

AN ABSTRACT OF THE THESIS OF

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Title Business Office Survey of Representative Portland Firms

Abstract approved: \_\_\_\_\_

(Major Professor)

The problem of this thesis is to determine the requirements of beginning office workers in representative business offices of Portland, Oregon, and, further, to determine the extent to which these requirements are being filled by beginning employees.

Questionnaires were sent to 195 office managers, 150 of whom were members of the National Office Management Association. Telephone calls and personal interviews were additional methods employed in the survey, which resulted in a return of 45.1 per cent.

The study revealed that a wide variety of duties is required of the beginning office workers in these Portland offices. The duties which were performed by the largest number of workers were: using the typewriter, using the telephone, using the adding machine, and meeting the public.

A large majority of office managers contacted indicated that beginning workers were deficient in accuracy. Three fourths of the office managers found workers lacking in initiative. Office managers also found workers deficient in personality and in attitude.

Clerical workers were found to lack a basic understanding of business. Typists were indicated as being deficient in proofreading and in careful erasing and correcting of copy. Stenographers were found to be unable to compose letters, to transcribe accurately or to spell correctly. Office managers stated that accuracy is far more important than speed in all phases of office work.

The survey also included questions regarding the machines in use in business offices and the amount of training required to operate them.

Questions were also asked regarding the amount of school education required for beginning workers in various office positions. It was found that, in general, the more responsible positions required more specialized training.

It was found that the most common basis for selection of employees was that of the personal interview. When securing information about applicants, office managers were most interested in learning about their intelligence, character, and personality.

Asked to express their opinions on the subjects of a cooperative work program for students, the use of business entrance examinations, and the value of office experience for business teachers, office managers stated their approval of these programs.

On the basis of the information compiled in this study, certain recommendations are made. The findings of the survey should be made available to interested persons, such as prospective business workers, vocational counselors, business educators, and administrators. An attempt should be made to set up a cooperative work program for business students, to encourage the use of business entrance tests, and to recommend office experience for business teachers.

It is further recommended that a city supervisor of business education be appointed to coordinate the activities of business and the schools of Portland.



BUSINESS OFFICE SURVEY  
OF  
REPRESENTATIVE PORTLAND FIRMS

by

ELIZABETH BRYANT OREM

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BUSINESS OFFICE SURVEY  
OF  
REPRESENTATIVE PORTLAND FIRMS

CHAPTER I

INTRODUCTION

Over two million students in the United States today are enrolled in business subjects. (20, p.64) How well are these courses preparing them for the business world?

For more than one hundred years, business education in the United States has attempted to keep pace with business itself. From the very beginning of business education in a Boston high school in 1824, students have continued to enroll in business courses in ever-increasing numbers throughout the years. It is evident that this training is fulfilling a very definite need.

The United States, with its unique system of private enterprise, its heritage of self-made men, its knowledge of manufacturing techniques, its vast resources and inventive genius, has established the greatest industrial nation in the history of the world. It has accomplished this in 150 years. Over sixty million persons are employed today in the United States. (2, p.159)

This phenomenal growth of business and industry has been accompanied by a similar and even more remarkable growth in a field which was hardly considered in the

business world fifty years ago--that of the business office. In the office are employed persons who are not directly concerned with the manufacture, the sale, or the distribution of the product. These persons are concerned solely with the keeping of records, the handling of communications, and the preparation of statements and reports which interpret the activities of the business to the officers of the company or the stockholders. These are the office or clerical workers, more popularly known as "the white-collar class." It is with this category of workers that this survey will be concerned.

Twenty-five per cent of the persons gainfully employed in the United States were in this category in 1940. (4, p.272) In the last ten-year period, it is estimated that this group of workers has greatly increased, not only in actual numbers, but also in proportion to the total number of workers.

One reason for the increased number of office workers is the expansion of business after the second World War. During the short interim between that war and the outbreak of the Korean war, offices operated on a peace-time basis and attempted to restore office staffs to normalcy. Still another reason for the increased number of office workers is a decrease in efficiency which is due to lack of training and to an indifferent attitude on the part of the worker. The result of this is that "more office workers

are required now (1946) than before the war to do exactly the same amount of work." (19, p.12) In fairness to the office workers and those who train them, it must be pointed out that office workers are not alone in receiving this criticism. Nearly every type of worker in all phases of production and distribution of goods has also revealed this same lowered efficiency and indifferent attitude toward work.

The third reason for the increased number of workers in business offices is the increase in governmental regulation of business, which requires the keeping of additional records and the preparation of countless forms and papers.

Those men who have been concerned with the selection and supervision of office workers have continually faced the problems of dismissals and resignations and have interviewed and trained new employees to fill existing vacancies. Approximately 200,000 clerical vacancies are to be filled each year. Today over 90 per cent of these office vacancies are to be filled by women. And to the amazement of the 1950 census taker, married women who are working outnumber single women by a seven-to-five ratio. (16, p.457) This new group of workers is presenting problems which are just beginning to be recognized by management.

However, today the office manager is facing a situation similar to the last war period. There is real



competition among business firms for qualified personnel, as increased demands upon the manpower pool are made by the armed forces, essential war work, and the government. The quality, as well as the number of office workers which is available for civilian office employment, is being decreased. Portland businessmen are becoming increasingly aware of the shortage of qualified clerical workers in this area.

Business can look to two sources for the solution of the office labor-shortage problem. First, there is the potential group of older women workers, not now employed, who may return to office jobs. Whether they will return, and in sufficient numbers, is debatable. The second group of potential workers, and one in which businessmen are becoming more and more interested, is the group now being trained in business in the schools.

Just how satisfactory is the beginning, school-trained worker in the business office? Are the secondary schools doing a good job of preparing students for work in today's business offices? Are these schools preparing an adequate number to fill the need?

In order to answer these and similar questions, it is necessary to take them directly to the experts in that field, the businessmen themselves.

Where this has been done, and it has been done in many cities all over the country, the results have been

surprising. An exchange of ideas between the educator and the businessman has assisted in the satisfactory selection, and placement of students. Businessmen, teachers, administrators, students, and the general public have come to realize the difficulties which the schools face in training prospective workers in a changing business world. There has been a realization that in order to do that job well, there must be close cooperation among all parties concerned with that training program.

That a costly employee-training program must now be provided by the company for inexperienced workers is the cause of much criticism of business education today. One educator who has conducted research in this field points out that there is a need for vocational objectives in the business-skill subjects that will meet head on the production requirements in offices. He points out further that until some plan is devised to facilitate the training of young people to handle their initial jobs more effectively than has been the case in the past, business education will continue to suffer prestige with the public that supports it. (20, p.73)

It is evident that business education must be as flexible as business itself, in order to adjust to developments which are taking place in the business world. The business training program must be constantly evaluated, improved, and revised. Businessmen must be consulted

frequently in order to ascertain the exact requirements of business, and to discover modern business methods and procedures.

### Statement of the Problem

The purpose of this thesis is to determine the requirements of beginning office workers in representative business offices of Portland, Oregon, in the period from 1950 to 1951, and to discover how well these requirements are being filled by beginning office employees.

It is recognized that not all beginning employees are coming into the business world direct from the schools. Little can be done to train the members of the heterogenous group returning to the business world after a period of time, except in company-sponsored training programs. However, the preparation of school-trained office workers is adjustable to meet the demands of business.

### Values of the Study

When asked about their experiences with beginning office workers, office managers can and do relate many tales of inadequately trained and misinformed applicants. For example, there is one tale about a young girl who answered an advertisement for a receptionist, but was

amazed to discover that she would be expected to type, to file, and even to dust the employer's desk.

Another manager tells of a new filing clerk who arrived at her job dressed in her finest, only to discover that the filing work included stapling voluminous stacks of carbon copies, wrapping packages for the mail, climbing a ladder to the top warehouse files. "I always thought filing clerks had a desk and a private office," she moaned. "If I had known what the job was like, I never would have applied." And the manager could have saved his firm the expense of hiring and training this girl, and of hiring and training someone to take her place.

Beginning workers seem to lack correct information about the duties of the various office jobs. They seem to form their impressions of glamorous secretaries at the movies.

One of the values of this thesis will be to provide realistic information as to the duties performed on each of fifteen different office jobs. This information should be of interest not only to the prospective employee, but to the teacher and the vocational advisor as well.

A second value of the thesis will be to discover the deficiencies of beginning office workers. A list of common deficiencies in knowledges and deficiencies as pointed out by office managers will show the necessity for additional training in certain fields. Discovering the personality



deficiencies of beginning office workers will be even more valuable, for it is in this area that we find the reasons for 90 per cent of all dismissals. (3, p.16)

A third value will be to discover the importance of office machines in business offices today, to discover which machines are in common use, and if training is required to operate them.

A fourth value will be to learn the amount of formal education which businessmen require of their beginning employees.

A fifth value will be to ascertain how office or personnel managers select new employees, and upon what basis these selections are made.

The sixth and final value will be to collect the reactions and opinions of Portland businessmen upon various plans which are now under experimentation or in actual practice in some localities--plans such as a cooperative work program for students, summer work program for teachers of business subjects, and a standardized testing plan for business students.

#### Location of the Study

Portland, Oregon, is the largest city in the state, with a population of almost a half million people. It is a

center of commerce, shipping, and manufacturing, although many of its industrial potentialities are still unrealized.

A comparatively small number of national manufacturing industries choose to make Portland their home, but there is a large number of local firms producing nationally-known products.

The residents of Portland are noted for their above-average civic pride in their famed City of Roses, and for an amazing number of organizations--civic, social, technical, professional, etc., to which its residents belong.

There are nine high schools within the city limits, with numerous new schools being constructed in the rapidly-growing suburban areas. Public interest in education is evidenced by the ever-increasing number of P.T.A. groups in the city.

#### Subjects Employed in the Study

The Portland Chapter of the National Office Management Association is a professional organization of office managers and those closely connected with business, such as business educators, business supplies salesmen, and business machine representatives. This alert group became interested in the possibility of a survey of Portland business offices, and made their roster available to the writer for mailing purposes.

Copies of the survey questionnaire were mailed to all of those whose addresses appeared in the Portland NOMA roster, over 200 individuals, representing 150 firms.

The NOMA president, Mr. Ray Keefer, also attempted to interest another local group of businessmen, the Personnel Management Association, in the survey. Their roster was made available to the writer, and after due checking, copies of the questionnaire were sent to 40 firms which had not already been included in the survey.

The writer selected an additional five firms for contact, as they were not included in the above rosters, and were of special interest due to type or size of the business.

#### Methods Employed in the Study

Early in 1951, following the Christmas rush season, when business was gradually beginning its return to normalcy, the writer began a telephone check of all those persons who had not returned questionnaires. Many persons pointed out that they had "lost" or "misplaced" their copies. New copies were mailed them. A number of office managers replied that their copies were ready and would be returned at once. A number of managers also indicated that they were too busy and did not intend to complete the questionnaire. Others stated that theirs was an unusual firm, and they could not adapt their firm to the questionnaire. In



those cases, the writer found it advisable to call on the latter persons for a personal interview, a time-consuming but gratifying procedure. The interviews in every case resulted in a completed questionnaire, a pleasant acquaintanceship, and an interesting tour of the business office itself.

On January 24, 1951, NOMA held a meeting directed toward Business and Education. Teachers in the Portland area were invited to attend. The main speakers of the evening, representing Business on the one hand and Education on the other, discussed their respective viewpoints. Mr. William Sharpe, office manager of Meier and Frank Company, expressed his opinion of what business education in the high schools should be, and pointed out what he considered the weaknesses to be. Dr. George Eby, Assistant Superintendent of Schools in Portland, outlined the schools' business education programs, admitted that they were not perfect, and urged the businessmen to make their ideas and suggestions known.

In the lively discussion which followed the meeting, many office managers who heretofore had shown no interest in the survey suddenly asked for copies of the questionnaire, apparently feeling that this was the means of expressing their ideas and suggestions. Returns poured in rapidly in the weeks following the meeting, and the many interesting comments which accompanied the questionnaires



revealed the vital interest which these businessmen have in business education.

Not all businessmen who expressed themselves so strongly during the meeting responded with a filled-in questionnaire, however. In some cases, it was a disappointment to note that those who were most critical of the schools were the last to offer suggestions for the improvement of the training program.

On January 26, a second letter was sent to all those who had not returned questionnaires, reminding them of the deadline date, March 1, 1951.

#### Limitations of the Study

One limitation to this study, and the factor which keeps the survey from being a complete report on business firms in Portland, was the fact that not all office managers in the city were contacted. The only point of contact was the membership of the two groups, the National Office Management Association and the Personnel Management Association of Portland.

The study is further limited because not all the office managers who were contacted replied with a completed questionnaire. That the questionnaire itself might have contributed to this limitation is a possibility pointed out by two managers. In the first place, on each questionnaire, a space appeared for the name of the firm and the office

manager. This information was used only for identification purposes. One manager felt, however, that businessmen prefer to remain incognito when expressing their opinions.

Another manager pointed out that on the first page of the questionnaire appeared a question which was rather difficult for most managers to answer without some research in the company's files. That question was to list the total number of office employees and the total number of all employees in the firm in 1940 and 1950. The fact that this difficult question appeared on the first page might have influenced the office managers against completing the remaining pages of the questionnaire, which actually required only check marks for answers.

At any rate, it must be noted that a limitation of the study is that it is based on only a sampling of business offices in Portland.

The major contributing factor to this latter limitation is that only one person actually conducted this survey. In order to take a complete survey of such a large community, a fairly good-sized committee is felt necessary.

Still another factor limiting the study was the attitude of the businessmen themselves. They were, in many cases, unable to take the long point of view of the present situation in business education in Portland, and to realize that a better business education program could result

in an increased profit for the firm, a decrease in turnover, and a more efficient office force.

It is felt that the questionnaires which were returned, however, were filled out by the office managers who are most interested in business education, and that their comments and suggestions represent the sincere opinions of these men.

In making comparisons and forming a clear picture of the business and personnel situation in Portland, the process was limited due to the fact that the returns from the 1950 Federal census were not available for Portland. No figures on the total number of office workers in 1950 could be obtained. Thus it was impossible to judge the actual percentage of growth which this group of workers had experienced since 1940.

## CHAPTER II

## PREVIOUS STUDIES

Although many studies of beginning office workers have been made throughout the country, there is still a great need for such research. The needs of the community must be studied and evaluated before the school business training program can be intelligently planned.

There are many sources of information which can be used. Recent school graduates who are employed as beginning office employees are one such source of information.

A follow-up study of commercial graduates of Salem High School, Salem, Oregon, was made between 1935 and 1939 by Miss Gertrude Roenicke. (23, p.14) A large percentage of graduates reported that they had felt deficiencies in their vocabularies for everyday use in business, in accuracy in spelling, paragraphing, and punctuation, and in their understanding of grammar. They also felt that more speed training in shorthand would be beneficial, that income-tax reporting in bookkeeping was essential, and that the typing course should include more practice in legal forms and numbers. They felt that training in office appliances would be helpful. Such is an evaluation of the high school business training program by recent graduates.



In other follow-up studies, such as one conducted by Miss Katherine Murphy (8, p.58) in Portland and Miss Mary Withycombe, (23, p.73) also in Portland, it was revealed that the high school graduates found typing the most valuable high school course.

Although such follow-up studies provide valuable information as to the opinions of the former students, they do not provide a complete picture of the situation in any community.

A second source of information is the businessmen themselves. Roy L. Patrick (23, p.16) in 1933 questioned merchants and businessmen in Napa, Oregon, as to their opinions regarding the graduates of Napa Union High School as employees. These businessmen, in listing deficiencies, indicated character traits and personalities rather than school subjects as being the weak points of their beginning employees.

Businessmen can also provide information as to the types of work performed by office workers. In a survey of Quincy, Illinois, in 1936, it was discovered that 70 per cent of the women workers were required to take dictation and to transcribe; 59 per cent kept books requiring a knowledge of debits and credits; and 80 per cent used the typewriter on the job. Of the men employed in these same offices, 12 per cent used shorthand on the job; 49 per cent kept books, and 53 per cent were required to type.

Contained in this same report, a survey of business offices of Wilmington, Delaware, in 1935, included an analysis of the duties of employees in small offices. It was shown that 93 per cent of these workers used the typewriter, 75 per cent used shorthand, and 56 per cent used bookkeeping on the job. (22, pp.343-344)

In 1948 a survey was made among 500 personnel directors of firms in the metropolitan area of New York to discover what the average employer required of job applicants. (14, p.374) This survey was conducted by a business school which was attempting to plan a training program to meet the demands of business. A total of 38 per cent of the personnel directors surveyed said that they preferred high school graduates with business school training, while 26.2 per cent said they preferred college graduates with business school training. As to skills and training desired in applicants, 91.1 per cent recommended bookkeeping, shorthand, typing, and office machines. A majority of personnel directors indicated that business schools were not paying enough attention to personality development, good grooming, and proper dress.

In 1947, an office practice class in the Community High School of Granite City, Illinois, conducted a survey of twenty-eight offices in the community, asking employers what a beginning employee should be expected to know. Employers indicated that personality traits are more

important than skill. Personality traits which are most important are: first, ability to get along with others, and second, loyalty to one's employer. As to essential skills, employers classed the following as important: typing, shorthand, using the duplicator, spelling, punctuation, grammar, filing, use of the adding machine, use of the telephone, accuracy with figures, penmanship, use of the transcribing machine, filling in forms, proofreading, use of the comptometer, use of IBM machines, bookkeeping, and simple record keeping. (9, p.215)

Another school, the Albany Business College, in Albany, New York, surveyed five hundred top business executives throughout the country in 1947. (11, p.80) Executives reported that in public relations, it was important for secretaries to avoid personal phone calls, friends calling at office, and flirting with male help. Under business procedure, items checked as most objectionable were: impoliteness to callers, poor personality, and lack of initiative. As to personal habits, executives objected to the following: frequent or prolonged trips to the ladies' room, gossiping at water cooler, weeping, or hot-headedness. It appears that businessmen are very much concerned with the personal habits and public relations of their secretaries.

In another business office survey, (21, p.7) businessmen were asked: "In what respects do you find your



new employees deficient?" The deficiencies were divided into two categories: training and personal. Businessmen have found workers deficient in both these categories. But, which category is most important to the employer?

"A survey of the dismissal of more than 12,000 stenographers and secretaries by 64 companies indicated that 31 per cent were dismissed for inefficiency and 69 per cent were dismissed for personality defects." (21, p.7) It would thus appear that the office manager more often dismisses an employee because of a personality defect than because of inefficiency in skills. However, it must be recognized that inefficient workers are often screened out in the application process, and thus never reach the "employee" status.

Mr. Henry E. Schuld (18, p.396) interviewed businessmen in Illinois in 1949 to discover the employers' opinions of the high school graduates. The employers' opinions indicated that the following were lacking in high school graduates:

1. Knowledge of English usage
2. Knowledge of office machines
3. Knowledge of how to apply for a job
4. Knowledge of simple arithmetic
5. Knowledge of proper office conduct
6. Knowledge of how to follow directions
7. Knowledge of a proper attitude
8. Accuracy

In 1950, a survey was conducted by Glamour magazine (10, pp. 416-417) among the three groups most closely



associated with the work of a secretary: the secretaries themselves, the people for whom they work, and the schools where they receive their training. All these groups were asked whether shorthand and typing skills were the factors most responsible for success as a secretary. A large majority of each group answered "no" to this question. They felt that the one factor most often responsible for secretarial success was the quality of good judgment and intelligence, with personality running a close second. This is important information for the schools concerned with the preparation of secretaries.

However, in communities today, there is a noticeable trend toward greater numbers of general office workers. In 1946, a survey made in York, Pennsylvania showed that out of 835 office jobs, 630, or approximately 75 per cent were of a general clerical nature. (7, p.399) To the educator, this information should present a definite challenge. Is the curriculum designed to meet the needs of the student who is preparing for these office jobs? Even though the educator may answer this question in the affirmative, what will he discover five years hence? Undoubtedly, business conditions are undergoing constant changes. But will the school keep pace with these changes?

In some wide-awake communities, a definite plan for continuous study of local conditions and a re-establishment of objectives for the business training program has been

made. In Loveland, Colorado, a survey of businesses (1, p.110) was made in 1944 and again in 1948. A comparison of the two studies reveals certain changes and trends which are, obviously, not possible when only one study of any community is made. In this Loveland survey, it was noted that the largest group of employees was that of clerks, with 38 per cent of all office workers in that classification in 1944. This group had increased in 1948 to 59 per cent of all workers. The second largest group of employees was that of general office workers, with about 30 per cent of all office workers in that classification in both 1944 and 1948. The third largest group of employees is found among business record keepers.

In analyzing work requirements, it was revealed that standards for stenographers and typists were lowered during the war, when there was a shortage of trained workers in these fields. The Loveland surveys both revealed that the duty of "answering the telephone" was the most common duty performed by workers in the office. The duties of receiving callers, filing, and ordering supplies were next in importance. In 1944, spelling and responsibility were both rated first in importance. Four years later, the second survey revealed that office managers listed responsibility alone as of first in importance to office workers, while spelling ability had dropped to ninth place. Both surveys indicated that the character

traits of prospective office workers should be developed just as the mechanical skills of shorthand and type-writing.

In 1949, a survey was made of 118 firms in Dowagiac, Michigan, by the Central High School (13, pp.26-28) to evaluate occupational training, placement, and adjustment of students enrolled in the business department of the high school. It was discovered that almost twice as many persons were employed in the general clerical field than in either the stenographic or bookkeeping occupations. Despite this fact, so often revealed in community surveys, high schools continue to offer shorthand and typing as the most common "business training" courses. The Dowagiac survey also revealed that there is a trend toward a large turnover in the stenographic field, and a stabilization of employees in the bookkeeping occupations. Asked to list serious weaknesses in employees, businessmen listed in first place a weakness in spelling, then a lack of interest in work. Arithmetic and computational deficiencies were also indicated. Employers stated that "an employable personality" is of more importance than occupational competency for a successful office worker.

In a similar study (12, p.248), made in 1950 by the Green Bay Public High Schools of Green Bay, Wisconsin, and reported by Amanda H. Schuette, supervisor of business education in that city, significant facts were brought out.



It was found that most business firms prefer that their employees be at least high school graduates. Some of the conclusions which may be drawn from the findings of this survey are as follows:

- "1. That more than 50 per cent of 1372 employees representing 21 different jobs are employed as general clerks, stenographers, book-keepers, and clerk-typists,
2. That certain jobs in the office require many different types of skills in addition to the regular skills associated with the particular job,
3. That the typewriter is rated the most essential machine in the office,
4. That accuracy, dependability, and co-operativeness are considered the most important personality traits of an employee by most of the business firms, and
5. That the knowledges and abilities ranked highest by most of the business firms are arithmetical fundamentals, following directions, logical thinking, spelling, and bookkeeping and accounting."

Although numerous community surveys have been made in addition to those mentioned above, a comparatively new type of occupational survey has recently attracted much attention all over the country. These surveys have been conducted by Education Committees of various local chapters of the National Office Management Association. Members of the committees include local businessmen and business teachers, who confer and carry on research regarding business education.



Toronto, St. Louis, Hartford, Akron, Cincinnati, and Chicago, among others, have already reported the results of their joint ventures in either conference or research. Here on the West Coast, two such surveys, one in Seattle in 1946, and in Yakima in 1949, are of special interest.

The Seattle survey (19, pp. 1-37) studied both the schools and the business firms of the city. The schools were studied in order to ascertain the number of graduates in the commercial field. Business firms were surveyed (161 in all) to discover the current demand for office workers in 1945. It was revealed that the schools were not training a sufficient number of office workers to fill the demands of business in the city.

It was also apparent that, in some areas, inadequate preparation for business was being offered in the schools. Knowledges and abilities in which beginning office workers were deficient were: arithmetic fundamentals, algebra, and bookkeeping and accounting. Typists were deficient in accuracy, speed, and arrangement of material. Stenographers were deficient in the ability to read shorthand notes rapidly and accurately, the ability to arrange letters, and the ability to compose a letter.

Four traits which Seattle businessmen considered most essential to office workers were: accuracy, dependability, cooperativeness, and acceptance of responsibilities.

On the basis of these and other significant facts, recommendations were made by the Seattle Education Committee, which were carried out to an encouraging extent.

The Seattle school curriculum was revised, an expenditure for the modernization of equipment in the high schools was recommended, a cooperative educational plan to provide work experience for business students was inaugurated, a standardized testing program and the awarding of certificates of proficiency based on NOMA standards were specified, a director of business education for the city was suggested, and it was agreed that there should be closer cooperation and collaboration between educators and business organizations.

Three years later, a similar survey of the community of Yakima, Washington, covered 76 business firms.

(24, pp.1-47) It was discovered that the most common deficiency of all beginning office workers, as indicated by Yakima businessmen, is that of inaccuracy. Beginning office workers were also found deficient in the following personality traits: willingness to assume responsibility, initiative, adaptability, and interest in work. Office workers were also found to be deficient in certain knowledges and abilities. They were considered by office managers to lack the following: a general business understanding, bookkeeping and accounting training, an

understanding of common business forms, the ability to follow directions, and the ability to make clear statements of thought.

Stenographers were criticized as being unable to transcribe accurately, to compose a letter, to arrange letters, to read back shorthand notes, and to take dictation rapidly.

Office managers found that typists were inaccurate, unable to erase and correct copy carefully, unable to arrange material neatly, unable to proofread, and unable to care for the typewriter.

It was discovered also that a large variety of duties was required of workers in small business offices. The most common duties required of all types of office workers were the following: to use the typewriter, to use the adding machine, to use the telephone, to file, and to meet the public.

It was revealed that the adding machine is the most common business machine in use in Yakima. The full keyboard adding machine is used in greater numbers than the ten-key machine.

Office managers stated that employees were most often selected on the basis of their performance and appearance at a personal interview, and that a high school education was necessary for a majority of office jobs.

On the basis of these and other significant findings, the Yakima committee recommended that all high school



students be given a basic business background, that terminal education be set up in the junior college, that an office management course be installed, that a cooperative work experience program be expanded, that business teachers have actual office experience, that standardized office entrance tests be given by the schools, and that an advisory committee of office managers, business educators, and a vocational guidance director be employed.

Dr. T. C. Holy, (5, p.39) in his digest of the Study of Public Elementary and Secondary Education in Oregon, reported that

"In the opinion of some 580 parents, employers, high school students, and dropouts, the high school should provide...more vocational learning in trades and crafts in particular. ... People in these groups were as a rule not satisfied that all high school subjects would be useful to graduates in their later life and work."

It was recommended in the digest of the above study that because the public in general favors more vocational education in the high school, the high school curriculum should be studied "for the purpose of making the curriculum of maximum utility to the individual student in terms of his future needs and responsibilities, and the needs of society."

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## CHAPTER III

## ANALYSIS OF THE DATA

The latter part of the year 1950 proved to be an especially difficult time in which to contact businessmen in Portland. Although the questionnaires were sent out the first week in December, the Christmas rush season was already at hand. Many firms were also involved with the unusually heavy buying on the part of the public, as a result of the Korean war. All firms were concerned with the preparation of end-of-the-year inventories and annual financial statements. As a result, office managers who did not answer the questionnaire at once found themselves under increased pressure of work as the month progressed.

The new year brought little change in the picture, as far as the office managers were concerned. Additional paper work, such as the preparation of withholding tax statements for employees, required the attention of office managers.

Some firms, too, were greatly affected by critical shortages which developed after the first of the year: the limitation of uses of metal in non-essential industries, for example, or again, the tightening up in distribution of paper and other office supplies. Trained employees were already difficult to find.

Such was the situation when the survey of Portland business firms was made.

These facts tend to explain, in part, why not all office managers responded to the survey, and why those who did respond were especially concerned with keeping down office costs and with getting the maximum from every "employee dollar."

The data which were compiled from the returned questionnaires divided itself into the major fields of interests which were touched upon in the survey itself: First of all, a general discussion of the returns from 88 office managers, followed by the duties required of beginning office employees on fifteen different jobs, the deficiencies in knowledges and abilities of beginning office workers, the deficiencies in personality of beginning office workers, the number and types of machines in use in these offices, the educational requirement for each job, the basis for selection of new employees, and the comments of the businessmen upon suggested procedures for coordinating business and education. Finally, a section will be devoted to the additional suggestions and comments received from office managers, concerning other phases of the same problem.

## PART I

## A Study of the Returns

A total of 195 office managers of business firms in Portland, Oregon, were mailed copies of the questionnaire. The firms which were contacted in the survey represent a cross section of types of businesses carried on in Portland. Questionnaires were returned by 88 office managers, or 45.1 per cent of those contacted.

## Classification of Firms

The firms which returned questionnaires were segregated into categories for the purpose of tabulation. Table I shows the number of firms which replied in each category.

TABLE I

## Returns of Questionnaires by Categories

Categories	No. of firms	Per cent of total
Finance . . . . .	9 . . . . .	10.2
Government . . . . .	4 . . . . .	4.6
Manufacturing . . . . .	20 . . . . .	22.7
Education . . . . .	3 . . . . .	3.4
Retail-Wholesale . . . . .	31 . . . . .	35.2
Service . . . . .	16 . . . . .	18.2
Transportation . . . . .	5 . . . . .	5.7
	<hr/> 88	<hr/> 100.00

Table I shows that the largest number of office managers who answered the questionnaire were in the category of Retail-Wholesale firms, with Manufacturing firms and Service firms next in frequency. Together these three categories provided 76.1 per cent of the returns. This fact will be important as the findings of the survey are examined later.

It is also interesting to note the number of employees represented by these 88 firms in the six types of businesses covered in the survey, as shown in Table II.

TABLE II

## Employees Represented in Each Category

Categories	No. of Employees	Per cent of total
Finance	1259	31.8
Government	121	3.1
Manufacturing	720	18.2
Education	223	5.6
Retail-Wholesale	826	20.9
Service	627	15.8
Transportation	182	4.6
	<hr/> 3958	<hr/> 100.0

Table II shows that the largest number of employees were found in the category of Financial firms. Almost one third of the total number of employees covered in the survey were in this classification, in spite of the fact that only 10 per cent of the questionnaires were returned by financial institutions. This is explained by the fact that Portland's two largest banks sent in complete reports for



their employees, almost one thousand in number. Table II also shows that the categories of Retail-Wholesale, Manufacturing, and Service firms, which had 76.1 per cent of the returns, represent but 54.9 per cent of the employees covered by the survey.

It is evident that there is a wide variation in the size of the office force of the various firms represented in the survey. Table III shows the average number of office workers in firms in each category.

TABLE III

Average Number of Office Workers  
in Each Firm Category

Category	No. of Workers	No. of Firms	Average No. of Workers
Finance	1259	9	139.9
Government	121	4	30.2
Manufacturing	720	20	36.0
Education	223	3	74.3
Retail-Wholesale	826	31	26.6
Service	627	16	39.2
Transportation	182	5	35.4
	<hr/> 3958	<hr/> 88	

Table III shows that the average number of office workers in the Financial firms covered in the survey is 139.9 workers per office, that the Education institutions are next in size with 74.3 employees in the average office, and Service firms third in size, with an average number of 39.2 office employees per firm.

However, averages do not always reveal a complete picture. The survey actually revealed a far greater variation in the size of the office force, as will be seen when the firms are classed according to the size of their office force. Table IV shows the number and per cent of offices in each size classification.

TABLE IV  
Size of Office Forces

Size of Office Force				No. of Offices	Per Cent of Offices
1 -	4	office workers		18	20.4
5 -	9	"	"	11	12.5
10 -	14	"	"	15	17.1
15 -	19	"	"	8	9.1
20 -	24	"	"	2	2.3
25 -	49	"	"	18	20.4
50 -	99	"	"	6	6.8
over	100	"	"	10	11.4
				<hr/> 88	<hr/> 100.0

Table IV shows that the size of office force which occurred most frequently in the offices covered by the survey were the two categories, 1 to 4 office workers, and 25 to 49 office workers. In these two categories are found 40.8 per cent of the offices. Next in frequency was the office force of 10 to 14 workers, which was the case in 17.1 per cent of the offices.

When an array of the number of office workers in each firm was made, it was discovered that the smallest office employed one worker, and the largest office had an office

force numbering 566. It was also apparent that the average number of workers per office was 45, although the median (the middle number in the range of numbers) indicated 15 workers to an office. The comparatively low median tends to indicate that there is a preponderance of small-sized office forces. Table V shows the frequency of certain sizes of offices.

TABLE V

## Sizes of Offices Occurring Most Frequently

Rank	Size	No. of offices	Per cent of total
1	2 office workers	9	10.3
3	1 office worker	5	5.7
3	10 office workers	5	5.7
5	6 office workers	4	4.5
5	14 office workers	4	4.5
		<hr/> 27	<hr/> 30.7

Table V shows that the size of office force occurring most frequently (nine times) was the firm having two office employees. Five offices had one employee, and another five employed ten office workers. Other sizes of offices occurring frequently were those having six and 14 employees. There were 27 offices of these sizes, or 30.7 per cent of the offices in the survey. The fact that the survey included a large number of small-sized offices will be important when the duties of office workers are

considered later, for it is in the small-sized office that a wide variety of duties must be performed by each worker.



## PART II

## Classifications of Employees

The returns were studied in order to ascertain the various types of employees in the business office, the number now employed, and the number and per cent of replacements for next year. Returns were also examined to determine the relationship, in number, of the office force to the entire working force of the business firms, in both 1940 and 1950.

Office managers were asked to indicate the number of employees in each classification in 1950, and the number they expected to hire next year, either to replace or in addition to present employees. From these figures, the percentage of replacement for the entire group of office workers, and for each classification of workers was determined, as shown in Table VI.

TABLE VI

## Number of Office Employees in All Classifications

Classifications	No. now Employed	No. to Replace	Percentage of Replacement
Receptionist	38	5	13.5
PBX Operator	71	1	1.4
General Clerks	901	89	9.9
Clerk-Typists	519	48	9.3
Bookkeeper-Acct.	164	14	8.5
Filing Clerks	74	10	13.5
Mail & Ship. Clerks	74	13	17.6
Stock Clerks	119	10	8.4
Cashier	300	83	27.7
Office Boy-Girl	33	33	100.0
Bkkg. Mach. Operator	220	65	29.5
Duplicator Operator	31	5	16.1
Stenographer-Secretary	483	79	16.4
Voice Transcribers	55	4	7.3
Calculator Operators	287	44	15.3
	<hr/>	<hr/>	
Others (Dept. Heads, Asst. Managers)	3369	529	
	589		
	<hr/>		
	3958		

Table VI shows that the classification of employee which has the highest percentage of replacement is that of Office Boy-Girl, in which 100 per cent of the employees now in that category will be hired in 1951. This high rate of replacement might be explained by the fact that in many firms, the Office Boy-Girl is the first position for beginning employees. From that position they are often promoted to positions of greater responsibility. The 100 per cent replacement rate thus indicates that this position is often a temporary one, somewhat similar to an apprenticeship.

Although a rather high replacement rate is also noted in the classifications of Bookkeeping Machine Operator, 29.5 per cent; and Cashier, 27.7 per cent, it must be pointed out that 45 of the 65, or 69.2 per cent, new Bookkeeping Machine Operators and 62 of the 83 new Cashiers, (74.7 per cent) are to be hired by one company, a large bank which is opening a new branch. The actual turnover for present Bookkeeping Machine Operators and Cashiers is thus not great.

The turnover or replacement rate for PBX Operators, Voice Transcribers, Stock Clerks, and Bookkeeper-Accountants is the lowest indicated.

The turnover rate for all office employees in the survey is 16 per cent. Office managers themselves indicated in conversations that they estimated the rate of turnover in their own offices to be as high as 30 per cent. One firm stated that their indicated high turnover rate was merely based on speculation that the war situation would result in many changes in the office personnel.

### Employment Trends

The returns were also examined in order to determine the trends of employment, and to make comparisons between the trends in employment of office workers and workers of all types. Table VII gives a picture of that comparison.

TABLE VII  
Employment Trends

	No. in 1940	No. in 1950	Per cent of Growth
Office workers	1284	2052	47.5
All workers	6868	10412	44.1

Table VII shows that Office Workers have shown a growth in numbers of 47.5 per cent, as reported by 58 firms. At the same time, in the last ten-year period, the total number of workers employed by 54 firms has increased 44.1 per cent. This indicates a trend of growth in the employment of office workers. It appears that there is an increasing demand for this type of worker, an even greater demand than for other types of workers.

It is also of interest to compare the ratio of office workers to all workers, as shown in Table VIII.

TABLE VIII  
Ratio of Office Workers to All Workers

	Office Workers	All Workers	Per Cent
1940	1284	6868	18.7
1950	2052	10412	19.7

Table VIII shows that ten years ago, Office Workers comprised 18.7 per cent of all workers. Today, Office Workers comprise 19.7 per cent of all workers. In other words, a staff of almost 20 persons is needed in an office



to keep the records of a business employing 80 other employees. One office employee is thus required for every four employees.

### Comparison of Classifications

As to the Office Workers themselves, a study of their numbers reveals information as to the types of workers found in business offices today. Table IX shows the numbers of employees found in each classification, ranked in order of size of group.

TABLE IX

#### Rank of Classifications of Office Workers

Classification	Number	Per cent of total
General Clerks	901	26.8
Clerk-Typists	519	15.4
Stenographer-Secretary	483	14.3
Cashier	300	8.9
Calculator Operators	287	8.5
Bkkg. Mach. Operator	220	6.5
Bookkeeper-Acct.	164	4.9
Stock Clerks	119	3.5
Filing Clerks	74	2.2
Mail & Ship. Clerks	74	2.2
PBX Operator	71	2.1
Voice Transcribers	55	1.6
Receptionist	38	1.1
Office Boy-Girl	33	1.0
Duplicator Operator	31	.9
	<hr/> 3369	<hr/> 99.9

Table IX shows that the largest classification of office workers in the study is that of General Clerks, which represent 26.8 per cent of the workers studied.

The Clerk-Typist and Stenographer-Secretary classifications are the next largest groups, representing 15.4 per cent and 14.3 per cent, respectively, of the total number of office employees. Together, these three classifications account for 56.5 per cent of the office workers.

The fifteen classifications which were used were the same as those used in reports by the U. S. Bureau of Labor Statistics. It was not always possible for office managers to classify employees according to the classification list. For example, many times it was revealed that the Receptionist was also the PBX Operator in the firm. Office managers who found that situation existing were asked to classify the employee according to her more important duty. Occasionally, too, classification titles were not the same as those used in the firm. For example, banking institutions contacted in the survey found no classification of "Teller," and thus, listed the employees in that group under the title of "Cashier." Nearly every office manager who replied to the survey was able to classify his employees according to the list provided.

## PART III

## Duties of Workers

The findings of the survey were studied in order to ascertain the degree of specialization required in business offices today. It was discovered that there is comparatively little specialization in office positions, and that, on the contrary, most office workers perform a wide variety of duties.

Despite this fact, which seems to be borne out by the returns on this study, one office manager recommended that students should specialize--should be an expert typist, or an expert at shorthand and typing. He suggests that it is best not to try to be an expert in all phases of office work at the same time, and his advice to prospective business workers is this: "Stick to popular combinations--typist and switchboard operator, or typist and calculator operator, or typist and receptionist--these are always in demand."

On the questionnaires, office managers were asked to check a list of thirteen duties which were required of each type of office worker in their offices. Table X gives their tabulated replies.

TABLE X

## Duties of Workers

No. answering	36	50	69	61	54	44	31	26	47	13	37	20	61	13	36
	Recep.	PBX	Gen.	Clerk	Bkkg.	File	Mail	Stock	Cash.	Off.	Bkkg	Dup.	Steno	Voice	Calc.
Duties			Clerk	Typ.	Acct.	Clerk	Clerk				Mach	Oper		Tran.	Oper.
Use telephone	36	50	49	35	39	21	24	18	38	8	20	7	53	4	16
File	17	19	46	38	24	44	10	14	16	12	17	9	50	4	17
Use typewriter	32	28	48	49	35	26	17	15	33	7	23	14	61	13	19
Use duplicating mach.	5	3	13	16	3	5	4		3	2	2	20	22	2	
Use voice transcriber	3	3	5	4		1			2			2	17	13	
Use adding listing	6	7	53	32	47	10	6	6	28	7	25	3	23	1	15
Use key-driven calc.	4	2	23	11	20	1	1	1	15		6	2	5		29
Use rotary calculator		1	15	6	27			2	9		5	2	5		11
Use bkkg. machine			4	1	23	1			4		37				
Take dictation	7	3	8	12	3	1			4		1	1	52	5	1
Make bkkg. entries	1	3	21	12	50	4	1	4	21	1	23	1	8		7
Meet the public	36	29	20	18	14	4	6	6	29	3	5		35		
Type stencils	13	7	16	29	4	4		1	1	1		11	33	8	
Other duties	6	6	12	8	6	4	8	3	8	1		2	7	1	6



Table X reveals certain interesting facts. The number of office managers replying under each classification is given in order to provide a basis for interpreting the data. For example, in the 36 offices which employ Receptionists, all 36 Receptionists use the telephone, 17 do filing, and 32 use the typewriter, as indicated in the first column. Similar comparisons may be made for each of the fifteen classifications of workers studied in the survey.

It will also be noted that three of the job classifications were checked in every one of the Duty columns. Those three classifications were General Clerks, Clerk Typists, and Cashiers. This might indicate that the work of these three workers is quite similar, but significant differences appear when percentages of workers performing the various duties are examined. Table XI shows the percent of each type of worker performing the most frequently required duties.

TABLE XI  
Per Cent of Workers  
Performing Five Most Common Duties

<u>Workers</u>	<u>Duties</u>				
	Using Typewriter	Using Telephone	Filing	Add. Mach.	Meet Public
Receptionist	88.9	100.0	47.2	16.7	100.0
PBX Operator	56.0	100.0	38.0	14.0	58.0
General Clerks	70.0	71.0	66.7	76.8	29.0
Clerk Typists	80.0	57.4	62.3	52.5	29.0
Bookkeeper-Acct.	60.3	67.2	41.4	81.0	29.5
Filing Clerks	59.1	47.7	100.0	22.7	9.1
Mail & Ship. Clerks	54.8	77.4	32.3	19.4	19.4
Stock Clerks	57.7	69.2	53.8	23.1	23.1
Cashier	70.2	80.9	34.0	59.6	61.7
Office Boy-Girl	53.9	61.5	92.3	53.9	23.1
Bkkg. Mach. Oper.	62.2	54.1	46.0	67.6	13.5
Duplicator Operator	70.0	35.0	45.0	15.0	
Steno.-Secretary	100.0	86.9	82.0	37.7	57.4
Voice Transcriber	100.0	30.8	30.8	7.7	
Calculator Operator	57.8	44.4	47.2	41.7	

Examining the three classifications of workers (General Clerks, Clerk-Typists, and Cashiers) on Table XI, it is evident that there is difference in the emphasis on duties performed on these jobs. For example, although all classifications use the typewriter, it is used by 80 per cent of Clerk-Typists, but by 70 and 70.2 per cent of General Clerks and Cashiers, respectively. The telephone is used by 80.9 per cent of Cashiers, 71 per cent of General Clerks, and 57.4 per cent of Clerk-Typists. The duty of filing is performed by 66.7 per cent of General Clerks, 62.3 per cent of

Clerk Typists, and only 34. per cent of Cashiers. Similar variations may be noted for each of the classifications of workers listed.

It is interesting too, to note the three classifications of workers which most frequently perform each of these five duties, as shown in Table XII.

TABLE XII

Job Classifications Ranked as to Performance  
of Five Most Common Duties

Duties	First	Second	Third
Use Typewriter	Stenographer Voice Trans.	Receptionist	Clerk-Typists
Use Telephone	Receptionist PBX Operator	Steno.-Sec.	Cashier
Filing	File Clerk	Office Boy-Girl	Steno.-Sec.
Use Add. Mach.	Bkkr.-Acct.	General Clerk	Bkkg. Mach. Operator
Meet Public	Receptionist	Cashier	PBX Operator

Table XII shows that Stenographers and Voice Transcribers use the typewriter more than any of the other office workers, followed by the Receptionist, and Clerk-Typists.

Receptionists and PBX Operators use the telephone most frequently, as one might expect. The Stenographer-Secretary also uses the telephone frequently, and in third place is the Cashier.

Filing is performed most frequently by the File Clerk, the Office Boy-Girl, and the Stenographer-Secretary.

Those who most often use the Adding Machine are the Bookkeeper-Accountant, the General Clerk, and the Book-keeping-Machine Operator.

Those who most often meet the public are the Receptionist, the Cashier, and the PBX Operator.

Table XIII shows the frequency of the duties performed by all office workers (602) in the fifteen classifications. The duties are ranked in order of their frequency. The number and per cent of workers performing each duty is also recorded.

TABLE XIII  
Frequency of Required Duties

Rank	Duties	No. Workers	Per Cent
1	Use typewriter	420	69.8
2	Use telephone	417	69.3
3	File	337	56.0
4	Use adding-listing mach.	269	44.7
5	Meet the public	205	34.1
6	Type stencils	128	21.3
7	Make Bkkg. entries, post	157	26.1
8	Use key-driven calculator	120	19.9
9	Use duplicating machine	100	16.6
10	Take dictation	98	16.3
11	Use rotary calculator	83	13.8
12	Use bookkeeping machine	70	11.6
13	Use voice transcriber	50	8.3

Table XIII shows that the most common duty of all office workers is that of using the typewriter, which was checked as a required duty for 69.8 per cent of all



employees. As shown earlier on Table X, the typewriter was used by 100 per cent of the Stenographer-Secretaries, by 88.9 per cent of Receptionists, by 80 per cent of Clerk-Typists, and by 70 per cent of all General Clerks, Cashiers, and Duplicator Operators.

The second most frequently required duty of office workers is that of using the telephone, which was required by 69.3 per cent of all office workers. On Table X it was shown that the telephone is used by 100 per cent of Receptionists and PBX Operators, by 86.9 per cent of all Stenographer-Secretaries, by 80.9 per cent of Cashiers, and 77.4 per cent of Mail and Shipping Clerks.

In third place in the list of most common duties is that of filing, which is required by 56 per cent of all office workers. Filing is, of course, performed by 100 per cent of the Filing Clerks, by 92.3 per cent of Office Boys or Girls, 82 per cent of Stenographer-Secretaries, by 66.7 per cent of General Clerks, and 62.3 per cent of Clerk Typists.

The three above-mentioned duties are required of members in every classification of office worker, and are the only duties which are required by a majority of the total number of employees in each classification.

Used by 44.7 per cent of all office workers was the adding-listing machine, the most frequently used office

machine, next to the typewriter. The adding machine was used, to some extent, by workers in every classification.

Over 34 per cent of the office workers were required to meet the public in some capacity. The only workers which did not perform this activity were the voice transcribers, the duplicator operators, and the calculator operators.

On the questionnaires, a space was provided for listing other duties of office workers. This list indicated the wide variety of tasks performed in today's business offices. Some of the other duties mentioned were as follows: billing, handle cash, sorting, giving placement exams and grading, check billing, purchase recording, dictate letters, Kardex posting, tabulating, prepare reports, credit control, payroll, price orders, statistical work, invoices, accounts payable, prepare cost statements, banking, collections, postage machine, addressograph machine, Multigraph machine, run errands, order stock, prepare advertising, fill supply orders, check physical stock, prepare tax reports, approve and pay bills, and service equipment.

All of the above duties were performed by office workers in business offices. The duties, of course, are determined by the nature of the business and the size of the office force.

While the above list of other duties is long, these duties were not mentioned more than two or three times by

office managers. It is possible, of course, that had space been given to such a list on the questionnaire, answers might have been more numerous.

The thirteen different duties which were listed on the questionnaire for checking appeared to be the most frequently performed duties in business offices.

## PART IV

## Personality Traits

## in which Beginning Office Workers are Deficient

The returns of the survey were studied carefully in order to ascertain the deficiencies of personality in beginning office workers, as indicated by the office managers. In recent years, the fact that personality is an important basis for success in business has come to be realized. According to some authorities, deficiencies in personality or personality weaknesses are the cause of as many as 90 per cent of employee dismissals. Since personality is so important, the replies of the office managers to the question, "What deficiencies do you discover in beginning office workers?" are of special interest.

Table XIV shows the deficiencies which were checked by 83 office managers, listed in order of frequency.



TABLE XIV

Personality Traits  
in which Beginning Office Workers are Deficient

Rank	Trait	No. Times Mentioned	Per Cent
1	Accuracy	71	85.5
2	Initiative	62	74.7
3	Adaptability	46	55.4
4	Willingness to Assume Responsibility	43	51.8
5	Neatness	42	50.6
6	Dependability	38	45.8
6	Willingness to Perform Unpleasant Tasks	38	45.8
8	Aggressiveness	33	39.8
9	Interest in Work	30	36.1
10	Emotional Stability	24	28.9
11	Attendance	23	27.7
12	Perseverance	21	25.3
13	Punctuality	18	21.7
14	Personal Appearance	17	20.5
15	Courtesy	14	16.9
16	Cooperativeness	8	9.6
17	Cheerfulness	6	7.2

Table XIV shows that beginning office workers are most often deficient in accuracy, according to 71 or 85.5 per cent of the 83 office managers who answered that question. As one office manager stated on his questionnaire, "Many youngsters are turned out of our schools feeling they must make haste. If we could stress accuracy as one of the all-important essentials, and not speed, it would make for better foundations."

Another office manager urged that students be instructed that the preparation of accurate records is

essential, while speed is only secondary." Office managers also indicated that inaccuracy was found not in just one office position, but all through the office.

Typical comments from office managers are: "Clerical workers are not accurate with numbers;" "Stenographers not only make errors in typing, but they fail to correct those errors neatly;" "I cannot find a school-trained file clerk who is fast and accurate;" and "On nearly every application blank, I find at least one spelling error." One office manager recommends that pupils be graded on the work they do or turn in. "If it is not perfect, require them to turn in perfect work before the grade is granted. It has to be perfect for us !"

Lack of initiative is the second most common personality deficiency of beginning office workers, according to 75 per cent of the office managers. Non-adaptability was third in frequency, as listed by 56.3 per cent of office managers. Unwillingness to assume responsibility was in fourth place, being checked as a deficiency by 51.8 per cent of office managers.

It is in the area of initiative, dependability, the assumption of responsibility that office managers voice the most vociferous complaints about today's office worker.

A typical complaint is one voiced by an office manager who supervises the work of almost 30 employees. "For beginning workers, the main trouble seems to be that they

feel they earn their pay by being present at a place of business. Some take no interest in their work, and as a result need constant or close supervision. A lackadaisical attitude is one thing I dislike the most." Another office manager suggests that future office employees be impressed with the fact that success comes from hard work, and that it cannot be accomplished in a few months. "So many of the younger folks think that they are qualified workers after a few short months on the job."

These and similar comments are forthcoming whenever the subject of beginning workers is discussed. Here is another such statement, "The greatest fault I find with post-war employees is a complete lack of desire to do a day's work. The idea seems to be to get by with the least amount of honest effort for the largest salary possible. I don't understand it, but most of them like to kill time, and are perfectly willing to sit at a desk and 'day dream' unless you keep crowding them with added work. I like to have employees come to me for extra work when they are 'caught up' and I know the time would go faster and be more enjoyable for them."

Other office managers have concrete suggestions for business educators. "Inform the student of the fact that employees have to earn, not draw a wage. All companies make a profit only from production, and all wages come from profits. Wages are never paid by a company that is out of

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business." And a further suggestion, "The biggest thing to instruct the students in is that they should understand that they must give the employer \$1 worth of work for every \$1 paid them."

Another office manager remarked, "Students should be taught that the business world is highly competitive and that jobs cannot be retained, nor promotions earned except by demonstrating one's right to them through initiative and ability. Too many beginners seem to think the 'world owes them a living' and do not feel that extra effort is necessary."

One office manager suggests that the cause of this lack of initiative is that too many students come from homes where there is "union" influence which seems to encourage students to take the attitude of laziness and carelessness. He feels that the schools have a responsibility to perform in training students to be dependable, and to desire to work.

Although a number of office managers commented upon deficiencies in courtesy, cooperativeness, and cheerfulness, these three personality traits were considered as deficient by the smallest number of office managers, by 16.9 per cent, 9.6 per cent, and 7.2 per cent, respectively. Apparently the beginning worker has these three traits in his favor.

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Many office managers mentioned the fact that the ability to get along with others is of great importance. "Office harmony is an important factor in obtaining production in office work," says one manager.

Another office manager remarked, "A cheerful, cooperative attitude toward all tasks assigned is a big asset to any beginner. If hired as a typist, he may still have filing, assembling, and other less attractive duties to perform. They are all a part of the job, and unless the proper attitude is reflected, it may seriously handicap the employee. Too many express the attitude 'But I was hired as a stenographer !' "

Another manager recommended that more emphasis be placed on manners and the common courtesies necessary in everyday life and that business students be instructed in courteous telephone conversation.

One office manager stated that in his office cheerfulness and the ability to get along with others is much more important than skill. Students should be trained in office discipline.

Several office managers mentioned the fact that women office workers were sometimes troublesome. One manager reported that new women employees have a difficult time adapting themselves to the office. "They want to change everything. They can't get along with the older girls."

He also remarked that women were never hired for "stepping-stone" jobs (jobs leading to higher positions).

Another manager observed critically, "Female employees and prospective employees should be taught that they have an obligation to their job as well as their home -- if they intend to work. Most frequently, women will swear their interest to a job, and pledge their loyalty to it during an interview. After they get the job, and it becomes necessary to secure their cooperation in occasional overtime work to meet a deadline, it will generally develop that their husbands require their presence or they have made a prior committment, etc. In other words, women are generally insincere toward their work. They aren't particularly interested in their job, only the extra pay brought home."

It is apparent that some members of the business world today are prejudiced against women workers, and with some justification. The business-trained woman, who honestly desires to work, may have difficulty in convincing businessmen of her sincere intentions as to her job.

## PART V

## Knowledges and Abilities

## in which Clerical Workers are Deficient

Since clerical workers are the largest group of office employees, it is of interest to examine that group of workers from the standpoint of the office manager. Office managers were asked to list the deficiencies which were common in this group. Table XV lists the deficiencies of these workers in order of their frequency, as indicated by 80 per cent, or 63 of the 80 office managers who answered this question.

TABLE XV

## Knowledges and Abilities

## in which Clerical Workers are Deficient

Rank	Knowledge and Ability	Per cent
1	General business understanding	80.0
2	Logical thinking, clearly stated	75.6
3	Arithmetic fundamentals	70.0
3	Following directions	70.0
5	Use of common business forms	68.8
6	Spelling	66.3
7	Penmanship	57.5
8	English	50.0
9	Bookkeeping and Accounting	47.5
10	Vocabulary	43.0
11	Pleasant speech	25.0
12	Reading	12.5

Table XV shows that present-day beginning office workers do not possess a clear understanding of the business world, since a definite majority or 80 per cent of the office



managers checked this deficiency. A personnel manager who plans the training program for new employees in one of Portland's largest banks recommended that the schools make the student aware of the place of free enterprise and its contribution to our standard of living, in order that the student might see more clearly his own role in business. "Schools must tie theory a little more closely to actual practice," said another manager.

Office managers indicated, as shown on Table XV, that clerical workers are also unable to think logically or to make clear statements of thought.

One manager indicated that prospective employees should be taught to think for themselves. "If they could just do that, it would go a long way toward solving the other problems."

Another remarked, "I would like to see more stress put on the individual to develop his analytical ability, using his own common sense. Too many young people have an education, but cannot adapt it to ordinary business practice."

"Students should be taught," said another manager, "to think at their job, and to plan their day's work. This is especially important on tasks that have some freedom of operation." One experienced office manager urges teachers to "Teach students to think clearly and use sound judgment when doing a job, 'common horse sense' and flexible



thinking, rather than the attitude 'This is the way the books say to do it !' "

It is apparent that businessmen today, as always, prefer intelligent young workers who can think clearly, organize their thoughts, and express themselves well.

Table XV shows that businessmen consider clerical workers deficient in arithmetic fundamentals, and in ability to follow directions, since these two were both checked by 70 per cent of the managers.

One office manager urged that greater emphasis in schools be provided on simple and business arithmetic. Another urged that business mathematics and accounting, as used in business offices, be stressed in schools.

As to following directions, one long-suffering office manager wrote the following single suggestion for business educators at the end of his completed questionnaire, "Please teach obedience to instructions !"

Over half of the office managers questioned indicated that office workers were deficient in spelling, penmanship, and English training.

One manager declared that the greatest deficiency of all office employees is in the area of English -- punctuation, sentence construction. He felt that there should be a greater emphasis in the "Three R's" in the schools.

According to the State Civil Service office in Portland, the greatest weaknesses of office workers are in arithmetic, spelling, and vocabulary.

A common complaint in offices is the poor penmanship of beginning workers, which is, of course, a frequent cause of inaccuracy. "Workers are especially inaccurate in writing figures," says one office manager.

Thus it is apparent that office managers do discover their beginning employees deficient in several respects. The most common deficiency which the managers indicated, that of a lack of general business understanding, is indirectly responsible for the other weaknesses. Students are not aware of the demands of business, and thus fail to prepare themselves accordingly.

Their business training needs to be rounded out, so that a broader background will be provided. It was pointed out by several managers that there is a lack of specialization in small offices such as are numerous in the Portland area. This means that a knowledge of one type of office job is not sufficient. The worker needs a variety of skills, and above all, a better understanding of business itself.

One manager pointed out, for example, "A knowledge of bookkeeping is very valuable in practically every job in

our office." And again, "Everyone in this office does some filing, and needs a good background in spelling and penmanship, and needs to know the alphabet!"

## PART VI

Knowledges and Abilities  
in which Beginning Typists are Deficient

According to the findings of the study as indicated on Table XIII, 69.8 per cent of the office workers use the typewriter. It seemed wise to separate the classification of typists from that of general clerical workers in order to ascertain the deficiencies of typists.

However, the most frequent deficiency in typists was the same deficiency indicated as most common in all clerical workers -- inaccuracy. Table XVI shows the deficiencies of beginning typists, ranked in order of their frequency, as checked by 77 of the 88 office managers surveyed.

TABLE XVI  
Knowledges and Abilities  
in which Beginning Typists are Deficient

Rank	Knowledges and Abilities	Per Cent
1	Accuracy	92.4
2	Proofreading	74.7
3	Careful erasing and correcting of copy	63.3
4	Spelling	60.8
5	Punctuation	59.5
6	Speed	57.0
7	Arrangement of typed material	54.4
8	Efficient organization and handling of paper and carbons	51.9
9	Care of typewriter	48.1
10	Total production	46.8
11	Numbers	32.9
12	Typing from rough draft	26.6
13	Tabulation	12.7



It is evident that accuracy is by far the most common deficiency of beginning typists, since it was checked by 92.4 per cent of the office managers. It was checked almost 20 per cent more times than the next most frequent deficiency, that of proofreading.

In third place was Careful Erasing and Correcting of Copy, which was listed as a deficiency by 63.3 per cent of office managers. These three deficiencies are by far the most important deficiencies in the judgment of the office heads.

When these three deficiencies are analyzed, it will be seen that they are closely related. Beginning typists apparently make frequent errors, then fail to proofread carefully enough to find those errors, and, finally, are not careful in erasing and correcting the errors which they do find.

Spelling and punctuation are also checked as common deficiencies, being checked by 60.8 per cent and 59.5 per cent respectively. It might thus be interpreted that the typist does not know enough about spelling or punctuation to know when he has made an error in those areas. So, perhaps, it is in these two areas that there is a serious need for better training.

Although schools frequently emphasize "Speed and Accuracy" in the skill subjects such as typing and

shorthand, it is evident that the office manager attaches less importance to speed than to accuracy. Speed is listed in sixth place, by 57 per cent of the managers.

As one manager indicated, "Speed is of no value to us in the office, unless it is speed with accuracy."

Typing from rough draft, and typing tabulations are apparently not too important in the minds of office managers who answered this question. This does not mean, however, that typists are proficient in these skills, as was pointed out by one manager who said, "We are unable to assign this type of work to beginning typists--they are hardly able to turn out straight-copy material without error."

That beginning typists cannot arrange typed material on the page is indicated by 54.4 per cent of office heads. Typists are also deficient in efficient handling and organization of paper and carbons.

Almost one half (48.1 per cent) of the managers felt that typists did not take proper care of the typewriter.

## PART VII

Knowledges and Abilities  
in which Beginning Stenographers are Deficient

As already observed (see Table IX) the classification of Stenographer-Secretary includes 14.3 per cent of all office workers. Thus approximately one out of every seven employees in the office is either a stenographer or a secretary. Office managers indicated that stenographers were more numerous than secretaries, for each office might have several stenographers, with only one private secretary.

Office managers were asked to check the most common deficiencies of beginning stenographers. Table XVII shows the knowledges and abilities in which office managers found stenographers deficient, ranked in order of frequency of mention.

TABLE XVII

## Knowledges and Abilities

in which Beginning Stenographers are Deficient

Rank	Trait	Per Cent
1	Ability to compose a letter	80.0
2	Ability to transcribe accurately	78.6
3	Spelling	68.6
4	Ability to discover typing errors	64.3
4	Knowledge of English	64.3
6	Punctuation	62.9
7	Letter arrangement	58.6
8	Ability to read back shorthand notes	52.9
9	Total production	35.7
9	Ability to transcribe rapidly	35.7
11	Speed	34.3
12	Ability to type well	31.4

An analysis of the replies received in answer to the question, "What are common deficiencies in beginning stenographers," provided a real surprise. Eighty per cent of the office managers indicated that the most common deficiency in beginning stenographers was inability to compose letters! That stenographers are expected to compose letters at all might be a surprise to many prospective stenographers, who seek training in shorthand and typing, but leave Business English strictly alone.

It was not surprising to discover that office managers felt that the lack of ability to transcribe accurately was an important deficiency, for inaccuracy has been indicated as a common deficiency for all types of workers. It was surprising, however, to find that inaccuracy took second



place, being checked as a deficiency by 78.6 per cent of office managers.

Spelling ranked third as the most common deficiency in beginning stenographers, being checked by 68.6 per cent of office heads.

Other common deficiencies were the inability to discover typing errors and a lack of knowledge of English, which were checked by the same number of office heads, 64.3 per cent. Punctuation was listed as a deficiency by 62.9 per cent.

These deficiencies in spelling, English, punctuation, and the ability to discover typing errors all contribute to the deficiency of being unable to transcribe accurately, which was the second most common deficiency. Those same deficiencies are responsible for the most common deficiency of all, that of ability to compose a letter. A good background in spelling, English, and punctuation, is essential in either composition of letters or transcription of letters from shorthand notes.

It was evident that the office manager is far more concerned about accuracy than about speed. Speed was listed as eleventh in importance in the list of common deficiencies, being checked by only 34.3 per cent of office managers.

The ability to type well was listed last in importance. One office manager pointed out that a stenographer was

"expected" to be able to type well. He indicated that most stenographers who fail to succeed on the job are weak in spelling and correction of errors.

Another office manager indicated that he had found stenographers deficient in taking rapid dictation and in reading back notes. He felt that schools should train stenographers to take dictation for long periods of time, rather than for short spurts. Actually, only 52.9 per cent of the office managers indicated that the inability to read back shorthand notes was an important deficiency.

One office manager felt that the stenographer of today lacked a sense of responsibility and a sense of pride in accomplishment. He suggested that the schools might foster in the student these proper attitudes for work.

## PART VIII

Minimum Educational Requirements  
for Office Workers

With the present high rate of employee turnover, and the increased demand for office workers, it is of interest to note the demands of business as to educational requirements. It was hoped that the study would provide some indication as to the point of view of the office manager in his advice to the high school student. Would the office manager urge the student to leave school and take one of the many jobs available, or would he recommend that the student complete his education?

Office managers were asked to check the minimum amount of formal education which they would require for each position in the office. Table XVIII shows the number of office managers who indicated the minimum educational requirement for each office position.

TABLE XVIII  
Minimum Educational Requirements  
for Office Workers

	Less than H.S.	H.S.	H.S. & one year	H.S. & two years	College
Receptionist	2	9	36	14	1
PBX Operator	6	12	42	5	
General Clerks	4	13	45	9	1
Clerk Typists	3	12	45	11	
Bookkeeper-Acct.		9	13	28	16
Filing Clerks	8	14	40	3	
Mail & Ship. Clerks	21	11	26		
Stock Clerks	15	14	23	3	2
Cashier		8	21	23	8
Office Boy-Girl	29	9	11	3	
Bkkg. Mach. Oper.	5	10	26	21	1
Duplicator Operator	12	9	27	6	
Stenographer-Sec.		8	21	37	10
Voice Transcriber	3	5	26	15	1
Calculator Operator	4	10	30	21	1

In the positions of certain office workers, office managers felt that less than high school education might be satisfactory. Mail and shipping clerks were required to have a minimum of less than high school by 21 office managers. Office boys and girls were given the same minimum of less than high school by 12 office managers.

For the positions of Filing Clerks and Stock Clerks, 14 office managers indicated a minimum requirement of a high school education.

According to 45 office managers, high school and one year is the minimum requirement for General Clerks and Clerk-Typists. PBX Operators also require a high school



education plus an additional year, according to 42 office heads. Filing Clerks also need this additional year, according to 40 office managers.

High school plus two years is required for the positions of Bookkeeper-Accountant, according to 28 office managers; for Cashiers, according to 23 office managers; and for Stenographer-Secretaries, according to 37 office managers.

Some office managers feel that these three positions require even more education, and indicate that a college education is a minimum. Sixteen office managers have this minimum for Bookkeeper-Accountants, eight have this minimum for Cashiers, and ten have that minimum for Stenographer-Secretaries.

Table XIX shows the number and percentage of times office managers indicated each minimum requirement.

TABLE XIX

## Percentages of Minimum Requirements

	Less than H.S.	H.S.	H.S. and one year	H.S. and two years	College	Total
No.	112	153	432	199	41	937
Per Cent	12.	16.3	46.1	21.2	4.3	99.9

Office managers listed high school and one year as the most frequent minimum educational requirement for office employees. This minimum was checked 432 times out of the

total number of 937 checks, or 46.1 per cent of the time. High school and two years was checked 21.2 per cent of the time.

High school was checked as a minimum requirement 16.3 per cent of the total checks. Less than high school was a minimum 12 per cent of the time. College was required for only 4.3 per cent of the positions.

However, one office manager pointed out that although his company's minimum requirement is high school, they prefer college graduates. Only college graduates receive promotions to upper bracket positions in the company.

Several office managers indicated that the educational requirement was not always the deciding factor in hiring an employee. Age and experience are also considered.

One company prefers to train its own employees up through the ranks, and believes that the company training program is best for their employees. Still the office manager said, "I believe that young people should complete their school training and get all the education possible. The more you have, the better equipped you are for the future." This office manager is definitely not urging young students to quit school to take jobs now. He feels that they will be of more value to the business world later on, when their education is complete.

In some cases, it was discovered that college graduates are not always preferred. Several office managers

indicated that their experiences with recent college graduates had led them to believe that the college-trained person had a superior attitude, and that he was difficult to train for routine jobs. High school graduates or business college students are sometimes preferred.

One office manager stated, "While college education is creditable, it would not be a deciding factor to us in selecting an employee. Our high schools and business colleges are turning out youngsters with more 'stick-to-it-iveness' than many of our colleges."

While a college education is still not required for a majority of office jobs, neither do we find many office managers accepting large numbers of job applicants with less than high school educations. Office managers remark, "High school or its equivalent is a minimum. Not that others couldn't do the job, but I believe that to get along a person's education should be well-rounded." And another interesting comment was, "We do not hire beginners for any job except that of receptionist -- and even then we have trouble."

In studying the returns on this question of establishing a standard minimum education requirement, it was discovered that six of the office managers recommended that all office positions have a minimum requirement of a high school education. Three felt that high school plus one year (business college or regular college) was a minimum

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for all positions, and three indicated a minimum of high school plus two years for all positions.

It is apparent that office standards are increasing, and that more and more education is being required of beginners.



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## PART IX

## Business Machines Used in Portland Offices

Table XX shows the number of machines now in use, both electric and manual, as reported by 76 office managers; and the number of machines which will be added in the next 24 months. Also indicated is the total number of each machine which will be in operation by 1952, listed in the order of frequency.

TABLE XX

## Business Machines Used in Portland Offices

	Now in Use		To Add		Total
	Elec.	Manual	Elec.	Manual	1952
Typewriters	124	1669	30	156	1979
Full Keyboard Add.	363	73	82	1	519
Key-driven Calc.	204	135	2	1	442
Rotary Type Calc.	188	37	20		245
High Key. Bkkg. Mach.	168	3	48		219
Ten-Key Add. Mach.	114	48	12	3	177
Voice Trans. Mach.	120		40		160
Tabulating Mach.	61	1	3		65
Key Punches	53	2	8		63
Stencil Duplicator	29	24	3		56
Addressing Machine	39	14			53
Type. Ten-Key Bkkg.	35	12			47
Fluid Dup. Mach.	22	21	1	1	45
Mailing Machine	30	14			44
Type. Full-Key Bkkg.	24	4			28
Photocopy Machine	12				12
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According to the 76 office managers who replied to the question, "How many business machines are in use in your

office at the present time?" and "How many do you expect to add next year?" the typewriter was the machine listed most often.

In the 76 firms, there were a total of 1793 typewriters now in use, of which 124 or 7.4 per cent are electric. They expect to add 186 typewriters, of which 30 or 19.2 per cent will be electric. Many office managers mentioned that their workers preferred electric machines, and that they would eventually replace old machines with electric ones. The trend seems to be toward the use of electric typewriters in Portland offices.

Table XXI shows the percentage of employees using the typewriter, ranked in order of frequency.

TABLE XXI

## Use of Typewriter by Employees

Rank	Employee	Per Cent
1	Stenographer-Secretary	100.0
1	Voice Transcriber	100.0
3	Receptionist	88.9
4	Clerk-Typists	80.0
5	Cashier	70.0
5	Duplicator Operator	70.0
7	Bkkg. Machine Operator	62.2
8	Bookkeeper-Accountant	60.3
9	Filing Clerks	59.1
10	Calculator Operator	57.8
11	Stock Clerks	57.7
12	PBX Operator	56.0
13	Mail & Ship. Clerks	54.8
14	Office Boy-Girl	53.9

The typewriter was used by the largest number of employees. It is used by 100 per cent of all Voice Transcribers and Stenographer-Secretaries. It is also used by 88.9 per cent of the Receptionists. In addition, the typewriter is used by over 50 per cent of all other workers in the office, including the Filing Clerks, the Bookkeeper-Accountants, and the Cashiers.

As shown on Table XX, the second most prevalent machine was the full keyboard adding machine, of which 436 are now in use, with an additional 83 expected to be added next year. Of these expected additions, 82 will be electric, indicating again a definite trend toward electrically operated machines.

The adding machine and the typewriter together are found in greater numbers than all other office machines. Together they account for 2498 or 60.1 per cent of all office machines in 76 Portland offices.

The ten-key adding machine was in sixth place in the list of most common business machines. There were 162 ten-key adding machines in use in 1950, with an additional 15 machines to be added next year, making a total of 177 machines for the 76 business offices.

The use of the adding machines (either full keyboard or ten-key) was one of the five most common duties of office workers, as indicated on Table XI. Table XXII shows the

percentage of employees using adding machines in Portland offices, ranked in order of frequency.

TABLE XXII

## Use of Adding Machines by Employees

Rank	Employee	Per Cent
1	Bookkeeper-Accountant	81.0
2	General Clerk	76.8
3	Bkkg. Machine Operator	67.6
4	Cashier	59.6
5	Office Boy-Girl	53.9
6	Clerk-Typists	52.5
7	Calculator Operator	41.7
8	Stenographer-Secretary	37.7
9	Stock Clerks	23.1
10	Filing Clerks	22.7
11	Mail & Ship. Clerks	19.4
12	Receptionist	16.7
13	Duplicator Operator	15.0
14	PBX Operator	14.0
15	Voice Transcriber	7.7

As shown on Table XXII, the adding machines are used by 81. per cent of all Bookkeeper-Accountants, by 76.8 per cent of the General Clerks, and by 67.6 per cent of the Bookkeeping Machine Operators. Adding machines are also used by large numbers of Cashiers, Office Boys or Girls, and Clerk-Typists. Every classification of worker uses the adding machines to some extent.

The third most prevalent machine in 76 Portland business offices is the key-driven calculator. By 1952 there will be 442 of these machines in use in these offices.



Table XXIII shows the percentage of each type of worker in the office who uses the key-driven calculator, ranked in order of frequency.

TABLE XXIII  
Use of Key-Driven Calculator by Employees

Rank	Employee	Per Cent
1	Calculator Operators	80.5
2	Bookkeeper-Accountant	45.5
3	General Clerk	33.3
4	Cashier	31.9
5	Clerk-Typist	18.0
6	Bkkg. Machine Operator	16.2
7	Receptionist	11.1
8	Duplicator Operator	10.0
9	Stenographer-Secretary	8.2
10	PBX Operator	4.0
11	Stock Clerk	3.8
12	Mail & Ship. Clerk	3.2
13	Filing Clerk	2.3
14	Office Boy-Girl	0.0
14	Voice Transcriber	0.0

The key-driven calculator is used by 80.5 per cent of Calculator Operators, as shown on Table XXIII. About half as many, 45.5, Bookkeeper-Accountants use the key-driven calculator. Approximately one out of every three General Clerks and Cashiers also use the key-driven calculator.

Smaller percentages of the other employees in the office use the key-driven calculator. The Office Boy or Girl and the Voice Transcriber in these offices apparently did not use the key-driven calculator at all.

The rotary type calculator (Marchant, Friden, and Monroe) was listed fourth on Table XX, close behind the

key-driven calculator in popularity. There will be 245 rotary type calculators in use in 1952.

The two calculators (key-driven and rotary type) together number 687, which is 16.5 per cent of the total number of business machines used in the 76 offices. Therefore, approximately one out of every six office machines in use in these 76 offices is a calculator.

Table XXIV shows the percentage of employees who use the rotary type calculator, ranked in order of frequency.

TABLE XXIV

## Use of Rotary Type Calculator by Employees

Rank	Employee	Per Cent
1	Bookkeeper-Accountant	61.4
2	Calculator Operator	30.6
3	General Clerk	21.7
4	Cashier	19.2
5	Bkkg. Machine Operator	13.9
6	Duplicator Operator	10.0
7	Clerk-Typist	9.8
8	Stenographer-Secretary	8.2
9	Stock Clerk	7.7
10	PBX Operator	2.0
11	Receptionist	0.0
11	Filing Clerk	0.0
11	Mail & Ship. Clerk	0.0
11	Office Boy-Girl	0.0
11	Voice Transcriber	0.0

According to Table XXIV there are twice as many Bookkeeper-Accountants (61.4 per cent) using the rotary type calculator in connection with their work than Calculator Operators themselves, 30.6 per cent. Considering the large number of Calculator Operators using the

key-driven calculator, 80.5 per cent, as indicated on Table XXIII, this shows that the largest percentage of Calculator Operators use the key-driven calculator.

Rotary calculators are used by 21.7 per cent of General Clerks, by 19.2 per cent of Cashiers, and by 13.9 per cent of the Bookkeeping Machine Operators. No workers in the following classifications use the rotary type calculator in their work: Receptionist, Filing Clerk, Mail and Shipping Clerk, Office Boy-Girl, Voice Transcriber.

The high keyboard bookkeeping machine ranked fifth in the list of most common business machines, as checked by 76 office managers. See Table XX. There will be 219 of these machines in use in 1952 in these 76 offices.

The typewriter ten-key bookkeeping machine was less prevalent, ranking twelfth on the list, with 47 such machines to be in use in 1952 in these same offices.

The typewriter full-keyboard bookkeeping machine was the fifteenth most prevalent machine. There will be 28 of them in use in 1952.

The three types of bookkeeping machines, the high keyboard bookkeeping machine, the typewriter ten-key bookkeeping machine, and the typewriter full keyboard bookkeeping machine, give a total of 304 out of the total number of 4154 office machines in 76 business offices. Together they provide 7.3 per cent of the total number of office machines.



As shown on Table IX, there were 220 full-time Bookkeeping Machine Operators covered in the survey. Since there are 304 machines in these offices, it would appear that there are other persons in the office who use bookkeeping machines to some extent.

Table XXV shows the percentage of each type of employee using the bookkeeping machines, ranked in order of the frequency.

TABLE XXV

## Use of Bookkeeping Machines by Employees

Rank	Employee	Per Cent
1	Bkkg. Machine Operator	100.0
2	Bookkeeper-Accountant	52.3
3	Cashier	8.5
4	General Clerk	5.8
5	Filing Clerk	2.3
6	Clerk-Typist	1.6
7	Receptionist	0.0
7	PBX Operator	0.0
7	Mail & Ship. Clerk	0.0
7	Stock Clerk	0.0
7	Office Boy-Girl	0.0
7	Duplicator Operator	0.0
7	Stenographer-Secretary	0.0
7	Voice Transcriber	0.0
7	Calculator Operator	0.0

According to Table XXV, every Bookkeeping Machine Operator operates a bookkeeping machine, as one might expect. It is interesting that over half (52.3 per cent) of the Bookkeeper-Accountants also operate bookkeeping machines in connection with their work.

Small percentages of Cashiers, General Clerks, Filing Clerks, and Clerk-Typists also use bookkeeping machines.



The nine other classifications of employees do not use the bookkeeping machines. This would indicate that the operation of the bookkeeping machines is a specialized duty, since a comparatively small number of the total workers in the office use the machine.

Referring again to Table XX it can be seen that voice transcribing machines are the seventh most common business machines in 76 Portland offices. There were 120 voice transcribing machines in use in 1950, with an expected purchase of 40 machines for 1951, an increase of 33.3 per cent. There will be 160 voice transcription machines in use in these 76 offices by 1952.

Table XXVI shows the percentage of employees using the voice transcribing machines, arranged in order of frequency.

TABLE XXVI

## Use of Voice Transcribing Machines by Employees

Rank	Employee	Per Cent
1	Voice Transcriber	100.0
2	Stenographer-Secretary	27.9
3	Duplicator Operator	10.0
4	Receptionist	8.3
5	General Clerk	7.2
6	Clerk-Typist	6.5
7	PBX Operator	6.0
8	Cashier	4.3
9	Filing Clerk	2.3
10	Bookkeeper-Accountant	0.0
10	Mail & Ship. Clerk	0.0
10	Stock Clerk	0.0
10	Office Boy-Girl	0.0
10	Bkkg. Machine Operator	0.0
10	Calculator Operator	0.0

While all the Voice Transcribers in the office use voice transcription machines, it is also revealed on Table XXVI that 27.9 per cent of Stenographer-Secretaries also use the voice transcription machines. Ten per cent of the Duplicator Operators also operate voice transcribing machines. There are six classifications of office workers which do not use these machines, which indicates that the machine is a rather specialized one, although it is not as highly specialized in use as the bookkeeping machines.

At this point, it is interesting to compare the employees who use the transcribing machines with those who take dictation. Table XXVII makes this comparison, showing the percentage of employees using the voice transcribing machine and the percentage taking dictation.

TABLE XXVII

Comparison of the Use of Voice Transcription Machines  
with the Taking of Dictation

Employee	Using Voice Trans. Machine	Taking Dictation
	Per Cent	Per Cent
Receptionist	8.3	19.4
PBX Operator	6.0	6.0
General Clerk	7.2	11.6
Clerk-Typist	6.5	19.7
Bookkeeper-Accountant	0.0	6.8
Filing Clerk	2.3	2.3
Mail & Shipping Clerk	0.0	0.0
Stock Clerk	0.0	0.0
Cashier	4.3	8.5
Office Boy-Girl	0.0	7.7
Bkkg. Machine Operator	0.0	2.7
Duplicator Operator	10.0	5.0
Stenographer-Secretary	27.9	85.2
Voice Transcriber	100.0	38.5
Calculator Operator	0.0	2.8
	<hr/> 172.5	<hr/> 216.2

According to Table XXVII, it is apparent that in these 76 Portland business offices more employees take dictation than use the voice transcription machines. Of the total number of employees, taking dictation is a duty performed by 55.7 per cent of the employees, while 44.3 per cent use the transcription machines.

These two duties are performed most often by Voice Transcribers and Stenographer-Secretaries. Although every one of the voice transcriber employees use the voice transcribing machines, 38.5 per cent of these employees also take dictation.

As for Stenographer-Secretaries, 27.9 per cent of them use the voice transcription machines, while 85.2 per cent take dictation.

According to the findings of the survey of 76 offices as reported on Table XX, the stencil duplicating machine was the tenth most common business machine. There will be 56 such machines in use in 76 offices by 1952. The fluid duplicating machines were in thirteenth place in frequency. There will be 45 of these machines in use by 1952. Together there will be 101 duplicating machines of the two types in use, or approximately 2.4 per cent of the total number of business machines in 76 offices.

Although many offices have Duplicating Operators whose principal duty is the operation of duplicating machines, many other employees in the office also operate these machines.

Table XXIX shows the percentage of each employee category who use the duplicating machines, ranked in order of frequency.



TABLE XXIX

## Use of Duplicating Machines by Employees

Rank	Employee	Per Cent
1	Duplicating Operator	100.0
2	Stenographer-Secretary	36.1
3	Clerk-Typist	26.2
4	General Clerk	18.8
5	Office Boy-Girl	15.4
5	Voice Transcriber	15.4
7	Receptionist	13.9
8	Mail & Shipping Clerk	12.9
9	Filing Clerk	11.4
10	Bookkeeper-Accountant	6.8
11	Cashier	6.4
12	PBX Operator	6.0
13	Bkkg. Machine Operator	5.4
14	Stock Clerk	0.0
14	Calculator Operator	0.0

According to Table XXIX, the duplicating machine is used by nearly every employee in the office. All Duplicator Operators of course use the duplicating machines, but, in addition, it is used by 36.1 per cent of the Stenographer-Secretaries, or about one out of every three employees in this classification.

Duplicating machines are also operated by 26.2 per cent of all Clerk-Typists and 18.8 per cent of General Clerks. The only two classifications of workers who do not use the duplicating machines in these 76 offices are the Stock Clerk and the Calculator Operator. Apparently the use of the duplicating machines is not a highly specialized skill, as so many types of workers are expected to be able to operate these machines.

## PART X

## Training for Operation of Business Machines

Having been asked which machines were in use in business offices, office managers were next asked their opinions on training for the use of these machines. They were asked to check for each machine whether training was essential, desirable, or not necessary for beginning workers who would be expected to use these machines. Their replies are compiled on Table XXX ranked in order of preference for training, by percentage of affirmative answers.

TABLE XXX

## Training for Operation of Business Machines

Machine	Train. Essen.	Train. Desir.	Total	Not Neces.	No. of Offices
Key-Driven Calculator	71.4	20.4	91.8	8.2	49
Rotary Type Calculator	45.5	41.8	87.3	12.7	55
Type.Ten-Key Bkkg.Mach.	47.8	34.8	82.6	17.4	23
High Key. Bkkg. Mach.	53.8	26.9	80.7	19.3	26
Electric Typewriters	20.3	39.7	80.0	20.0	59
Type.Full Key.Bkkg.Mach.	50.0	30.0	80.0	20.0	30
Stencil Duplicating Mach.	19.1	59.6	78.7	21.3	47
Ten-Key Adding Mach.	39.3	39.3	78.6	21.4	56
Voice Trans. Mach.	37.7	37.8	75.5	24.5	53
Full Key. Add. Mach.	33.9	41.1	75.0	25.0	56
Key Punch Machine	57.7	7.7	65.4	34.6	26
Fluid Dup. Mach.	8.1	57.3	65.4	34.6	37
Tabulating Mach.	48.0	12.0	60.0	40.0	25
Addressing Mach.	15.2	41.3	56.5	43.5	56
Mailing Machine	6.8	40.9	47.7	52.3	44
Photocopy	8.3	18.4	16.7	83.3	24
	35.2	34.9	70.1	29.9	

The key-driven calculator is the machine which, in the opinion of 91.8 per cent of the office managers, requires training. Training is also either essential or desirable on the rotary type calculator, according to 87.3 per cent of the office heads. Apparently the calculators, in the opinions of these businessmen, are the machines which require training before a beginner is able to operate them.

Training on the bookkeeping machines is either essential or desirable in the opinions of over 80. per cent of the office managers.

A total of 82.6 per cent of the office managers indicated that training on the typewriter ten-key bookkeeping machine was either essential or desirable. A total of 80.7 essential or desirable responses were counted for the high keyboard bookkeeping machine, and 80. per cent for the typewriter full keyboard bookkeeping machine. Eighty per cent of the office managers also felt that training on electric typewriters would be either essential or desirable.

A majority of office managers in nearly every instance recommended that training precede the operation of business machines. However, only 16.7 of the managers felt that training would be important to the operation of the photocopy machine.

Table XXXI shows the machines for which training is indicated as being essential, ranked in order of frequency of mention by office managers.



TABLE XXXI

## Machines for which Training is Essential

Rank	Machine	Per Cent
1	Key-Driven Calculator	71.4
2	Key Punch Machine	57.7
3	High Keyboard Bookkeeping Machine	53.8
4	Typewriter Full Keyboard Bkkg. Machine	50.0
5	Tabulating Machine	48.0
6	Typewriter Ten-Key Bookkeeping Machine	47.8
7	Rotary Type Calculator	45.5
8	Ten Key Adding Machine	39.3
9	Voice Transcription Machine	37.7
10	Full Keyboard Adding Machine	33.9
11	Electric Typewriter	20.3
12	Stencil Duplicating Machine	19.1
13	Addressing Machine	15.2
14	Photocopy	8.3
15	Fluid Duplicating Machine	8.1
16	Mailing Machine	6.8

According to 71.4 per cent of the office managers in 49 offices, training is essential on the key-driven calculator. Training is also required on the key-punch machine, as reported by 57.7 per cent of the office heads. The bookkeeping machines also require previous training according to a majority of the office managers. Less than 10 per cent of the office managers felt that training was essential on the photocopy, the fluid duplicating machine or the mailing machine.

Table XXXII shows the machines for which training is indicated as being desirable, ranked in order of frequency.



TABLE XXXII

## Machines for which Training is Desirable

Rank	Machine	Per Cent
1	Electric Typewriters	59.7
2	Stencil Duplicating Machine	59.6
3	Fluid Duplicating Machine	57.3
4	Rotary Type Calculator	41.8
5	Addressing Machine	41.3
6	Full Keyboard Adding Machine	41.1
7	Mailing Machine	40.9
8	Ten-Key Adding Machine	39.3
9	Voice Transcription Machine	37.8
10	Typewriter Ten-Key Bookkeeping Machine	34.8
11	Typewriter Full Keyboard Bkkg. Machine	30.0
12	High Keyboard Bookkeeping Machine	26.9
13	Key-Driven Calculator	20.4
14	Tabulating Machine	12.0
15	Photocopy	8.4
16	Key Punch Machine	7.7

Table XXXII shows that 59.7 of the office managers felt that training in electric typewriters was desirable. Only 20.3 per cent felt that training on this machine was essential. Training on the stencil duplicating machine was also indicated as desirable by 59.6 per cent of office managers. Only 19.1 per cent of the managers, however, had indicated that training on the stencil duplicating machine was essential. Another 57.3 per cent recommended that training on the fluid duplicating machine be provided, while only 8.1 per cent of these managers felt that this training was essential.

Training was also indicated by a large percentage of office managers as being desirable for the following machines: rotary type calculator, addressing machine, full

keyboard adding machine, mailing machine, ten-key adding machine, and voice transcription machines. There were only two machines for which less than 10 per cent of the managers indicated that training was desirable. Those machines were the photocopy and the key punch machine.

Table XXXIII shows the percentage of office managers who indicated that training on machines is not necessary, ranked in order of frequency.

TABLE XXXIII

Machines for which Training is not Necessary

Rank	Machine	Per Cent
1	Photocopy	83.3
2	Mailing Machine	52.3
3	Addressing Machine	43.5
4	Tabulating Machine	40.0
5	Fluid Duplicating Machine	34.6
5	Key Punch Machine	34.6
7	Full Keyboard Adding Machine	25.0
8	Voice Transcription Machine	24.5
9	Ten-Key Adding Machine	21.4
10	Stencil Duplicating Machine	21.3
11	Typewriter Full Keyboard Bkkg. Machine	20.0
11	Electric Typewriter	20.0
13	High Keyboard Bookkeeping Machine	19.3
14	Typewriter Ten-Key Bookkeeping Machine	17.4
15	Rotary Type Calculator	12.7
16	Key-Driven Calculator	8.2

Table XXXIII shows that the photocopy machine does not require training for beginners to operate, according to 83.3 per cent of the managers. A majority of managers also feel that training is unnecessary for the mailing machine.

It will be noted that 25 per cent of the office managers feel that training is unnecessary to operate the

full keyboard adding machine. Seventy-five per cent, however, indicate that training is either essential or desirable.

As one office manager commented, "Beginners have not learned how to use an adding machine. It is necessary for most employees to use an adding machine to some extent, and they should at least know how to use it with a fair degree of speed and accuracy."

Only 8.2 per cent of the managers felt that training was unnecessary on the key-driven calculator, which left 91.8 per cent who recommended that previous training be provided. Only 12.7 per cent of the managers felt that training was not required to operate the rotary type calculator. The remaining 87.3 per cent favored previous training.

There was frequent mention made of the inability of most calculator operators to use percentages and to find decimal places. One manager pointed out that these weaknesses in calculator operators indicated that they lacked a basic knowledge of mathematics.

## PART XI

## Selection of Office Personnel

In order to ascertain the basis for selection of employees which was used most frequently by office managers, the questionnaire provided this question: In selecting personnel, what is your basis for selection? Five typical bases for selection were provided, and the managers were asked to number these bases in order of importance to them.

Table XXXIV shows the bases for selection of personnel, ranked in the five positions by office managers.

TABLE XXXIV

## Bases for Selection of Personnel

Bases	First	Second	Third	Fourth	Fifth	Sixth
Application Blank	4	28	14	11	3	6
Entrance Tests	6	13	15	10	8	4
Personal Interview	69	10	2	1		
References	5	25	17	13	5	9
School Records	1	4	15	13	20	6
Teacher's Recomm.	1	4	3	12	15	21
	<hr/> 86	<hr/> 84	<hr/> 66	<hr/> 60	<hr/> 51	<hr/> 46

Table XXXIV shows that in the first place in the selection of employees, 69 of the 86 employers prefer the personal interview. The personal interview, then, is considered of prime importance by 80.2 per cent of the managers. Over one-third listed the application blank as second in importance, though it was explained thus by one



manager, "The application blank screens out applicants, so that I actually interview only the most promising applicants."

References were third in importance in the selection of personnel, according to 17 or 25.7 per cent of the 66 managers checking a third choice. Selected references, such as former employers or company employees were indicated as being of special importance. References in some cases were considered an integral part of the application blank.

Equal numbers of checks for the fourth most important basis for selection were assigned to References and to School Records. School records were also checked most often in fifth place, while Teachers Recommendations received the most checks as least important in determining factors for selecting personnel.

Table XXXV shows the number of checks which were assigned to each basis of selection, ranked in order of frequency.

TABLE XXXV

## Popular Bases for Selection of Employees

Rank	Bases of Selection	No. Times Checked	
		Per Cent	
1	Personal Interview	82	95.4
2	References	74	86.
3	Application Blank	66	76.7
4	School Records	59	68.6
5	Entrance Tests	56	65.
5	Teacher's Recommendations	56	65.

Table XXXV shows that the Personal Interview is the most frequently used determinant in the selection of employees, with References and the Application Blank also considered important.

Least important of all to the office managers are Entrance Tests and Teacher's Recommendations. Several office managers pointed out that they had never used either source of information before. Business teachers, it would seem, should inform the businessmen of the potential value of these last-named bases.

Although the National Office Management Association itself has provided excellent entrance tests, based on office standards, many of the members of the organization admitted that they had never attempted to use these tests.

However, many office managers indicated that they could not use just one method for judging applicants. Several office heads declared that all the above-mentioned determinants were important in order to do a fair job of selecting employees.

## PART XII

School Information Desired  
by Office Managers about Employees

Although only a small majority of the office managers indicated that they attempted to secure information from school records about an applicant, it was felt that it would be of interest to learn what information the office manager attempts to obtain from the school.

Table XXXVI shows the number and percentage of total checks which 82 office managers used to indicate which information they obtained from schools, ranked in order of frequency.

TABLE XXXVI  
School Information Desired  
by Office Managers about Employees

Rank	Information	No.	Per Cent
1	Intelligence	65	23.6
2	Character	50	18.2
3	Personality	46	16.7
4	General Background	39	14.2
5	Actual Accomplishment in Subjects	38	13.8
6	Specific Commercial Subjects Studied	37	13.5
		<hr/> 275	<hr/> 100.0

Table XXXVI shows that employers most often seek information from the schools in regard to the intelligence of the applicant, since 23.6 per cent of the checks listed

were in this area. Character was next in importance, being checked 18.2 per cent of the time, while personality was checked next in importance, by 16.7 per cent.

General background was considered important, 14.2 per cent of the total checks. Office managers were less interested in the specific commercial subjects studied, and the actual accomplishment in them.

One office manager remarked that the most important information to him was to learn how the applicant got along with others while in school, which would be indicative of his office personality.

Another manager said, "All information from the school is important." This same manager, who has over 90 employees under his supervision, reported that he always considers an applicant's family background. In his business, which is insurance, he considers that the ability to think on one's feet is essential. For this reason, he is interested in knowing whether an applicant has had training in speech and debate.

It is apparent, however, that the office manager is interested first in the intelligence of an employee. If the applicant is intelligent, he can quickly learn what is required of him, even if he has not had extensive formal training in certain areas. It seems likely that the applicant who is intelligent and who has a good character



and personality has an excellent chance of obtaining a position, regardless of his actual school record.

Only one office manager remarked that he felt that the school record was of prime importance. He said, "Intelligence would be considered the most important information, except that great intelligence would be worthless if studies had not been completed."



EAGLE-A

AGAWAM BOND

100% COTTON CONTENT

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## PART XIII

## Difficulties in Filling Positions

So far, the study has revealed the employer's bases for selecting employees, and the type of information which the employer secures from the schools. Also, by discovering the weaknesses of beginning workers as indicated by these office managers, the survey has indirectly revealed the knowledges and abilities and personality traits which the employer desires in beginning workers.

The office managers seem to have well-defined standards for the workers in their offices. Will these standards be maintained? Is it difficult to find adequately trained beginning office workers to fill positions in the office? Table XXXVII shows the compilation of answers to this question.

TABLE XXXVII

Filling Positions with Adequately Trained  
Beginning Office Workers

		No.	Per Cent
Do you have difficulty in securing trained employees?	Yes	46	55.7
	No	39	44.3
	Total	<hr/> 85	<hr/> 100.0

Table XXXVII shows that a majority, 55.7 per cent, of the 85 office managers who answered this question do have difficulty in filling positions with adequately trained beginning office workers. Although 44.3 per cent of the managers indicated that they had no difficulty in securing these trained employees, nearly every office manager listed at least one position when answering the question, "For which office position do you find beginners least adequately trained?"

Table XXXVIII shows the positions which office managers have difficulty in filling with adequately trained employees, listed in order of frequency of mention.

TABLE XXXVIII

## Office Positions which are Difficult to Fill

Rank	Position	No. of Offices	Per Cent of Offices
1	Stenographer	21	38.2
2	Bookkeeper	15	27.3
2	Typist	15	27.3
4	General Clerk	10	18.2
4	Calculator Operator	10	18.2
4	Adding Machine Operator	10	18.2
7	Bookkeeping Machine Operator	5	9.1
7	Filing Clerks	5	9.1
9	Cashier	3	5.5
10	Duplicator Operator	2	3.7
11	Receptionist	2	3.7
12	Teletype Operator	1	1.8

The position of Stenographer is most difficult to fill with adequately trained beginning workers, according to 38.2 per cent of the office managers. About one office

head in every three voices this difficulty. One office manager felt that the stenographer shortage in Portland was due to the great demand for this type of worker in government offices.

About one of every four office managers, 27.3 per cent, found it difficult to secure beginning bookkeepers and typists who were adequately trained. One office manager was very much aware of the difficulties of Portland businessmen. His comment was "Jobs such as those of secretary or bookkeeper are most difficult to fill. They require some background for accuracy and responsibility."

In evaluating the work of beginning typists, one office head comments, "Typists are slow and inaccurate. I have yet to find a girl out of high school or business college who can look at copy and know how to place it on the page in order to give a balanced letter or form. We have to do a great deal of proofreading. New girls cannot read accurately. They have not read aloud for so long that they say all kinds of words that are not in the copy and misread what is there."

General clerks, calculator operators, and adding machine operators who are adequately trained are also difficult to find, according to 18.2 per cent of the managers.



One office manager reported that it was impossible to find a trained teletype operator in the city.

Apparently the schools are not providing business with a sufficient number of adequately trained beginning employees to satisfy the demand.

## PART XIV

Attitude of Office Managers  
Toward Cooperative Work Program

Businessmen have indicated that there is a lack of well-trained beginning office workers in the Portland area. In other localities, where such a shortage has developed, businessmen have cooperated with the schools in an attempt to provide better training.

One of the experimental programs which has been carried on successfully in other cities is that of the Cooperative Work Program. Under this plan, high school students who are majoring in business, spend a part of their senior year at work in business offices, getting actual business experience. For their work they receive compensation and school credit.

Would Portland businessmen favor such a program? Would Portland firms be willing to cooperate in such a program? These were questions which the study attempted to answer.

Table XXXIX shows the number and percentage of office managers who favored the Cooperative Work Program.

TABLE XXXIX

Attitude of Office Managers  
Toward Cooperative Work Program

		No.	Per Cent
Do you favor the Cooperative Work Program?	Yes	59	72.8
	No	22	27.2
	Total	<u>81</u>	<u>100.0</u>

As shown on Table XXXIX, 59 of the 81 office managers, or 72.8 per cent, felt that the Cooperative Work Program would be a good plan. Four of these office managers indicated that they are already practicing some sort of training program in their firms, in one case, however, without compensation.

Since Portland businessmen seem to favor the Cooperative Work Program, would they also be willing to participate in such a program?

Table XXXX shows the number and percentage of office managers who favored the Cooperative Work Program.

TABLE XL  
Willingness to Participate  
in Cooperative Work Program

		No.	Per Cent
Is your firm willing to participate in the Cooperative Work Program?	Yes	37	52.1
	No	34	47.9
Total		71	100.0

According to Table XL, only a bare majority of the office managers were willing to participate in the program, if it were organized. It is noted too that only 71 managers replied to this question, while 81 had answered the question concerning their opinion of the program.

Office managers who did not favor the program felt, in some cases, that the plan was impractical for their firm, or felt that their decision would depend entirely on how the program was organized, and how much cooperation would be given by the school.

Several office managers pointed out that such a decision would be up to the top management, and that they, as office managers, were not in a position to commit the firm. Perhaps this is the reason why 20 per cent of the managers failed to answer this question on the questionnaire.

It is evident, however, that a majority of those managers who answered the question would favor the



Cooperative Work Program. As one office manager stated, "We feel that we can do a better job of training a future worker for our firm than the school." When it was pointed out to this manager that the schools did not attempt to train a student for a specific job, but did attempt to provide the basic principles which could be applied to any job that the student might meet, the manager admitted that the schools were fulfilling that purpose. But he still felt that business would prefer to short cut that educational process by training on the job, for the job.

One manager who indicated that he was in favor of the program felt that it would solve the problem for the high school student who was not mature enough to fully realize the wonderful opportunity of advanced education. He further remarked that the prospective office worker should spend one or two years at a company where he can work close by or can watch persons who are actually doing the job he is considering for his future livelihood.

Cleveland High School carried on a cooperative work program some years ago. One manager was heartily in favor of this plan, since they have profited by later hiring some of the trainees as employees. This manager commented, "In our experience, the cooperative work program between schools and employers has brought us in years past several of the finest employees, who in turn were not only more willing to

learn but equally self-reliant, intelligent, and showed great initiative."

## PART XV

Attitude of Office Managers regarding Office Experience  
for Business Teachers

According to most business educators, business teachers who have had office experience are better teachers of business subjects. Some cities are already requiring that business teachers have actual business experience before teaching.

The survey attempted to discover what businessmen have to say in answer to the question, "Should business teachers have actual office experience?"

Table XLI shows the number and percentage of office managers who favored office experience for business teachers, and the number and percentage of those who did not favor it.

TABLE XLI

Attitude of Office Managers regarding Office Experience  
for Business Teachers

		No.	Per Cent
Should business teachers have actual office experience?	Yes	82	96.4
	No	3	3.6
	Total	<hr/> 85	<hr/> 100.0

As shown on Table XLI, office managers were overwhelmingly in favor of business-trained business teachers,

since 96.4 per cent of the 85 managers indicated a favorable attitude. One office head felt that the teaching procedure would be much more practical if the teacher had had some office experience.

Another office manager answered very definitely that a business teacher should have office experience. He said, "A very difficult task is to teach something to others about which you are not familiar yourself. Consequently, a teacher having actual business experience is definitely in a better position to instill in the minds of students those things of which they have a definite knowledge. Also the best managers are those who know the employee's side as well as the employer's side. The same holds true wherein teachers are concerned."

Several other managers pointed out that the question was unnecessary, that the only possible answer to the question "Should business teachers have actual office experience?" was "Yes."

How many of these same managers, however, are able to provide summer work positions for business teachers?

Table XLII shows the number and percentage of office managers whose firms had summer positions available for teachers, and the number and per cent of those who did not have positions available.



TABLE XLII

## Summer Work Possibilities for Business Teachers

		No.	Per Cent
Does your firm have openings for business teachers in summer work?	Yes	18	20.9
	No	68	79.1
Total		86	100.0

Thus, according to Table XLII, only 20.9 per cent of the office managers, or one out of five, are able to provide openings for business teachers in summer work. Certain firms do not hire temporary help, others do not have stenographic relief work, others were too small to require additional summer help.

Opportunities for summer work seemed to be best in the larger firms. One firm reported that it would prefer teachers for summer replacement, but had not been able to secure the services of a teacher! One office manager felt that teachers would demand a higher wage than he could afford to pay for office work.

Another office manager indicated that he could not spare the time to train a teacher, who would be only temporary, for summer work.

One office manager qualified his acceptance of the summer work idea by remarking that his firm hires only qualified personnel, and that a teacher would be expected to meet the same qualifications before employment. He also

pointed out that a teacher would be expected to do the same amount of work as the others in the office.

In the Portland area, there is apparently some opportunity for summer work should business teachers desire that experience. A coordinate program between the businessmen and the schools would help to make the purposes of the program clear to everyone. It is possible that such a program might be worked out as successfully in Portland as it has elsewhere.

## PART XVI

Attitude of Office Managers Toward  
Business Entrance Tests

Businessmen have tried to eliminate, by various means, the employment of unqualified personnel. One way to decrease the possibility of hiring a worker who is unable to do the required work is to give an ability test prior to employment.

In recent years, attempts have been made to standardize these ability tests. The National Council for Business Education (UBEA) and the National Office Management Association have established a permanent clerical ability testing program. This program provides standardized tests for beginning applicants in the positions of stenographer, machine transcriber typist, bookkeeper, file clerk, and key-driven calculating machine operator. There is also a general information test and a test in fundamentals.

Those who pass the tests, revealing that they are capable of filling a position in which this skill is used, are awarded a Certificate of Proficiency.

It was this testing program which the survey questionnaire mentioned in the question, "Would you be in favor of standardized office entrance production tests given by the schools?"

Table XLIII shows the compilation of the replies of the office managers in answer to that question.

TABLE XLIII

Attitude of Office Managers Toward  
Business Entrance Tests

		No.	Per Cent
Do you favor standardized office entrance production tests given by the schools?	Yes	66	83.5
	No	13	16.5
Total		<hr/> 79	<hr/> 100.0

Standardized office entrance production tests, given by the schools, were favored by 66 out of 79, or 83.5 per cent of the office managers answering that question.

However, several of the managers indicated that they are not familiar with these tests, which are devised by NOMA (to which most of the managers belong. !)

One manager felt that the tests were of questionable value, that he was much more interested in the personality and character of an applicant than in his speed or skill.

It was pointed out by one manager that the tests are of value only in cases where much hiring of new personnel is done. In small offices, he feels, there is no need for a standardized testing program.

Another manager felt that the tests were not realistic enough to be of value to the office manager, although they



might be good to set standards for the student while in school.

The survey did not ask how many managers were now using entrance tests, nor how many were considering the NOMA Certificates of Proficiency as verification of the ability of an applicant. One manager, however, volunteered that in his insurance firm office, all applicants were given a test which was graded to the job being applied for. Typing tests were also given to applicants for every position. This manager was the only one, however, who indicated that entrance tests were in use. Despite the fact that 83.5 per cent of the managers favor the use of entrance tests, it would appear that further information on these tests should be provided before the tests will fulfill their purpose.

## CHAPTER IV

## SUMMARY AND RECOMMENDATIONS

## Summary

This study is based upon a survey which had for its purpose the determination of the requirements of beginning office workers in representative business offices of Portland, Oregon, and, further, the determination of the extent to which these requirements are being filled by beginning employees.

The questionnaire was sent out to the members of the National Office Management Association, who represented 150 firms, to 40 members of the Personnel Management Association, and to five additional office managers who were not members of either organization.

Three weeks later, every office manager who had not returned a questionnaire was telephoned to ask him to return the questionnaire. In some cases, additional copies of the questionnaire were mailed. Two weeks later, following the Education meeting of the National Office Management Association, a follow-up letter was mailed to those who had not yet responded. Personal interviews with ten office managers were made during this period.

A total of 88 replies, or about 45 per cent, were received.

The largest number of questionnaires were returned by office managers in the field of Retail-Wholesale business. Thirty-one questionnaires were returned by these men.

The 88 office managers who replied to the survey questionnaires were supervisors of a total of 3958 employees. The largest number of employees, 1259 or 31.8 per cent were in the category of Financial firms. Actually, only nine Financial firms were included in the study, but two of these firms employed over 1000 office workers.

The returns revealed a wide variation in the size of the business office. Many offices had but one employee, while the largest office had 566 employees. In the study, the office which had two workers was the most numerous.

It was found that the replacement of employees was highest in the position of Office Boy or Girl. Every one of the 33 Office Boys or Girls was to be replaced next year. This does not mean that they are all to be released, but that many of these workers are to be promoted, for this is a starting or training position in many firms.

A comparatively high turnover was indicated for Bookkeeping Machine Operators and for Cashiers. Since these two categories are the ones for which the office manager considers it difficult to find adequately trained beginners, it would seem that the office managers are planning to hire new Bookkeeping Machine Operators and Cashiers, rather than to replace present ones. The



turnover rate for all office employees in the survey is approximately 16 per cent. Office managers felt that the turnover rate would be higher, as war will result in many changes in office personnel.

The returns verified the nation-wide trend toward increased employment of office workers, since there was a growth in number of office workers of 47.5 per cent from 1940 to 1950 in these 88 Portland offices. The numbers of other kinds of workers, on the other hand, increased 44.1 per cent in the same period. Today office workers in Portland offices comprise almost 20 per cent of all workers. In other words, one out of five employees in these firms is an office worker.

It was found that the classification of General Clerks included the largest number of employees in the survey, about 27 per cent. Clerk-Typists were the second largest group, and Stenographer-Secretaries third. Together these three classifications accounted for almost 57 per cent of the total number of employees covered in the survey.

The study revealed that there was a wide variation in the duties performed by office workers. Only in the larger offices was there a high degree of specialization.

The duties which were performed by the largest numbers of workers were using the typewriter, using the telephone, filing, using the adding machine, and meeting the public.



Stenographer-Secretaries use the typewriter most of all, Receptionists use the typewriter almost as much, and Clerk-Typists are third.

Receptionists and PBX Operators use the telephone most frequently, as might be expected. The Stenographer-Secretary also uses the telephone frequently, as does the Cashier.

Filing is performed most often by the File Clerk, the Office Boy-Girl, and the Stenographer-Secretary.

The adding machine is used most frequently by Bookkeeper-Accountants, next by General Clerks, and third by Bookkeeping Machine Operators.

The Receptionist most often meets the public, as do the Cashiers and the PBX Operators.

Actually, the typewriter is used by 69.8 per cent of all office employees. The telephone is almost as widely used, since 69.3 per cent of the employees use the telephone in connection with office work. Filing is performed by 56 per cent of the employees. Almost half of the office employees (44.7 per cent) use the adding machines, while over one third (34.1 per cent) meet the public.

Other duties, listed in order of frequency, were found to be the following: make bookkeeping entries, post; type stencils; use key-driven calculator; use duplicating machine; take dictation; use rotary calculator; use

bookkeeping machine; use voice transcriber. These, however, were not the only duties performed by office workers, since a list of 30 additional duties were listed by office managers under "Other duties."

The greatest deficiency of beginning office workers was found to be inaccuracy, according to 85.5 per cent of the office managers. A lack of initiative was also reported by almost three-fourths of the managers. Other important deficiencies were lack of adaptability, of willingness to assume responsibility, and of neatness.

On the other hand, beginning office workers are less deficient in the traits of courtesy, cooperativeness, and cheerfulness, for they were checked as deficiencies by less than 17 per cent of the managers.

Since a large majority of the employees who are dismissed are dismissed because of a personality defect, the deficiencies which were indicated by the study are of special importance. Office managers brought forth the greatest amount of criticism about employees in the area of personality and attitude. The managers felt that employees were more interested in remuneration than in a good day's work, and that this attitude resulted in a poor quality of work.

Office managers pointed out the fact that women employees were sometimes troublesome in the office. It was

apparent, by the number of unsolicited remarks on the subject, that there was some prejudice against women workers.

A study of the knowledges and abilities in which clerical workers are deficient revealed that a lack of general business understanding is the most common deficiency. Workers were also reported to be deficient in the ability to think clearly, to organize thoughts, and to express themselves clearly. About 70 per cent of the managers found workers deficient in a knowledge of arithmetic and in ability to follow directions.

Inaccuracy is the most common deficiency of beginning typists, according to 92.4 per cent of the managers. The office managers were almost unanimous in this opinion. It was also discovered that typists were deficient in proof-reading and in careful erasing and correcting of copy. Speed was far less important to the office heads than was accuracy.

The study revealed that stenographers are expected to compose letters, and that they are not always able to do so.

Stenographers were also unable to transcribe accurately or to spell words correctly. Again speed was found to be far less important than accuracy for stenographers.

The minimum educational requirement for office jobs is high school and one year of either business college or



college. Almost one-half of the office managers indicated this minimum for all office jobs.

For some positions, especially Bookkeeper-Accountant, Cashier, and Stenographer-Secretary, a college education was required by a large percentage of managers.

Mail and Shipping Clerks, Office Boys or Girls, and Duplicator Operators, on the other hand, were occasionally hired with less than high school education.

In most cases it was shown that the more responsible positions required more school training.

The total number of office machines used in 76 of the offices was 4154. The typewriter was found to be the most common business machine. An increased percentage of electric machines were to be purchased in the future.

The second most prevalent machine was found to be the full-keyboard adding machine, while the ten-key adding machine was the sixth most common machine.

It was found that about one out of every six machines in the office is a calculator. The key-driven calculator is more prevalent than the rotary-type calculator. Employees who are Calculator Operators use the key-driven calculators, while more Bookkeeper-Accountants use the rotary type calculators than do Calculator Operators.

While all the Bookkeeping Machine Operators used the bookkeeping machine, over one-half of the Bookkeeper-



Accountants were found to use the bookkeeping machine in connection with their work.

Voice transcription machines and duplicating machines were also common in Portland offices.

Almost three-fourths of the office managers indicated in the survey that they thought training for machines was either essential or desirable.

Training is essential for such machines as the key-driven calculator, the key punch machine, the high-keyboard bookkeeping machine, and the typewriter full-keyboard bookkeeping machine, according to the majority of office managers who took part in the survey.

Training was found to be desirable for the electric typewriters, the stencil duplicating machine and the fluid duplicating machine, by a majority of the managers.

Training on the photocopy or mailing machine was not felt to be necessary.

A study of the replies showed that the personal interview was the most common basis for selection of personnel. The application blank was found to be second most common. References were also important. Teacher's recommendations were revealed to be the least used source of information for selection of employees by these office managers. Entrance tests were likewise used infrequently.

It was found that the office managers who secured information from schools in regard to the qualifications

of an applicant were most interested in learning the intelligence of the applicant. Next, they were interested in the character and personality of the applicant. Office managers were found to be less interested in the specific commercial subjects studied by an applicant or the actual accomplishment in those subjects.

A study of the returns revealed that a majority of office managers have had difficulty in securing adequately trained beginning office workers. The position which was found to be the most difficult to fill was that of Stenographer. Adequately trained Bookkeepers and Typists were also indicated as being difficult to find in the locality.

The responses of the office managers concerning their attitude toward a Cooperative Work Program showed that the businessmen were in favor of such a program, for about 73 per cent answered that question in the affirmative.

However, only a bare majority of the managers were found to be willing to participate in the program. A variety of reasons prevented them from making commitments for their firms. There seemed to be some possibility for a Cooperative Work Program in Portland.

It was found that the office managers were in almost unanimous agreement that business teachers should have actual office experience, for about 96 per cent indicated a favorable attitude toward this suggestion. It was found

that about 21 per cent of the office managers would have openings for business teachers in summer work.

A study of the replies of the office managers as to their opinion of office entrance production tests revealed that they were in favor of the tests, since over 83 per cent indicated a favorable attitude.

## Recommendations

On the basis of the information compiled in this study, it is believed that the following recommendations for the office manager, the school administrator, and the business teacher of Portland are justified.

1. The findings of the survey should be made public.
2. A description of the duties required for each type of position should be made available to vocational counselors and to prospective business employees.
3. Prospective business workers should be advised to prepare themselves basically for office work by learning to type, to use the telephone, to file, to use the adding machines, and to meet the public.
4. Steps should be taken to provide a sufficient number of prospective stenographers, bookkeepers, and typists to meet the demand.
5. Prospective business workers and their teachers should be informed that inaccuracy is the greatest deficiency of beginning workers. An effort must be made to stress the importance of accuracy in all school work.
6. Prospective business workers and their teachers should be informed that a lack of initiative is considered a great detriment to an employee. A good attitude toward work is important.



7. Prospective clerical workers should be informed that their job will require a general understanding of business. Their business training course should provide a broad background in addition to specific skill courses.

8. Prospective typists should be informed that their job will require proofreading ability, and the ability to erase and correct copy in order to produce accurate work. These skills are more important than speed.

9. Stenographers should be informed that one of their duties will be to compose letters. They will also be expected to transcribe accurately and to spell correctly.

10. Prospective business workers should be informed that they will need at least a high school education in order to meet the minimum requirements of business. For certain positions as Bookkeeper-Accountant, Cashier, and Stenographer-Secretary, a college education is recommended.

11. Prospective business workers should be informed that the typewriter is an essential tool of business. The full keyboard adding machine is also in common usage.

12. Students who desire to become Calculator Operators or Bookkeeping Machine Operators should understand that training is required on these machines.

13. Students should be trained in the procedure of representing themselves correctly in a personal interview.

14. Schools should be informed that businessmen will be interested in securing information about an applicant's intelligence, personality, and character.

15. An attempt should be made to set up a cooperative work program for Portland.

16. An attempt should be made to set up a summer work program for business teachers.

17. An attempt should be made to encourage the use of the Business Entrance Tests.

18. A city supervisor of business education should be appointed to coordinate the activities of business and the schools of Portland and to arrange for the three above-mentioned programs.

The following are recommendations for further study:

1. A study to determine the extent to which the Portland school business training program fulfills the needs of business.

2. A future study of representative Portland business firms to ascertain business trends.

3. A study to determine the replacement plan of business machines in offices, and to determine the trends in purchases of machines.

4. A study of the company training programs which are now being carried on in Portland firms.

5. A study to determine the amount of business experience which Portland business teachers have had.

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APPENDICES

EAGLE-A

AGAWAM BOND

100% COTTON CONTENT

U.S.A.

## APPENDIX A

## QUESTIONNAIRE TO OFFICE MANAGERS

1. Firm name \_\_\_\_\_ Branch office \_\_\_\_\_  
 Home office \_\_\_\_\_

Type of business (Check one)

<input type="checkbox"/> Finance	<input type="checkbox"/> Retail
<input type="checkbox"/> Government	<input type="checkbox"/> Service
<input type="checkbox"/> Manufacturing	<input type="checkbox"/> Wholesale
<input type="checkbox"/> Education	<input type="checkbox"/> Other (Please describe)

Information given by \_\_\_\_\_ Title \_\_\_\_\_

No. of office employees 1940 \_\_\_\_\_ Total No. of employees 1940 \_\_\_\_\_  
 1950 \_\_\_\_\_ (In Portland) 1950 \_\_\_\_\_

2. How many of each kind of employee listed below do you have now (1950)? Due to turnover or to change in your requirements, how many beginners do you expect to hire next year (1951)?

	<u>1950</u>	<u>1951</u>		<u>1950</u>	<u>1951</u>
Receptionist			Cashier		
PBX Operator			Office Boy-Girl		
General Clerks			Bkkg. Mach. Operator		
Clerk-Typists			Duplicator Operator		
Bookkeeper-Acct.			Stenographer-Sec.		
Filing Clerks			Voice Transcribers		
Mail and Shipping			Calculator Operators		
Stock Clerks			Other jobs (specify)		

3. What are the various duties performed by each type of worker in your office? Check the duties performed under each job.

Duties	Recep- tionist	PBX Op- erator	General Clerk Clerks	Bkkr. Filing Typists Acct. Clerks
Use telephone	—	—	—	—
File	—	—	—	—
Use typewriter	—	—	—	—
Use duplicating mach.	—	—	—	—
Use voice transcriber	—	—	—	—
Use adding-listing mach.	—	—	—	—
Use key-driven calc.	—	—	—	—
Use rotary calculator	—	—	—	—
Use bookkeeping mach.	—	—	—	—
Take dictation	—	—	—	—
Make bkkg. entries, post	—	—	—	—
Meet the public	—	—	—	—
Type stencils	—	—	—	—
Other duties (specify)	—	—	—	—



## APPENDIX A (Cont.)

3. Duties of office workers continued. Check duties performed under each job.

Duties	Mail & Stock		Office Bkkg. Mach.	
	Shipping Clerks	Cashier	Boy-Girl	Operator
Use telephone	—	—	—	—
File	—	—	—	—
Use typewriter	—	—	—	—
Use duplicating mach.	—	—	—	—
Use voice transcriber	—	—	—	—
Use adding-listing mach.	—	—	—	—
Use key-driven calc.	—	—	—	—
Use rotary calculator	—	—	—	—
Use bookkeeping mach.	—	—	—	—
Take dictation	—	—	—	—
Make bkg. entries, post	—	—	—	—
Meet the public	—	—	—	—
Type stencils	—	—	—	—
Other duties (specify)	—	—	—	—

Duties	Duplicator	Stenographer	Voice Tran-	Calc.
	Operator	Secretary	scriber	Operator
Use telephone	—	—	—	—
File	—	—	—	—
Use typewriter	—	—	—	—
Use duplicating mach.	—	—	—	—
Use voice transcriber	—	—	—	—
Use adding-listing mach.	—	—	—	—
Use key-driven calc.	—	—	—	—
Use rotary calculator	—	—	—	—
Use bookkeeping mach.	—	—	—	—
Take dictation	—	—	—	—
Make bkg. entries, post	—	—	—	—
Meet the public	—	—	—	—
Type stencils	—	—	—	—
Other duties (specify)	—	—	—	—

## APPENDIX A (Cont.)

4. Check the personality traits listed below in which you most often find beginning office workers deficient. Rank 7 in order of frequency. Give the number "1" to the most frequent, "2" to the second most frequent, etc.

<input type="checkbox"/> Accuracy	<input type="checkbox"/> Emotional stability
<input type="checkbox"/> Adaptability	<input type="checkbox"/> Initiative
<input type="checkbox"/> Aggressiveness	<input type="checkbox"/> Interest in work
<input type="checkbox"/> Attendance	<input type="checkbox"/> Neatness in work
<input type="checkbox"/> Cheerfulness	<input type="checkbox"/> Perseverance
<input type="checkbox"/> Cooperativeness	<input type="checkbox"/> Personal appearance (grooming)
<input type="checkbox"/> Courtesy	<input type="checkbox"/> Punctuality
<input type="checkbox"/> Dependability	<input type="checkbox"/> Willingness to assume responsibility
	<input type="checkbox"/> Willingness to perform unpleasant tasks

5. Check the knowledges and abilities listed below in which you most frequently find beginning clerical workers deficient. Rank 7 in order of frequency, as before.

<input type="checkbox"/> Arithmetic fundamentals	<input type="checkbox"/> Penmanship
<input type="checkbox"/> Bookkeeping and accounting	<input type="checkbox"/> Pleasant speech
<input type="checkbox"/> English	<input type="checkbox"/> Reading
<input type="checkbox"/> Following directions	<input type="checkbox"/> Spelling
<input type="checkbox"/> General business understanding	<input type="checkbox"/> Use and understanding of common business forms
<input type="checkbox"/> Logical thinking, clearly stated	<input type="checkbox"/> Vocabulary

6. Check the knowledges and abilities listed below in which you most frequently find beginning typists deficient. Rank 7 in order of frequency, as before.

<input type="checkbox"/> Accuracy	<input type="checkbox"/> Proofreading
<input type="checkbox"/> Arrangement of typed material	<input type="checkbox"/> Punctuation
<input type="checkbox"/> Careful erasing and correcting of copy	<input type="checkbox"/> Speed
<input type="checkbox"/> Efficient organization and handling of paper and carbons	<input type="checkbox"/> Spelling
	<input type="checkbox"/> Tabulation
	<input type="checkbox"/> Total production
	<input type="checkbox"/> Typing from rough draft
	<input type="checkbox"/> Numbers

## APPENDIX A (Cont.)

7. Check the knowledges and abilities listed below in which you most frequently find beginning stenographers deficient. Rank 7 in order of frequency, as before.

_____ Ability to compose a letter	_____ Knowledge of English
_____ Ability to discover typing errors	_____ Letter arrangement
_____ Ability to read back shorthand notes	_____ Punctuation
_____ Ability to transcribe accurately	_____ Speed in taking dictation
_____ Ability to transcribe rapidly	_____ Spelling
_____ Ability to type well	_____ Total production

8. Give the number of machines listed below which are used in your firm, and the number you expect to add in the next 24 months.

	Now in use		Expect to add	
Voice transcribing machines	_____		_____	
Photocopy	_____		_____	
	Now in use		Expect to add	
	Electric	Manual	Electric	Manual
Typewriters	_____	_____	_____	_____
Mailing machine	_____	_____	_____	_____
Addressing machine	_____	_____	_____	_____
Stencil duplicating machine	_____	_____	_____	_____
Fluid duplicating machine	_____	_____	_____	_____
Punched card equipment:				
Key punches	_____	_____	_____	_____
Tabulating machines	_____	_____	_____	_____
Adding machines:				
Full keyboard	_____	_____	_____	_____
Ten-key	_____	_____	_____	_____
Calculators:				
Key-driven	_____	_____	_____	_____
Rotary type	_____	_____	_____	_____
Bookkeeping machines:				
High keyboard	_____	_____	_____	_____
Typewriter ten-key	_____	_____	_____	_____
Typewriter full keyboard	_____	_____	_____	_____

## APPENDIX A (Cont.)

9. Check after the following machines which you use in your office those on which training is Essential, Desirable, or Not Necessary for beginners who would be expected to use them.

	Essential	Desirable	Not Necessary
Electric typewriters	_____	_____	_____
Photocopy	_____	_____	_____
Voice transcribing machines	_____	_____	_____
Mailing machine	_____	_____	_____
Addressing machine	_____	_____	_____
Stencil duplicating machine	_____	_____	_____
Fluid duplicating machine	_____	_____	_____
Punched card equipment:			
Key punches	_____	_____	_____
Tabulating machine	_____	_____	_____
Adding machines:			
Full keyboard	_____	_____	_____
Ten-key	_____	_____	_____
Calculators:			
Key-driven	_____	_____	_____
Rotary type	_____	_____	_____
Bookkeeping machines:			
High keyboard	_____	_____	_____
Typewriter ten-key	_____	_____	_____
Typewriter full keyboard	_____	_____	_____

10. Indicate with a check mark what you feel is the minimum educational requirement for each type of position, assuming that all have had business training.

	Less than High school	High school & one year	High school & two years	College
Receptionist	_____	_____	_____	_____
PBX Operator	_____	_____	_____	_____
General Clerks	_____	_____	_____	_____
Clerk-Typists	_____	_____	_____	_____
Bookkeeper-Accountant	_____	_____	_____	_____
Filing Clerks	_____	_____	_____	_____
Mail and Shipping	_____	_____	_____	_____
Stock Clerks	_____	_____	_____	_____
Cashier	_____	_____	_____	_____
Office Boy-Girl	_____	_____	_____	_____
Bkkg. Mach. Operator	_____	_____	_____	_____
Duplicator Operator	_____	_____	_____	_____
Stenographer-Sec.	_____	_____	_____	_____
Voice Transcribers	_____	_____	_____	_____
Calculator Operators	_____	_____	_____	_____



## APPENDIX A (Cont.)

11. In selecting personnel, what is your basis for selection? Number in order of importance to you. Give the rank "1" to the most important, "2" to the second most important, etc.

☐ Application blank  
☐ Performance on Entrance tests  
☐ Personal interview  
☐ References  
☐ School Records  
☐ Teachers' Recommendations

12. When securing information from a high school or college about an applicant for an office position, what are you most interested in learning? Indicate with check mark.

☐ Specific commercial subjects studied.  
☐ Actual accomplishment in each  
☐ General background of knowledge  
☐ Intelligence  
☐ Personality  
☐ Character

13. Do you have difficulty filling positions with adequately trained beginning office workers? Circle your answer. Yes No  
For which type of office position do you find beginners least adequately trained? Be as specific as you can.

14. Are you in favor of a cooperative work program in which students go to school part time and work part time in business offices, for which they receive compensation and school credit? Circle your answer. Yes No

Would your firm be willing to participate? Yes No

15. Should business teachers have actual office experience? Circle your answer. Yes No

Does your firm have summer openings for teachers? Yes No

16. Would you be in favor of standardized office entrance production tests given by the schools? Circle your answer. Yes No

17. Indicate on this sheet specific recommendations you would make to the school which would serve to improve business education. Feel free to comment on various phases of this questionnaire or on any problem not covered herein.

## APPENDIX B

## LETTER OF TRANSMITTAL

December 7, 1950

Dear Office Manager:

Would you like to know what other office managers and businessmen have to say about their office workers -- the basis for their selection, their training and educational requirements, their ability to perform assigned duties?

Would you like to make suggestions about how these workers can be properly trained at school?

The Portland chapter of the National Office Management Association is sponsoring this survey in order to obtain just such information. We plan to make available to you and to business educators the findings of this survey. Through mutual cooperation, both business and education will benefit.

Similar surveys have already been conducted in such cities as Chicago, St. Louis, Toronto, Seattle, Akron, Hartford and Cincinnati. Portland too can undertake such a project and carry it to a successful conclusion.

Mr. John Miller, office manager of May Hardware Company, filled in the questionnaire last week in just a half hour. We hope that you can spare 30 minutes of your time to give us the information we need.

One word of instruction: when classifying workers under the various job headings, be sure to list only one for each employee. If, for example, your receptionist is also your PBX operator, classify her as either Receptionist or PBX operator, (depending upon her most important duty) but not both. You will indicate that combination of jobs as you check the duties listed under that heading. Feel free to comment on any phase of the questionnaire. Your opinions are of great interest to us.

## APPENDIX B (Cont.)

March 1, 1951 has been set as a deadline for compiling the findings of this questionnaire, and we would appreciate your returning your copy by that date. Thank you for your cooperation.

Sincerely yours,

J. R. Keefer, President  
Portland chapter of the  
National Office Management  
Association

Elizabeth Bryant Orem  
Survey Chairman

Enclosures:  
Questionnaire  
Self-addressed, stamped  
envelope

EAGLE-A

AGAWAM BOND

100% COTTON CONTENT

U.S.A.

## APPENDIX C

## THE FOLLOW-UP LETTER

## NATIONAL OFFICE MANAGEMENT ASSOCIATION

Portland Chapter

January 26, 1951

Dear Fellow Member:

At the last Wednesday night meeting, Dr. George Eby, Assistant Superintendent of Portland Public Schools, told us that the school administrators would be happy to provide high school students with the training which businessmen want. The administrators at present, however, are "in the dark" as to just what businessmen want.

Our obvious duty is to provide the school administrators with that information. Just what is it that businessmen want in prospective employees? What school training should be given to equip them for their future in the business world?

This survey is being sent to the real authorities on this subject, the businessmen themselves.

Your cooperation in completing the questionnaire and returning it promptly will be greatly appreciated. Over 50 NOMA members have already returned their questionnaires. We will be looking for yours soon.

Sincerely yours,

Elizabeth Orem, Survey Chairman