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## An Analysis of the Qualifications of Selected Business Students Who Graduated from Comstock, Michigan, High School to Determine the Adequacy of Their Training

Esther Larsen Fellows

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AN ANALYSIS OF THE QUALIFICATIONS  
OF SELECTED BUSINESS STUDENTS WHO GRADUATED  
FROM COMSTOCK, MICHIGAN, HIGH SCHOOL  
TO DETERMINE THE ADEQUACY OF THEIR TRAINING

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by  
Esther Larsen Fellows  
June, 1956

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A Thesis  
Submitted to  
the Faculty of the Graduate Division  
Western Michigan College of Education  
Kalamazoo, Michigan

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts

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E. L. F.

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## CHAPTER I

### THE PROBLEM AND ITS BACKGROUND

Since the first World War, business training on the secondary level has steadily grown in the number of students enrolled and in importance. New inventions, recent legislation involving more record keeping, and rapidly growing industry has brought about the demand for more workers, especially for office workers.

In a survey made in 1954 for the Comstock School Board it was found that most of the graduates from Comstock High School begin working in offices without further training. Although 49 per cent of the graduates seek further education before beginning regular employment, only 30 per cent of those who were employed in offices sought further training. It is for this reason that the business department must train the graduates so that they will be qualified to cope with the demands of the business community.

#### I. THE PROBLEM

Statement of the problem. In order to determine whether or not Comstock High School is giving adequate training to its business graduates so that they might be fitted for office positions, this study will: (1) survey the recent literature showing the results of studies made of high school graduates regarding their training for office positions;

(2) make a survey of the employers of the Comstock High School business graduates to determine whether or not, in their opinion, the students were properly trained for office employment; (3) summarize the results of these findings; and (4) make recommendations to the Comstock High School business department based on the results of these findings.

This problem brings the following questions into focus:

Are the Comstock High School graduates finished products of the business course?

Should the teachers stress accuracy more than speed in preparing graduates for office work?

Should more emphasis be placed on transcription in the teaching of shorthand?

Should the graduates have a broader knowledge of bookkeeping?

Are the graduates being familiarized with a sufficient number of office machines, especially the different types used in this area?

Are the business graduates prepared to meet the challenge facing them in a business office, after completing the secondary school business course?

Are the graduates lacking in personal traits, such as ambition, initiative, responsibility or cooperation?

Should the graduates acquire better English?

Should the graduates gain a better knowledge of mathematics?

Should only the more capable graduates be encouraged to become efficient stenographers and typists?

Should the school set up certain minimum standards to be met by the business graduates?

Importance of the study. The aims of the business studies department should be to help every business graduate acquire the knowledge and skills that meet the standards for initial employment set by the surrounding business offices where the graduate might later be employed.



Schneider<sup>1</sup> states:

"That there is need for the graduates of the vocational courses in business education is unquestioned. For fifteen years now, ever since the war clouds gathered in 1939 and business revived and gathered momentum, there has been an increasing, insistent demand for more and more trained-for-business graduates from the public high schools."

The purpose of this survey was to find the weaknesses, if any, in the business training of the Comstock High School graduates, and to suggest any needed changes in the curriculum so that future graduates may be better trained to meet the business office standards of the present day. Tonne<sup>2</sup> says that "the primary aim of business education is to prepare the student to obtain a position and to advance himself therein."

Tonne<sup>3</sup> stresses the importance of local surveys to help fill out the picture of the training needs that the high school and post-high-school business-training facilities must render. He states:

"It is often desirable to set up a local survey of business education. When a survey is well-conducted, it may have results similar to those already known, and also other fringe values. It makes the investigator himself more aware of the nature of his local community, and it gives him relationships with the local businessmen that might otherwise be difficult to obtain. Such surveys also make the businessmen aware not only of the difficulties of the high

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<sup>1</sup>Schneider, Arnold E., "New Frontier: Recordkeeping." Business Teacher, XXXI (May-June 1954), 7-8.

<sup>2</sup>Tonne, Herbert A., Principles of Business Education. New York: McGraw-Hill Book Company, 1954. p. 41.

<sup>3</sup>Tonne, loc. cit., p. 122.

school, but also of the very considerable contributions that the school is rendering."

George Linnane<sup>1</sup> explains the purpose of a follow-up study when he states that the school should

"make courses fit the needs of the community and the students. The follow-up data will provide the school with answers to such questions as: How effective was your course in shorthand? How much machine training is needed? Should attention be given to business etiquette and relationships in business? How useful were your vocational subjects? What recommendations would you make?

"The trend in employment can be followed more readily by an organized follow-up system, and at the same time the expectations and requirements of business can be observed. The number of graduates using their training and to what extent their training is being used may be determined through follow-up studies."

It was advisable to make this follow-up study by means of questionnaires. Erickson<sup>2</sup> defends the use of the questionnaire when he states:

"No other technique has been devised that will enable a school to evaluate its efforts of the past and to plan for each pupil currently in school, the kinds of training best adapted to his abilities and in the amount calculated to develop his maximum usefulness to himself, his community, and society."

The importance of this study was to determine how well Comstock High School has been preparing its business graduates for office positions.

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<sup>1</sup>Linnane, George W., "Guidance Tests That Predict Success in Business Education." The Balance Sheet, XXXV (October 1953), 63-5.

<sup>2</sup>Erickson, Clifford E. and Smith, Glenn E., Organization and Administration of Guidance Services. New York: McGraw-Hill Book Company, 1947. p. 120.

## II. DELIMITATIONS

This study was made specifically to determine how well the business graduate of Comstock High School was qualified for initial employment in an office.

It was considered important in this study to discover any weaknesses in the business training received by these graduates.

It was found necessary to conduct a follow-up of the graduates to determine where the business graduates had been employed, so that business firms could be contacted by questionnaires regarding their performances and qualifications. Consequently, a five-year follow-up study was made of the Comstock High School graduates of 1949-1953 to find out how many of the graduates were employed in business offices immediately after graduation. Further study was made to determine how successful these graduates were in office positions.

It was not the purpose of this survey to discover the amount of salary received by the business graduate, or to find out the opportunities for advancement in his position. How long the graduate had remained with one business firm, or how many different jobs he had held since graduation was not determined by this study of the Comstock High School business studies department.

## CHAPTER II

### REVIEW OF THE LITERATURE

Numerous pertinent surveys have been made in this area of business education. A brief summary of a few studies which are directly related to the problem will be given.

One of the most recent surveys was made by Blase<sup>1</sup> at Kansas State Teachers' College. The purpose of his survey was to determine the desirable qualifications required by employers of stenographic and clerical workers in the Joplin, Missouri area.

Data were collected by means of a check list filled out by employers in 60 offices. The material included in the check list was as follows: number of men and women engaged in office work; educational requirements for office workers; methods of contacting prospective office workers; training programs; factors considered in employing office personnel; personal traits and habits; general background attributes; and business skills and knowledges in the area of typewriting, bookkeeping, general clerical, stenography, and office machines.

The survey disclosed that more women than men were employed for office work at a ratio of three to one. Stenographers made up about 24 per cent of the total office workers.

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<sup>1</sup>Blase, Robert, "A Survey in the Joplin, Missouri Area to Determine the Desirable Qualifications Required by Employers of Stenographic and Clerical Workers." Unpublished Master's Thesis, Kansas State Teachers College, August 1952. Pp. 72.

Over half of the firms surveyed required only a high school education for stenographers and 72.54 per cent of the employers of clerks required only high school education.

The general background attributes most desired were found to be: computational ability, ability to speak well, command of English, penmanship, and spelling. There were some differences in the order of the above attributes for clerks and for stenographers.

Personal traits and habits that ranked most important were: reliability, honesty, ability to keep business matters confident, cooperation, courtesy, and loyalty.

The typewriting duties most performed by stenographers were: filling in forms, addressing envelopes, and typing from rough draft. Those most performed by clerks were: addressing envelopes, filling in forms, and composing business letters at the typewriter.

The most important bookkeeping duties performed by clerks were: balancing cash, posting to ledgers and making customers' statements. Those most performed by stenographers were: balancing cash, making customers' statements, and keeping accounts payable records.

The general clerical duties deemed most important for stenographers were: using the telephone, meeting office callers, filing, handling money and making change. Those most important for clerks were: handling money and making change, meeting office callers and using the telephone.

The office machines that stenographers used most were: adding machines, electric typewriters and dictating and transcribing machines. Those most used by clerks were: adding machines, bookkeeping machines, and key-driven calculators.

The information gained from making this survey was valuable to the teachers in business education in the Joplin, Missouri area, in training their students to meet the qualifications required in office positions.

Swafford<sup>1</sup> made an analysis of the specific duties performed by a selected group of office employees in Pittsburg, Kansas, which might have some bearing on this study. The purpose of Swafford's study was to determine the exact skills and knowledges that the office employees in the Pittsburg, Kansas, area are called upon to use in their work.

This survey was conducted by means of personally delivering a check list containing 194 possible office duties to 100 selected office employees representing forty-five offices in the Pittsburg area. Each employee was asked to check the duties he was called upon to perform in his work.

The specific duties were grouped into ten general areas on the check list. These ten groups were ranked according to the frequency with which they were checked by the employees

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<sup>1</sup>Swafford, Carmen, "An Analysis of the Specific Duties Performed by a Selected Group of Office Employees in Pittsburg, Kansas." Unpublished Master's Thesis, Kansas State Teachers College, 1953. Pp. 42.

participating as follows: office machines, bookkeeping, typewriting, duties involving meeting the public, mailing, filing, general clerical duties, banking duties, duties outside the office and dictation duties. The most commonly checked specific duties were using the typewriter, answering the telephone, filing material in alphabetical order, addressing envelopes, and giving information to others.

It was recommended by Swafford that instruction in office machines be given to all business students and that an opportunity be provided to enable business students to develop a marketable skill on the typewriter, the ten-key adding machine, the calculator, and the full-keyboard adding machine.

Since the bookkeeping duties most generally performed were making out checks, posting to ledgers, making customers' statements, balancing cash daily, checking postings, keeping expense accounts, and preparing payrolls, it was recommended that opportunities be provided for prospective office employees to become familiar with these procedures.

It was also recommended that the typewriting course include adequate instruction to develop competence in composing letters at the typewriter, since this was one of the most common typewriting duties, and that instruction be given to prepare prospective office employees to perform duties involving meeting the public, along with mailing, filing, general clerical, and banking duties.

Smith<sup>1</sup> made a survey of selected business firms in Monroe, Louisiana, to determine employment requirements for beginning secretaries and stenographers. The purpose of the survey was to determine the opportunities and requirements for beginning secretaries and stenographers in selected business firms in Monroe, Louisiana.

The survey was conducted by personal interviews with a representative of each business firm obtaining information regarding the employment requirements, and the replies were recorded on an interview schedule.

The survey covered 106 firms employing full-time secretaries and stenographers. Most firms indicated willingness to employ beginning secretaries and stenographers at the age of eighteen without previous working experience or formal education beyond high school graduation. Nearly all employers specified high school graduation as a minimum educational requirement. Women were preferred in secretarial and stenographic positions.

It was found that approximately one-third of the firms had minimum typewriting rate requirements; a smaller number of the firms had minimum shorthand-dictation rates. Only one firm out of 106 specified a minimum transcription rate.

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<sup>1</sup>Smith, Wilma Cleo, "A Survey of Selected Business Firms in Monroe, Louisiana, to Determine Employment Requirements for Beginning Secretaries and Stenographers." Unpublished Master's Thesis, Oklahoma A. & M. College (Stillwater), 1953. Pp. 70.



It was recommended by Smith that since a majority of beginning secretaries and stenographers will be expected to be able to file, to apply knowledge of bookkeeping principles and practices, and compose letters, these skills should be emphasized in the student training program.

It was also recommended that operation of the adding machine, calculator and duplicating machines, required of many secretaries and stenographers, should be included in the training program.

Sutton<sup>1</sup> made a survey of office machines and available office job opportunities in Muncie, Indiana. The purposes of this survey were to locate the various office-job opportunities for the high school graduate in the manufacturing industries of Muncie; to list the office machines in use by high school graduates on their initial jobs; to determine employment requirements; and to find out what questions employers ask a beginner during his interview.

The survey was conducted by personal interviews, using check lists, with office managers in fifty-four industrial firms.

It was found that of the 518 office employees, 93 per cent were females and 7 per cent males. Office clerks and

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<sup>1</sup>Sutton, Mary Etta, "A Survey of Office Machines in Use and Available Office Job Opportunities for High School Graduates in the Manufacturing Industries in Muncie, Indiana." Unpublished Master's Thesis, Ball State Teachers College, 1953. Pp. 46.

typists were even in number. Entrance tests were required for 30 per cent of the jobs.

Nearly 56 per cent of the employers were not in favor of a work experience program. Only 9 per cent required a minimum typing speed for employment. Half of the offices used shorthand dictation and one-third of them did not have a minimum standard for employment. The average minimum standard for shorthand speed was 80-90 words a minute.

The machines used in offices were: typewriters, adding machines, calculators, transcribers, bookkeeping machines, billing machines, checkwriters, mimeographs, direct process duplicators, and addressographs. Of the 310 typewriters used, 16 per cent were electrics.

The conclusions were that high school should continue to provide vocational training in business and that girls have the greatest opportunity as office clerks and typists for initial jobs.

It was recommended by Sutton that pupils be encouraged to obtain additional education that will give them background for advancement when the opportunity comes.

The results of the survey revealed that ability to operate the typewriter is the most useful skill for the beginning office worker and that instruction in the operation of the adding machine and calculator should be intensified.

Frey<sup>1</sup> made a follow-up study of graduates of Iowa City High School to obtain data that would be of assistance in curriculum planning in the business subjects and in the shaping of school policy.

The data were obtained by means of a questionnaire sent to the high school graduates and then compiled so that they would be useful in discovering and helping to meet the needs of the present students.

The purposes of the study were:

(1) to learn what subjects graduates studied and the uses made of those subjects

(2) to obtain a picture of work experience before and after graduation

(3) to learn what subjects graduates would recommend to others anticipating similar work experience

(4) to obtain from the graduates an evaluation of their training

(5) to discover the occupational choices of these graduates

(6) to obtain evaluation of the extra-curricular program.

Questionnaires were sent to 480 graduates and there was a return of 56 per cent. A large percentage of those 270 persons making returns indicated that they had taken typewriting in high school. Typewriting was the subject most frequently used

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<sup>1</sup>Frey, Edith Gurner, "A Follow-up Study of Iowa City High School Graduates." Unpublished Master's Thesis, University of Iowa, August, 1952. Pp. 77.

in part-time work during high school according to the summary of responses.

In the results of Frey's survey, it was found that clerical office work rated fifth place in the kind of jobs held by boys in the survey, but clerical work and typist-clerical were second highest for girls followed by secretarial, then bookkeeping and finally telegraphic operator. In determining the use of business subjects on jobs held after graduation, it was found that typewriting was used by 96 out of the 270 persons responding in the study, bookkeeping by 31, and shorthand by only 18.

A total of 109 graduates listed typewriting as of great importance in the commercial courses recommended for high school students and 44 considered it desirable.

Business English ranked second, commercial arithmetic ranked third, bookkeeping and clerical training ranked fourth.

English was indicated by the greatest number of graduates as the subject that had been of the most value in jobs held.

Typewriting was rated most useful from a personal use standpoint by 162 of 270 persons responding. Bookkeeping was second, shorthand third and commercial geography fourth.

It was found that 64 per cent of the graduates reported having attended college at some time. Liberal arts was the field of study pursued by the greatest number and commerce was next. Under the subjects considered not useful in real life, history and foreign language took the burden of criticism.

Developing study and work habits and acquiring greater ability in the basic skills were indicated on the questionnaires as areas in which more help was needed. The next suggestion was that more help should be given in preparing for marriage, home-making, and parenthood.

In the conclusions of this study, Frey found that 40 per cent of those who had studied typewriting made use of it on their jobs.

It was also found that 32 per cent of those who studied shorthand made use of it on the job, and 33 per cent of those who studied bookkeeping used it on the job. It was concluded that the percentage of students using business subjects on the job is not as large as those shown in similar studies in other localities. The smaller percentage was due in some measure to the large percentage in college attendance.

No major in business studies was offered in the high school; only a college preparatory course was offered. Frey recommended that a business course be offered, based on the results of the findings.

Other studies have been made in certain communities to determine how well the high school business department was preparing its graduates for initial employment. Fritz<sup>1</sup> made such a study of Punxsutawney, Pennsylvania.

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<sup>1</sup>Fritz, Noble V., "A Study to Determine How Well the Business Education Department of Punxsutawney High School is Meeting the Community Needs of Punxsutawney Firms Who Hire its Graduates for Office and Sales Work." Unpublished Master's Thesis, Pennsylvania State College, 1952.

Park<sup>1</sup> and Witherow<sup>2</sup> each made a follow-up study of graduates with business education training to determine whether or not the business graduates had adequate training for office work.

Studies have also been made relative to the duties and requirements of office workers. Two recent studies were made by Logan<sup>3</sup> and Walker.<sup>4</sup>

Plocher<sup>5</sup> made a study of graduates from the office practice course at Bowling Green, Ohio, to determine the value of their training.

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<sup>1</sup>Park, Edward E., "A Follow-up Study of the Commercial Graduates of Burlington High School during the Years 1947-51." Unpublished Master's Thesis, State University of Iowa, 1952.

<sup>2</sup>Witherow, Mary E., "A Follow-up Study of the Unionville (Missouri) High School Graduates with Business Education Training for the Years 1948-1950." Unpublished Master's Thesis, State University of Iowa, 1952.

<sup>3</sup>Logan, Helen L., "Office Standards for Beginning Workers in Business Offices in Ossian (Indiana) area." Unpublished Master's Thesis, Ball State Teachers College, 1952.

<sup>4</sup>Walker, Erwin W., "A Study of the Duties and Requirements of Office Workers in Independence, Missouri." Unpublished Master's Thesis, State University of Iowa, 1952.

<sup>5</sup>Plocher, Howard M., "A Follow-up Study of the Office Practice Students From the Years 1947 to 1952, Inclusive, to Evaluate the Effectiveness of their Training." Unpublished Master's Thesis, Bowling Green (Ohio) State University, 1953.

Walsingham<sup>1</sup> made a similar study in Pinnellas County, Florida, to determine the adequacy of preparation for initial employment of the business education graduates.

Russell<sup>2</sup> conducted a survey in order to make an analysis of the traits and abilities needed by clerical workers for employment in Salina, Kansas.

In a Michigan high school survey at Saginaw, Anderson<sup>3</sup> made a study of office training graduates for the years 1948-51. The results of that survey showed that thirty-three per cent held office clerical positions, nineteen per cent were secretaries, sixteen per cent were stenographers, ten per cent were bookkeepers, five per cent were cashiers, three and one-half per cent machine operators, and three and one-half per cent were receptionists. Those in other types of office positions totaled ten per cent.

In a recent study of an analysis of the office duties in 42 firms in East Chicago, Macek<sup>4</sup> reported pertinent data.

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<sup>1</sup>Walsingham, Ophelia, "The Adequacy of Preparation for Initial Employment of the Business Education Graduates of the Pinnellas County, Florida, Senior High School." Unpublished Master's Thesis, University of Florida, 1954.

<sup>2</sup>Russell, Robert H., "An Analysis of the Traits and Abilities Needed by Clerical Workers in Salina, Kansas." Unpublished Master's Thesis, Kansas State Teachers College, 1945.

<sup>3</sup>Anderson, Mildred, "Michigan High School Makes Survey." The Balance Sheet, XXXV (November, 1953), 124-6.

<sup>4</sup>Macek, Joseph J., "Indiana Office Occupations Survey." The Balance Sheet, XXXIV (October, 1952), 70-1.

Table I contains this information.

TABLE I  
RESULTS OF AN ANALYSIS OF THE OFFICE DUTIES IN EAST CHICAGO

OCCUPATION	LARGE INDUSTRY	SMALL INDUSTRY	SMALL BUSINESS
General Clerical	55%	26.5%	15.2%
Stenographers	18	13.7	21
Calculator Operators	9.6	7.1	--
Billing Clerks	6.9	6.3	--
Secretaries	3	7.4	14.1
Stock Clerks	3.3	6.6	--
Bookkeepers	2.2	4.3	21
Miscellaneous	2.0	28.1	28.7

According to the results above, the largest percentage falls in the office clerical position.

The results of the Chicago and the Saginaw studies correspond with the percentages in different office positions found in the answer to the first question in this survey of Comstock High School.

Numerous other valuable studies have been made, but only a few important surveys have been reviewed in this chapter. There is a relationship between the studies reviewed and the follow-up study of the business graduates of Comstock High School.



## CHAPTER III

### TECHNIQUES AND METHODS USED FOR THIS STUDY

A five-year follow-up study of the Comstock High School graduates of June, 1949, through June, 1953, was made.

Comstock High School is situated in the southwestern part of Michigan on the fringe of a metropolitan area. Most of the workers of the community commute to the city of Kalamazoo for employment.

At the time of this study, 314 students were enrolled in the high school with eighteen full-time teachers employed. The teacher-pupil ratio was 18.2, which is a lower percentage than the average teacher-pupil ratio in the state.

Four courses of study are offered in addition to the general course. A student may select two majors and two minors from a college preparatory course, a mechanical course, a home economics course, or a business course. The five different course offerings in the high school curriculum are listed in the chart on the following page.

Description of the graduate's questionnaire. A survey by questionnaire was conducted to determine what percentage of the graduates were employed in business offices, and where they had been employed, so that a further study could be made to determine how well these business graduates were trained for office occupations.

## COMSTOCK HIGH SCHOOL COURSE OF STUDY

1954-1955

COLLEGE	MECHANICAL	HOME ECONOMICS	COMMERCIAL	GENERAL
Algebra English 2 Electives Physical Education	Algebra or General Math. English Shop I Mech. Drawing I Physical Education	Algebra or General Mathematics English Home Economics I 1 Elective Physical Education	English General Mathematics Business Arithmetic 1 Elective Physical Education	English General Mathematics Physical Education 2 Electives
English Geometry Modern European History Biology I	English Geometry Shop II Mechanical Drawing II	English Bus. Arithmetic Home Economics II 1 Elective	English Typing I 2 Electives	English 3 Electives
English American History Chemistry 1 Elective	Shop III Mechanical Drawing III 2 Electives	Chemistry American History Home Economics III 1 Elective	English American History Bookkeeping Typing II Shorthand I	American History 3 Electives
Adv. Composition Gov't. & Problems Adv. Math or Physics 1 Elective	Adv. Composition Gov't. & Problems Shop IV 1 Elective	Adv. Composition Gov't. & Problems Home & Family Living 1 Elective	Gov't. & Problems Office Practice Shorthand II Co'op Training	Gov't. & Problems Adv. Composition 2 Electives

Electives to be taken from the subjects listed in other groups

The questionnaire technique was decided upon as the means for collecting data from the graduates of the years 1949-1953. After analyzing the problem and making a study of related literature, including studies of a similar nature, a questionnaire was constructed. This questionnaire was then submitted to the Comstock High School principal for criticism. His suggestions were based upon the value to be derived from the desired information in planning the high school curriculum.

Next, the questionnaire was studied by each department in the high school, and the teachers were asked to add any pertinent questions that they would like to have answered on the questionnaire.

After the staff had offered their suggestions, and their questions had been included in the form, the questionnaire was again presented to the principal for final approval. He also approved and signed the letter which was to accompany the questionnaire in this study.

Names of the graduates were obtained from the official list of those who had received diplomas. Addresses were received from the school directory. School office personnel, members of the faculty, and the students were helpful in collecting the addresses of graduates of whom they had personal knowledge. The telephone directory was also helpful.

The introductory letter, which was signed by the principal, was attached to the questionnaire with a return addressed,

stamped envelope and mailed on October 25, 1954, to every graduate of the past five years. A total of 189 questionnaires was sent.

As replies came in, they were checked against the mailing list. The addresses of all the graduates of the five years were brought up to date.

Copies of the questionnaire and the cover letter may be seen in the Appendix.

The questionnaire asked for the following data: the name of the graduate, the present address, the year graduated, and information concerning any school attended since graduation. The next question was regarding whether or not the graduate was or had been in the Armed Services, in order to find out how many of the graduates went into service from high school.

In order to know about the graduate's present employment, he was asked to check one or more of the following: employed for wages, full-time; employed for wages, part-time; self-employed; housewife; in school, full-time; unemployed and seeking work; or others.

If the answer to the question, "What kind of work do you do?" was some type of office work, the respondent was asked the name of the employer, the name of the firm, and the type of work he did. This information was used as a source for the questionnaires sent to employers of those business graduates.

The answers to the next group of questions were opinions to be expressed by the graduates about their high school education. These questions, which helped to evaluate the high school program, were as follows:

Which of the following subjects that you carried in high school (English, science, mathematics, foreign language, and social studies) gave you adequate preparation for your college work? (Answer only if you went to college.)

Which of the following helped you most in selecting an occupation, and in making your educational and vocational plans? Check one or more: parents, other relatives, friends, teacher, principal, work experience, no help received, school subjects.

Where was the knowledge or training needed in your present occupation gained?

To what extent has your school training helped you on your present job?

What subjects do you feel the school should have offered which would be of more value to you now?

What subjects do you feel the school could have eliminated because they are of no value to you now?

To what extent has the vocational information and guidance you received in high school been helpful to you?

Could a guidance counselor have helped you more while in school to solve your problems at home, at school, with people, and with your vocational selection?

What leisure time activity did the school offer which helped you most in your present life?

Do you feel that the teachers required too little work?

Do you think that you were overworked in school?

Do you feel that your time in school could have been better spent?

In order to discover how much the school had helped the graduate to meet his present-day problems, the respondent was asked fourteen questions about his training. He was to designate by only a check mark whether the school had helped him a great deal, some, very little or none, or if he were not certain about his training. A table listing these different points to be evaluated may be found on page 3 of the questionnaire. (See the Appendix.)

Description of the employer's questionnaire. The answers to the question, "Did you work in an office after graduating?", on the above questionnaire, were used to make a further study. A questionnaire was sent to each employer named on the returns by whom a business graduate had been employed.

In the introductory letter, the employer was asked to fill out a questionnaire and give helpful suggestions about the business graduates from Comstock High School in order to discover whether or not the graduates were qualified to meet the needs of the offices in which they were employed. The letter stated that the employer did not need to sign his name on the questionnaire, and if there were any questions he did not wish to answer, he could omit them. This letter was signed by the person making this study.

Fisk<sup>1</sup> believes that job analyses and follow-up studies should be qualitative as well as quantitative to be of most use in curriculum construction. He advises:

"The point is that some judgment must be exercised in the use of job analysis data. Such data should be factual although it is probably wise in order to introduce the qualitative element to give some consideration to empirical data. Empirical data submitted by employers should be checked against identical data submitted by workers. 'Opinionnaires' have their place in determining what content should be included, but their use must be tempered by their limitations."

From the results of the follow-up study of the Comstock High School graduates, it was found that thirty graduates out of the first hundred returns had been employed in business offices after graduation. These thirty graduates had been employed by twenty-four Kalamazoo firms, and a questionnaire was sent to each of the twenty-four business offices regarding the qualifications of the Comstock graduates.

The employer's questionnaire was patterned after a report on cooperative office work experience used by Ewing High School, Trenton, New Jersey. The report appeared in an article by Davolio<sup>2</sup> in the Balance Sheet, and it listed the personal, scholastic, and fundamental factors which were suitable for evaluating business graduates. A copy of the questionnaire used for this survey appears in the Appendix.

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<sup>1</sup>Fisk, McKee, "Principles of Curriculum Construction in Vocational Business Education." The Changing Business Education Curriculum. The American Business Education Yearbook, IV, 1947, 43.

<sup>2</sup>Davolio, Rose M., "Planning a Cooperative Office Work-Experience Program in a New High School." The Balance Sheet, XXXV (May, 1954), 390-3.

In the first section of the employer's questionnaire, he was asked: first, if he had employed a business graduate of Comstock High School in his office during the past five years; second, what type of work the employee had performed; and third, the make and type of machines used in his office. These questions were asked to determine the demand for specific training in business education and what kinds of business machines were being used most in the surrounding area.

The chief purpose of the questionnaire sent to the employer was to determine how well the graduates had qualified for the position they held. Therefore, the second section of the questionnaire consisted of five parts listing skills or traits to be evaluated as superior, good, or poor by means of a check mark. The five points to be evaluated were:

(1) the graduate's skill performance, including typewriting, shorthand, bookkeeping, filing, general clerical, calculation machine operation, and duplicating processes; (2) production ability, described as volume of work, quality of work, steadiness, organization of work, and resourcefulness; (3) fundamentals, including spelling, handwriting, punctuation, arithmetic, and speech; (4) business techniques, such as, ability to meet people, to work harmoniously with others, to use office telephone, and to use sources of information, and (5) personal traits, consisting of appearance, manners, adaptability, accuracy, punctuality, and judgment.



At the close of the questionnaire, the employer was asked to list any skills in which the graduate should have had more training and also any skills and fundamentals in which the graduate was considered to be adequately trained. The last statement called for suggestions in regard to further training.

All of the twenty-four business firms receiving questionnaires made replies regarding the thirty business graduates covered in the survey.

## CHAPTER IV

### FINDINGS OF THE SURVEY

In the follow-up study that was made of the Comstock High School graduating classes of 1949, 1950, 1951, 1952, and 1953, one hundred and eighty-nine questionnaires were mailed. Of these, one hundred, or 53 per cent of the questionnaires were returned, and it is on the basis of these one hundred responses that the results are computed.

Results of the survey of the graduates. The results showed that 49 per cent of the graduates who sent returns sought further education after graduation. Secretarial training ranked second to the field of teaching in the list of college courses pursued. Only 30 per cent of the business graduates sought further training after they graduated from high school.

In the results of the graduate survey, 49 per cent of the graduates indicated that they were employed full-time. All of the business graduates were employed full-time. Clerical work was performed by 42 per cent of the business graduates listing the kinds of work they were doing. Secretarial duties were performed by 25 per cent of the business graduates, 11 per cent were machine operators, another 11 per cent were receptionists, 8 per cent were PBX operators, and only one graduate was an IBM key-punch operator.

At least 40 per cent of the business graduates expressed the opinion that they had gained more knowledge or training needed in their present occupations from their high school subjects, while 30 per cent expressed the opinion that they had gained more knowledge through work experience.

The school subjects listed as having been most helpful in giving them the training needed were: typing, office practice, office machines, bookkeeping and mathematics.

Those graduates who had gone to college believed that the high school had given them adequate preparation for college work in English, mathematics, science, and social studies. A few believed that grammar was not stressed enough in school.

About 37 per cent of all graduates who responded believed that school subjects were of great value to them in their present jobs, while 60 per cent of the business graduates indicated that they derived great value from their high school subjects. The following figure shows a comparison between the responses of all the graduates and only the business graduates.

#### VALUE OF SCHOOL SUBJECTS IN THEIR PRESENT JOBS

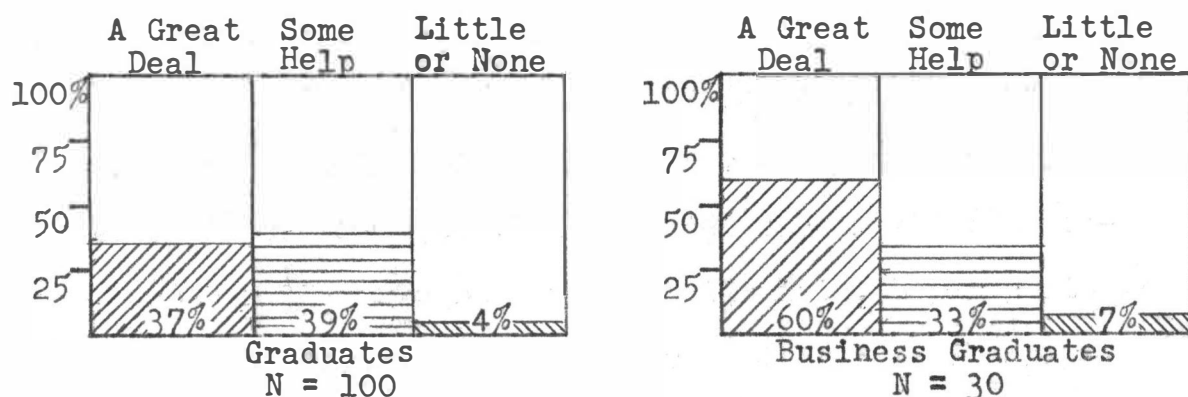


FIGURE 1

The subjects which the business graduates listed that the school should have offered in the order of importance were: home and family living, more advanced typing, shorthand, bookkeeping, more business machine training on newer machines, and more grammar, spelling and penmanship.

Retailing, art, and history were named as some subjects that the school could have eliminated because they were of no apparent value.

The following figures reveal the comparison between the opinions expressed by all graduates and business graduates regarding how much the school helped them in their everyday lives. Only the percentage of those who believed they derived little or no value is shown here.

PERCENTAGE OF THOSE WHO DERIVED LITTLE OR NO HELP  
IN USING SPARE TIME

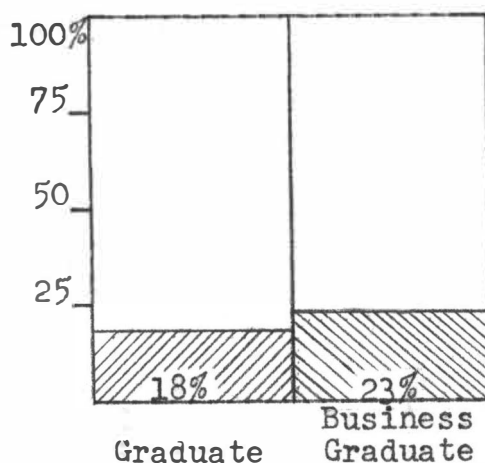


FIGURE 2

PERCENTAGE OF THOSE WHO DERIVED LITTLE OR NO HELP  
IN TAKING CARE OF HEALTH

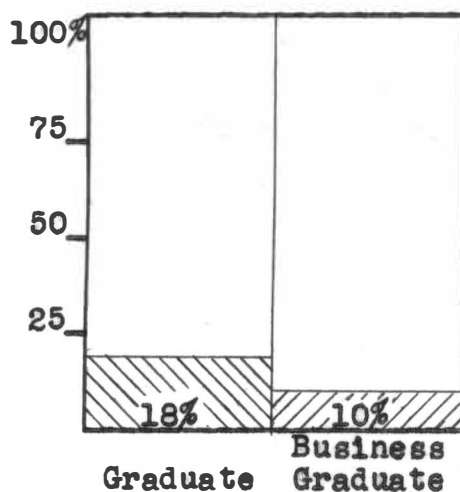


FIGURE 3

PERCENTAGE OF THOSE WHO DERIVED LITTLE OR NO HELP  
IN PREPARING FOR MARRIAGE AND FAMILY LIFE

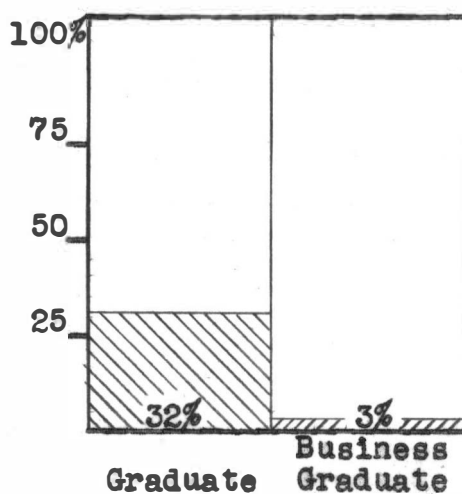


FIGURE 4

PERCENTAGE OF THOSE WHO DERIVED LITTLE OR NO HELP  
IN PREPARING FOR FURTHER EDUCATION

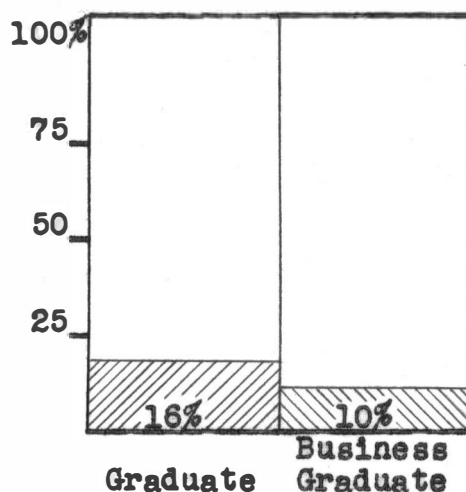


FIGURE 5

PERCENTAGE OF THOSE WHO DERIVED LITTLE OR NO HELP  
IN SECURING A JOB

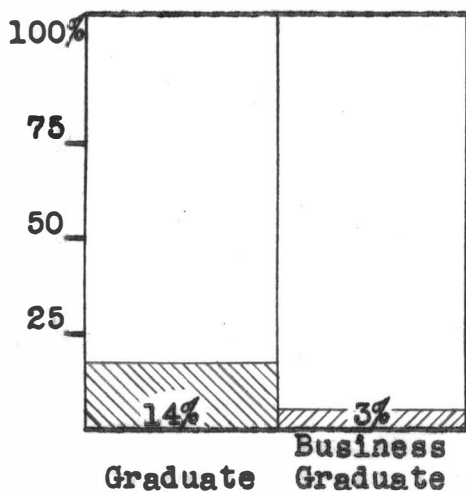


FIGURE 6

PERCENTAGE OF THOSE WHO DERIVED LITTLE OR NO HELP  
IN USING BASIC MATHEMATICAL SKILLS

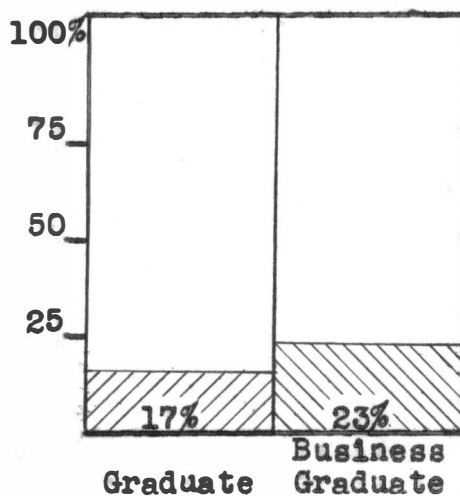


FIGURE 7

PERCENTAGE OF THOSE WHO DERIVED LITTLE OR NO HELP  
IN USING ART COURSES IN EVERYDAY LIFE

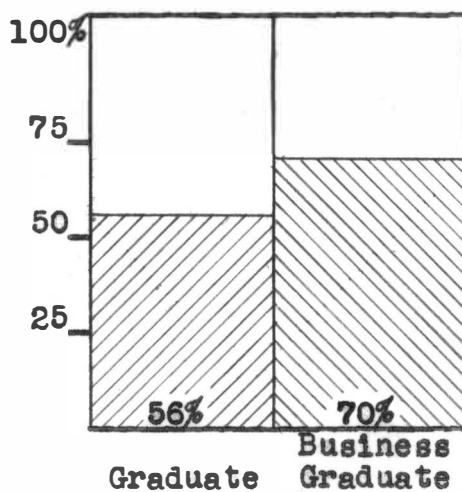


FIGURE 8

PERCENTAGE OF THOSE WHO DERIVED LITTLE OR NO HELP  
IN THINKING THROUGH PROBLEMS

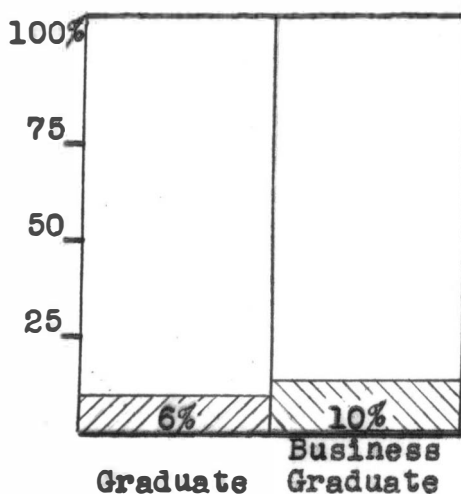


FIGURE 9

PERCENTAGE OF THOSE WHO DERIVED LITTLE OR NO HELP  
IN USING SCIENCE IN EVERYDAY LIFE

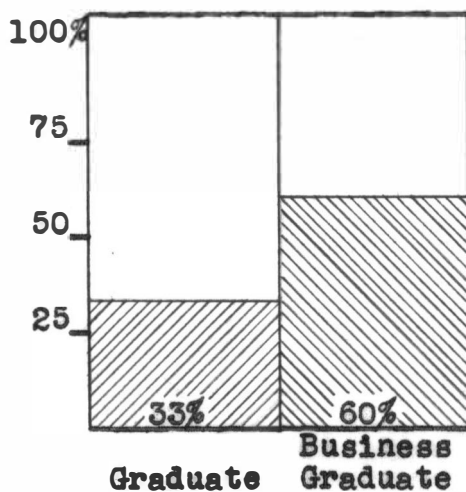


FIGURE 10



Approximately 49 per cent of the graduates checked that the teachers did not require enough work in school, and 67 per cent of the business graduates believed that the teachers did not require enough work.

It was found that 3 per cent of the graduates thought that they were overworked, but none of the business graduates thought that they were. It appears that the business graduates made better use of their time in school, because 67 per cent of them expressed the opinion that they had spent their time well, while only 30 per cent of all the graduates were of the opinion that their time had been well spent.

Most of the comments and suggestions on the questionnaires from the business graduates were favorable. The following list contains the individual comments:

"I feel what I learned in high school has served to make me a somewhat well-rounded person. Comptometer School, unknown to me or anyone else at the time, was a stepping stone to my present job, which affords better pay and opportunity. This survey will certainly help in attaining the end result you seek."

"It would be beneficial to the student if anyone taking a college preparatory course were required to take a foreign language. Perhaps study methods could be taught in high school so that in college the student will have a knowledge of how to study."

"All in all, I think it's a good school."

"When I was in school most of the teachers would not give assignments for several days and then they would all give large ones at the same time. I think all of them should give small daily assignments."

"I think the teachers should stress the need of good spelling and penmanship a good deal more."

"I think there should be more teaching in spelling. Everybody should know how to spell the most common words. Penmanship is another. I work with a lot of mail, and only half of the people know how to spell and many people do not write plain. I would like to see spelling and penmanship stressed more in school."

"I think the commercial department should have at least one or more electric typewriters. I use one while working and there is quite a difference between that and the manual typewriter. The touch system is completely different."

"I think subjects related to home and family living should be offered in the senior year."

"This school has helped me a great deal in a lot of ways. I have no suggestions to make because a very good job is already being done."

"More composition writing should be taught along with more grammar. Literature courses were adequate."

"I think that in a lot of cases students could not take certain subjects because they were not able to arrange their schedules."

"There should be greater stress on the teaching and understanding of personal health. There should be a class offered to seniors in family problems and in getting along with others."

"In the Kalamazoo area, students should definitely be encouraged to continue studies in college. Mathematics along with English should be compulsory, also a more intensive study of American History. Students at Comstock should have more background in classical music and literature."

"Had there been more of this co-op training program, I think it would have helped set us up better. It would have been better to start a new full-time job after co-op training, than just starting out after graduation with no experience at all."

"I hope I have been of some help to you in conducting this survey. I think it's a grand idea to be interested in improving your school program, and I am most willing to cooperate anytime."

Results of the survey of the employers. As a result of all Comstock High School graduates for the five years, 1949-1953, it was found that thirty of the graduates from the first hundred returns had been employed in business offices after graduation. These thirty graduates had been employed by twenty-four Kalamazoo firms, and a questionnaire regarding the qualifications of the Comstock business graduates was sent to each of these business offices.

Of the twenty-four business firms receiving questionnaires, 100 per cent replied, giving information about the thirty graduates covered in this survey.

In answer to the first question regarding the type of work that the graduates had performed, general office work, involving typewriting, clerical work and filing was performed by 18 or 60 per cent of the office workers, machine posting was done by 4 or 13 per cent, and the remaining 27 per cent had each performed different tasks.

Eight different types of work were designated. These included cashier, keypunch operator, office assistant, payroll clerk, policywriter, telephone recorder, switchboard operator, and safety vault attendant.

The different types of machines used by the twenty-four firms in the order of frequency used were: manual typewriters, Burroughs and Monroe adding machines, Monroe (rotary) calculators, Elliot and Fisher and also National accounting

machines, electric typewriters, Comptometers, National cash registers, addressographs, multilith machines, telephone recorders, checkwriters, checkprotectors, mimeographs, spirit duplicators and receipt registers.

The employers of the business graduates were asked to rate their office workers regarding their skill performance by checking superior, good or poor on the questionnaire. The results are shown in Table II.

TABLE II  
EVALUATION OF GRADUATES IN SKILL PERFORMANCE

	Superior	Good	Poor
Typewriting	10%	40%	--
Shorthand	--	3	--
Bookkeeping	--	17	3
Filing	10	40	--
General Clerical	17	33	--
Calculation Machine Operation	3	23	--
Duplicating Processes	3	3	--

The employers were requested to evaluate the production ability of the office workers, and the results of these evaluations appear in Table III.

TABLE III  
EVALUATION OF GRADUATES IN PRODUCTION ABILITY

	Superior	Good	Poor
Volume of work	13%	47%	--
Quality of work	13	30	--
Steadiness	23	37	--
Organization of work	7	43	--
Resourcefulness	10	43	3

A basis of fundamentals is important in the training of every business graduate. How the office workers were rated in fundamentals is revealed in Table IV.

TABLE IV  
EVALUATION OF GRADUATES IN FUNDAMENTALS

	Superior	Good	Poor
Handwriting	13%	37%	7%
Spelling	7	37	10
Punctuation	--	30	7
Arithmetic	3	33	--
Speech	10	30	10

The employers rated the business graduates regarding the business techniques they had acquired as shown in the following table.

TABLE V  
EVALUATION OF GRADUATES IN BUSINESS TECHNIQUES

	Superior	Good	Poor
Ability to meet people	7%	50%	--
Ability to work with others	17	40	--
Ability to use office telephone	13	23	7
Ability to use information sources	3	27	--

The final part of the check list was regarding the personal traits of the office workers. The opinions expressed by the employers are revealed in the table below:

TABLE VI  
EVALUATION OF GRADUATES IN PERSONAL TRAITS

	Superior	Good	Poor
Appearance	10%	50%	--
Manners	17	43	--
Adaptability	17	43	--
Accuracy	13	40	7
Punctuality	20	40	--
Judgment	13	53	--

One-third of the employers (33 per cent) were of the opinion that their business office employees from Comstock High School should have had more adequate training in certain aspects. It was believed by 8 per cent that the employees should have had more training in bookkeeping fundamentals and working with figures. The same percentage indicated that their employees should have received more training in grammar.

It was recommended by 4 per cent of the employers that more training be given in machine operations and also in transcription by machine.

Another 4 per cent of the employers indicated that there should be more training in typewriting, another 4 per cent mentioned shorthand, another 4 per cent listed psychology (or the ability to get along with others), and the final 4 per cent believed their office workers should have had more training in spelling. Results are shown in Table VII.

TABLE VII

## PERCENTAGE INDICATED FOR MORE ADEQUATE TRAINING

Type of Training Needed	Percentage of Employers
Bookkeeping fundamentals and working with figures. . .	8%
Letter-writing and grammar . . . . .	8
Machine operations and machine transcription . . . . .	4
Typewriting . . . . .	4
Shorthand . . . . .	4
Ability to get along with others and attitudes . . . .	4
Spelling . . . . .	4

Only 12 per cent of the employers answered the question which was included on the questionnaire to determine whether or not the employee was adequately trained. One employer made the comment that the graduate had been "very well trained."

According to the results, one employee was adequately trained in speech and another well trained in typewriting.

In the space provided for added comments and suggestions on the questionnaire, employers gave some worthy suggestions.

One employer advised that the school should concentrate on fundamentals, because students should be well versed in fundamentals.

One of the employers was satisfied with his office worker, and reported that the employee would be eligible for rehire. Another employer was very satisfied with the performance of the graduate.

One respondent made the comment that responsibility and the importance of one's application to his or her job might be stressed more in the training for office work.

One graduate was employed in a Kalamazoo bank. The comment about that employee as it appeared on the questionnaire was:

"We have recently transferred her to our bookkeeping department where she will run a bookkeeping machine. She will gain a great deal of knowledge regarding bank business and it will benefit her when she again works with the public."

Conclusions drawn from the results of this follow-up study and recommendations pertaining to these results are discussed in the next chapter.



## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

In order to determine whether or not Comstock High School is giving adequate training to its business graduates so that they might be fitted for office positions, this study has: (1) surveyed the recent literature showing the results of studies made of high school graduates regarding their training for office positions; (2) made a survey of the employers of the Comstock High School business graduates to determine whether or not, in their opinion, the students were properly trained for office employment; and (3) summarized the results of these findings; and now recommendations will be made to the Comstock High School business department based on the results of these findings.

In the preceding chapter, the results of the follow-up study made of Comstock High School graduates and the results of the survey of the employers of business graduates are recorded. In the following conclusions, the results have been analyzed to determine what implications this study might have for the business training of future graduates.

Conclusions of the survey of the graduates. Because only 30 per cent of the business graduates sought further training after they graduated from high school, it is

recommended that the high school continue to offer a terminal course for seniors, such as office practice, for the business graduates. Adequate business training is also essential to the business graduates who plan to take advantage of further study, since secretarial training ranked second to the field of teaching in the list of college courses pursued.

Almost half of the graduates who were employed in business offices or 42 per cent performed clerical duties. Therefore, it is recommended that the various clerical duties performed in an office be practiced in the advanced business courses. The students might gain a broad background of business procedures and a knowledge of general clerical duties from a course in general business training, if such a course were offered. A mastery of the basic fundamentals of arithmetic is also important in the business training curriculum. At the present time, a course in business mathematics is being offered for freshmen.

Secretarial duties were performed by one-fourth of the business graduates. This 25 per cent is significant enough to justify the continuance of offering two years of shorthand training.

It is recommended that various office machines be taught on the acquaintanceship level, inasmuch as 11 per cent of the business graduates were machine operators.

The results of this study revealed that 11 per cent of the business employees were receptionists; therefore, it is important that the graduate be taught how to use the telephone properly, to meet the public, to use grammar correctly, and to develop a pleasing personality in addition to the skills and fundamentals.

Although the results of this survey showed that 8 per cent of the office workers were PBX operators, it does not seem advisable for the school to offer training on a PBX board. It would be too costly to offer such training, and, furthermore, PBX systems vary according to the needs of the different offices in which they are used. It is essential that the fundamentals of good telephone usage be taught in the business curriculum, because answering the telephone is one of the most common clerical duties.

It was found that only one graduate out of one hundred was an IBM keypunch operator; hence, it would not be practicable to offer training on the IBM machine in Comstock High School. Most industries which use the IBM keypunch machine offer training to their employees in the operation of this machine.

A majority of the graduates expressed the opinion that they gained the knowledge needed in their present occupations from their high school subjects. It is recommended that the high school continue to offer vocational business training to its students.

The school subjects listed as having been most helpful in giving the graduates the training needed were: typing, office practice, office machines, bookkeeping and mathematics. It is recommended that the training be intensified in these subjects.

It was found that 60 per cent of the business graduates who responded believed that school subjects were of great value to them in their present jobs, while only 37 per cent of all the graduates believed that they derived great value from their high school subjects. Also it was found that only 30 per cent of the business graduates received further training after high school graduation while 49 per cent of all graduates sought further training. It would seem, therefore, that the business courses are of greater value to the business graduates because they are terminal in nature.

It was interesting to note that the business graduates listed the same subjects that should have been offered in high school as the rest of the graduates. They suggested that a course in home and family living be offered and that more grammar, spelling and penmanship be taught. Comstock now offers a course in home and family living to the seniors, a course which is proving to be an interesting and valuable elective. It is recommended that more grammar, spelling, and penmanship be integrated into the business course along with the training in skills and fundamentals, instead of leaving that phase of education entirely to the English teachers.

The business teachers and the English teachers strive to correlate the business and English courses, so that the students might get better training in these fundamentals.

In Figures 1 through 10, which reveal the percentages of those who believed they derived little or no value from their school training, it is indicated how the percentages of all graduates compare with the percentages of graduates who had business training. These tables show the evaluation of the benefits derived from school training in relation to: using spare time, taking care of health, preparing for marriage and family life, using basic mathematical skills, preparing for further education, using art courses, thinking through problems, securing a job, using science in everyday life.

A small percentage of the business graduates believed they received little or no value in preparing for marriage and family life. It was found that 80 per cent of the business graduates had married since graduation. Because four-fifths of the business graduates had married, it is recommended that all business graduates be given the opportunity of electing the course in home and family living, which is offered to seniors.

In Figure 8, page 33, it is shown that a greater per cent of the business graduates derived little help in using art courses in everyday life than did all graduates. The same is shown in Figure 10, page 34, regarding the value of

science in everyday life. It is recommended that the art and science courses be electives for the business students who are particularly interested in these subjects. It would seem that in answering this question, the graduates did not consider mathematics as a part of science. The great value of mathematics in every office would seem to indicate that science should be of greater value to the graduates in their everyday life than they had indicated in their responses to this question.

Since 49 per cent of all graduates and 67 per cent of the business graduates expressed the opinion that they were not required to do enough work in school, it is recommended that the faculty of Comstock High School consider the problem of assigning adequate amounts of work to challenge the abilities of the students.

A significant comment made by the graduates was the recommendation that more penmanship, spelling and grammar be stressed in the high school curriculum.

It was also recommended that the commercial department have an electric typewriter, and one was added to the Comstock business department last year. This typewriter is in great demand and is constantly being used in the office practice room; therefore, it is recommended that, as soon as it is financially possible, an electric typewriter be bought for use in the typing room also. Typewriting representatives

relate that there are more electric typewriters being sold on the market to business offices than manual typewriters, so, the typing students should be familiarized with the features of the electric typewriter.

Conclusions of the survey of the employers. From the results of the employers' questionnaires, it was found that the types of work performed by the office workers differed from the classifications given by the business graduates on their questionnaires. There was a greater percentage classified as performing clerical work than performing secretarial duties. Clerical duties were performed by the greatest percentage of the office workers; therefore, an adequate proportion of the business training program should be devoted to clerical phases as well as secretarial training.

Machine posting was done by 13 per cent, so it is recommended that skill in the performance of the posting machine be promoted. In addition to a desk-size posting machine in the business department, there is a large posting machine which was donated to the school last year by the Home Savings Bank of Kalamazoo. The large machine is an excellent tool in helping to round out the office practice course.

The other types of machines most frequently used by the business firms covered by this survey were typewriters, adding machines, and Monroe (rotary) calculators. These machines are included in the Comstock business department and are being

constantly used to train the business students for initial jobs. Every student in the office practice course must have acquaintanceship knowledge and be able to pass a test on every machine in the department so that when the student completes the course, he will be competent in the operation of machines in his initial job.

Although few firms stated that they used the mimeograph or the spirit process duplicator, it is recommended that the business graduates be qualified to operate these duplicating machines in order to be better prepared for office work.

The employers rated their office workers in skill performance as either superior or good in typewriting, shorthand, filing, general clerical duties, operation of the calculator and in the duplicating processes. Only 3 per cent rated their office employees as being poor in bookkeeping. It is recommended that more stress be placed on the office duties and phases of record keeping that a bookkeeper would be expected to perform in his initial job. It is not recommended that two years of bookkeeping be taught in Comstock High School because of the small number who are actually placed in bookkeeping positions when they graduate.

In the results of this study, the business graduates were considered weak by 10 per cent of the employers in resourcefulness, handwriting, spelling, punctuation, and speech. It is recommended that the business students be taught to be



more resourceful in their studies. The students should be encouraged to plan for themselves, to pay attention to instructions, to carry out instructions efficiently, and to find out some things for themselves. It is also recommended that the basic fundamentals handwriting, spelling, punctuation, and speech be stressed in high school through reviews and remedial practice. These practices might be integrated in the skill courses.

The graduates were rated as superior or good in production ability, including volume of work, quality of work, steadiness, and organization of work, so it is recommended that these essential abilities continue to be stressed in the Comstock business department.

The ability to meet people, ability to work harmoniously, ability to use the office telephone, and the ability to use sources of information were the business techniques rated by the employer. They were all rated as superior or good with the exception of the ability to use the office telephone. It is recommended that the school continue to stress the importance of good telephone usage. A unit on the telephone is included in the office practice course for the seniors, and all seniors who plan to work in offices are encouraged to take the course.

It is recommended that accuracy be stressed in typewriting, in proofreading, in transcription--either from shorthand or a transcribing machine, and in working with figures.

The students should be taught to proofread their own type-written material and to discover their errors so that they will gain vocational competence.

Because it was found that 8 per cent of the employers believed the business graduates to be inadequately trained in bookkeeping fundamentals and in the ability to work with figures, it is recommended that business arithmetic be required as a prerequisite to a course in bookkeeping. It is further recommended that a greater understanding of the bookkeeping principles and fundamentals be promoted. The ability to work with figures should be stressed in the bookkeeping classes and also in the office practice course where the business machines are used.

It is concluded from the results of this study that the business graduates should have received more training in letter-writing and grammar; therefore, it is recommended that more business letter-writing activities, such as composing letters at the typewriter, be assigned to the business students. Grammar should be stressed in the writing of these letters, so that the letters would be acceptable for mailing. The students should be able to place letters correctly on the page, use the correct and accepted letter forms, use good grammatical construction, use good writing sense, fold letters properly, address envelopes in good style, and type letters accurately and neatly. These performances might be taught in

the typewriting classes, the transcription classes, and also in the office practice course.

The employers indicated that more training be given in machine operations and also in machine transcription. The business department is equipped with a ten-key adding machine, a full-keyboard adding machine, four crank-driven calculators, one semi-automatic rotary calculator, and the posting machine. The different machines provide the opportunity for all of the office practice students to gain an acquaintanceship level of training on them. It is recommended that a newer ten-key adding and listing machine be added to the department, and a fully automatic calculator be available for use.

It is now possible to give adequate training on transcribing machines, because the school secures both the Ediphone Voicewriter and the Dictaphone on the rental plan.

Since 4 per cent of the employers indicated that there should be more training in typewriting and in shorthand, it is recommended that the school continue to offer two years of training in both shorthand and typewriting. It would be advisable to give more intensive training in both courses.

Only 4 per cent of the employers indicated that the employees need more training in attitudes and the ability to get along with others. It is recommended that the importance of good attitudes, tact, and willingness to work with others be constantly stressed in the training of office workers.

The students should be made aware of the importance of human relationships in the business office. To be successful in an office, the graduate must possess good attitudes in addition to skill performance.

It may be concluded that Comstock High School business graduates found clerical jobs, made successful adjustments, and that their high school courses were of value, especially typewriting. Based on these conclusions, then, it is recommended that emphasis be placed on clerical courses, proofreading, and that typewriting be made available to all students.

Additional studies comparable to this one should be made in order to determine other factors which might be pertinent to the Comstock business department. Further study might be made to determine the standards of achievement desired by the employers for beginning office workers, opportunities for advancement in office positions, and how often the graduates change positions. Another study might be made to discover how many of the graduates who took shorthand in high school actually used it in their beginning occupations.

This survey is only a beginning in the attempt to determine whether or not Comstock High School is adequately training its business graduates. It is hoped that it will promote interest in the training of the business graduates and that other follow-up studies will be made to determine how Comstock High School can better serve its community in the proper training of students pursuing a business career.

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## D. UNPUBLISHED MATERIALS

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- Frey, Edith Gurner, "A Follow-up Study of Iowa City High School Graduates." Unpublished Master's Thesis, University of Iowa, August 1952. Pp. 77.
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- Russell, Robert H., "An Analysis of the Traits and Abilities Needed by Clerical Workers in Salina, Kansas." Unpublished Master's Thesis, Kansas State Teachers College, 1945.
- Smith, Wilma Cleo, "A Survey of Selected Business Firms in Monroe, Louisiana to Determine Employment Requirements for Beginning Secretaries and Stenographers." Unpublished Master's Thesis, Oklahoma A & M College, 1953. Pp. 70.
- Sutton, Mary Etta, "A Survey of Office Machines in Use and Available Office Job Opportunities for High School Graduates in the Manufacturing Industries in Muncie, Indiana." Unpublished Master's Thesis, Ball State Teachers College, 1953. Pp. 46.
- Swafford, Carmen, "An Analysis of the Specific Duties Performed by a Selected Group of Office Employees in Pittsburg, Kansas." Unpublished Master's Thesis, Kansas State Teachers College, 1953. Pp. 42.

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October 25, 1954

Dear

Your high school is interested in knowing what you have been doing since you left school. We feel that through your experience we may be able to improve our program so as to better meet the needs of the boys and girls still in school.

Will you please assist us by filling in and returning the enclosed questionnaire? The greater the number of responses, the greater will be the value of this survey. Your name will not be used in connection with your answers. The information furnished by you and your classmates will be used for statistical purposes only. However, if there are any questions which you do not care to answer, just omit them.

You can answer most of the questions very quickly, by means of a check mark or a few words. However, if you have any further comments or suggestions, we would be glad to have you write them in the spaces provided.

We would greatly appreciate an immediate reply.

Very truly yours,



Richard Young, Principal

RY:EF

Would you care to give the name and address of a relative or friend through whom we can locate you in future years in case you are temporarily among the "missing"? Please write it below.



## FOLLOW-UP STUDY OF GRADUATES

OF

## COMSTOCK HIGH SCHOOL

(NOTE: Your answers will be considered confidential. They will be used only for statistical purposes and for the improvement of our school program.)

Date \_\_\_\_\_

Your Name \_\_\_\_\_ Present Address \_\_\_\_\_

If Mrs., give maiden name here \_\_\_\_\_ Class of \_\_\_\_\_

1. Have you attended any school since graduation? Yes \_\_\_\_\_ No \_\_\_\_\_

2. If Yes, give name of school and dates of attendance:

Name of school \_\_\_\_\_ Dates \_\_\_\_\_ Course \_\_\_\_\_

\_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_

\_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_

3. Are you now, or have you been, in the Armed Services of your country? Yes \_\_\_\_\_

No \_\_\_\_\_

4. What are you doing now? (Please check one or more)

Employed for wages, full-time \_\_\_\_\_ In school, full-time \_\_\_\_\_

Employed for wages, part-time \_\_\_\_\_ In school, part-time \_\_\_\_\_

Self-employed \_\_\_\_\_ Unemployed and seeking work \_\_\_\_\_

Housewife \_\_\_\_\_ Others (please describe) \_\_\_\_\_

5. Kind of work you do \_\_\_\_\_

6. Did you work in an office after graduating? If so, please give name of your employer and type of office work:

Employer \_\_\_\_\_

Firm \_\_\_\_\_

Type of work \_\_\_\_\_

7. Which of the following subjects that you carried in high school gave you adequate preparation for your college work? (Answer only, if you went to college.)

English \_\_\_\_\_ Science \_\_\_\_\_ Mathematics \_\_\_\_\_ Foreign language \_\_\_\_\_ Social Studies \_\_\_\_\_

8. Which of the following helped you most in selecting an occupation and in making your educational and vocational plans? (Check one or more)

(1) Parents \_\_\_\_\_ (4) A teacher \_\_\_\_\_ (7) No help received \_\_\_\_\_  
 (2) Other Relatives \_\_\_\_\_ (5) Principal \_\_\_\_\_ (8) School subjects \_\_\_\_\_  
 (3) Friends \_\_\_\_\_ (6) Work Experience \_\_\_\_\_ (Name them) \_\_\_\_\_

9. Where was the knowledge or training needed in your present occupation gained?

10. To what extent has your school training helped you on your present job? (Check appropriate blank to the right)

(1) A great deal \_\_\_\_\_  
 (2) Some \_\_\_\_\_  
 (3) Little or none \_\_\_\_\_  
 (4) I'm not certain about this \_\_\_\_\_

11. a. What subjects do you feel the school should have offered which would be of more value to you now?

- b. What subjects do you feel the school could have eliminated because they are of no value to you now?

12. To what extent has the vocational information and guidance you received in high school been helpful to you?

(1) A great deal \_\_\_\_\_ (3) Little or none \_\_\_\_\_  
 (2) Some \_\_\_\_\_ (4) I'm not certain about this \_\_\_\_\_

13. Could a guidance counselor have helped you more while in school to solve your problems at home, at school, with people, and vocational selection?

Yes \_\_\_\_\_ No \_\_\_\_\_

14. What leisure time activity did the school offer which helped you most in your present life?

15. Please indicate by checking in the proper column how much this school helped you in regard to each of the following:

	A Great Deal	Some Help	Little or None	Not Certain
(1) Using your spare time . . . . .	. . . . .	. . . . .	. . . . .	. . . . .
(2) Taking care of your health . . . . .	. . . . .	. . . . .	. . . . .	. . . . .
(3) Taking part in community affairs..	. . . . .	. . . . .	. . . . .	. . . . .
(4) Marriage and family life. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
(5) Securing a job . . . . .	. . . . .	. . . . .	. . . . .	. . . . .
(6) Getting along with others . . . . .	. . . . .	. . . . .	. . . . .	. . . . .
(7) Preparing for further education . .	. . . . .	. . . . .	. . . . .	. . . . .
(8) Understanding your abilities . . . .	. . . . .	. . . . .	. . . . .	. . . . .
(9) Deriving value from English . . . .	. . . . .	. . . . .	. . . . .	. . . . .
(10) Using basic mathematical skills . .	. . . . .	. . . . .	. . . . .	. . . . .
(11) Using art courses in everyday life.	. . . . .	. . . . .	. . . . .	. . . . .
(12) Conducting own business affairs . .	. . . . .	. . . . .	. . . . .	. . . . .
(13) Thinking through problems . . . . .	. . . . .	. . . . .	. . . . .	. . . . .
(14) Deriving value from science . . . .	. . . . .	. . . . .	. . . . .	. . . . .

16. Do you feel that the teachers required too little work? Yes \_\_\_\_\_ No \_\_\_\_\_

17. Do you think that you were overworked in school? Yes \_\_\_\_\_ No \_\_\_\_\_

18. Do you feel that your time in school could have been better spent? Yes \_\_\_\_\_ No \_\_\_\_\_

If you have further comments or suggestions for improving any part of this school's program, please state them here.

**THANK YOU FOR YOUR HELP AND COOPERATION.**

January 10, 1955

Gentlemen:

The business department of Comstock High School is interested in discovering whether or not the past business graduates from our school are well qualified to meet the needs of the offices in which they are employed. We feel that through your experience and helpful suggestions we may be able to better train our students for office positions.

Will you please assist us by filling out and returning the enclosed questionnaire. The information you can give us will be of great value in this survey. Your name will not be needed on this questionnaire, and if there are any questions which you do not care to answer, just omit them.

You can answer most of the questions very quickly, by means of a check mark or a few words. However, if you have any further comments or suggestions, we would be glad to have you write them in the space provided.

We would greatly appreciate an immediate reply.

Very truly yours,

COMSTOCK HIGH SCHOOL

*Esther Fellows*

(Mrs.) Esther Fellows  
Business Studies Instructor

# FOLLOW-UP STUDY OF OFFICE EMPLOYEES

63

## TRAINED BY THE COMSTOCK HIGH SCHOOL BUSINESS DEPARTMENT

Date \_\_\_\_\_

You, as an employer are asked to please fill out this report and return it in the attached envelope. The report should be mailed to: Comstock High School  
Attn. Mrs. Esther Fellows  
Comstock, Michigan

Have you employed a business graduate of Comstock High School in your office during the past five years? (Please check.)

\_\_\_\_\_ Yes \_\_\_\_\_ No

If so, please write the type of work done by the employee: \_\_\_\_\_

Please list the make and type of machines used in your office: \_\_\_\_\_

Please check your impression of the following skills and traits possessed by the graduate, and evaluate by checking in the appropriate column:

<u>Skill Performance:</u>	<u>Superior</u>	<u>Good</u>	<u>Poor</u>
Typewriting . . . . .			
Shorthand (note taking or machine trans.) .			
Bookkeeping . . . . .			
Filing . . . . .			
General Clerical . . . . .			
Calculation Machine Operation . . . . .			
Duplicating Processes . . . . .			
<u>Production Ability:</u>			
Volume of work . . . . .			
Quality of work . . . . .			
Steadiness . . . . .			
Organization of work . . . . .			
Resourcefulness . . . . .			

Please check in the appropriate column how you would rate this employee:

<u>Fundamentals:</u>	<u>Superior</u>	<u>Good</u>	<u>Poor</u>
Handwriting . . . . .			
Spelling . . . . .			
Punctuation . . . . .			
Arithmetic . . . . .			
Speech . . . . .			
<u>Business Techniques:</u>			
Ability to Meet People . . . . .			
Ability to Work Harmoniously with others. . .			
Ability to use office telephone . . . . .			
Ability to use sources of information . . . . (dictionary, telephone directory, etc.)			
<u>Personal Traits:</u>			
Appearance . . . . .			
Manners . . . . .			
Adaptability . . . . .			
Accuracy . . . . .			
Punctuality . . . . .			
Judgment . . . . .			

In which skills, if any, do you think the employee should have had more training?

In which skills and fundamentals do you think the employee was adequately trained?

If there are any suggestions you would like to offer in regard to better training, please write them below: