trait or Factor
1	96.1	3	Accuracy in work
2	95.3	1	Regular attendance
3	94.0	2	Being on time
4	90.7	17	Good appearance of work - appropriate arrangement, without smudges, etc.
5	89.7	15	Ability to follow instructions
6	82.1	13	Personal hygiene
7	76.5	10	Appropriate dress and grooming
8	75.7	5	Responsibility, dependability
9	70.3	16	Neatness and order in desk, files, etc.
10	70.2	8	Ability to take criticism without resent- ment
11	68.8	18	Patience in checking figures, details, etc.
12	68.6	4	Speed in work
13	67.9	9	Ability to work under pressure - meet deadlines
14	67.1	6	Initiative
15	66.1	19	Organization of work
16	65.2	20	Business-like habits, industry
17	65.0	12	Cheerfulness
18	62.7	22	Social and business etiquette
19	62.6	11	Cooperation with fellow employees
20	61.0	21	Strict observance of recess and lunch periods
21	57.4	7	Ability to make decisions
22	54.7	14	Interest in work

with regular attendance and punctuality close seconds and thirds, respectively. The next two items which were considered of special importance to them were Item 17 (good appearance of work -- appropriate arrangement, without smudges, etc.) and Item 15 (ability to follow directions, which received composite scores of 90.7 per cent and 89.7 per cent respectively. Lowest on the list are Items 14 (interest in work) and 7 (ability to make decisions), which received scores of 54.7 per cent and 57.4 per cent respectively. It is of interest to note that only these two aspects in the entire list ranked below 60 per cent. When the material is grouped by year of graduation (See Table XXXVIII, page 120), it is observed that while these two traits are ranked low by the 1954 graduates, they are rated high or of special value by the 1950 group, thus indicating that as the graduate progresses in her work experience, the value of these and other traits assume more meaning and importance to her.

It is difficult to explain the low value placed on the five aspects ranked lowest by the graduates, as well as the relatively low composite value on the aspects as a whole when considering them as part of the training of the respondents while in school.

While social and business etiquette received a score of only 62.7 per cent, 70.2 per cent of the graduates indicated elsewhere in their responses to another item included in the questionnaire that they felt it would be desirable to incorporate into the school program more training in this area. (Refer to Table XXIV, page 102).

Again, it is difficult to explain the low score placed upon cooperation (Item 11), when this trait is valued so highly by

businessmen,¹ and was emphasized by the graduates when relating incidents that had occurred in business that were especially pleasing to their employers.

Lack of strict observance of lunch and relief periods was mentioned frequently by the graduates as causes of the displeasure of their employers by several of the graduates. In their rating of the importance of training along this line, however, their score was only 61.0.

The low score on the ability to make decisions (Item 21) might, to some extent, be explained by the fact that in many positions the stenographer, and especially the typist and other office employees on initial jobs, are not expected to exercise this trait to any great extent, especially until they have been with the company long enough to know the policies of the company, and even then they work in most cases under the supervision of others. As might be expected, the 1950 graduates rated this trait much higher than the 1954 graduates.

It is unfortunate that interest in work is rated extremely low by the graduates. The question is raised as to whether or not something should be done in industry to stimulate interest in work. Is it possible that the enthusiasm of the graduate looking for her first job has in so short a time waned to such a low degree? Is it that she has become disillusioned as to the glamour she expected to find in her job and now she believes that hers is just a routine

¹Charles B. Hicks, "RRR's in Secretarial Practice," Business Education World (December, 1952), 178.

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¹Charles B. Hicks, "RRR's in Secretarial Practice," Business Education World (December, 1952), 178.

job to be done by her, while her employer reaps the rewards? The problem of interest in work is apparently one that concerns both the educator and the businessman. It is possible that while the graduate actually rates this aspect higher than is here indicated, she feels that it is the responsibility of the employer rather than the school to stimulate its growth and thus rates it low in her response. Perhaps business with its trend toward allowing employees to share in company benefits will, in the future, do more to improve this situation. In the meantime, it seems that perhaps the school should do more to help the prospective employee face a realistic world and accept a certain amount of routine as necessary and to develop pride in doing well whatever is expected of her, thus reducing to some extent boredom, and stimulating as much as possible interest in her work.

Comparison of Judgments of Graduates Grouped According to Year of Graduation

Inasmuch as duties change and responsibilities become greater with the length of employment tenure, and since one's insight and attitudes often change with maturity, a study of the responses of the graduates was made to determine whether or not their judgments regarding the aspects changed with their extended length of employment. Table XXVIII shows the judgments of the graduates grouped by year of graduation.

It is interesting to note that Items 1, 2, 3, 15, and 17 (regular attendance, being on time, accuracy in work, ability to follow instructions, and good appearance of work) were included in

the top five indices for each group studied, even though the order of value was not identical.

The 1952 graduates placed Items 10, 11, 16, 20, and 21 (appropriate dress and grooming, cooperating with fellow employees, neatness and order in desk, files, etc., business-like habits, industry, and strict observance of recess and lunch periods) on a noticeably lower level of value than either the 1954 or 1950 graduates. The 1950 graduates placed Items 4, 6, and 22 (speed in work, initiative, and social and business etiquette) on a higher level of value than either of the other groups studied. Item 19 (organization of work) apparently lost value from a training point of view as the employment tenure of the graduates increased.

It may be a cause for concern to observe that the 1952 graduates in most instances placed a lower value on the items on a comparative basis than either of the other two groups.

The group of items studied received 75.1 per cent of the possible score for the 1950 and 1954 graduates in comparison with a 69.3 per cent for the 1952 graduates. It is difficult to explain the low value placed by the 1952 graduates upon these aspects of their training. Reference to employment opportunities at that time indicates that business, while good, was not so good, considering the clerical field as in 1950 and 1954. Is it possible that frustrations, as a result of the lack of employment opportunities and promotional possibilities, were reflected in their attitudes?

Item 1 (regular attendance) was rated high by all the graduates, but was rated considerably higher by the 1954 graduates than

TABLE XXVIII

COMPARISON BY YEAR OF GRADUATION OF JUDGMENTS OF GRADUATES CONCERNING
THE IMPORTANCE OF PERSONAL TRAITS AND EFFICIENCY FACTORS

Personal Trait or Efficiency Factor	Percentage of Possible Score			
	1954 N = 54	1952 N = 39	1950 N = 26	Total* N = 119
Regular attendance	99.0	92.3	92.0	95.3
Being on time	97.2	91.0	92.0	94.0
Accuracy in work	96.2	93.6	100.0	96.1
Speed in work	67.3	65.8	76.1	68.6
Responsibility, dependability	77.6	76.3	71.1	75.7
Initiative	63.0	65.3	78.0	67.1
Ability to make decisions	56.6	59.7	55.8	57.4
Ability to take criticism	68.6	69.7	74.0	70.2
Ability to work under pressure	70.2	66.7	65.3	67.9
Appropriate dress and grooming	77.7	70.5	82.7	76.5
Cooperation with fellow employees	65.1	56.4	67.4	62.6
Cheerfulness	66.0	58.1	73.9	65.0
Personal hygiene	83.3	78.9	84.0	82.1
Interest in work	61.1	47.4	52.1	54.7
Ability to follow instructions	92.5	85.5	90.0	89.7
Neatness and order in desk, etc.	72.2	64.1	76.0	70.3
Good appearance of work	90.7	86.8	96.2	90.7
Patience in checking details	67.9	71.1	67.3	68.8
Organization of work	73.0	61.8	58.0	66.1
Business-like habits, industry	72.5	55.3	68.0	65.2
Strict observance of recess periods	68.5	50.0	64.0	61.0
Social and business etiquette	63.7	56.8	69.2	62.7
Total	75.1	69.3	75.1	73.2

*For information regarding computation of the scores, see
Appendix D, pp. 165-168.

by the 1952 or 1950 graduates. It was rated 99.0 by the 1954 graduates compared to 92.0 and 92.3 by the 1950 and 1952 graduates, respectively.

Item 2 (being on time) was similar to Item 1 in its rating by the graduates in that, while it was rated high by all the graduates, it was rated especially high or 97.2 by the 1954 graduates.

Item 3 (accuracy in work) was rated high by all three groups and was rated 100 per cent by the 1950 graduates, 93.6 by the 1952 graduates, and 96.3 by the 1954 graduates. It is interesting to note that accuracy, rated highest by the respondents in this study, was also ranked first in the Charters and Whitley study.¹

Item 4 (speed in work) was rated relatively high by all three groups but much lower than Item 3, or accuracy in work. This rating reflects the feeling of the group expressed in their comments that accuracy in work is much more important than speed, which may be acquired on the job. Speed in work was rated somewhat higher by the 1950 group than the other groups.

The responses to Item 5 (responsibility and dependability) were somewhat similar in all three groups, but this aspect was rated lower by the 1950 group. The reason for this is difficult to explain. Dependability was rated second only to intelligence in the Johnston Study.²

¹Charters, W. W., and Whitley, Isadore B., Summary of Report on Analysis of Secretarial Duties and Traits, National Junior Personnel Service, Inc., New York, 1924, pp. 48-49.

²Johnston, loc. cit.

It is interesting to note that initiative or Item 6 is ranked 8th by the 1950 graduates, 13th by the 1952 graduates, and 20th by the 1954 graduates. The difference in emphasis on this trait by the 1950 graduates may be due to the fact that by the time they have been employed in business for as long as four or five years they have begun to learn the policies of the company and are able to assume greater responsibilities than a newcomer to business who, for the most part, is not expected to exercise initiative to any great extent. The respondents, however, might be considered inconsistent, at least to some extent, in their rating of this personal trait, as is exemplified in their responses to the question on page 8 of the questionnaire (see Appendix A), in which they were asked to tell of some specific incident that pleased their employer. The incidents related by them most frequently exemplified the use of initiative. Some of the incidents in their own words are given below:

Initiative in straightening out files, etc., during spare time.

My employer is very kind and enthusiastic. Any minor thing which I do "beyond the call of duty" is noticed, and appreciation and gratitude are shown. It happens too frequently to cite one incident.

Taking upon myself to do things before he has to tell me -- such as when I receive a letter from an owner, I look up the ... dealer and distributor before passing the letter on to him.

My employer is pleased when an employee will offer to do an extra job not really connected with his regular job.

Doing anything right -- on my own initiative.

I had devised a method for running off post cards on the duplicating machine, which saved a lot of time especially during rush survey jobs.

My employers are pleased when I use initiative and can be depended on for things so as to relieve them of some of their responsibilities.

I once found my boss in an emergency, when he was at a meeting where there was no phone at which he could be contacted. Using a little common sense and ingenuity, I was able to locate him, which very much surprised him.

When I go ahead and take some responsibility upon myself, taking the load off of him.

Doing the little things which are not required or asked for. Example, getting phone numbers or forms, dusting his office, and decorating the general office without being told.

Showing initiative as far as answering phone, following up phone calls, making suggestions on sorting volume of material to be filed, taking care of his personal needs as far as filling pen, running errands, etc.

When in his absence, I went ahead and did what had to be done on something important.

Being able to think for yourself. Showing initiative in your job.

Item 7 (ability to make decisions) is rated low by all three groups. Item 8 (ability to take criticism without resentment) received a rating comparable by all three groups. The importance of accepting criticism graciously is emphasized from the employer's point of view.¹

The responses to Item 9 (ability to work under pressure -- meet deadlines) are similar to those to Item 8. This aspect is rated slightly higher by the 1954 graduates. Perhaps these beginning

¹ Bloch, op. cit., pp. 46, 47.

workers were realizing the importance of meeting the demands of business, whereas those employed for a longer period of time had already learned this important aspect related to their work and had developed work habits that relieve them of the pressure of having to finish things at the last minute. A graduate of 1952 makes the following pertinent statement as to that aspect of her high school training that had been most helpful to her:

A specific assignment -- preparing a term paper. Should not have let it go until the last day. Am still learning that I should never let what may seem like an unpleasant task go until it gets on my nerves.

Item 10 (appropriate dress and grooming), Item 11 (cooperation with fellow employees), and Item 13 (personal hygiene) received comparable ratings by all three groups, but a somewhat lower rating by the 1952 group.

Cheerfulness (Item 12) was rated higher by the 1950 group and much lower by the 1952 group. Interest in work (Item 14) was rated low by all groups, but lowest by the 1952 group. Ability to follow directions (Item 15) was considered relatively high by all groups, but lower by the 1952 group. Neatness and order in desk, files, etc., (Item 16) was likewise rated lower by the 1952 group, with comparable ratings by the others. Good appearance of work -- appropriate arrangement, without smudges (Item 17) was rated relatively high by all three groups but lower by the 1952 group. Patience in checking figures and other details (Item 18), however, was rated higher by the 1952 group. Business-like habits, industry (Item 20) was rated low by all three groups, but lower by the 1952 group.

The pattern of responses to Item 21 (strict observance of recess and lunch periods) was similar. Organization of work (Item 19) was rated considerably higher by the 1954 group, and Item 22 (social and business etiquette) was rated higher by the 1950 group.

Interest in work (Item 14) the trait that was rated lowest by the graduates, was last in importance in the judgments of the 1950 and 1952 graduates and next to last by the 1954 graduates.

Comparison of Judgments of Graduates According to Citizenship Marks and Attendance Records

To determine whether or not there was a difference in the judgments of the graduates, grouped according to their citizenship and attendance records, a study was made to investigate possible differences.

A weighted scale was devised by adding together the citizenship marks of each graduate during the last two semesters of high school. To this number was added the number of times the student had been absent or tardy during that time. It is obvious that the lower the number, the more satisfactory the attendance and citizenship record. The scale had a range from 1 to 4. Table XXIX shows the variations that were found in the responses when they were grouped this way.

TABLE XXIX

VARIATION IN RESPONSES GROUPED ACCORDING TO
CITIZENSHIP AND ATTENDANCE

Description of Trait or Factor	Item No.	Percentage of Variation*
Regular attendance	1	7
Accuracy in work	3	9
Being on time	2	10
Interest in work	14	10
Initiative	6	13
Appropriate dress and grooming	10	14
Speed in work	4	15
Cooperation with fellow employees	11	15
Ability to follow instructions	15	15
Ability to work under pressure	9	16
Cheerfulness	12	16
Personal hygiene	13	16
Good appearance of work	17	16
Ability to take criticism	8	18
Business-like habits, industry	20	20
Neatness and order in desk, files, etc.	16	23
Social and business etiquette	22	23
Responsibility, dependability	5	25
Patience in checking figures, details	18	30
Organization of work	19	30
Ability to make decisions	7	31
Strict observance of recess periods	21	32

*Fractions were disregarded in the percentages.

An examination of the responses of the graduates grouped according to the weighted scale of citizenship and attendance indicated that there was not a great deal of differences in most of the items. Table XXX gives in detail a comparison of the judgments of the graduates grouped in this way.

Items where agreement was greatest. There were some items that were rated much the same by all four groups. Item 1 (regular attendance) showed a difference of only 7 per cent in the responses. In other words, regardless of the citizenship mark and attendance record in school, there was agreement among the respondents that this trait was very important and should be stressed in school. The responses of those who received 1's and 4's were almost the same; those of the 2's and 3's were slightly higher.

Item 3 (accuracy in work) was rated high by all four groups. However, it received the lowest rating by those who had received 1's in citizenship.

Item 2 (being on time) had a difference of 10 per cent in the responses. The respondents who had received 1's and 4's rated it almost the same; those having 2's and 3's slightly higher.

Item 14 (interest in work) was rated low by all the groups, but lowest by those who had received 1's and highest by those who had received 3's and 4's. It is difficult to understand the reason for this. Was it more difficult for the 3's and 4's to get their positions and, as a result, they were more appreciative of them?

TABLE XXX

COMPARISON OF JUDGMENTS OF GRADUATES (GROUPED ACCORDING TO CITIZENSHIP AND ATTENDANCE RECORDS) AS TO IMPORTANCE OF PERSONAL TRAITS AND EFFICIENCY FACTORS

Aspect	Citizenship and Attendance Weighted Score*			
	1	2	3	4
	N = 27 Per Cent	N = 27 Per Cent	N = 23 Per Cent	N = 37 Per Cent
1. Regular attendance				
Important	85.2	91.9	87.0	84.2
Desirable	14.8	2.7	12.4	10.5
Learn outside school	3.7	2.7	4.3	5.3
2. Being on time				
Important	81.5	89.2	91.3	84.2
Desirable	18.5	5.4	8.7	13.2
Learn outside school	3.7	2.7	4.3	2.6
3. Accuracy in work				
Important	92.6	86.5	95.7	89.8
Desirable	7.1	10.8	4.7	7.9
Learn outside school	3.7	.0	4.3	5.3
4. Speed in work				
Important	37.0	43.2	52.2	47.4
Desirable	37.0	37.8	43.5	50.0
Learn outside school	11.1	16.2	8.7	5.3
5. Responsibility, dependability				
Important	63.0	48.6	73.9	71.1
Desirable	25.9	24.3	13.0	18.4
Learn outside school	14.8	18.9	21.7	15.8

*A weighted scale was devised by adding together the citizenship marks of each graduate during the last two semesters of high school. To this score was added the number of times the student had been absent or tardy during that time. It is obvious that the lower the number, the more satisfactory the attendance and citizenship record. The scale had a range of from 1 to 4.

The total percentages to many items do not equal 100 per cent, since it was possible for the respondent to check two responses to each item. Table XXIII excludes the responses where more than one response to an item is checked; however, in this table the total responses are used.

TABLE XXX (Continued)

Aspect	Citizenship and Attendance			
	Weighted Score			
	1 N = 27 Per Cent	2 N = 37 Per Cent	3 N = 23 Per Cent	4 N = 37 Per Cent
6. Initiative				
Important	55.6	56.8	43.5	50.0
Desirable	25.9	21.6	34.8	28.9
Learn outside school	18.5	10.8	30.4	23.7
7. Ability to make decisions				
Important	40.7	37.8	26.1	57.9
Desirable	25.9	27.0	47.8	23.7
Learn outside school	29.6	29.7	34.8	23.7
8. Ability to take criticism without resentment				
Important	59.3	52.2	47.8	65.8
Desirable	7.4	18.9	34.8	15.8
Learn outside school	33.3	13.5	26.1	21.1
9. Ability to work under pressure -- meet deadlines				
Important	48.1	51.4	47.8	63.2
Desirable	37.0	21.6	34.8	21.1
Learn outside school	22.2	24.3	26.1	21.1
10. Appropriate dress and grooming				
Important	55.6	67.6	69.6	60.5
Desirable	29.6	24.3	26.1	26.3
Learn outside school	14.8	5.4	13.0	18.4
11. Cooperation with fellow employees				
Important	40.7	54.1	39.1	47.4
Desirable	40.7	27.0	52.2	34.2
Learn outside school	22.2	24.3	17.4	18.4
12. Cheerfulness				
Important	40.7	43.2	39.1	55.3
Desirable	37.0	45.9	43.5	26.3
Learn outside school	18.5	13.5	21.7	18.4
13. Personal hygiene				
Important	81.5	73.0	65.2	76.3
Desirable	7.4	21.6	21.7	10.5
Learn outside school	11.1	5.4	21.7	15.8

TABLE XXX (Continued)

Aspect	Citizenship and Attendance			
	Weighted Score			
	1	2	3	4
	N = 27	N = 37	N = 23	N = 37
	Per Cent	Per Cent	Per Cent	Per Cent
14. Interest in work				
Important	29.6	32.4	39.1	39.5
Desirable	51.9	29.7	82.6	44.7
Learn outside school	18.5	35.1	26.1	15.8
15. Ability to follow instructions				
Important	74.1	89.2	22.6	81.6
Desirable	11.1	5.4	17.4	13.2
Learn outside school	11.1	2.7	8.7	7.9
16. Neatness and order in desk, files, etc.				
Important	66.7	45.9	43.5	65.8
Desirable	25.9	35.1	34.8	26.3
Learn outside school	11.1	16.2	30.4	7.9
17. Good appearance of work-- appropriate arrangement, without smudges, etc.				
Important	85.2	89.2	73.9	84.2
Desirable	11.1	5.4	17.4	13.2
Learn outside school	3.7	2.7	13.0	5.3
18. Patience in checking figures, details, etc.				
Important	41.7	56.8	30.4	60.5
Desirable	40.7	32.4	56.5	34.2
Learn outside school	22.2	10.8	17.4	5.3
19. Organization of work				
Important	33.3	43.2	56.5	63.2
Desirable	44.4	35.1	26.1	28.9
Learn outside school	22.2	16.2	26.1	13.2
20. Business-like habits, industry				
Important	44.4	43.2	47.8	63.2
Desirable	29.6	40.5	39.1	15.8
Learn outside school	25.9	16.2	21.7	18.4

TABLE XXX (Continued)

Aspect	Citizenship and Attendance			
	Weighted Score			
	1	2	3	4
	N = 27	N = 37	N = 23	N = 37
	Per Cent	Per Cent	Per Cent	Per Cent
21. Strict observance of recess and lunch periods.				
Important	33.3	54.1	47.8	55.3
Desirable	22.2	32.4	30.4	26.3
Learn outside school	44.4	13.5	30.4	21.1
22. Social and Business etiquette				
Important	44.4	48.6	34.8	52.9
Desirable	22.2	32.4	34.8	26.3
Learn outside school	33.3	16.2	39.1	8.8

Items Where Disagreement Was Greatest. Item 21 (strict observance of recess and lunch periods), with a difference of 32 per cent in the responses, was rated lowest by those who had received 1's in citizenship and highest by those who had received 4's. It is possible that the 4's, usually careless in their attendance and observance of the conventional rules of school, had learned by experience that their employers were displeased when observance of such periods was disregarded and now advise that this trait be taught in school.

Item 18 (patience in checking figures and other details), with a difference of 30 per cent in the responses, was rated highest by those who had received 4's. Likewise, Item 19 (organization of work), with a difference of 30 per cent, received the highest rating by those who had received 4's, lowest by those who had received 1's. Item 5 (responsibility and dependability) with a difference of 20 per cent in the responses was rated lowest by those who had 2's in citizenship and highest

by those with citizenship scores of 3 or 4.

Item 16 (neatness and order in desk and files), with a difference of 23, was rated higher by those with 1's and 4's and lower by those with citizenship marks of 2 and 3.

An examination of the ratings assigned by the graduates reveals that there were several items rated higher by those with a low rating in citizenship and attendance than by the total group. Item 22 (social and business etiquette), with a difference of 23, was rated highest by those who had 4's in citizenship. Perhaps these respondents came from homes where they received little encouragement to be punctual and regular in attendance and where there was less emphasis on the cultural aspects of life, and as a result they realized that they had a definite need for such training. A similar pattern of response is found in Items 8 (ability to take criticism without resentment), with a difference in the score of 18 per cent, and in Item 20 (business-like habits, industry), with a difference of 20 per cent.

Item 4 (speed in work), with a difference of 15 per cent, was rated lowest by those who had received 1's in citizenship. These students were probably naturally conscientious in their work and would naturally do their best and, therefore, felt no particular need to have this trait stressed in school.

Item 9 (ability to work under pressure -- meet deadlines), with a difference of 16 per cent in the responses, was ranked highest by those with ratings of 4, who probably had been less conscientious in school and had not developed habits of keeping up with their work,

but once employed in business, were realizing the importance of good work habits.

Item 11 (cooperation with fellow employees) was rated higher by the 2's and 4's. Item 12 (cheerfulness) with a difference of 16 was rated highest by the 4's.

Summary

An examination of the responses of the graduates relative to the importance of stressing desirable personal traits and efficiency factors in the training offered by the secondary school indicates that there are some traits that they feel should be emphasized in school. The five highest on the list in importance are accuracy in work, regular attendance, punctuality, good appearance of work, and the ability to follow directions.

When comparing the judgments of the respondents grouped by year of graduation, it was found that these five items were included in the top five indices for each group, even though the order of value was not identical. The 1950 graduates emphasized speed in work, initiative, and social and business etiquette more than the other two groups. It was observed that the 1952 graduates, for some reason, placed a lower value on the items on a comparative basis than either of the other two groups.

A comparison of the judgments of the respondents grouped according to citizenship and attendance records revealed that, regardless of their records in school, the respondents were almost unanimous in emphasizing the importance of regular attendance, accuracy in work,

and punctuality; and on many other items there was not a great deal of difference in their judgments. However, those having the least desirable records in citizenship and attendance while in school seemed more appreciative of their training in many respects and emphasized its importance.

CHAPTER VIII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This dissertation was undertaken as a means of describing and evaluating the effectiveness of the training offered by the Detroit High School of Commerce to students with shorthand majors. The appraisal is concerned with both curricular and personal components of the training offered. A description and evaluation of the school program provides a means of improving the program offered by the local school and will prove beneficial also to educators associated with other similar institutions.

Summary and Conclusions

Methodology. The study is based upon the appraisals of graduates of the High School of Commerce, a school which specializes in business education. The study includes the shorthand majors of the June graduating classes of 1950, 1952, and 1954, a total of 223 students, most of whom are currently employed in business. The responses of these graduates reflect the difficulties, progress, and criticisms of recent graduates and their initial progress on the job, and also the mature judgments and criticisms of stenographers and secretaries successfully employed in business for as long as five years.

A questionnaire was developed with the cooperation and assistance of students and graduates of the school, with interested university

professors and public school teachers and principals, and with selected personnel directors employed in business. The questionnaire gathered factual and statistical data descriptive of the respondents and of their activities since their graduation from high school. Most of the categories, however, were concerned with the major objectives -- the attitudes, opinions, and judgments of the graduates relative to the essential elements of their school training, concerning both the curricular components and the concomitant personal traits and efficiency factors considered essential to success in business.

The research methods employed in this dissertation may be classified as descriptive research combined with curricular research. The normative survey by means of a questionnaire was selected as the best method adapted for securing the needed data.

From the permanent records of the school office were secured the names and addresses of the shorthand majors of the three selected graduating classes. Other information, including the academic marks received by the graduates on courses considered pertinent to the study, and regarding the students' attendance and citizenship records, was also secured from the permanent records. The questionnaire was mailed to the graduates by first-class mail, accompanied by a letter bearing the signature of the principal. There were 124 responses received from the questionnaire, or 71.7 per cent of those who probably received it. A coding technique was used in compiling the data, which was transposed to Hollerith cards by the Computation Laboratory of Wayne State University.

To determine whether or not the responses received were representative of the entire population, an examination was made of the total graduates with shorthand majors, dividing them into two groups -- the respondents and the non-respondents. A comparison was then made of the two groups on the basis of three known criteria:

1. Scores on the intelligence test taken during their senior year in high school,
2. Citizenship marks and attendance records during the last two semesters in high school, and
3. Final marks on important courses in their major field, including their final English course and the final courses in shorthand and transcript.

The technique of drawing inferences about the nature of the population on the basis of these crucial characteristics was applied to the two groups by a comparison of the medians of the groups on the specified criteria. This technique was also applied in another way by means of the application of the null hypothesis, or the postulation that there is no statistically significant difference between the means of the two groups.

The application of the technique, as applied by both methods, revealed that the respondents and non-respondents were apparently very similar, but that there was a slight difference with respect to intelligence scores and final marks (particularly Business English), in favor of the group that responded.

The Graduates - Their Activities and Progress Since Graduation.

Approximately 54 per cent of the respondents have taken some type of

additional educational training since their graduation from high school, with approximately 17 per cent working toward college degrees -- an indication that their educational activities are comparable to the educational status of the modern secretary according to other research studies. More than one half of their employers, out of a total of fifty-five, have offered some type of incentive toward their further training. Those who have not evidently are satisfied with the training their employees received in high school. The fact that more than half of the group have continued their education beyond high school indicates that the respondents are an ambitious group, striving for self-improvement professionally and for better use of personal or leisure-time activities.

Since graduation, the graduates have been active socially with a variety of personal interests, including church and club activities, sports, and other hobbies. Out of the total group, 77 per cent indicated one or more hobbies. They expressed an interest in current national and world affairs and stated that they read regularly newspapers and other periodicals.

Professionally, more than 62 per cent of the respondents are employed as stenographers and secretaries. The others are employed as typists, bookkeepers, and clerks. Their monthly salary schedule shows that their monthly salaries range from \$199 to \$375, and 64 per cent are receiving from \$225 to \$299 per month. The median salary of the total group responding is \$254. These salaries, in view of the findings of other research studies, may be considered relatively high for employees of their age and work experience.

The respondents are employed by fifty-five different employers scattered throughout the City of Detroit. The employer employing the largest number was the Board of Education. The place of employment for the next highest number was the City of Detroit and other governmental agencies, and the place of the next highest was the automobile industry and other related manufacturing concerns. The majority of the graduates indicated that they were satisfied with their present employment status. Among the chief duties listed by them with the highest frequency in rank order were:

1. Answering the telephone.
2. Taking dictation.
3. Filing.
4. Typing invoices and other forms.
5. Receiving callers.
6. Typing from copy.
7. Keeping records.

These duties are similar to those listed by the secretaries included in other research studies.

The School Curriculum. The courses indicated by the graduates as being of most value to them in their work and the percentage of respondents ranking them of most value are as follows:

Typewriting	88.7
Shorthand	71.8
English	58.1
Office Machines	25.0
Mathematics	17.7

The courses that they indicated of least value were chiefly the academic subjects -- namely, biology, history, and literature. These judgments are not surprising, since the graduates, while they were in school, had been serious in their objectives of securing optimum

training in the business courses that would insure their success in business; and there were many who, though their part-time employment while in school, had contributed to the support of their families. Areas ranked by 75 per cent or more of the graduates as being of most value to them in their work are shown below.

	<u>Per Cent</u>
Capitalization	91.6
Spelling	88.2
Punctuation	88.2
Speed and accuracy in transcribing letters for mailability	84.9
Knowledge of grammar and sentence structure	80.7
Making carbon copies, typing envelopes, etc.	79.8
Making erasures on typewritten copy	78.2

Areas which should receive even more emphasis than was given while the respondents were in high school (ranked by 20 per cent or more of the graduates) are as follows:

	<u>Per Cent</u>
Word usage and vocabulary building	51.3
Figuring income tax	35.3
Composing original letters and notices	31.1
Pronunciation and syllabication	26.9
Knowledge of grammar and sentence structure	25.2
Penmanship	24.4
Drills in addition, multiplication, and other fundamentals	20.2

There was an expression by 70.2 per cent of the group that more training should be offered in personality development and in business etiquette.

Highest on the list of those areas that had been of least value

to the graduates and therefore might be de-emphasized in the curriculum offered by the school are the following aspects: (ranked by 50 per cent or more of the graduates):

	<u>Per Cent</u>
Making out payrolls	68.9
Arranging itineraries	63.2
Bookkeeping principles	62.2
Reconciliation of bank statements	61.3
Computing extensions	58.8
Making train reservations	58.0
Writing letters of application	56.3
Typing legal documents	56.3

There was a cluster of similar responses relative to the arithmetic courses. The emphasis, according to the judgments of the graduates, should be placed upon the fundamentals, with less emphasis on the rigidly vocational aspects such as making up payrolls, computing extensions, and the reconciliation of the bank statement.

When the responses of the graduates were grouped according to job classifications (secretary, stenographer, typist and others), it was found that, regardless of the job classification, the respondents were quite unanimous in their evaluation of those courses and items which they considered of most and least value to them in their work. In some areas, where there was considerable variation in the relative value of the course content, it was observed that the highest value placed upon the training was done so by the secretaries (who had been out of school for a longer period of time), the next highest by the stenographers, and the least by the group of typists and other workers. It is possible that longer employment tenure and maturity have helped to enhance, in the judgments of the graduates, the value of the

training received in school. The secretaries, moreover, indicated less felt need for additional training than did the stenographers and other workers. Perhaps their experience in the business world and further study in evening courses following graduation from high school have helped to diminish their feelings of inadequacy and felt need for more intensive training in high school.

When the responses of the graduates were grouped according to year of graduation, it was found that there was a great deal of similarity in the responses regardless of the year of graduation. Those who had been out of school longer seemed somewhat more vocal in expressing their appreciation for the training they had received in high school. The 1950 graduates had found, as the secretarial group, the writing of the application letter and the composition of original letters and notices of much more value than the other two groups; whereas, the employees who had been out of school for a shorter period of time had found the training that was more general and less rigidly vocational, more helpful.

The Office Cooperative Program. Replies from the respondents indicated that 80 out of the 124 total respondents had been employed on the office cooperative program. Most of the graduates praised the program highly, and 89 per cent stated that if they were going back to school again, they would participate in the program. The chief benefits derived from participation in the program, listed by 50 per cent or more, in rank order of importance are:

1. Was a help in social adjustment and in making friends.
Gave self-confidence.
2. Co-op experience made school work more meaningful.

3. Was an aid in securing a position after graduation.
4. Was a help financially while in school.
5. Training was valuable in preparation for present position.

Although most of the respondents praised the program highly, there were some negative remarks by some of the students regarding their work as cooperative students. There was an expression by some that it was too great a strain on their physical stamina and that it deprived them of the time they needed for other school and social activities.

Personal Traits and Efficiency Factors. In the phase of the study relative to desirable personal traits and efficiency factors considered essential to success in business, it was revealed that, according to their composite judgments, certain traits should be emphasized in school. The aspects with a score of 75 per cent or more are listed in order of importance:

	<u>Per Cent</u>
1. Accuracy in work.	96.1
2. Regular attendance	95.3
3. Punctuality	94.0
4. Good appearance of work	90.7
5. Ability to follow instructions	89.7
6. Personal hygiene	82.1
7. Appropriate dress and grooming	76.5
8. Responsibility, dependability	75.7

The two aspects rated lowest by the entire group were interest in work and the ability to make decisions. The low score on ability to make decisions might be explained by the fact that in many positions stenographers and other office employees, particularly on initial jobs, are not expected to exercise this trait to any great degree. As might be expected, the 1950 graduates, who have been employed in business for a longer period of time, rated this trait much higher than the 1954 graduates.

It is, however, difficult to explain the low value placed upon interest in work. This problem is apparently one that concerns both the educator and the employer. It is possible that the graduates actually rated this aspect higher than was indicated in the study. They may have felt, however, that this was the chief responsibility of the employer rather than that of the school.

It is a cause for concern, however, to observe that the 1952 graduates in most instances placed a lower value on the aspects on a comparative basis than either of the other two groups. It is difficult to explain their evaluation unless it is possible that the frustrations due to a lack of employment opportunities and promotional possibilities during that period are reflected in their attitudes.

When the responses were arranged according to year of graduation it was found that the five items rated highest by the composite scores of the three groups still remained in the top five indices for each group studied, even though the order of value was not identical. The 1950 graduates emphasized more than the other two groups speed in work, initiative, and social and business etiquette. The 1954 and 1952 graduates emphasized organization of work more than the 1950 group, and the 1954 group rated higher than either of the other two groups strict observance of recess and lunch periods. In many other respects the ratings were very similar.

When the responses were grouped according to a weighted scale based on the citizenship and attendance records, the graduates (regardless of their citizenship and attendance records while in school) were almost unanimous in emphasizing the importance of accuracy in work, regular attendance, and punctuality; and on many other aspects

there was but little variation in their judgments.

In many instances those who had a less desirable record while in school, as far as attendance and citizenship were concerned, seemed more appreciative of their training and emphasized the importance of stressing desirable personal traits and efficiency factors. It is possible that (although while they were in school, they had been careless in their attendance and observance of the conventional rules of school) they had learned by experience that their employers were displeased when such rules were violated at work. These respondents may have come from homes where they had received little encouragement to be punctual and regular in attendance and where there may not have been much emphasis on the cultural aspects of life, and they were therefore particularly appreciative of training relative to these aspects.

Although the percentage of possible score was only 73.2, (when the aspects were considered as a whole) it is high enough to warrant training in the secondary school in the development of personal traits and efficiency factors considered essential to success in business.

Recommendations

Recommendations Concerning the School Curriculum. The graduates, on the whole, were unanimous in expressing their satisfaction with the training they had received while in high school and the following recommendations based upon their judgments are made:

1. That the present school curriculum be continued, for the most part, along existing lines.

2. That there be more thorough teaching of English grammar and spelling.
3. That there be more thorough training in skill subjects with emphasis on accuracy.
4. That the academic courses be reviewed to determine the possible cause for the low value placed upon them, that the students be oriented more thoroughly as to their possible value, and that efforts be made to enhance their practical aspects and to present them in a more interesting manner.
5. That in business arithmetic more emphasis be placed upon the fundamentals.
6. That instruction on the use of the telephone and on telephone manners be continued.
7. That the possibility be considered of de-emphasizing instruction on the writing of the application letter, on typing of legal documents, and on other aspects of training considered of relatively less practical value to the graduates.

Recommendations Regarding the Office Cooperative Program.

Although a large majority of the students praised the cooperative work experience program highly, there were some suggestions for its improvement, the chief of which are:

1. That adequate counseling be given the students, particularly during their initial period of employment, since the emotional strain of adjusting to the new employment situation and attempting to maintain desirable scholarship in school is especially great at this time.
2. That a closer relationship between course work and the work of the cooperative students on the job be established.
3. That some instruction be given in preparation for the job interview and on the use of the telephone. This training should be given sometime previous to their initial introduction into the cooperative program.
4. That a better rapport be established between the cooperative students and some of the teacher personnel who seemed less appreciative of the program.

Recommendations Concerning the Personal Traits and Efficiency Factors. Inasmuch as the graduates stressed the importance of assistance in the development of desirable personal traits and efficiency factors essential to success in business, the following recommendations are made:

1. That in all classes emphasis be directed toward developing habits of good attendance, punctuality, and accuracy in work, as well as the other aspects rated of special importance by the graduates.
2. That students be taught to choose office clothes wisely, and guidance be given on personal hygiene and good grooming.
3. That some additional training in personality development and in business etiquette be offered.

Other Recommendations. Recommendations are made relative to providing adequate counseling of the students in the following respects (1) selection of courses and majors; (2) the wise use of leisure time; (3) education after graduation, including the possibilities of scholarships; and (4) vocational guidance to students in their selection of positions that will provide personal satisfactions and rewarding remuneration.

Other suggestions and recommendations include more student participation in planning of school activities (by a minority of 30.6 per cent of the graduates) and more field trips to industry (by 37.1 per cent).

Recommendations for Further Research. The information derived from the study shows that the graduates are happy socially and successful professionally. Their success reflects to a great extent the effectiveness of the training they received while in school. It is recommended, however, that further study be made to secure an

evaluation from their employers as to their competency and the adequacy of their high school training, and that suggestions for the improvement of the school program be secured from the employers.

Evidence has been presented in this dissertation that the training offered by the High School of Commerce to its shorthand majors is, for the most part, effective. It shows, however, that there are operative factors in each of the above aspects of the program which could be improved to aid in the attainment of its optimum effectiveness.

A study of this type and of the one suggested may serve as bases for the elimination of such factors, insofar as they may be controlled, and result in an improved service to the students of the High School of Commerce and to the area of influence of the School.

APPENDIX A

Letter and Questionnaire Sent to Graduates from the High School
of Commerce in June, 1950, 1952, and 1954

DETROIT PUBLIC SCHOOLS

HIGH SCHOOL OF COMMERCE • 2330 GRAND RIVER AVENUE • DETROIT 1, MICHIGAN • Woodward 2-3484

HARRY L. DAVIS, Principal

July 20, 1955

Dear Commerce Graduate:

In an effort to find out how effective the Business Department of our High School of Commerce is in helping to train students for their future jobs in business and industry, we are asking you to help us evaluate your school program. We should appreciate very much your being frank and critical.

Your life outside of school and particularly your work in business, if you are employed, will enable you to give us valuable criticisms. Will you, therefore, please answer the questions on the enclosed form and return it as soon as possible. Most of the questions can be answered by making a simple check mark, which will take you only a few minutes.

We should like to include in our program training for the wise use of leisure time. For this reason, we are asking you about the way you spend yours. Your comments will help us revise our curriculum so that our students may receive better training in the future.

Your cooperation and suggestions will be greatly appreciated and will help in the improvement of instruction for other students of the High School of Commerce. The enclosed self-addressed envelope is for your convenience in returning the form to us. May we have your reply by July 30.

Sincerely yours,

Harry L. Davis, Principal

11h

THE SHORTHAND CURRICULUM
HIGH SCHOOL OF COMMERCE
DETROIT, MICHIGAN
June, 1955

Name: Miss
Mrs. _____
Mr. _____

Last First Phone No.

Address: _____
Street City State

Name of Employer: _____ Address: _____

I. Education Since Graduation

(1) Indicate what, if anything, you have done to further your education since graduation.

<u>Type of School</u>	<u>Course</u>	<u>Credit</u>
1) College _____	_____	_____
2) Business School _____	_____	_____
3) Public Night School _____	_____	_____
4) Training by Employer _____	_____	_____
5) School for Nurses _____	_____	_____
6) Others _____	_____	_____

(2) If you are a college student, are you working toward a degree?

- 1) Yes _____
2) No _____

(3) What is your field of study? _____

(4) How many semester hours have you to date? _____

(5) What incentive does your employer offer to encourage your further study, if any?

- 1) _____ Offers no incentive.
2) _____ Pays part or all of tuition.
3) _____ Allows time off for training.
4) _____ Makes record of training on employee's personnel record.
5) _____ Takes training into consideration when promotions are available.
6) _____ Gives training on job.
7) _____ Others (specify). _____

II. Vocational Information

(1) Will you please list below all positions you have held since graduation and indicate your chief work in each -- such as, stenographic, bookkeeping, clerical, filing. (Please use back of the sheet if more space is needed.)

<u>Name of Firm</u>	<u>Type of Work</u>	<u>Beginning Monthly Salary</u>	<u>Length of Time With Firm</u>	<u>Reason for Leaving</u>
1) _____	_____	_____	_____	_____
2) _____	_____	_____	_____	_____
3) _____	_____	_____	_____	_____
4) _____	_____	_____	_____	_____
5) _____	_____	_____	_____	_____

II. Vocational Information

- (2) What is your present employment status?
- 1) _____ Full-time regular employment.
 - 2) _____ Part-time employment.
 - 3) _____ Unemployed.
 - 4) _____ Student, not working
 - 5) _____ Housewife.
 - 6) _____ Other (specify). _____
- (3) What was the chief factor in the obtaining of your first job?
- 1) _____ Was a co-op, remained with company.
 - 2) _____ Work before graduation, not co-op.
 - 3) _____ Personal contact.
 - 4) _____ Employment agency.
 - 5) _____ Placement by school or faculty.
 - 6) _____ Family influence.
 - 7) _____ Advertisement.
 - 8) _____ Other (specify). _____
- (4) Have you had a promotion since you have been with your present employer?
- 1) _____ Yes.
 - 2) _____ No.
- (5) If so, describe briefly, telling the duties you perform now that you did not on previous position.
- _____
- _____
- _____
- (6) What are your chief duties?
- 1) _____ Taking and transcribing dictation.
 - 2) _____ Typing most of the time from copy.
 - 3) _____ Filing.
 - 4) _____ Answering the telephone
 - 5) _____ Receiving callers.
 - 6) _____ Typing invoices or other forms.
 - 7) _____ Others (specify). _____
- _____
- _____
- (7) Have you had a raise in salary while with your present employer?
- 1) _____ Yes.
 - 2) _____ No.
- (8) Are you paid on a 12-month basis _____, a 10-month basis _____, or other (specify)?
- _____
- _____
- (9) Indicate below your present salary before deductions.
- 1) \$ _____ salary per month.
 - 2) \$ _____ salary per week.
 - 3) \$ _____ salary per hour.
 - 4) \$ _____ other manner of payment (specify). _____
- _____
- (10) How many days or weeks vacation with pay do you receive yearly? _____

II. Vocational Information

- (11) Indicate below the way you feel about your job.
- 1) _____ Like my job very much. Plan to continue with company.
 - 2) _____ Hope to get a promotion soon to that of secretary or _____
 - 3) _____ Expect an increase in pay.
 - 4) _____ If I get a better job, will probably have to go to another company.
 - 5) _____ Want to quit and go into nursing or some other field. (specify) _____

- (12) List below the courses taken in high school or elsewhere, which have been of most and least value to you in your work.

	<u>Most Value</u>	<u>Least Value</u>
1) _____	_____	_____
2) _____	_____	_____
3) _____	_____	_____

III. Course Content

Most of the following items have been included as part of the course content of subjects you were required to take. Will you please check those items that have been of most value, and those that have been of least value, and the areas in which you wish you had had more training.

<u>Item</u>	<u>Most Value</u>	<u>Least Value</u>	<u>More Training Needed</u>
1) Making erasures on typewritten copy and carbons.	_____	_____	_____
2) Knowledge of office forms, telegrams, postal cards, index cards, invoices, etc.	_____	_____	_____
3) Cutting of stencils and use of mimeograph.	_____	_____	_____
4) Training in typing figures, special characters, etc.	_____	_____	_____
5) Making carbon copies, typing envelopes, etc.	_____	_____	_____
6) Typing legal documents.	_____	_____	_____
7) Copying from rough drafts.	_____	_____	_____
8) Writing letters of application.	_____	_____	_____
9) Typing tabulations.	_____	_____	_____
10) Knowledge of letter styles.	_____	_____	_____
11) Proof-reading and editing.	_____	_____	_____
12) Care of typewriter, changing ribbons, etc.	_____	_____	_____
13) Arranging itineraries.	_____	_____	_____
14) Making train reservations, etc.	_____	_____	_____
15) Speed and accuracy in transcribing letters for mailability.	_____	_____	_____
16) Penmanship.	_____	_____	_____
17) Composing original letters and notices.	_____	_____	_____
18) Spelling.	_____	_____	_____
19) Punctuation.	_____	_____	_____
20) Capitalization.	_____	_____	_____
21) Pronunciation and syllabication.	_____	_____	_____
22) Knowledge of grammar and sentence structure.	_____	_____	_____
23) Alphabetizing.	_____	_____	_____
24) Word usage and vocabulary building.	_____	_____	_____

III. Course Content - (continued)

	Most Value	Least Value	More Training Needed
25) Balancing the bank book.			
26) More emphasis on bookkeeping principles.			
27) Making up payrolls.			
28) Computing extensions and postage.			
29) Simple arithmetic problems such as computing interest.			
30) Figuring income tax.			
31) Fundamentals of simple arithmetic such as fractions.			
32) Drills in addition, multiplication, and other fundamentals.			
33) Use of the dictionary.			
34) List others.			

IV. Personality Traits and Efficiency Factors

Will you check below under Column A those traits that you consider very important and should be stressed in school; under Column B those that while desirable could be learned incidentally in school or on the job; and under Column C those that could be learned more effectively outside school or on the job.

	A.	B.	C.
1) Regular attendance.			
2) Being on time.			
3) Accuracy in work.			
4) Speed in work.			
5) Responsibility, dependability.			
6) Initiative.			
7) Ability to make decisions.			
8) Ability to take criticism without resentment.			
9) Ability to work under pressure -- meet deadlines.			
10) Appropriate dress and grooming.			
11) Cooperation with fellow employees.			
12) Cheerfulness.			
13) Personal hygiene.			
14) Interest in work.			
15) Ability to follow instructions.			
16) Neatness and order in desk, files, etc.			
17) Good appearance of work -- appropriate arrangement, without smudges, etc.			
18) Patience in checking figures, details, etc.			
19) Organization of work.			
20) Business-like habits, industry.			
21) Strict observance of recess and lunch periods.			
22) Social and business etiquette.			
23) Others (specify).			

V. High School Extra-Curricula Activities

Indicate below the number of semesters you were active in extra-curricula activities in high school, and those in which you served as an officer. Check also those that have been of special value to you in some way in your life since high school.

	<u>Activity</u>	No. of semesters you were a participant	No. of semesters you were an officer	Office held	Valuable since high school
1)	Biology Club	_____	_____	_____	_____
2)	Business Teens	_____	_____	_____	_____
3)	Debating Club	_____	_____	_____	_____
4)	Girls Athletic Club	_____	_____	_____	_____
5)	Girl Scouts	_____	_____	_____	_____
6)	Glee Club	_____	_____	_____	_____
7)	Library Staff	_____	_____	_____	_____
8)	Masquers Club	_____	_____	_____	_____
9)	Orchestra or Band	_____	_____	_____	_____
10)	Athletics (specify)	_____	_____	_____	_____
	_____	_____	_____	_____	_____
11)	School Paper	_____	_____	_____	_____
12)	Square Dancing Club	_____	_____	_____	_____
13)	Student Council	_____	_____	_____	_____
14)	Talent Show	_____	_____	_____	_____
15)	Y-Teen Club	_____	_____	_____	_____
16)	The School Play	_____	_____	_____	_____
17)	Other Activities	_____	_____	_____	_____
	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____

VI. Social Activities -- Leisure Time

- (1) Check the types of radio and television programs to which you listen regularly:
- 1) _____ Commentators
 - 2) _____ Drama, Individual
 - 3) _____ Drama, Serial
 - 4) _____ Educational Talks
 - 5) _____ Interviews
 - 6) _____ Music, Classical
 - 7) _____ Music, Modern
 - 8) _____ Political
 - 9) _____ Religious
 - 10) _____ Varieties
 - 11) _____ Others (specify)
- _____
- _____
- _____
- _____

- (2) Check the word that describes your attendance at church:
- 1) _____ Frequent
 - 2) _____ Occasional
 - 3) _____ Only on important holidays
 - 4) _____ Never
- (3) Check below any hobby or social activities in which you participate:
- 1) _____ Bowling
 - 2) _____ Bridge
 - 3) _____ Dancing
 - 4) _____ Photography
 - 5) _____ Social Club
 - 6) _____ Tennis
 - 7) _____ Others (specify)
- _____
- _____
- _____

VIII. Miscellaneous

(1) Indicate below the aspect in high school that has aided you most in your present social and business sphere-- such as an experience in school, a specific assignment, a certain teacher:

(2) Indicate that aspect that has aided you least: _____

(3) Describe a specific incident which you have experienced or observed at work that pleased your employer very much: _____

(4) Describe an incident that annoyed your employer very much: _____

(5) Indicate below your suggestions for improving the work of the high school in preparing the student for his future life:

- 1) _____ More field trips to industry.
- 2) _____ More student participation in planning of activities.
- 3) _____ More exacting standards maintained by teachers of skill subjects such as typewriting, shorthand, etc.
- 4) _____ Higher goals of speed in typewriting, shorthand, and transcription.
- 5) _____ More exacting standards in English.
- 6) _____ More courses offered for wise use of leisure, social dancing, tennis, etc.
- 7) _____ More work in personality development, business etiquette, etc.
- 8) _____ Others (specify).

APPENDIX B

Schedule of the Detroit Weekly Salary Rates of Typists,
Stenographers, and Secretaries

DETROIT WEEKLY SALARY RATES

	High	Low	Median	Middle 50% of Workers		Number of	
				High	Low	Plants	Employees
Copy Typist							
Junior	74	35	53	59	47	17	287
Senior	84	45	60	67	54	25	705
Stenographer	94	45	70	75	61	27	593
Secretary	129	50	84	93	76	32	431

The medians are used in this survey because they are less likely to be affected by extremely high or extremely low rates. In the survey, where the number of employees reported for a particular job is ten or less, data are omitted. The data included information from 23 manufacturing and 12 non-manufacturing employers.

APPENDIX C

Job Descriptions of Typists, Stenographers,
and Secretaries

JOB DESCRIPTION

Senior Copy Typist

1. Works under supervision and has no supervisory responsibilities. Types varied material of any degree of difficulty from either clean copy or rough draft. Specific work may include:
 - a. Typing tabular, columnar, and statistical material.
 - b. Typing reports, records, and letters of any degree of difficulty, including technical terminology and unusual terms.
 - c. Stencil cutting of varied material of any degree of difficulty.
 - d. Ability to arrange material for typing.
2. Work may be self-checked or spot checked by others.
3. Does NOT include taking dictation.

Junior Copy Typist

1. Works under supervision and has no supervisory responsibilities. Letters and copy typing of simple, business routine nature. Specific work may include:
 - a. Straight typing from clean copy or clear corrected copy.
 - b. Types form letters, simple reports, addresses and envelopes, and simple fill-ins, such as names and addresses.
 - c. Stencil cutting which involves only simple, straight-forward typing.
2. Work is usually checked or spot-checked by others.
3. Does NOT include taking dictation.

Stenographer

1. Under supervision, may work for one individual, may serve several correspondents, or may be attached to a central correspondence or stenographic department.
2. Takes dictation and transcribes by typewriting from shorthand notes.
3. Has no other responsibilities normally associated with those of a secretary.

Secretary

1. Performs general office work in relieving an executive, OR minor executive, OR other company official.
2. Takes dictation and transcribes by typewriting from shorthand notes.

3. Makes appointments for executive.
4. Interviews and screens people coming into the office.
5. Handles incoming and outgoing phone calls.

SECRETARY

Performs secretarial and clerical duties for a superior in an administrative or executive position. Duties include making appointments for superior; receiving people coming into office; answering and making phone calls; handling personal and important or confidential mail, and writing routine correspondence on own initiative, taking dictation (where transcribing machine is not used) either in shorthand or by stenotype or similar machine, and transcribing dictation or the recorded information reproduced on a transcribing machine, May prepare special reports or memoranda for information of superior.

STENOGRAPHER, GENERAL

Primary duty is to take dictation from one or more persons, either in shorthand or by stenotype or similar machine, involving a normal routine vocabulary, and to transcribe this dictation on a typewriter. May also type from written copy. May also set up and keep files in order, keep simple records, etc. Does not include transcribing machine work....

STENOGRAPHER, TECHNICAL

Primary duty is to take dictation from one or more persons, either in shorthand or by stenotype or similar machine, involving a varied technical or specialized vocabulary such as in legal briefs or reports on scientific research and to transcribe this dictation on a typewriter. May also type from written copy. May also set up and keep files in order, keep simple records, etc. Does not include transcribing-machine work.

TYPIST

Uses a typewriter to make copies of various material or to make out bills after calculations have been made by another person. May do clerical work involving little special training, such as keeping simple records, filing records and reports or sorting and distributing incoming mail.

Class A - Performs one or more of the following: Typing material in final form from very rough and involved draft; copying from plain or corrected copy in which there is a

frequent and varied use of technical and unusual words or from foreign-language copy; combining material from several sources, or planning layout of complicated statistical tables to maintain uniformity and balance in spacing; typing tables from rough draft in final form. May type routine form letters, varying details to suit circumstances.

Class B - Performs one or more of the following: Typing from relatively clear or typed drafts; routine typing of forms, insurance policies, etc.; setting up simple standard tabulations, or copying more complex tables already set up and spaced properly.

APPENDIX D

Responses of Graduates Concerning Aspects of Personal
Traits and Efficiency Factors

General Summary of Responses of 119 Graduates Concerning Significant
Aspects of Personal Traits and Efficiency Factors

Aspects	A Very Important	B Desirable	C Could be learned outside school	No Response	Response Omitted*	Percentage of Possible Score
1	106	11	0	1	1	95.3
2	105	12	1	0	1	94.0
3	109	7	1	0	2	96.1
4	53	49	11	5	1	68.6
5	75	21	17	4	2	75.7
6	50	29	22	6	2	67.1
7	49	34	32	3	1	57.4
8	70	20	24	3	2	70.2
9	65	29	23	0	2	67.9
10	76	30	13	0	0	76.5
11	51	42	22	0	4	62.6
12	52	43	18	3	3	65.0
13	88	16	13	0	2	82.1
14	41	45	30	2	1	54.7
15	99	10	7	2	1	89.7
16	66	34	18	0	1	70.3
17	102	10	6	0	1	90.7
18	57	47	13	0	2	68.8
19	58	36	21	2	2	66.1
20	57	36	21	3	2	65.2
21	57	31	30	0	1	61.0
22	56	31	27	3	2	62.7
Total	1552	623	370	37	36	73.2

*Response omitted because respondent gave more than one response to item.

Formula for determining percentage of possible score:

$$\frac{W_1 (N_1) + W_2 (N_2) + W_3 (N_3)}{W_1 (N_1) + N_2 + N_3}$$

N_1 = No. Responses - Column A

N_2 = No. Responses - Column B

N_3 = No. Responses - Column C

W_1 = 2; (Wt. Assigned to Column A Responses)

W_2 = 1; (Wt. Assigned to Column B Responses)

W_3 = 0; (Wt. Assigned to Column C Responses)

**GENERAL SUMMARY OF RESPONSES OF TWENTY-SIX 1950 GRADUATES CONCERNING
SIGNIFICANT ASPECTS OF PERSONAL TRAITS AND EFFICIENCY FACTORS**

Aspects	A	B	C	No Response	Response Omitted*	Percentage of Possible Score
	Very Important	Desirable	Could be learned outside school			
1	21	4	0	0	1	92.0
2	21	4	0	0	1	92.0
3	24	0	0	0	2	100.0
4	14	7	2	3	0	76.1
5	16	5	5	0	0	71.1
6	17	5	3	1	0	78.0
7	11	7	8	0	0	55.8
8	17	3	5	0	1	74.0
9	14	6	6	0	0	65.3
10	19	5	2	0	0	82.7
11	12	7	4	0	3	67.4
12	12	10	1	1	2	73.9
13	18	6	1	0	1	84.0
14	8	9	7	2	0	52.1
15	22	1	2	1	0	90.0
16	16	6	3	0	1	76.0
17	25	0	1	0	1	96.2
18	12	11	3	0	0	67.3
19	10	9	6	1	0	58.0
20	13	8	4	0	1	68.0
21	13	6	6	0	1	64.0
22	15	6	5	0	0	69.2
Total	350	125	74	9	14	75.1

*Response omitted because respondent gave more than one response to item.

Formula for determining percentage of possible score:

$$\frac{W_1 (N_1) \dagger W_2 (N_2) \dagger W_3 (N_3)}{W_1 (N_1) \dagger W_2 (N_2) \dagger W_3 (N_3)}$$

N_1 = No. Responses - Column A

N_2 = No. Responses - Column B

N_3 = No. Responses - Column C

W_1 = 2; (Wt. Assigned to Column A Responses)

W_2 = 1; (Wt. Assigned to Column B Responses)

W_3 = 0; (Wt. Assigned to Column C Responses)

**GENERAL SUMMARY OF RESPONSES OF THIRTY-NINE 1952 GRADUATES CONCERNING
SIGNIFICANT ASPECTS OF PERSONAL TRAITS AND EFFICIENCY FACTORS**

Aspects	A	B	C	No Response	Response Omitted*	Percentage of Possible Score
	Very Important	Desirable	Could be learned outside school			
1	33	6	0	0	0	92.3
2	32	7	0	0	0	91.0
3	35	3	1	0	0	93.6
4	18	14	6	1	0	65.8
5	25	8	5	1	0	76.3
6	19	9	8	1	2	65.3
7	16	11	9	2	1	59.7
8	22	9	7	1	0	69.7
9	20	12	7	0	0	66.7
10	21	13	5	0	0	70.5
11	16	12	11	0	0	56.4
12	12	19	6	1	1	58.1
13	27	6	5	0	1	78.9
14	9	18	11	0	1	47.4
15	29	7	2	0	1	85.5
16	20	10	9	0	0	64.1
17	32	2	4	0	1	86.8
18	20	14	4	0	1	71.1
19	19	9	10	0	1	61.8
20	17	8	13	0	1	55.3
21	14	11	14	0	0	50.0
22	16	10	11	1	1	56.8
Total	472	218	148	8	12	69.3

*Response omitted because respondent gave more than one response to item.

Formula for determining percentage of possible score:

$$\frac{W_1 (N_1) + W_2 (N_2) + W_3 (N_3)}{W_1 (N_1) + N_2 + N_3}$$

N_1 = No. Responses - Column A

N_2 = No. Responses - Column B

N_3 = No. Responses - Column C

W_1 = 2; (Wt. Assigned to Column A Responses)

W_2 = 1; (Wt. Assigned to Column B Responses)

W_3 = 0; (Wt. Assigned to Column C Responses)

**GENERAL SUMMARY OF RESPONSES OF FIFTY-FOUR 1954 GRADUATES CONCERNING
SIGNIFICANT ASPECTS OF PERSONAL TRAITS AND EFFICIENCY FACTORS**

Aspects	A	B	C	No Response	Response Omitted*	Percentage of Possible Score
	Very Important	Desirable	Could be learned outside school			
1	52	1	0	1	0	99.0
2	52	1	1	0	0	97.2
3	50	4	0	0	0	96.3
4	21	28	3	1	1	67.3
5	34	8	7	3	2	77.6
6	24	15	11	4	0	63.0
7	22	16	15	1	0	56.6
8	31	8	12	2	1	68.6
9	31	11	10	0	2	70.2
10	36	12	6	0	0	77.7
11	23	23	7	0	1	65.1
12	28	14	11	1	0	66.0
13	43	4	7	0	0	83.3
14	24	18	12	0	0	61.1
15	48	2	6	1	0	92.5
16	30	18	6	0	0	72.2
17	45	8	1	0	0	90.7
18	25	22	6	0	1	67.9
19	29	18	5	1	1	73.0
20	27	20	4	3	0	72.5
21	30	14	10	0	0	68.5
22	25	15	11	2	1	63.7
Total	730	280	148	20	10	75.1

*Response omitted because respondent gave more than one response to item.

Formula for determining percentage of possible score:

$$\frac{W_1 (N_1) + W_2 (N_2) + W_3 (N_3)}{W_1 (N_1) + N_2 + N_3}$$

N_1 = No. Responses - Column A
 N_2 = No. Responses - Column B
 N_3 = No. Responses - Column C

W_1 = 2; (Wt. Assigned to Column A Responses)
 W_2 = 1; (Wt. Assigned to Column B Responses)
 W_3 = 0; (Wt. assigned to Column C Responses)

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BIOGRAPHICAL DATA

The author received her B. S. degree from Wayne State University in June, 1947. She was granted a Master's degree from Wayne State University the following year.

For several years she has been employed as a teacher in the Detroit Public Schools in the field of business education, having taught at Wilbur Wright Vocational High School, Southeastern High School, and the High School of Commerce. She is presently employed as the head of the Business Department at Eastern High School. Prior to her work as a teacher with the Detroit Public Schools, she was employed for several years as a stenographer and secretary. In Detroit, she was affiliated with the General Motors Corporation, the Salt Producers Association, and with Bodman, Longley, Bogle, Middleton and Armstrong (a law firm).

She is a member of various organizations associated with her work, including the Detroit Teachers Association, Michigan Education Association, National Education Association, National Business Teachers Association, Business Teachers Association of Metropolitan Detroit, the Detroit Women Principals Club, Association of Department Heads and Counselors, Pi Omega Pi, and Pi Lambda Theta.

Through her training and experience, the author has always been particularly interested in the secretarial field and with the training, problems, and opportunities of the present-day stenographer and secretary. This dissertation is based upon research conducted by

her while she was employed as a teacher in business education at the High School of Commerce.