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## A Study of Selected Business Firms in the Bismarck-Mandan Employment Area with Implications for Improvement of an Office Education Program

Marilyn K. Nielsen

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A STUDY OF SELECTED BUSINESS FIRMS IN THE  
BISMARCK-MANDAN EMPLOYMENT AREA WITH  
IMPLICATIONS FOR IMPROVEMENT OF AN  
OFFICE EDUCATION PROGRAM

By

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Bachelor of Science, Dickinson State College, 1965

An Independent Study  
Submitted to the Faculty  
of the  
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This independent study submitted by Marilyn K. Nielsen in partial fulfillment of the requirements for the Degree of Master of Science from the University of North Dakota is hereby approved by the Faculty Advisor under whom the work was completed.

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Chairman, Business Education Department

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## CHAPTER I

### Introduction

The gap between school theory and actual work needs to be narrowed. We must train our students to meet the standards required in the various areas of his employment.

In connection with the need for more practical education, Tonne and Nanassey point out:

One of the faults of high school business education is that much of it is theoretical rather than practical. The solution to the problem of how to combine theoretical and practical education seems to depend on some form of cooperation between schools and industry.<sup>1</sup>

Perhaps business educators should be asking themselves if business employers accept low standards simply because they find it very difficult or perhaps impossible to get employees who are well enough trained to meet the higher standards they might otherwise prefer.

The statement made by Norris, "People + Education = Jobs." seems to bring out the point that if businesses and educators will work together cooperatively, people will get an education and consequently find jobs. Unless educators take a survey or in some other way determine what

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<sup>1</sup>Herbert A. Tonne and Louis C. Nanassey, Principles of Business Education, (Dallas: Gregg Division, McGraw-Hill Book Company, 1970), p. 163.

<sup>2</sup>Carol Norris, "How Education and Industry Can Work Cooperatively," National Business Education Quarterly, Summer, 1969, p. 36.

standards the employers in that area are expecting, or requiring, it would be difficult for them to set their educational goals or standards in line with those of the employers. A need for close cooperation very definitely exists. The researcher feels a survey of the businesses, as done for this study, could be used by business educators of that area to indicate to them the standards expected by employers.

Students who are to have employable skills when they are looking for a job must gain them before that time. It would seem that school would be the place for them to start gaining these skills they are going to need. It is not possible for business educators to provide for them all the time, equipment, practice, training, and other things they will need, but it is important that enough be provided so they will have a basic knowledge and skills. It would not be possible to train each student for every specific job he might possibly need to do when he starts working on an actual job.

If he has basic skills on some of the more common types of machines and is able to use the available machines with at least some amount of accuracy and speed, he would probably be able to adjust to any of the various situations that might be encountered.

It is also important to teach students so they will be able to perform the miscellaneous duties that office employees encounter. They need to know about various common reference books, how to use them and when. It may be that they will need to be able to take charge of the office at times, so they should know about some of the responsibilities they may need to assume. It is also important that students know that salaries do vary from business to business and in the different parts of the state and country. They should know the possibilities of working



into higher positions or levels offered by some kinds of jobs over others.

#### Statement of the Problem

The problem of this study was to conduct a survey of the clerical and secretarial requirements as expressed by employers in the selected business firms in the cities of Bismarck and Mandan, North Dakota. This study also attempted to determine the conditions existing as to the clerical and secretarial employment situation concerning the following:

1. To determine the degree of competence possessed by the clerical and secretarial employees included in this study, relative to their skills, abilities, and personal qualities.
2. To find to what extent the schools are meeting the training needs for prospective clerical and secretarial workers.
3. To form a basis for suggestions and recommendations in training clerical and secretarial employees to the educational institutes in this area.
4. To form a basis for suggestions and recommendations to those who are employing these clerical and secretarial employees.
5. An attempt to develop a closer relationship between the schools training the clerical and secretarial employees and the businesses hiring those employees.

#### Purpose of the Study

As employers of beginning clerical and secretarial workers, businessmen require that they have certain competencies. The standards and extent to which they are expected to meet those standards vary

with each employer. These standards may be determined by the type of business, by the nature of the work to be done and perhaps somewhat by the individual employers own personal expectations and desires. The personality characteristics required of these workers will vary from employer to employer also.

Our educational institutions should be training these clerical and secretarial workers while they are in school, so that they can meet the demands made by these businesses and employers.

It is necessary for us to evaluate and revise our curriculum so that it is in closer agreement with the community and business needs.

Office work is the second largest employment area in the United States, with approximately 16 percent of all employed persons found in this category. Also, office work is the largest employment area for women, with one-third of employed women in this category.<sup>3</sup>

As Lomax said, there are two major objectives in business education. The first objective is to prepare students for business employment. The second objective being to prepare students for those business experiences that all citizens should be proficient in both in knowledge and performance.<sup>4</sup>

Through the use of a survey the researcher will attempt to determine the expectations of office employers in order that the gap between what is taught and what is required may be narrowed as much as possible.

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<sup>3</sup>Harry Huffman, ed., "Criteria for Evaluation Business and Office Education," Objectives and Directions as the Result of Existing Vocational Legislation, National Business Education Yearbook, number 7 (Washington, D. C.: National Business Education Association, 1969), p. 19.

<sup>4</sup>Harry Huffman, ed., "Criteria for Evaluative Business and Office Education," Principles for Evaluation for Business and Office Education, National Business Education Yearbook, number 7 (Washington, D. C.: National Business Education Association, 1969), p. 8.

It is the purpose of this study then, to help the business educator and the employers to work together more closely for the benefit of those students who will be seeking a job upon graduation from school.

#### Limitations of the Study

This study was limited to the cities of Bismarck and Mandan, North Dakota. Selected business establishments of various kinds that employed clerical and secretarial office help, were surveyed. An attempt was made to cover and include as wide a variety of business firms as possible from that area. Business establishments with as few as one office-employee to as many as 85 full-time office employees were included in this study.

It should be noted here that not all of the clerical and secretarial office employees who were employed by firms surveyed, graduated from schools in either the Bismarck or Mandan, North Dakota area. This fact will make some difference when suggestions are offered and recommendations are made concerning the role of these schools in training office workers.

This study is limited to the data received from a personal interview and questionnaire. The personal interview was completed by the writer with the cooperation of the employer. The questionnaire was left with the employer at the time of the interview and then returned to the writer by way of a stamped self-addressed envelope left at the time of the interview. Each employer was given the opportunity to reply to each question in the interview and on the questionnaire.

#### Definition of Terms

Certain selected business terms as applied to this study, have been defined as follows.

Clerk-Typist.--An office worker who performs such duties as filing, billing, handling mail, answering the telephone, bookkeeping, operating business machines as well as the switchboard. This type of worker may also serve as an information clerk and receptionist.

Stenographer.--An office worker who performs many of the duties of a clerk-typist but also transcribes from a voice-writing machine, and takes and transcribes dictation from shorthand.

Secretary.--An office worker who performs the duties of a stenographer, but in addition, assumes responsibility for operation of the office; and, also, supervises other office workers.

Employee or office worker.--The person employed in business firms whose major duties are of a secretarial, stenographic or clerical nature.

Employer.--The person in a business firm for whom the clerical, stenographic or secretarial office employee works.

Full-time worker.--An office employee who works forty or more hours a week.

Part-time worker.--An office employee who works less than forty hours per week.

## CHAPTER II

### REVIEW OF PERTINENT LITERATURE

#### The Cities of Bismarck and Mandan, North Dakota<sup>1</sup>

Bismarck is located at the approximate geographical center of North Dakota, on the east bank of the Missouri River. It is the county seat of Burleigh County.

Mandan is located on the West Missouri Slope. It is the county seat of Morton County and is the oil refinery center of the Williston Basin.

The two cities have a combined population of 46,803 people, 34,703 of these in Bismarck and 12,100 in Mandan.

The name and location of Bismarck were determined by the Northern Pacific Railway when it was constructing the first transcontinental railroad which was to traverse the northern half of the United States. The rail company established a city when it reached the east bank of the Missouri River in Dakota Territory in 1873, and it named this city Bismarck.

In 1833, Bismarck was named the capitol of the Dakota Territory. Then in 1889, when North and South Dakota were admitted to the Union, Bismarck became the capitol of North Dakota. Since that time, the area has experienced steady growth and has become the business, cultural and financial center of the central and southwest part of the state.

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<sup>1</sup>Based upon information obtained from: Polk's Bismarck City Directory, and Polk's Mandan City Directory, (Missouri: H. L. Polk and Company, 1969), pp. 7-15 and pp. 6-9.

Bismarck is the location of a new civic center with possible seating capacity of 6500.

Mandan is known as the second oldest incorporated city in North Dakota, with Fargo being the oldest. Mandan has taken a leading part in the development of the area located west of the Missouri River as its trade area.

The city was named for the early day tribe of Mandan Indians.

With the discovery of oil in North Dakota, Mandan was selected as the site of North Dakota's first major refinery by American Oil Company.

The two cities have very good school systems, both public and private, which would indicate that citizens of the area are highly interested in education.

There are two public senior high schools, one parochial high school, four public junior high schools, eighteen public grade schools and seven parochial grade schools. Bismarck also has a four-year college, a Junior College, a Priory, a Commercial College, two Schools of Nursing which are accredited, a Conservatory of Music, two Beauty Schools, a Dance Studio, and two Aviation Schools. It also has an Art Association, Community Concert Association, as well as several bands, concert choirs and orchestras.

#### Related Literature

Business educators and businessmen have published a dearth of information in books, professional journals, magazines, pamphlets, and other publications relative to clerical and secretarial duties and standards in the business office. Frequently the standards for clerical and secretarial workers set by businessmen and those set by business educators differ significantly.

Langemo feels:

Business needs secretaries and stenographers; in fact, the demand now is greater than it has ever been. Surveys reveal that approximately 200,000 new employers for secretarial jobs are needed each year in the United States.<sup>2</sup>

The increasing demand for new secretarial employees needed each year in the field of business, makes it imperative that business educators provide an education that will prepare their students for work.

According to Ealy, many changes are taking place in our society and business educators must ask themselves:

Are we realistically preparing our students to meet this ever-increasing demand for new and presently unknown skills that will be necessary during the life span of our current high school students?<sup>3</sup>

In support of Ealy, Witherow stated: "Yes, clerical programs must change as the job picture changes."<sup>4</sup>

Pearen feels that in order for business educators to prepare their students for the office of today, we must look at some of the changes that have and are taking place and we must then gear our program to take these changes into account.<sup>5</sup>

Business educators need to be concerned about their students acquiring skills they can use and that will be adequate enough to insure

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<sup>2</sup>Mark Langemo, "Focus on the Secretarial Program," Business Education Forum, October, 1970, p. 11.

<sup>3</sup>Jane Ealy, "Focus on the Clerical Program," Business Education Forum, February, 1971, p. 7.

<sup>4</sup>Mary Witherow, "An Up-to-date Secondary Clerical Program," Business Education Forum, February, 1971, p. 18.

<sup>5</sup>F. N. Pearen, "Office Practice for the '70s," Balance Sheet, February, 1971, p. 202.

successful employment. This is brought out in the statement by Mott:

Business Education is, as its name indicates, education for a successful, productive life in the world of business. It is the never ending task of business education departments to provide the necessary skills and competencies required in the operation of a business enterprise. . . . The course work in these areas must be designed so as to enable students with a business education department must constantly strive to change, delete, or increase their offerings so as to keep abreast with the rapidly changing characteristics of the business system.<sup>6</sup>

It is possible that we need to emphasize the development of competencies in the off-set duplication process instead of the stencil duplication process or we may need to be developing competencies in the operation of printing calculators instead of key-driven calculators.<sup>7</sup>

The basic aim of vocational education for stenographers and secretaries is to develop marketable stenographic-secretarial skills that will enable a person to obtain a job.<sup>8</sup>

A survey is one way business educators can determine what the current needs are in their area and what the employers want in a prospective clerical or secretarial employee. It is also a very good way of determining what machines are being utilized, the skill required on those machines, typing and shorthand skill requirements, as well as various other information that may be pertinent.

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<sup>6</sup>Dennis L. Mott, "The Changing Role of Business Education," Balance Sheet, September, 1970, p. 26.

<sup>7</sup>J. Curtis Hall, ed., "Business Education: An Evaluative Inventory," Strengths of the Past and Present, National Business Education Yearbook, number 6 (Washington, D. C.: National Business Education Association, 1968), p. 6.

<sup>8</sup>Ibid., 5-6.



The importance of using a survey as one means of determining what the employers in the community want is brought out in the statement, "In determining the composition and sequence of the curriculum, we should continue to be guided by past experience, by advisory committees, by job surveys, by job analysis, and by research findings."<sup>9</sup>

Brady states we should consider the following questions: "What are the machines to be used and the consequent preparation needed by tomorrow's clerical worker?" and "What new knowledges, attitudes, and understandings do our general clerical students need today?" A survey would be helpful to business educators in answering these questions. They could determine the kinds and makes of machines that would be used on the job as well as determining how much skill and proficiency were needed on those machines.<sup>10</sup>

Maliche feels that a change in curriculum is not necessarily desirable for the sake of change but should be made when necessary to meet the changing needs of our society. Are the current needs of students and business being met? Maliche gives the following activities that should be continuing and concurrent for business educators to obtain an answer to the question:

1. Follow up former students. Follow-up is necessary in order to learn how well you helped students meet their occupational needs. . . . You might want to use a stratified random sample (representative cross-section) of students who have taken particular courses and of majors in particular programs.

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<sup>9</sup>J. Curtis Hall, ed., "Business Education: An Evaluative Inventory," Strengths of the Past and Present, National Business Education Yearbook, number 6 (Washington, D. C.: National Business Education Association, 1968), p. 7.

<sup>10</sup>Dorothy L. Travis, ed., "Selected Readings in Business and Office Occupations," A New Contour for the Clerical Worker, National Business Education Yearbook, number 5 (Washington, D. C.: National Business Education Association, 1967), p. 8.

2. Survey the business community. You should scientifically (not haphazardly) survey the business community at least every five years. . . . Between surveys keep in touch with business by means of advisory committees, cooperative education programs, and visits to companies, to mention only a few ways.

3. Read current publications include information on:  
 (a) needs for training as perceived by business; (b) on-the-job training provided by business (this training has implications for the classroom teacher); (c) training techniques used by business which may provide some good ideas applicable to classroom training.

4. Obtain information on training needs in your community. Area skill surveys published by the employment services of the various states show the skills in demand for a particular area. In this connection it is desirable to know something about the geographic mobility of the business education students following graduation.<sup>11</sup>

Fries says this concerning surveys:

That the entire business education faculty should become involved to some degree in any survey of its business community goes without saying because of its very nature. For example, in the determination of those competencies employers want in the beginning worker, the survey reveals data that must necessarily cut across course lines. Those desired competencies--whether they be specific skills such as typewriting or machine operation abilities or the more general qualities of dependability, meeting deadlines, and following instructions--are not limited to achievement in one particular business course. Rather, they are the "sum total" outcomes from the student's experiences in all the courses he completes.<sup>12</sup>

Forkner states:

. . . the content of the business curriculum is checked on and developed cooperatively with businessmen and former students. It is kept up to date by surveys, follow-up studies, and provides for all phases of business activity.<sup>13</sup>

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<sup>11</sup>Eleanor Maliche, "Determining Need for Change," Business Education Forum, November, 1967, p. 18.

<sup>12</sup>Albert C. Fries, "The Over-all Business Curriculum," Informal Research by the Classroom Business Teacher, Eighteenth yearbook of The Eastern Business Teachers Association and The National Business Teachers Association, (Somerville, New Jersey: Somerset Press, 1961), p. 47.

<sup>13</sup>Ibid., p. 47.

The importance of surveys is further pointed out by Malsbary in the following:

Many surveys and follow-up studies have been made in various parts of the country and in various types of schools to determine whether the curriculums in the schools are meeting the needs of the students they serve. The findings of these studies may be and often are used by the schools as a basis for improving and updating the curriculum in order to prepare students better to meet the occupational demands of the world of business. However, there are some schools and educators who apparently care very little about what happens to their students after they leave school, and who make little or no attempt to determine whether the educational programs meet the needs of the students.<sup>14</sup>

In conclusion, it is important that business educators prepare students for what is expected of them on the job. The businesses and the schools need to get together on what is expected of clerical and secretarial workers. A survey is one of the tools which can be used to help make educators aware of what is expected by employers.

Due to the rising costs of our time, it is important that employers have employees who initially are able to do the work required of them eliminating the need for on the job training programs.

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<sup>14</sup>Dean R. Malsbary, " . . . Re-evaluation of Business Education Based on Surveys," Business Education Forum, January, 1968, p. 16.

## CHAPTER III

### PROCEDURES USED IN SECURING THE DATA

The following procedures were utilized in conducting this study:

1. Library Research
2. Selection of the business firms to be surveyed
3. Development of the questionnaire
4. Interview of each business firm
5. Evaluation and interpretation of the data

#### Library Research

Material for this study was obtained through the examination of professional Business Education and General Education literature.

Included in this were the following publications: American Business Education Yearbook;<sup>1</sup> Balance Sheet;<sup>2</sup> Business Education Forum;<sup>3</sup> Business

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<sup>1</sup>Eastern Business Teacher Association and National Business Teacher Association, (publishers), American Business Education Yearbook, (Somerville, New Jersey: Somerset Press).

<sup>2</sup>C. F. Templeman, ed., Balance Sheet, (Cincinnati, Ohio: South-Western Publishing Company).

<sup>3</sup>O. J. Byrnside, Jr., ed., Business Education Forum, (Washington, D. C.: National Business Education Association).

Education World;<sup>4</sup> the Journal of Business Education;<sup>5</sup> and the National Business Education Yearbook.<sup>6</sup> Many various articles, methods books, monographs published by South-Western Publishing Company, and theses were also read, to obtain valuable information on the subject.

The data found in the literature was recorded and the information was used when writing the chapter pertaining to the review of literature related to the topic.

#### Selection of Business Firms to be Surveyed

The most feasible research instrument in securing data for this survey was chosen to be the personal-interview-questionnaire.

The selection of fifteen different types of businesses to be included in the study was made. An attempt was made to get a wide selection of various different types of businesses. When this was completed, the yellow pages in the Bismarck-Mandan Telephone Directory were used in selecting the fifteen business firms to be included in the study. Large and small firms were selected. This was done in order to get a representative of business firms of various sizes. The firms visited are listed in Apperdix B, page 58.

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<sup>4</sup>James Bolger, ed., Business Education World, (New York: Gregg Publishing Division of the McGraw-Hill Book Company).

<sup>5</sup>Elizabeth Van Derveer Tonne, ed., Journal of Business Education, (Wilkes-Barre, Pennsylvania: Robert C. Trethaway).

<sup>6</sup>National Business Education Association, (Publisher), National Business Education Yearbook, (Washington, D. C.: National Business Education Association).

### Development of the Questionnaire

The questionnaire is an important tool of research. It is one way of securing data for a survey study such as this. In order to obtain the data for this study, a tentative questionnaire was prepared. It was then used on a trial basis on a local business firm. A few minor changes were made and a revised questionnaire was then developed. A two part questionnaire was then prepared in collaboration with Carl Peter, Valley City, North Dakota; Sylvia Lee, Williston, North Dakota; and the researcher. It was then approved by the researchers advisor.

Part I of the questionnaire was divided into seven sections. These sections were firm and person interviewed; number of employees; qualifications desired of employees; practices of firm and reference books used; and salary information.

Part II of the questionnaire was divided into two sections. One section was duties performed by office employees and the other was machines used, purchasing trends, and school training level required. The final questionnaire, which was used for this study can be found in Appendix A, pages 49-56.

### Collection of Data

Before the interviews were conducted, an appointment was made by telephone with each employer at the respective business firm. The employer was contacted at each of the fifteen firms surveyed. During the interview, the questions from Part I of the questionnaire were read to the employer. The response of the employer was filled in on the questionnaire by the writer for each question.

Each interview lasted from 20 to 45 minutes, depending on the size of the firm and the amount of time allotted by the employer. At the end of the interview, Part II of the questionnaire on duties and machines was left with the employer along with a stamped, self-addressed envelope to the researcher. The person interviewed completed the questionnaire at his convenience and returned it by mail to the researcher.

Each employer was thanked in person by the researcher for his cooperation which was invaluable.

#### Evaluation and Interpretation of the Data

After each interview, the items on the questionnaire were classified and tabulated. A summary of this data is included in Chapter IV. Various tables are included, making it possible to see the findings in summary form.

## CHAPTER IV

### ANALYSIS OF THE DATA

One employer from each of the fifteen selected business firms in Bismarck and Mandan, North Dakota was interviewed. The questionnaire was used to record the data during the interviews. See Appendix A, pages 49-56. The recorded data was tabulated and is presented in this chapter.

Table 1, page 19, shows the number of office employees employed in the 15 business firms surveyed. The number of employees was divided into seven categories: Clerk-typist, teller, secretary, machine operator, bookkeeper, stenographer, office manager, and those which could not be classified as one of the seven were indicated as others.

There were 94 clerk-typist employees (40.5%); 34 tellers (15.0%); 10 secretaries (4.0%); 6 machine operators (3.0%); 7 bookkeepers (3.0%); 8 stenographers (3.0%); 1 office manager (.05%); and 72 (31.0%) were classified as others which included accountants, computer services technician, underwriter, accountant executive, land man, switch board operator, messenger, clerks, cashiers, and medical stenographer.

Table 2, page 20, gives the factors that are considered when hiring new office employees. Seven (47%) employers indicated they required average typing ability, 7 (47%) indicated they required above average ability and 1 (6%) felt this was not applicable. Seven (47%) employers required average



TABLE 1

THE NUMBER OF SELECTED OFFICE EMPLOYEES  
IN THE BISMARCK-MANDAN EMPLOYMENT AREA

Office Employees	Full Time	Percentage	Part Time	Percentage	Total	Percent of Total Office Employees
Clerk-Typist	78	83	16	17	94	40.5
Teller	32	94	2	6	34	15.0
Secretary	10	100	0	--	10	4.0
Machine Operator	6	100	0	--	6	3.0
Bookkeeper	6	86	1	14	7	3.0
Stenographer	6	75	2	25	8	3.0
Office Manager	1	100	0	--	1	.5
Others	59	82	13	18	72	31.0
Totals	198	85	34	15	232	100.0

TABLE 2

FACTORS CONSIDERED WHEN HIRING NEW OFFICE EMPLOYEES  
IN THE BISMARCK-MANDAN EMPLOYMENT AREA

Factor	Not Necessary		Average		Above Average		Should		Must		Do Consider		Do Not Consider		Prefer		Require	
	1	Percentage	7	Percentage	7	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	
Typewriting Ability	1	6	7	47	7	47												
Shorthand Ability	5	33	7	47	3	20												
Transcription Machine Proficiency	8	53	5	33	2	13												
Electronic Data Processing Knowledge	10	67					2	13	3	20								
Electronic Data Processing Training	14	93					1	7										
Previous Work Experience	8	53					2	13	5	34								
Letter of Application	11	73							4	27								
Data Sheet	12	80							3	20								
Application Blank	4	27															11	73
Employment Test											7	47	7	47				
Personal Interview																	14	93
References											15	100						

shorthand ability, 3 (20%) required above average ability, and 5 (33%) stated it was not necessary. Eight (53%) employers indicated transcription machine proficiency was not necessary, 5 (33%) indicated the need for average ability, and 2 (13%) required above average ability.

Electronic data processing knowledge was not necessary according to 10 (67%) of the employers, 2 (13%) stated employees should have some knowledge, and 3 (20%) indicated it was necessary. Fourteen (93%) employers indicated electronic data processing training was not necessary while 1 (7%) indicated employees should have this training.

Eight (53%) employers indicated previous work experience was not necessary, 2 (13%) stated it was necessary, while 5 (34%) indicated it was a must for employees to have it.

Eleven (73%) employers do not require a letter of application, while 4 (27%) stated they do require one. Twelve (80%) employers do not feel a data sheet is necessary while 3 (20%) required one. Eleven (73%) employers required employees fill out an application blank and 4 (27%) do not.

Of the fifteen firms, 7 (47%) do test employees before hiring them, 7 (47%) do not test them, and 1 (6%) indicated it was sometimes done. Fourteen (93%) of the employers required a personal interview, leaving 1 (6%) who did not do so. All 15 (100%) of the employers take into consideration references. Tests used included: typewriting tests and aptitude tests given by the firms; the North Dakota State Merit System Test; and the test results obtained by the Employment Security Bureau of the State of North Dakota.

TABLE 3

FACTORS CONSIDERED DURING THE PERSONAL INTERVIEW  
BY SELECTED BISMARCK-MANDAN EMPLOYERS

Factors	Yes	Percentage	No	Percentage
Personal Appearance	15	100	0	---
Attitude	14	93	1	7
Maturity	14	93	1	7
Courtesy and Manners	13	87	2	13
Voice and Communication	13	87	2	13
Self Confidence	13	87	2	13
Emotional Control & Behavior	12	80	3	20

The factors which are considered during the personal interview are shown on table 3, page 22. All 15 (100%) of the employers consider personal appearance, 14 (93%) consider attitude, 14 (93%) consider maturity, 13 (87%) consider courtesy and manners, 13 (87%) consider voice and communication, 13 (87%) consider self confidence, and 12 (80%) consider emotional control and behavior as important factors during an interview. Other factors considered were: bookkeeping knowledge, knowledge of product and hand shake.

TABLE 4

SOURCES CONTACTED FOR NEW OFFICE EMPLOYEES  
BY SELECTED BISMARCK-MANDAN EMPLOYERS

Sources	Yes	Percentage	No	Percentage
Employment Agencies	12	80	3	20
Business Associates	5	33	10	67
Employees	5	33	10	67
Newspapers	4	27	11	73
High Schools	2	13	13	87
Collogo	1	7	14	93
Friends	1	7	14	93

Table 4, page 23, shows the sources contacted for new office employees. Twelve (80%) of the businessmen interviewed stated that they use employment agencies as a source of securing new office employees. Five (33%) businessmen indicated the use of business associates and 5 (33%) used other employees as sources for new employees. Four (27%) indicated the use of newspapers, 2 (13%) indicated high schools as a source, 1 (7%) indicated use of the college, and 1 (7%) indicated friends as a source. Other sources used included personal application, school district office, bulletin, and those who walked in.

TABLE 5

REFERENCE BOOKS USED IN SELECTED OFFICES  
OF THE BISMARCK-MANDAN EMPLOYMENT AREA

Reference Books	Yes	Percentage	No	Percentage
Dictionary	15	100	0	----
Zip Code Directory	15	100	0	----
Telephone Directory	15	100	0	----
City Directory	13	87	2	13

The reference books used in offices of the interviewed business firms are shown in table 5, page 24. All 15 (100%) of the firms use the dictionary, the telephone directory, and the zip code directory. Thirteen (87%) of the firms use the city directory while 10 (67%) stated other sources were used also such as: church annual, postal guide, company directory, law dictionary, secretary handbook, bank directory, various law books, credit bureau listing, medical dictionary, various doctor books, various handbooks, and manuals.

Table 6, page 25, shows the use of filing systems in the selected business firms. Thirteen (87%) indicated use of the alphabetic system, 4 (27%) use the numeric system, 1 (7%) use the geographic system, 1 (7%) the subject filing system, and 7 (47%) use others such as: terminal digit,

TABLE 6

FILING SYSTEM USED BY SELECTED OFFICES  
IN THE BISMARCK-MANDAN EMPLOYMENT AREA

Filing System	Yes	Percentage	No	Percentage
Alphabetic	13	87	2	13
Numeric	4	27	11	73
Subject	1	7	14	93
Geographic	1	7	14	93

account number, cross reference alphabet, filing according to own information, and the choice of the individual secretary.

Beginning monthly salaries paid to new office employees are shown on table 7, page 26. Seven (47%) employers indicated their clerk-typists start at an amount ranging from \$301 to \$325, one (7%) from \$326 to \$325, and 1 (7%) from \$376 to \$400. Employers indicated starting salaries for stenographers as follows: 2 (13%) from \$275 to \$300, 1 (7%) from \$301 to \$325, 1 (7%) from \$351 to \$375, and 1 (7%) from \$451 to \$475. Secretaries are started by 2 (13%) firms from \$301 to \$325 and 1 (7%) from \$326 to \$350. Bookkeepers are started by 3 (20%) firms from \$275 to \$300 and by 1 (7%) from \$376 to \$400. Other employees start from \$275 to \$300, from \$326 to \$350, from \$451 to \$475, and from \$476 to \$500 at each of four firms.

TABLE 7

NUMBER OF FIRMS PAYING THE STATED BEGINNING MONTHLY SALARY  
TO SELECTED OFFICE WORKERS IN THE  
BISMARCK-MANDAN EMPLOYMENT AREA

Office Workers	\$275-\$300	\$301-\$325	\$326-\$350	\$351-\$375	\$376-\$400	\$401-\$425	\$426-\$450	\$451-\$475	\$476-\$500
Clerk-Typist	7	1	1		1				
Stenographer	2	1		1				1	
Secretary		2	1						
Bookkeeper	3				1				
Teller	1								
Others	1		1					1	1

Table 8, page 27, shows the highest monthly salaries paid to office employees by firms surveyed. Employers indicated highest salaries paid a clerk-typist as being: 1 (7%) from \$351 to \$375, 1 (7%) from \$376 to \$400, 1 (7%) from \$426 to \$450, 1 (7%) from \$451 to \$475, 1 (7%) from \$476 to \$500, 2 (13%) from \$526 to \$550, and 1 (7%) from \$626 to \$650. One (7%) firm pays stenographers from \$325 to \$350, 1 (7%) from \$451 to \$475, 2 (13%) from \$526 to \$550, 1 (7%) from \$626 to \$650. Secretaries can receive from \$426 to \$450 working with 1 (7%) firm, 1 (7%) from \$451 to \$475, and 1 (7%)



TABLE 8

NUMBER OF FIRMS PAYING THE STATED HIGHEST MONTHLY SALARY  
TO SELECTED OFFICE WORKERS IN THE  
BISMARCK-MANDAN EMPLOYMENT AREA

Office Workers	\$325-\$350	\$351-\$375	\$376-\$400	\$401-\$425	\$426-\$450	\$451-\$475	\$476-\$500	\$501-\$525	\$526-\$550	\$551-\$575	\$576-\$600	\$601-\$625	\$626-\$650	\$651-\$675	\$676-\$700	\$701-\$725	\$726-\$750	\$751-\$775	\$776-\$800	\$801-\$825	\$826-\$850	\$851-\$875	\$876-\$900	\$901-\$925	\$926-\$950	\$951-\$975
Clerk Typist		1	1		1	1	3		2			1														
Stenographer	1				1				2			1														
Secretary				1	1						1															
Bookkeeper	1			1							1	1														
Tellers									1																	
Others				1										1	1									1		

from \$576 to \$600. The highest salary paid bookkeepers by 1 (7%) firm ranges from \$325 to \$350, 1 (7%) from 426 to \$450, 1 (7%) from \$576 to \$600, and 1 (7%) from \$626 to \$650. Other office employees receive from \$426 to \$450 with 1 (7%) firm, 1 from \$676 to \$700, 1 (7%) from \$726 to \$750, and 1 (7%) from \$926 to \$950.

Eight (53%) employers indicated performance as the main factor which determines pay increases. Other factors considered are the cost of living

index, personal feelings, attitude, length of service, ability, pleasantness, Merit System Regulations, once a year, knowledge, initiative, wage and hour law increases, union contract, and as the employer sees the need.

Some of the firms indicated they should be adding new equipment but at the present time, they have no plans. One (7%) firm plans to add an accounting posting machine, 1 (7%) plans to add the use of a computer, 1(7%) indicated adding equipment whenever necessary to stay up to date, and 1 (7%) indicated long range plans for adding new equipment.

Of the total 232 office workers employed by the 15 business firms, 149 (64%) answer the telephone, 134 (58%) use the typewriter, and 115 (50%) change typewriter ribbons. Only 5 (2%) of the employees take dictation at the typewriter, 7 (3%) operate the offset machine and 8 (3%) keep a mail register.

Table 9, pages 29-31, indicates the number of office employees performing selected duties. Thirty (13%) employees take and transcribe dictation using shorthand, 31 (13%) transcribe dictation from a transcribing machine, 10 (4%) take dictation over the telephone, and 5 (2%) take dictation at the typewriter.

Of the 232 office employees, 134 (58%) use the typewriter, 32 (14%) compose letters at the typewriter, 62 (27%) type tabulations, 39 (17%) type statistical material, 49 (21%) type from rough-drafts originally typed, 48 (21%) type from longhand notes, 52 (22%) type legal or other forms, and 115 (50%) change typewriter ribbons.

Thirty-nine (17%) employees answer routine correspondence, 48 (21%) receive callers, 31 (13%) make appointments, 21 (9%) arrange meetings, 37 (16%) secure and compile information for reports, 21 (9%) make travel

TABLE 9

DUTIES PERFORMED BY OFFICE WORKERS IN  
SELECTED BISMARCK-MANDAN BUSINESSES

Duties Performed	Number Who Perform	Percentage Who Perform
Uses the Typewriter	134	58
Answers the Telephone	149	64
Transfers Telephone Calls	87	38
Works Overtime	89	38
Makes Long-Distance Telephone Calls	46	20
Operates Ten-Key Adding Machine	66	28
Operates Photocopying Machines	95	41
Changes the Typewriter Ribbon	115	50
Promotes the Business Through Public Relations	33	14
Secures and Compiles Information For Reports	37	16
Sorts Materials for Filing	61	26
Prepares Outgoing Mail	33	14
Answers Routine Correspondence	39	17
Types Tabulations	62	27
Types from Longhand Notes	48	21
Makes Appointments	31	13
Types Statistical Material	39	17
Types from Rough-Drafts Which had been Originally Types	49	21

TABLE 9-Continued

Duties Performed	Number Who Perform	Percentage Who Perform
Transfers Files	36	16
Composes Letters at the Typewriter	32	14
Operates Postage Meter Machine	48	21
Receives Callers	48	21
Types Legal or Other Forms	52	22
Orders Office Supplies	24	10
Writes Checks	21	9
Opens and Sorts Incoming Mail	18	8
Keeps a Follow-Up File	32	14
Arranges Meetings	21	9
Prepares Materials for Electronic Data Processing Equipment	27	12
Codes Materials for Filing	45	19
Makes Deposits	19	8
Makes Travel Arrangements	21	9
Transcribes Dictation from a Transcribing Machine	31	13
Operates Printing Calculator	33	14
Works with the Payroll	21	9
Prepares Stencils	25	11
Operates Mimeograph Machines	10	4
Prepares Telegrams	19	8
Operates Electronic Calculator	14	6

TABLE 9-Continued

Duties Performed	Number Who Perform	Percentage Who Perform
Takes and Transcribes Dictation Using Shorthand	30	13
Prepares Itineraries	14	6
Supervises Other Workers	33	14
Operates Addressing Machines	22	9
Operates Rotary Calculator	43	18
Operates Spirit Duplicators	12	5
Prepares Spirit Duplicator Masters	12	5
Takes Dictation at the Typewriter	5	2
Takes Dictation over the Telephone	10	4
Prepares Offset Masters	26	11
Keeps a Mail Register	8	3
Operates Offset Machine	7	3
Operates Collator	30	13
Operates Automatic Typewriter	23	10

arrangements, 14 (6%) prepare itineraries, 24 (10%) order office supplies, 19 (8%) prepare telegrams, 33 (14%) supervise other workers, 27 (12%) prepare materials for electronic data processing equipment, 33 (14%) promote the business through public relations, and 89 (38%) work overtime.

Twelve (5%) employees prepare spirit duplicator masters, 25 (18%) prepare stencils, and 26 (11%) prepare offset masters.

The telephone is answered by 149 (64%) employees, 46 (20%) make long distance telephone calls and 87 (38%) transfer telephone calls to the proper person.

Photocopying machines are operated by 95 (41%) employees, 12 (5%) operate spirit duplicators, 10 (4%) operate mimeograph machines, 7 (3%) operate offset machines, 22 (9%) operate addressing machines, 30 (13%) operate the collator, 66 (28%) operate ten-key adding machines, 43 (18%) operate rotary calculators, 33 (14%) operate printing calculators, 14 (6%) operate electronic calculators, 48 (21%) operate postage meter machines, and 23 (10%) operate an automatic typewriter.

Sorting materials for filing is done by 61 (26%) employees, 45 (19%) code material for filing, 36 (16%) transfer files, and 32 (14%) keep a follow-up file.

Eight (3%) employees keep a mail register, 18 (8%) open and sort incoming mail, and 33 (14%) prepare outgoing mail.

Checks are written by 21 (9%) of the employees, 19 (8%) make deposits, and 21 (9%) work with the payroll.

Table 10, page 33, deals with the number of adding machines and calculators used, the purchasing trends, and training level indicated by employers. The full-key adding machine being the most popular with 32. There were 9 direct subtraction and 9 credit balance machines in use. Twenty-six ten-key adding machines were indicated in use with 20 direct subtraction and 23 credit balance machines. Two employers indicated they would purchase less full-key adding machines while 6 stated they would maintain the same level. Maintaining the same purchasing level was indicated by 1 employer concerning direct subtraction machines, by 2 for

TABLE 10

NUMBER OF ADDING MACHINES AND CALCULATORS BY TYPE, PURCHASING TRENDS  
AND RECOMMENDATIONS FOR SCHOOL TRAINING AS STATED  
BY SELECTED EMPLOYERS IN THE  
BISMARCK-MANDAN EMPLOYMENT AREA

Adding Machines and Calculators	No.	Purchasing Trends			School Training Level		
		Less	Same	More	Re- quired	Desir- able	Not Needed
<u>Adding and Listing Machines</u>							
Full-Key Keyboard	32	2	6	---	4	1	4
Direct Subtraction	9	---	1	---	1	1	---
Credit Balance	9	---	2	---	2	1	1
Ten-Key Keyboard	26	---	6	---	3	2	2
Direct Subtraction	20	1	4	---	2	3	---
Credit Balance	23	1	4	---	3	1	---
<u>Printing Calculators</u>							
Automatic Multiplication	7	---	2	---	1	---	1
Automatic Division	7	---	2	---	1	---	1
<u>Calculators</u>							
Rotary Full-Key	24	---	---	---	1	1	2
Rotary Ten-Key	15	---	---	---	---	---	1
Electronic	1	---	---	---	1	---	---
Key-Driven (Comptometer)	---	---	---	---	---	---	---

credit balance machines, by 6 for ten-key adding machines, by 4 for direct subtraction machines and by 4 for credit balance machines. One employer indicated a decrease in the purchase of direct subtraction machines as was

TABLE 11

NUMBER OF UNIT RECORD AND ELECTRONIC MACHINES BY TYPE, PURCHASING TRENDS AND RECOMMENDATIONS FOR SCHOOL TRAINING AS STATED BY SELECTED EMPLOYERS IN THE BISMARCK-MANDAN EMPLOYMENT AREA

Unit Record and Electronic Machines	No.	Purchasing Trends			School Training Level		
		Less	Same	More	Re-quired	Desir-able	Not Needed
<u>Unit Record Machines</u>							
Key Punch	10	---	3	---	2	---	1
Verifier	4	---	2	---	2	---	---
Sorter	3	---	2	---	2	---	---
Tabulator Machines	2	---	1	---	1	---	---
<u>Electronic Machines</u>							
Computer	1	---	1	---	1	---	---

the case for credit balance machines also. The majority of the employers indicated they required training on these adding and listing machines, while some indicated training was desirable and a small number said it was not necessary.

There were 7 automatic multiplication and 7 automatic division printing calculators. Employers indicated maintaining the same purchasing trends for these machines. One employer indicated training was necessary on each machine and one said training was not needed on either machine.

The rotary full-key calculator was the most popular with 24 in use. There were 15 rotary ten-key and 1 electronic calculator in use. Two



TABLE 12

NUMBER OF POSTING MACHINES BY TYPE, PURCHASING TRENDS  
AND RECOMMENDATIONS FOR SCHOOL TRAINING AS STATED  
BY SELECTED EMPLOYERS IN THE  
BISMARCK-MANDAN EMPLOYMENT AREA

Posting Machines	No.	Purchasing Trends			School Training Level		
		Less	Same	More	Re-quired	Desir-able	Not Needed
Alpha-numeric Keyboard	2	---	3	---	---	1	1
Numeric Keyboard	5	2	3	---	2	1	1

employers indicated they required training on these machines, 1 said it was desirable and 3 said it was not needed.

Unit record and electronic machine use, purchasing trends, and training level are shown on table 11, page 34. There were 10 key punch machines in use, 4 verifiers, 3 sorters and 2 tabulator machines. Maintaining the same purchasing trends was indicated for all machines. Training was required by the majority of employers with the exception of 1 who stated training was not needed on the key punch machine.

There was only 1 computer in use. The employer will maintain the same purchasing level and training was required on this machine. One employer indicated the use of a computer by his firm in the near future.

Table 12, page 35, shows posting machines in use, purchasing trends, and training levels required by employers. There were 2 alpha-numeric keyboard machines and 5 numeric keyboard machines in use. The same pur-

TABLE 13

NUMBER OF DUPLICATING AND COPYING MACHINES BY TYPE, PURCHASING TRENDS  
AND RECOMMENDATIONS FOR SCHOOL TRAINING AS STATED  
BY SELECTED EMPLOYERS IN THE  
BISMARCK-MANDAN EMPLOYMENT AREA

Duplicating and Copying Machines	No.	Purchasing Trends			School Training Level		
		Less	Same	More	Re- quired	Desir- able	Not Needed
<u>Duplicating Machines</u>							
Spirit (Liquid)	6	---	4	---	2	---	---
Stencil (Mimeograph)	3	---	4	---	2	1	1
Offset Process	4	---	3	---	2	1	---
<u>Copying Machines</u>							
Heat Transfer (3-M)	12	1	6	---	2	2	2
Dye Transfer (Verifax)	---	---	---	---	---	---	---
Photographic Process	---	---	---	---	---	---	---
Electrostatic (Xerox)	8	---	8	---	3	1	4
Pitney-Bowes	1	---	1	---	---	---	1

chasing level is to be maintained by the majority while 2 indicated a decrease in purchasing of these machines. Two employers required training on these machines, 2 said it was desirable, and it was not needed by 2.

The number of duplicating and copying machines in use, purchasing trends, and training level needed are shown on table 13, page 36. Six spirit duplicators were in use, 3 stencil machines and 4 offset processing machines. Purchasing trends were indicated by all Bismarck and Mandan firms as remaining the same. Training was required by the majority, 2 said it

TABLE 14

NUMBER OF TYPEWRITERS BY TYPE, PURCHASING TRENDS AND  
RECOMMENDATIONS FOR SCHOOL TRAINING AS STATED  
BY SELECTED EMPLOYERS IN THE  
BISMARCK-MANDAN EMPLOYMENT AREA

Typewriters	No.	Purchasing Trends			School Training Level		
		Less	Same	More	Re- quired	Desir- able	Not Needed
<u>Typewriters</u>							
Manual	31	1	5	—	5	1	—
Electric	76	—	8	1	8	1	1
<u>Special Typewriters</u>							
Selectric	9	1	1	1	3	—	—
Executive	12	1	2	1	4	—	—
Magnetic Tape Selectric	2	—	—	—	—	—	—
Flexowriter	—	—	—	—	—	—	—
Varietyper	—	—	—	—	—	—	—
Automatic	—	—	—	—	—	—	—
Carbon Ribbon	5	—	1	—	1	—	—
Magnetic Card	—	—	—	—	—	—	—

was desirable, and 1 indicated it was not needed. The most popular copy machine was the heat transfer with 12 of these machines in use. There were 8 electrostatic machines in use, and 1 Pitney-Bowes. The majority of the employers will maintain the same purchasing trends while 1 indicated a decrease. Training was required by 5 firms, desirable by 3 and not needed by 7 firms.

TABLE 15

NUMBER OF TRANSCRIBING AND DICTATION MACHINES BY TYPE, PURCHASING TRENDS  
AND RECOMMENDATIONS FOR SCHOOL TRAINING AS STATED  
BY SELECTED EMPLOYERS IN THE  
BISMARCK-MANDAN EMPLOYMENT AREA

Transcribing and Dictating Machines	No.	Purchasing Trends			School Training Level		
		Less	Same	More	Re- quired	Desir- able	Not Needed
<u>Transcribing Machines</u>							
Magnetic Belt	11	---	1	---	---	1	---
Plastic Belt	2	---	1	---	1	---	---
Disc	2	1	1	---	---	2	---
Tape	5	---	3	---	3	---	---
<u>Dictation Machines</u>							
Stenograph (Machine Shorthand)	2	---	1	---	1	---	---

The number of typewriters in use, purchasing trends, and training level are indicated on table 14, page 37. The majority of typewriters in use are electric with 76 of these and 31 manuals being used. There were 9 selectric, 12 executive, 2 magnetic tape selectric, 5 carbon ribbon, and 1 magnetic card machine in use. Purchasing trends will remain stable with most firms, with a decrease indicated by 3 firms. The majority of employers required training, with 2 stating it was desirable, and 1 indicated it was not needed on the electric typewriter.

Table 15, page 38, indicates number in use, purchasing trends, and training level desired on transcribing and dictating machines. The most

TABLE 16

NUMBER OF ITEMS OF MAILING EQUIPMENT BY TYPE, PURCHASING TRENDS  
AND RECOMMENDATIONS FOR SCHOOL TRAINING AS STATED  
BY SELECTED EMPLOYERS IN THE  
BISMARCK-MANDAN EMPLOYMENT AREA

Mailing Equipment	No.	Purchasing Trends			School Training Level		
		Less	Same	More	Re-quired	Desir-able	Not Needed
Address Machine	3	1	1	---	1	---	1
Postage Meter	11	---	9	---	2	---	7
Folding and Inserting Machine	2	---	1	---	---	---	1
Sealing Machine	2	---	1	---	---	---	1
Letter Opening Machine	3	---	2	---	---	---	2

widely used machine was the magnetic belt with 11 in use, 2 plastic belt, 2 disc, and 5 tape machines. There were 2 stenograph machines in use. Bismarck and Mandan firms will continue to purchase about the same number of these machines, with only 1 firm indicating a decrease in the number of disc transcribing machines to be purchased. Training was required in 5 cases while 3 indicated it was desirable.

Postage meters were the most popular mailing equipment in use as shown on table 16, page 39. Eleven postage meters were in use, 3 address machines, 2 folding and inserting machines, 2 sealing machines, and 3 letter opening machines. One firm indicated a decrease in purchasing address machines while all of the other firms indicated maintaining the same purchasing level. Training was required in 3 cases and not needed in the remaining 12.

TABLE 17

NUMBER OF OTHER MACHINES AND EQUIPMENT BY TYPE, PURCHASING TRENDS  
AND RECOMMENDATIONS FOR SCHOOL TRAINING AS STATED  
BY SELECTED EMPLOYERS IN THE  
BISMARCK-MANDAN EMPLOYMENT AREA

Other Machines and Equipment	No.	Purchasing Trends			School Training Level		
		Less	Same	More	Re- quired	Desir- able	Not Needed
Microfilm	12	---	3	---	---	2	1
Collator	2	---	1	---	---	---	1
Teletype	1	---	1	---	1	---	---

Table 17, page 40, shows the number of other machines and equipment in use, along with purchasing trends and training level necessary. There were 12 microfilm machines in use, 2 collators, and 1 teletype. There will be no increase or decrease in purchasing of these machines. One firm required training, 2 stated training was desirable, and 2 said it was not needed on these machines.

The most popular adding and listing machines in use by Bismarck and Mandan firms was the Olivetti. Others used were National Cash Register, Burroughs, Monroe, Smith Corona, Friden and Victor machines. Monroe was the most widely used calculator, followed by Commodor, Friden, and Victor.

The most popular manual typewriter used was the Royal. Others used were Underwood and Remington. IBM was definitely the most widely used electric typewriter. One of each of the following were used: Royal, Olympia, Friden, and Smith Corona.

## CHAPTER V

### SUMMARY AND RECOMMENDATIONS

#### Summary

This study attempted to secure data regarding selected business firms in the Bismarck-Mandan employment area that would contribute to the improvement of the office education programs at the local high schools.

In order to see what changes are taking place in the business world, a search was made of literature related to this area. This review of the literature is given in Chapter II.

The questionnaire prepared by Carl Peter, Valley City; Sylvia Lee, Williston; and the researcher, was reviewed by them and also a businessman. A final questionnaire was then prepared and duplicated.

Fifteen firms from the Bismarck and Mandan employment area were contacted and surveyed by the researcher. A personal interview took place with each selected business employer which resulted in the completion of the questionnaire. The procedures used in obtaining the data are presented in Chapter III.

Chapter IV, presents the information in detail and classified, which was obtained from the survey. Certain significant information was obtained from the data that was gathered from the 15 employers:

1. Ninety-four of the 232 office employees were clerk-typists.
2. Very little electronic data processing equipment is being used in these business firms.

3. Employers were not able to state what they considered to be average or above-average typing and shorthand speed. Some of them stated they preferred a reasonable speed with a rather high degree of accuracy.

4. Eight of the 15 employers indicated they are willing to hire employees with no previous work experience.

5. Fourteen employers indicated they require having a personal interview with prospective office employees and all contact persons serving as references.

6. During a personal interview, all employers consider personal appearance as being the most important factor, while fourteen consider attitude and maturity as being second in importance.

7. Twelve employers go to employment agencies when looking for office employees. Five employers indicated they use business associates and five use other employees as sources of securing new office employees.

8. All employers indicated the use of the dictionary, the telephone directory, and the zip code directory as reference sources. Thirteen firms use the city directory as a reference source.

9. Thirteen of the business firms use the alphabetic filing system. Four indicated use of the numeric system, one geographic and one subject.

10. The average beginning salary paid office employees in the Bismarck and Mandan area is in about the \$275 to \$300 range. The average high salary paid office employees ranges from about \$425 to \$550.

11. The majority of the employers indicated they required average shorthand ability and ability to use transcribing machines.

12. The duty performed by the greatest number of office employees was answering the telephone.



13. Some of the other more popular duties performed by office employees were: using the typewriter, changing typewriter ribbons, and operating photocopying machines.

14. The most popular adding and listing machine was the full-key adding machine. There were 32 of these machines in use.

15. The rotary full-key calculator was the most widely used, with 24 being used.

16. Of the unit record machines used, the most used one was the key punch.

17. There was only 1 computer in use in the firms surveyed.

18. There were 5 numeric keyboard posting machines used by the Bismarck and Mandan firms.

19. The most widely used copy machine used was the heat transfer with 12 of them being used and there were 6 spirit duplicating machines, used.

20. The typewriter was used by 134 office employees. There were 76 electrics in use and 31 manuals.

21. Eleven of the transcribing machines in use were magnetic belt machines.

22. The most widely used piece of mailing equipment used by Bismarck and Mandan firms was the postage meter. Eleven of these were used by office employees.

23. There were no key-driven calculators; dry transfer or photographic process copying machines; flexowriter; varityper; automatic or magnetic card typewriters used in the Bismarck and Mandan offices surveyed.

Recommendations

The curriculum of a program which is set up to prepare office workers has to serve the employers as well as the student. As a result of analyzing the findings of this survey, the following recommendations are made.

1. It was found that clerk-typists and secretaries make up the largest portion of the office employees, so those who are being trained for office positions should be ready to perform a variety of office duties.

2. The business teachers need to know the many various office duties that are requested by business employers, so they can better teach their students.

3. It is important for students to know how to complete application forms and write a letter of application.

4. Students should be taught how to make an appointment for an interview and some of the things to do and be aware of during an interview. Personal appearance, attitude, maturity, voice and communication ability, self-confidence and courtesy and manners should have special attention given.

5. The main source contacted for new employees is employment agencies, consequently students should be aware of these agencies and in what ways they can help them obtain a job.

6. It is important that students know how to use the dictionary, telephone directory, zip code directory and city directory since most of the firms use these a great deal.

7. Students need to know how to file information using various filing systems. The most used filing system in this area is the

alphabetic system. Some use is made of the numeric, geographic and subject systems of filing.

8. Typewriting is important for most office employees and it is recommended that emphasis should be placed on accuracy more than typewriting speed.

9. The typewriting material that should be stressed should include: composing letters at the typewriter, typing tabulations and typing statistical material, typing from rough-drafts, typing from longhand notes, typing legal and other forms, answering routine correspondence, taking dictation at the typewriter and transcribing dictation from a transcribing machine.

10. A thorough knowledge of the alphabetical filing systems should be learned as they are used in various forms in the Bismarck and Mandan firms.

11. Filing duties which are important include: sorting material for filing, coding materials for filing, transferring files and keeping a follow-up file.

12. A thorough knowledge of the use of the dictionary, telephone directory, zip code directory and city directory are necessary for employees of Bismarck and Mandan firms.

13. Correct telephone usage should be stressed. Knowledge of the proper way to answer the telephone, making long-distance calls, and transferring calls to the proper person is needed.

14. General office duties performed widely by office employees in Bismarck and Mandan firms include: receiving callers, securing and compiling information for reports, supervising other workers, promoting the business through public relations, making appointments, preparing

materials for electronic data processing equipment, ordering office supplies, arranging meetings, writing checks, making deposits, working with the payroll, making travel arrangements, and preparing telegrams.

APPENDIX A  
THE QUESTIONNAIRE

Firm Name and Address \_\_\_\_\_

Type of Business \_\_\_\_\_

Name of Owner or Manager \_\_\_\_\_

Name of Person Interviewed \_\_\_\_\_

Position Held by Person Interviewed \_\_\_\_\_

Number of Full-Time Office Employees: (40 or more hours per week)

Clerk-Typist \_\_\_\_\_

Stenographer \_\_\_\_\_

Secretary \_\_\_\_\_

Others \_\_\_\_\_ (Title and Number)

Number of Part-Time Office Employees: (Less than 40 hours per week)

Clerk-Typist \_\_\_\_\_

Stenographer \_\_\_\_\_

Secretary \_\_\_\_\_

Others \_\_\_\_\_ (Title and Number)

Total Number of Office Employees \_\_\_\_\_

Qualifications required when hiring new employees:

\_\_\_\_\_ Must have (no, average, above average) typewriting ability.

Explain: \_\_\_\_\_

\_\_\_\_\_ Must have (no, average, above average) ability to take shorthand.

Explain: \_\_\_\_\_

\_\_\_\_\_ Must have (no, average, above average) ability to use transcribing machines.

Explain: \_\_\_\_\_

\_\_\_\_\_ (Need not, should, must) have electronic data processing knowledge.

Type of knowledge: \_\_\_\_\_

\_\_\_\_\_ (Need not, should, must) have electronic data processing training.

Type of training: \_\_\_\_\_

\_\_\_\_\_ (Must have, need not have) previous work experience.

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

\_\_\_\_\_ (Do, do not) take into consideration references.

\_\_\_\_\_ (Must, need not, preferable to) submit a letter of application.

\_\_\_\_\_ (Must, need not, preferable to) submit a data sheet.

\_\_\_\_\_ (Require, do not require) applicants complete an application blank.

\_\_\_\_\_ (Do, do not) test the applicants before hiring them.

If so, what type of test? \_\_\_\_\_

\_\_\_\_\_ (Require, do not require) prospective employee have a personal interview.

Factors considered during interview.

- \_\_\_\_\_ 1. Personal appearance.
- \_\_\_\_\_ 2. Attitude.
- \_\_\_\_\_ 3. Emotional control and behavior.
- \_\_\_\_\_ 4. Maturity.
- \_\_\_\_\_ 5. Voice and communication ability.
- \_\_\_\_\_ 6. Courtesy and manners.
- \_\_\_\_\_ 7. Self-confidence.

Others:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Sources contacted for new employees:

- \_\_\_\_\_ a. Business Associates.
- \_\_\_\_\_ b. Employees.
- \_\_\_\_\_ c. Employment Agencies.
- \_\_\_\_\_ d. High Schools.
- \_\_\_\_\_ e. Colleges.
- \_\_\_\_\_ f. Friends.
- \_\_\_\_\_ g. Newspapers.
- \_\_\_\_\_ h. Others \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Resource persons or materials available for use in classes:

(Name, topic, when available, etc.)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Preferred Letter Style \_\_\_\_\_

Preferred Form of Punctuation \_\_\_\_\_

Reference Books Used:

- \_\_\_\_\_ 1. City Directory.
- \_\_\_\_\_ 2. Dictionary.
- \_\_\_\_\_ 3. Telephone Directory.
- \_\_\_\_\_ 4. Zip Code Directory.
- \_\_\_\_\_ 5. Others: \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



## Filing System Used:

- \_\_\_\_\_ 1. Alphabetic.  
 \_\_\_\_\_ 2. Geographic.  
 \_\_\_\_\_ 3. Numeric.  
 \_\_\_\_\_ 4. Subject.  
 \_\_\_\_\_ 5. Others: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Salaries Received by Office Workers:

## Beginning Salary Received by:

- \$ \_\_\_\_\_ per \_\_\_\_\_ 1. Clerk-Typist.  
 \$ \_\_\_\_\_ per \_\_\_\_\_ 2. Stenographer.  
 \$ \_\_\_\_\_ per \_\_\_\_\_ 3. Secretary.  
 \$ \_\_\_\_\_ per \_\_\_\_\_ 4. Other: \_\_\_\_\_

Pay increases determined by: \_\_\_\_\_  
 \_\_\_\_\_

## Highest Salary Received by:

- \$ \_\_\_\_\_ per \_\_\_\_\_ 1. Clerk-Typist.  
 \$ \_\_\_\_\_ per \_\_\_\_\_ 2. Stenographer.  
 \$ \_\_\_\_\_ per \_\_\_\_\_ 3. Secretary.  
 \$ \_\_\_\_\_ per \_\_\_\_\_ 4. Other: \_\_\_\_\_

Plans for adding new equipment or expanding the office: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Has this firm participated in the supervised work experience program?

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

Is this firm interested in participating in the supervised work experience program?

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

The number of workers in the office who perform the following duties:

- |       |     |  |
|-------|-----|--|
| _____ | 1.  | Takes and transcribes dictation using shorthand.   |
| _____ | 2.  | Transcribes dictation from a transcribing machine.                                       |
| _____ | 3.  | Takes dictation over the telephone.  |
| _____ | 4.  | Takes dictation at the typewriter.   |
| _____ | 5.  | Uses the typewriter.   |
| _____ | 6.  | Composes letters at the typewriter.  |
| _____ | 7.  | Types tabulations.   |
| _____ | 8.  | Types statistical material.  |
| _____ | 9.  | Types from rough-drafts which had been originally typed.                                 |
| _____ | 10. | Types from longhand notes.   |
| _____ | 11. | Types legal or other forms.  |
| _____ | 12. | Changes the typewriter ribbon.   |
| _____ | 13. | Answers routine correspondence.  |
| _____ | 14. | Prepares spirit duplicator masters.  |
| _____ | 15. | Prepares stencils.   |
| _____ | 16. | Prepares offset masters.   |
| _____ | 17. | Answers the telephone.   |
| _____ | 18. | Makes long-distance telephone calls.   |
| _____ | 19. | Transfers telephone calls to proper person.  |
| _____ | 20. | Operates photocopying machines.  |
| _____ | 21. | Operates spirit duplicators.   |
| _____ | 22. | Operates mimeograph machines.  |
| _____ | 23. | Operates offset machine.   |
| _____ | 24. | Operates addressing machines.  |
| _____ | 25. | Operates collator.   |
| _____ | 26. | Operates ten-key adding machine.   |
| _____ | 27. | Operates rotary calculator.  |
| _____ | 28. | Operates printing calculator.  |
| _____ | 29. | Operates electronic calculator.  |
| _____ | 30. | Operates postage meter machine.  |
| _____ | 31. | Operates an automatic typewriter.  |
| _____ | 32. | Sorts materials for filing.  |
| _____ | 33. | Codes materials for filing.  |
| _____ | 34. | Transfers files.   |
| _____ | 35. | Keeps a follow-up file.  |
| _____ | 36. | Opens and sorts incoming mail.   |
| _____ | 37. | Keeps a mail register.   |
| _____ | 38. | Prepares outgoing mail.  |
| _____ | 39. | Receives callers.  |
| _____ | 40. | Makes appointments.  |
| _____ | 41. | Arranges meetings.   |
| _____ | 42. | Secures and compiles information for reports.  |
| _____ | 43. | Writes checks.   |
| _____ | 44. | Makes deposits.  |
| _____ | 45. | Works with the payroll.  |
| _____ | 46. | Makes travel arrangements.   |
| _____ | 47. | Prepares itineraries.  |
| _____ | 48. | Orders office supplies.  |
| _____ | 49. | Prepares telegrams.  |
| _____ | 50. | Supervises other workers.  |
| _____ | 51. | Prepares materials for electronic data processing equipment.<br>Type of equipment: _____ |
| _____ | 52. | Promotes the business through public relations.  |
| _____ | 53. | Works overtime.  |



	Approx. Number	Purchasing Trends			School Training Level		
		Less	Same	More	Required	Desirable	Not Needed
Section III							
Posting Machines							
Alpha-numeric keyboard							
Numeric keyboard							
Section IV							
Duplicating Machines							
Spirit (liquid)							
Stencil (mimeograph)							
Offset process							
Copying Machines							
Heat transfer (3-M)							
Dye transfer (verifax)							
Photographic process							
Electrostatic (Xerox)							
Diaz							
Section V							
Typewriters							
Manual							
Most frequent brand name _____							
Electric							
Most frequent brand name _____							
Special Typewriters							
Selectric							
Executive							
RT/ST							
Flexewriter							
Vanityper							
Automatic							
Carbon Ribbon							
Other: _____							
Section VI							
Transcribing Machines							
Magnetic Roll							
Plastic Roll							
Disc							
Tape							
Dictation Machine							
Stenograph (Machine shorthand)							

	Approx. Number	Purchasing Trends			School Training Level	
		Less	Same	More	Required	Desirable   Not Needed
Section VII						
Mailing Equipment						
Address machine						
Postage meter						
Folding and inserting machine						
Sealing machine						
Letter opening machine						
Other						
Section VIII						
Other Machines and Equipment						
Micro film						
Collector						
Teletype						
Other						

APPENDIX B  
LIST OF  
SELECTED FIRMS

LIST OF SELECTED FIRMS

American Oil Company, Box 549, Mandan N. Dak.  
Bismarck Hospital, 323 N 6, Bismarck, N. Dak.  
Bismarck Junior College, Bismarck, N. Dak.  
Charles F. Ellis, Agency, Incorporated, 105 3rd Avenue N W, Mandan, N. Dak.  
Conrad Publishing Company, Mandan, N. Dak.  
Dakota National Bank, 212 N 4, Bismarck, N. Dak.  
Farmers Union Oil Company, 2006 E Broadway, Bismarck, N. Dak.  
Fleck Smith Mather Strutz and Mayer, 418 E Rosser Avenue, Bismarck, N. Dak.  
Richard P. Gallagher, Attorney, 105 3rd Avenue, N W, Mandan, N. Dak.  
Good Shepherd Lutheran Church, Washington and Divide, Bismarck, N. Dak.  
Hart Agency, Incorporated, 104 N 3, Bismarck, N. Dak.  
Missouri Valley Clinic, 9th and Rosser Avenue, Bismarck, N. Dak.  
Montana Dakota Utility Company, 410 Main W, Mandan, N. Dak.  
Northern Improvement Company, Airport Road, Bismarck, N. Dak.  
State Employment Service, 201 East Broadway, Bismarck, N. Dak.

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