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## Follow-up Study of Business Education Proficiency Card Holders That Have Graduated from Nathan Hale High School, Seattle, Washington, 1965, 1966, 1967

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FOLLOW-UP STUDY OF BUSINESS EDUCATION PROFICIENCY CARD  
HOLDERS THAT HAVE GRADUATED FROM NATHAN HALE HIGH  
SCHOOL, SEATTLE, WASHINGTON, 1965, 1966, 1967

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A Thesis  
Presented to  
the Faculty of the School of Education  
Central Washington State College

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Education in Business Education

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by  
Donald T. Smith

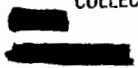
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W. G. Gaskell

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## CHAPTER I

### INTRODUCTION

#### I. GENERAL PURPOSE OF STUDY

The general purpose of this study has been to determine the effectiveness and usefulness of the Business Education Curriculum at Nathan Hale High School in Seattle, Washington, based on an analysis of information provided by students who graduated in 1965, 1966, and 1967 and who earned Business Education Proficiency Cards.

#### II. SPECIFIC PURPOSES

The study was designed to determine:

1. The occupational status of the graduates.
2. The type and length of post-high school education of the graduates.
3. The average number of hours worked by the graduates in a work week.
4. The length of time the graduates have been employed in their present positions.
5. How the graduates located their present positions.
6. The procedures used in the hiring process of the graduates.
7. The appraised value the graduates gave to business courses taken at Nathan Hale.

8. Which duties the graduates performed on the job frequently, occasionally, or never.
9. Which business machines the graduates were using on the job.

### III. DELIMITATIONS OF THE STUDY

This study included only students from Nathan Hale High School in Seattle, Washington, who graduated in 1965, 1966, and 1967, and who earned a Business Education Proficiency Card.

### IV. DEFINITION OF TERMS

In order to clarify the terminology used in this study, the following terms have been defined as they apply to this specific study:

Business Education Curriculum. That area of the total high school curriculum which strives to develop business skills, attitudes, and understandings.

Business Education Proficiency Cards. Cards issued to those students who earn a high school diploma and who successfully completed a specified group of business subjects.

Basic Courses. Those courses within the Business Education Curriculum required of all students pursuing any of the four Business Education Proficiency Card sequences.

Slow Learner Program. A series of courses established for those students who cannot achieve successfully in the regular Business Education program.

#### V. RESEARCH METHODOLOGY

The names and addresses of the students who graduated from Nathan Hale High School in Seattle, Washington, in 1965, 1966, and 1967, with Business Education Proficiency Cards were obtained from school records. A questionnaire was developed. A personal cover letter and stamped-addressed envelope were mailed February 20, 1968, along with the questionnaire to all of the sixty-three graduates holding Proficiency Cards.

#### VI. PROFICIENCY CARD COURSE REQUIREMENTS

There was a set of required business courses which were the same for all Proficiency Card candidates. They were as follows:

##### Basic Courses

Business Law, 1 semester

Accounting I (Bookkeeping I), 1 semester

Business English, 1 semester

Typing I, II, III, 1 semester each

Office Practice I, 1 semester

Business Arithmetic, 1 semester

In addition each student fulfilled these requirements:

1. For the Secretarial Proficiency Card:

Gregg Shorthand I, II, III, IV or  
Forkner Shorthand I, II

2. For the Retailing Proficiency Card:

Retailing I, II

3. For the Accounting Proficiency Card:

Accounting II, III

4. For the Clerical Proficiency Card:

Office Practice II.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

Research in general. The purpose of research of any kind, according to Lomax and Wilson, is "to search in an organized and scholarly manner for a better way of doing things" (9:1). A follow-up study then must help business education teachers do their jobs better. Llewellyn points out that there are generally four reasons follow-up studies are made at the high school level. They are

. . . to determine (a) the adequacy of instruction as it relates to the goals of the high school graduates, (b) the appropriateness of course content and instructional equipment, (c) the nature of the entry jobs of graduates, and (d) choices of graduates in post-high school education (8:19).

He further suggests several devices that have proved successful in follow-up studies conducted by him. He recommends the researcher send an individually typed letter explaining the purposes of the study, a stamped, self-addressed envelope, and the questionnaire. The writer employed these same devices in this study.

Questionnaire construction. Van Dalen and Meyer (20:304-5) suggest many criteria to be considered in the construction of a questionnaire. Such considerations as how to establish rapport, how to frame questions, the ordering of questions, how to design the directions, and how to elicit

honest replies were all beneficial in the construction of the questionnaire used in this study.

Population. Lomax and Wilson (9:16-7) point out that the value of a survey is most dependent on the people selected to be questioned. They emphasize the obvious fact that a survey of a total population is more valid than one of a sample. This survey deals with information obtained from an entire population.

Seattle Public Schools. Nathan Hale High School in Seattle, Washington is new (its fourth graduating class will graduate in June of 1968). It has never before had a follow-up study performed on its graduates. There are no recent follow-up studies completed on graduates of any of the other Seattle public high schools. For this reason, research studies conducted in schools in other parts of the country were reviewed prior to embarking on this study.

Related follow-up studies. Autrey (1:1-31) conducted a study of the business graduates for the years 1963, 1964, and 1965 of Foley High School, Foley, Alabama. Fifty-six or 45.08 per cent of the 122 questionnaires mailed were completed and returned. Twenty-seven or 48.21 per cent reported that they were employed full time. Three or 5.37 per cent were employed part time. There were eleven or 19.64 per cent



full-time students. There were no part-time students. Fifteen or 26.78 per cent of the graduates who responded indicated they were unemployed. Autrey's conclusions were as follows:

1. Most business students enrolled in business subjects in order to prepare for employment.
2. For over one-half of the business graduates high school was terminal education.
3. Most of the graduates who had post high school education in business received this further education at a State Vocational Trade School.
4. Seventy-five per cent of the graduates had been employed at one or more businesses since graduation.
5. The most frequently reported job titles were store clerk, bookkeeper, and general secretary.
6. The job activities most frequently mentioned by the graduates were typewriting, filing, and bookkeeping.
7. The machines most often used on the job by the graduates were the standard typewriter, the electric typewriter, and the adding machine.
8. There appeared to be a definite need for a shorthand class in the Foley High School business curriculum.
9. There was a need for a business machines course

with special emphasis on the electric typewriter and the adding machine (1:23).

Carroll received 69 of the 81 questionnaires, or 85 per cent, in her follow-up study of the business graduates of Chillicothe High School in Chillicothe, Illinois (4:11). Carroll found that the high school business curriculum was relatively complete and successful as determined by the large percentage of graduates who had been employed and the small percentage who received any advanced training (4:35).

Sell obtained a 74.2 per cent return from the 182 questionnaires mailed in his follow-up study of the graduates of Waterloo High School, Waterloo, Wisconsin; and Marshall High School, Marshall, Wisconsin (19:66). One hundred per cent of the Marshall graduates and 80 per cent of the Waterloo graduates sought additional education after high school (19:66). It is important to point out that this study was not limited to just the business graduates, but rather, the total enrollment of the two high schools for the three specified years.

Sister Marie Christine McAndrew O.P. (12:53) performed a follow-up study in 1963 to secure information on the educational and vocational pursuits of one graduating class two years after their graduation from Edgewood High School of the Sacred Heart, Madison, Wisconsin. One hundred sixty-six

of the 225 questionnaires mailed were returned. Sister McAndrew found that 73 per cent were enrolled in college with most of the graduates majoring in liberal arts. Most of the graduates who responded indicated that they wanted the English courses in high school to be made more difficult and a greater stress placed on good study habits (12:53).

Brady (2:11) received 174 of the 206 questionnaires mailed in her follow-up study conducted in 1964 of the graduates of Tomahawk High School, Tomahawk, Wisconsin. Brady found that girls working in offices did more typing and general office work than shorthand and bookkeeping. Most of the graduates enrolled in college indicated teaching as their professional goal. Brady (2:11) concluded that "For business purposes, the usefulness of one year of shorthand was negligible; it was most useful when taken for two years."

Haberer (6:23) conducted a study in 1963 to obtain general information about the graduates of Twin Valley (Minnesota) High School. Seventy-seven of the 180 questionnaires mailed were returned. Twenty-six per cent of the graduates were employed as office and store workers. Twenty-nine per cent had college training. Over 28 per cent indicated that they were using their business training to finance their education in either college or business college. Haberer also found that over 80 per cent of the individuals surveyed had been employed since graduation from high school.

Typewriting, Business Arithmetic, and Bookkeeping, in that order, were the business subjects most often used on the job (6:23).

Brady (3:11) mailed 163 questionnaires in a follow-up study of the business education graduates of Woodstock Community High School, Woodstock, Illinois. One hundred and three, or 63 per cent, were returned. Brady found the positions held by the graduates in descending order were housewife, secretary, and student. Business Education was the most popular major of the 20 per cent who attended college. Forty per cent of the graduates who had been employed received on-the-job training. English was considered the most useful subject for the on-the-job value by 53 per cent of the graduates (3:11).

Cloyd (5:66-8), by the use of a questionnaire sent at three-month intervals to graduating seniors who had completed four semesters of business education courses, learned how many had found employment, the nature of their jobs, and the activities most of them were engaged in. The majority were in clerical positions and used the typewriter, other common office machines, and the telephone almost exclusively. The unusual feature of this survey was that it measured not only employment but changes over a six-month period.

Sammataro (17:49), in a follow-up study of business graduates of East Haven High School in Connecticut, found the

graduates were receiving adequate preparation for typewriting duties. The graduates indicated that they felt their preparation inadequate in the general clerical and sales areas. More training on office machines, particularly the electric typewriter, was desired. Sammataro also summarized that the high school needs to develop an understanding of the duties and responsibilities of an office worker with its students (17:49).

Malone (10:42) conducted a follow-up study to determine whether Jefferson High School in Jefferson City, Tennessee, is providing the required business knowledge to its graduates. Two questionnaires were used in this study. A personal information questionnaire was mailed to 358 graduates. Two hundred sixty-six were returned. A personal interview check-list was then given individually to 40 of the 266 who returned the first questionnaire. Malone found that the high school needs to broaden its business curriculum. One-fourth of the graduates made use of personal-use typing, and only one-eighth made use of shorthand. Two-thirds of the graduates were forced to learn business machines on the job (10:42).

## CHAPTER III

### NATHAN HALE HIGH SCHOOL

Nathan Hale High School, located in the northeast section of Seattle, first opened its doors in 1963. There was no senior class in this first year of operation; the first class to graduate from Nathan Hale High School was at the completion of the 1964-65 school year. This study covers the business graduates of all three years, 1965, 1966, and 1967.

The newest of the twelve Seattle High Schools, Nathan Hale has been a school constantly involved in experimentation with new teaching methods, equipment and facility utilization, as well as a new type of rotating schedule. Its principal, Claude F. Turner, is progressive and is always searching for better ways of doing the job of educating children. One of the innovations pioneered in this area under his leadership has been the rotating schedule. This schedule, often referred to as the seven on five program, is one which offers seven periods--only five of which meet any average day.

The advantage of this schedule is that it requires each student to carry five subjects, instead of four, with physical education and a study hall. The schedule permits an increase in the pupil load by one subject and many students elect a business education subject to complete their course schedule.

It is partly due to this schedule that the enrollment in business education courses at Nathan Hale High School has remained so high. In October, 1964, the Business Department had an enrollment of 1276 or 68.05 per cent of the total school's enrollment of 1875. The Business Department had an enrollment in October of 1965 of 1240 or 61.93 per cent of the 2002 enrolled in the total school program. In October, 1966, 1206, or 60.78 per cent, of the 1984 enrolled in the school were taking business education subjects. The Business Education Department enrollment is compared to the total school enrollment for the three years in Table I.

TABLE I  
BUSINESS EDUCATION DEPARTMENT ENROLLMENT COMPARED  
TO TOTAL SCHOOL ENROLLMENT\*

Date	Business Department	Total School	Business Department Per Cent of Total
October 1964	1276	1875	68.05
October 1965	1240	2002	61.93
October 1966	1206	1984	60.78

\*Seattle Public Schools, Business Education Department Enrollment, 1964, 1965, and 1966.

The Business Education Department like all the other departments at Nathan Hale operates within the philosophy

developed by the faculty and administration after much consideration. It is herewith included in its entirety.

It is our belief that:

1. The operation of the school should demonstrate the fundamental principles of democracy.
2. The school shares with the home, the church, and the community organizations the responsibility for inculcating moral and ethical principles in youth.
3. The school's primary responsibility is the academic training of its students.
4. The administration and staff have the duty of keeping current with recent studies of youth and the educative process, and adapting curricular methods to their findings.
5. The school must be concerned with the moral, physical, intellectual, and cultural growth of its students.
6. The teacher must be the leader and director in the learning process.
7. The relationship between the teacher and the students should be helpful, consistent, and just.
8. Administrator-teacher relationships should be characterized by dignity, mutual respect, and mutual understanding of each other's problems.
9. Education is a right of every student, which may be revoked for actions deemed detrimental to himself or others.
10. The Board of Education must authorize the establishment of criteria governing student progress.
11. Within the structure of the school, educational and vocational opportunities must be offered to students of varied interests and abilities.



12. Student activities, while serving a useful educational purpose, must be kept in proper balance with academic endeavors (14:1).

In the Business Education Department's constant effort to meet the needs of its students, several changes have been made since its beginning in 1963. In the 1964-65 school year, the department increased its teaching staff from four to six. Business English, Business Law, Typing III, and Office Practice were first offered in 1964-65. Two additional teachers were added in the 1965-66 school year. A Secretarial Service course was now offered to students as a last step before graduation and the possible office position. Forkner Shorthand was also offered to seniors in the belief that students could learn enough in one year with this form of shorthand to fulfill secretarial dictation needs. A slow-learner program was initiated in the 1966-67 school year. This included a new course for sophomores entitled Business Procedures and a revised Bookkeeping course for juniors. There were still eight full-time teachers in the Business Education Department.

For an accurate understanding of the current business education offerings, the following course descriptions are included:

Typing I. Enables the student to learn the keyboard and the best techniques for use of the operative parts of the typewriter, to type simple letters, outlines, and tabulations;

stresses correct grammatical usage and punctuation by means of dictation and composition at the typewriter.

Typing II. (Prerequisite: Typing I) - Increases the skill of touch typing, resulting in more speed, accuracy, and endurance, better proofreading, and greater facility in preparation of manuscripts, letters, and business forms.

Typing III. (Prerequisite: Typing II) - Develops office production skills that meet vocational proficiency standards.

Accounting I. Enables a student to understand the language of business; covers the recording of financial transactions and their interpretation; clarifies business procedures; provides skills needed for keeping personal records.

Accounting II. (Prerequisite: Accounting I) - Comprises a more comprehensive study of the types of journals, discounts, credit memorandums, payrolls, taxes, depreciation, and the interpretation of financial statements.

Accounting III. (Prerequisite: Accounting II) - Shifts the emphasis from general education to the vocational objective; applies accounting to partnerships and corporations.

Accounting IV. (Prerequisite: Accounting III) - Introduces cost accounting and gives practice in the setting up of accounting systems.

Business Arithmetic. Develops a high level of competence in the fundamentals, applies arithmetical principles to the understanding and use of statistics, consumer credit, investments, insurance, and taxation.

Business English. Is designed for the student who wishes to learn to compose effective letters and reports at the typewriter on first draft; stresses spelling, punctuation, sentence structure, and clear and concise expression through composition at the typewriter.

Business Law. Includes an overview of law, rights and obligations of minors and adults, the use of credit, interest rates, simple contracts, checks, etc.

Office Practice I. (Prerequisite: one year of typing) - Develops vocational skill in filing, telephone usage, stencil and master unit preparation; teaches office procedures, use of rotary calculators, ten-key and full-keyboard adding-listing machines, machine transcription, mimeoscope, stencil and spirit-duplicators.

Office Practice II. (Prerequisite: Office Practice I) - Completes the work begun in Office Practice I, and, in addition, covers units on payroll preparation and on the printing calculator.

Retailing I. Covers topics related directly to the student's performance on his job--selling techniques, store system, merchandise information, and personal development.

Retailing II. Gives instruction on job performance; considers the broad aspects of retailing, marketing, and distribution, and the opportunities these business fields offer for careers; includes more intensive study of business management, merchandising, sales promotion, and business finance.

Shorthand I. (Prerequisite: Typing II) - Enables the student to learn the scientific high speed Forkner system of writing. This course presents the principles of the system, together with extensive dictation and transcription practice.

Shorthand II. (Prerequisite: Shorthand I) - Provides graded material and a planned procedure for a systematically correlated course in dictation and transcription. Each day's work correlates shorthand, typewriting, English, punctuation, spelling, division of words, and vocabulary building--reaching the standards required of a secretary in secretarial skills.

Office Machines. Enables the student to operate various machines used in the office such as the ten-key adding-listing machines, full-keyboard adding-listing machines,

rotary calculators, printing calculators, transcribing machines, electric typewriters, mimeoscopes, stencil and spirit duplicators.

Secretarial Service. (Prerequisite: Office Practice I) - Offers an in-school work-experience program to the student who plans to seek employment in the business world after graduation. It provides secretarial and office production services for all teachers.

Business Procedures I. (Prerequisite: Counselor permission) - Special course for students planning on employment after graduation. Covers basic skills and attitudes necessary for success on a job. Includes business computation, business geography, human relations, handwriting, functions of business, and business communications.

Business Procedures II. (Prerequisite: Business Procedures I) - Continues skill and attitude development of Business Procedures I and includes choosing and applying for a job and handling money and materials.

Bookkeeping I. (Prerequisite: Counselor permission) - Enables the student to develop an understanding of the fundamental principles of double-entry bookkeeping; to acquire an understanding of the bookkeeping cycle and the language of business; to acquire competency in analyzing and recording

transactions in books of original entry; and to develop proper attitudes toward accuracy, neatness, responsibility, integrity, and ethical values.

Bookkeeping II. (Prerequisite: Bookkeeping I) - Covers work done in Bookkeeping I in more depth and includes interpretation of business reports and financial statements.

Data Processing. An introduction to the fundamental concepts of data processing including the basic nature of data processing, the function of commonly used machines, and the interrelationship of data processing systems and machines (13:100-1).

In addition to the curricular offering, Nathan Hale High School students in the Business Education Department have the opportunity to participate in a national association known as the Future Business Leaders of America. It is primarily through this organization that students learn about the application of skills and attitudes necessary for success in business.

Description of the school population. It seemed that a description of the present school population would be helpful in understanding the background of its recent graduates. For this reason, an arbitrarily chosen ten-per cent sampling survey was undertaken to determine the vocations of the fathers of students as listed on the office records of March 4, 1968.

The 193 student program cards examined in this sampling were classified into four categories:

1. Professional--Management
2. Skilled workers
3. Semi-skilled and unskilled workers
4. Unclassified, deceased.

There were 69, or 36 per cent, of the fathers in professional or management positions. Fifty-two, or 27 per cent, were skilled workers. Sixty-one, or 31 per cent, were semi-skilled or unskilled. Eleven, or 6 per cent of the fathers were either unclassified or deceased. The results are presented below in Table II.

TABLE II  
SAMPLING OF FATHER'S OCCUPATIONS

Classification	Number	Percentage
Professional--Management	69	36
Skilled Workers	52	27
Semi-skilled and unskilled	61	31
Unclassified, deceased	<u>11</u>	<u>6</u>
Totals	193	100

These results offer some idea of the background of Nathan Hale students and with 121, or 63 per cent, of the parents in the professional--management and skilled worker classification, it suggests an upper-middle-class population. It might be

assumed also that interest in and support of the school program could be expected from such parents in all areas of the curriculum and that the students might have been taught to respect the value of education.



## CHAPTER IV

### ANALYSIS OF THE DATA

On February 20, 1968, an individually-typed cover letter (Appendix C), a four-page questionnaire (Appendix B), and a self-addressed stamped envelope were mailed to each of the 63 graduates from Nathan Hale High School who earned a Business Department Proficiency Card. Two envelopes were returned because of incorrect addresses. These two graduates were never located. On March 7, 1968, graduates who had not responded were contacted by telephone. These telephone calls continued until March 19, 1968, when questionnaires were received from all graduates living in Seattle. A second letter and questionnaire with self-addressed stamped envelope was mailed to eleven graduates. Seventeen, or 85 per cent, of the 20 questionnaires sent to the 1965 graduates were returned. Twenty-one, or 95 per cent, of the questionnaires mailed to the twenty-two 1966 graduates were returned. Twenty, or 95 per cent, of the 21 questionnaires sent to the 1967 graduates were returned. In all, 58, or 92 per cent, of the 63 graduates participating in this study returned their questionnaires. Table III shows the return totals and percentages. Of the five questionnaires which were not returned, two of the graduates' addresses were not known, two were in Germany, and one was in Illinois.

TABLE III  
YEARLY AND TOTAL RETURNS RECEIVED FROM 58  
NATHAN HALE HIGH SCHOOL GRADUATES

	Total Three Years	1965	1966	1967
Total number of questionnaires sent	63	20	22	21
Number of questionnaires returned	58	17	21	20
Per cent of replies received	92	85	95	95

One section of the questionnaire provided the graduates the opportunity to comment on the strengths and weaknesses of their high school training. Many of the graduates commented. As their responses covered a wide diversity of topics, too many to present in tabulated form, they may be read in their entirety in Appendix A.

Variations of proficiency cards held. Table IV shows the number of variations of proficiency cards that the 63 graduates earned. Two, or 3.2 per cent, earned a proficiency card in all four areas. Two, or 3.2 per cent, earned a proficiency card in three areas. There were 33, or 52.4 per cent, who earned a proficiency card in two areas. Twenty-six, or 41.2 per cent, earned a proficiency card in only one area.

TABLE IV

NUMBER OF AREAS PROFICIENCY CARDS HELD BY 63  
GRADUATES OF NATHAN HALE HIGH SCHOOL

Number of Areas	Number of Graduates	Per Cent of Total
4	2	3.2
3	2	3.2
2	33	52.4
1	<u>26</u>	<u>41.2</u>
Total	63	100.0

Proficiency card areas. Table V shows the areas and combination of areas in which the graduates earned proficiency cards. Sixteen, or 25.4 per cent, earned a proficiency card in Bookkeeping. Forty-five, or 71.4 per cent, earned a proficiency card in the Clerical area. Eight graduates, or 12.7 per cent, earned a Retailing Proficiency Card. A proficiency card in the Secretarial area was earned by 37, or 58.7 per cent. Six, or 9.5 per cent, of the graduates earned a proficiency card with a combination of Bookkeeping and Clerical. Two, or 3.2 per cent combined Bookkeeping and Secretarial. The combination of Clerical and Retailing was earned by three, or 4.8 per cent. Twenty, or 31.7 per cent, earned a proficiency card with a combination of Clerical and Secretarial. Two, or 3.2 per cent, combined Secretarial and Retailing. The three areas, Bookkeeping, Clerical, and Secretarial, were combined by 2, or 3.2 per cent, of the

graduates. Two, or 3.2 per cent, of the graduates earned a proficiency card in all four areas.

TABLE V

AREAS IN WHICH PROFICIENCY CARDS WERE EARNED BY THE  
63 NATHAN HALE GRADUATES

Proficiency Card Areas	Number of Graduates	Per Cent of Total
Bookkeeping	16	25.4
Clerical	45	71.4
Retailing	8	12.7
Secretarial	37	58.7
Bookkeeping and Clerical	6	9.5
Bookkeeping and Secretarial	2	3.2
Clerical and Retailing	3	4.8
Clerical and Secretarial	20	31.7
Secretarial and Retailing	2	3.2
Bookkeeping, Clerical, and Secretarial	2	3.2
Bookkeeping, Clerical, Retailing, and Secretarial	2	3.2

Occupational status of the graduates. Table VI shows the breakdown by year of the present occupational status of the graduates. Percentages were not included because several indicated more than one status.

The high number of graduates who indicated they were employed for wages full time, 34 in all, was very encouraging. Eighteen of the graduates indicated they were in some post-secondary educational institution on full-time basis. Nine stated their occupational status as a housewife. Six graduates

indicated they were employed for wages part-time. Three of these graduates also checked that they were in some post-secondary educational institution part time or a housewife. Four students stated they were in some post-secondary educational institution part-time. Two declared their status as unemployed and not seeking full-time employment; one of these also checked housewife, the other in a post-secondary educational institution full time. The one individual who stated she was unemployed and seeking full-time employment also checked housewife.

TABLE VI

PRESENT OCCUPATIONAL STATUS OF THE 58 BUSINESS GRADUATES FROM NATHAN HALE HIGH SCHOOL

Occupational Status (Number of Graduates by Year)	1965 (17)	1966 (21)	1967 (20)	Total (58)
In school full time	1	6	11	18
In school part-time	3	1	0	4
Housewife	5	3	1	9
Employed for wages full time	12	13	9	34
Employed for wages part-time	1	2	3	6
Unemployed and seeking full-time employment	1	0	0	1
Unemployed and not seeking full-time employment	1	0	1	2
Operate own business	0	0	0	0
In military service	0	0	0	0
Totals	24	25	25	74

Post-secondary education. Forty of the 58 who returned the questionnaires indicated that they had some form of formal education since leaving high school. Table VII provides the names of the educational institutions they gave and the number of graduates who have or are attending each institution. It is interesting to note that all but one of the institutions are in the state of Washington, with all but three west of the mountains.

TABLE VII

POST-SECONDARY EDUCATIONAL INSTITUTIONS NATHAN HALE  
HIGH SCHOOL GRADUATES HAVE OR ARE ATTENDING

Institution	Number of Graduates
University of Washington	6
Western Washington State College	6
Seattle Community College	6
Shoreline Community College	6
Central Washington State College	2
Everett Junior College	2
Pacific Luthren University	2
Northwest College	2
Northwest College for Medical Assistants	2
Washington State University	1
Seattle Pacific College	1
Grays Harbor Junior College	1
Northwest Nazarene College	1
American Institute of Banking	1
Griffin-Murphy Business College	1
Beauty School	1
Total for all institutions*	41

\*One graduate attended two of the above institutions.

Business seemed to be the most popular major of those who have or are still attending some post-secondary institution. Ten graduates gave this field to describe their work taken. Three people took an I.B.M. key punch course. Business Education was listed twice. Nine graduates used "general" to describe their educational endeavors. Algebra, beauty culture, banking, biology, home economics, social sciences, and marketing were given only once.

The length of time in post-secondary schooling varied from one month to two and one-half years.

Hours worked. Table VIII indicates the average number of hours the graduates work per week. The 1965 graduating class with 13 individuals working averaged 36.6 hours per week. The 1966 graduating class with 17 working also averaged 36.6 hours per week. Sixteen of the 1967 graduates working averaged 30.6 hours.

TABLE VIII

AVERAGE HOURS WORKED PER WEEK BY THE GRADUATES  
FROM NATHAN HALE HIGH SCHOOL

Year of Graduation	Number Employed	Average Number of Hours of Those Working
1965	13	36.6
1966	17	36.6
1967	<u>16</u>	<u>30.6</u>
Total	46	34.6

It is important to realize that in calculating the data in Table VIII both those graduates working full and part-time were included. This may partly explain why the averages are so far below the normal 40 hours presently considered to be a full-time work week.

Length of time worked. The 13 graduates of the 1965 class have worked an average of 15.8 months at their present place of employment. The 1966 graduating class with 17 working have been at their present position an average of 10.7 months. The 16 working graduates of the 1967 class have been at their present place of employment for 6.4 months on the average. Table IX shows this data along with the overall average for the three classes of 11.0 months.

TABLE IX

AVERAGE LENGTH OF TIME IN MONTHS IN PRESENT EMPLOYMENT  
OF THE GRADUATES FROM NATHAN HALE HIGH SCHOOL

Year of Graduation	Average Number of Months of Those Working
1965	15.8
1966	10.7
1967	6.4
Average for total group	11.0

Methods used in locating positions. Table X shows how the graduates located their present position. Thirteen of



the 47 working located their position with the aid of a placement service. This represents 27.6 per cent of the total. Door-to-door searching and family or friends were used by seven, or 14.8 per cent, each. Three graduates used the services of someone in the Business Education Department at Nathan Hale High School; three used classified advertisements. Thus, 6.3 per cent of the graduates used each of these methods. Fourteen, or 29.8 per cent, used other methods. Of these, three, or 6.3 per cent, located their present positions with the aid of the Washington State Employment Office. The same number indicated that they obtained their positions as a result of taking the Civil Service Examination. Seven, or 14.8 per cent, located their present job through their college. One graduate used the services of his union to locate his present position.

TABLE X

METHODS USED IN LOCATING PRESENT JOB BY THE  
NATHAN HALE HIGH SCHOOL GRADUATES

Method	1965	1966	1967	Total	Per Cent of Total
Someone at Nathan Hale	1	1	1	3	6.4
Door-to-door searching	3	2	2	7	14.9
Classified advertisements	2	1	0	3	6.4
Family or friends	1	1	5	7	14.9
Placement service	4	5	4	13	27.6
Other	2	8	4	14	29.8
Totals	13	18	16	47	100.0

Methods used in job applications. The personal interview was used by 41 graduates in applying for their present job. Only 19 graduates were required to take a test. Eight graduates used a data sheet to aid them in applying for their present job. A letter of application was used only five times. Table XI shows the number of graduates using each method according to the year of their graduation. Percentages were not computed as many graduates used more than one method.

TABLE XI

METHODS USED IN APPLYING FOR PRESENT JOB BY THE  
NATHAN HALE HIGH SCHOOL GRADUATES

Method	1965	1966	1967	Accumulative Total
Letter of application	1	2	2	5
Data sheet	3	2	3	8
Personal interview	13	15	13	41
Test	<u>7</u>	<u>4</u>	<u>8</u>	<u>19</u>
Yearly and Accumulative Totals	24	23	26	73

Business education curriculum. Part two of the questionnaire dealt with the business education curriculum at Nathan Hale High School in Seattle, Washington. As mentioned earlier in Chapter III, many changes have taken place since the first class graduated in 1965. Business Procedures and Bookkeeping became a part of the slow-learner program in 1966.

Consequently, many graduates were confused when they tried to evaluate the course "Bookkeeping and Accounting" as it was called prior to 1966 and "Accounting" as it has been identified since 1966. Business Procedures, first added to the curriculum in 1966, has only been a part of the slow-learner program. This explains why no graduate appraised the value of this course.

Typewriting was considered of much value by 48, or 82.8 per cent, of the graduates surveyed; of little value by six, or 10.3 per cent; and no value by four, or 6.9 per cent. All of the graduates took three semesters of typewriting. The four graduates who checked the course as being of no job value were either full-time students or housewives. Six, or 75 per cent, of the graduates rated Secretarial Service as being of much value; one, or 12.5 per cent, said it was of little value; and one said it was of no value. Eight graduates took an average of 1.87 semesters of Secretarial Service. Twenty, or 74.1 per cent, felt Office Machines was of much value; five, or 18.5 per cent, of little value; and two, or 7.4 per cent, of no value. Twenty-seven students took an average of 1.07 semesters of Office Machines.

Fifty-eight graduates took Office Practice an average of 1.7 semesters. Thirty-seven, or 63.8 per cent, of these graduates felt Office Practice was of much job value; 18, or 31.0 per cent, of little value; and three, or 5.2 per cent,

TABLE XII

BUSINESS COURSES TAKEN IN HIGH SCHOOL AND THEIR JOB VALUE AS RATED  
BY THE 58 GRADUATES FROM NATHAN HALE HIGH SCHOOL

Course	Much Value					Little Value					No Value				
	1965	1966	1967	Total	% of Total Enrolled	1965	1966	1967	Total	% of Total Enrolled	1965	1966	1967	Total	% of Total Enrolled
Accounting	0	0	4	4	36.9	0	0	3	3	27.3	0	0	4	4	36.9
Bookkeeping	7	7	4	18	33.3	5	12	6	23	42.6	5	2	6	13	24.1
Business Arithmetic	6	9	7	22	37.9	6	7	9	22	37.9	5	5	4	14	24.1
Business English	10	13	11	34	58.6	2	6	8	16	27.6	5	2	1	8	13.8
Business Law	3	9	1	13	22.4	7	6	13	26	44.8	7	6	6	19	32.8
Business Procedures	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
Forkner Shorthand	1	5	1	7	33.3	1	0	5	6	28.6	1	4	3	8	38.1
Gregg Shorthand	3	4	2	9	45.0	1	0	3	4	20.0	2	2	3	7	35.0
Office Practice	13	12	12	37	63.8	2	8	8	18	31.0	2	1	0	3	5.2
Office Machines	10	9	1	20	74.1	2	2	1	5	18.5	2	0	0	2	7.4
Retailing	2	1	2	5	55.6	1	0	2	3	33.0	1	0	0	1	11.0
Secretarial Service	0	3	3	6	75.0	0	0	1	1	12.5	0	0	1	1	12.5
Typewriting	15	17	16	48	82.8	0	2	4	6	10.3	2	2	0	4	6.9

of no value. Thirty-four, or 58.6 per cent of the 58 graduates who each took one semester of Business English felt it had much job value; 16, or 27.6 per cent, little value; and eight, or 13.8 per cent, no value. Nine graduates took an average of 1.87 semesters of Retailing. Five, or 55.6 per cent, of them checked Retailing as being of much job value; three, or 33.0 per cent, of little value; and only one, or 11.0 per cent, of no value.

Gregg Shorthand was taken by 20 graduates for an average of 3.7 semesters. Nine, or 45.0 per cent, of them felt this course of much job value; four, or 20.0 per cent, of little value; and seven, or 35.0 per cent, of no value. Business Arithmetic was taken for one semester by all 58 graduates who responded. Twenty-two, or 37.9 per cent, felt Business Arithmetic was of much job value; 22, or 37.9 per cent, felt the course of little value; and 14, or 24.1 per cent, felt it was of no job value. Eleven graduates took an average of two semesters of Accounting. Four, or 36.9 per cent, felt the course of much job value; three, or 27.3 per cent, of little value; and four, or 36.9 per cent, of no value.

Twenty-one graduates took Forkner Shorthand an average of 1.95 semesters. Seven, or 33.3 per cent, felt the course was of much job value; six, or 28.6 per cent, of little value; and eight, or 38.1 per cent, of no value. Bookkeeping was taken by 54 graduates an average of 2.3 semesters. Eighteen,

or 33.3 per cent, of them felt it was of much job value; 23, or 42.6 per cent, of little value; and 13, or 24.1 per cent, of no value. All of the 58 respondents took Business Law for one semester. It was felt to be of much job value by 13, or 22.4 per cent, of them; of little value by 26, or 44.8 per cent; and of no value by 19, or 32.8 per cent.

Business courses of much job value. Table XIII shows the same business courses ranked by the per cent of students who had taken the course who felt it to be of much job value.

TABLE XIII

BUSINESS COURSES RATED MUCH JOB VALUE BY  
THE 58 GRADUATES FROM NATHAN HALE HIGH  
SCHOOL LISTED IN DECLINING ORDER

Course	1965	1966	1967	Total	Per Cent
Typewriting	15	17	16	48	82.8
Secretarial Service	0	3	3	6	75.0
Office Machines	10	9	1	20	74.1
Office Practice	13	12	12	37	63.8
Business English	10	13	11	34	58.6
Retailing	2	1	2	5	55.6
Gregg Shorthand	3	4	2	9	45.0
Business Arithmetic	6	9	7	22	37.9
Accounting	0	0	4	4	36.9
Bookkeeping	7	7	4	18	33.3
Forkner Shorthand	1	5	1	7	33.3
Business Law	3	9	1	13	22.4
Business Procedures	0	0	0	0	0.0

This ranking from the greatest per cent feeling the courses to be of much job value down to the lowest was as follows: Typewriting, Secretarial Service, Office Machines, Office Practice, Business English, Retailing, Gregg Shorthand, Business Arithmetic, Accounting, Bookkeeping, Forkner Shorthand, Business Law, and Business Procedures.

Business courses of no job value. Table XIV deals with the per cent of students who felt the courses had no job value. The ranking of the courses from the greatest per cent feeling them to be of no job value down to the lowest per cent indicating this value was as follows: Forkner Shorthand, Accounting, Gregg Shorthand, Business Law, Bookkeeping, Business Arithmetic, Business English, Secretarial Service, Retailing, Office Machines, Typewriting, Office Practice, and Business Procedures.

In comparing these two tables, it is interesting to note which courses were ranked in the lower half of Table XIII and also in the upper half of Table XIV. Forkner Shorthand, Accounting, Business Law, and Bookkeeping all fall into this category.

Duties performed on the job. Table XV shows the frequency that the graduates have performed certain common duties on the job. Letters were typed frequently by 30, or 51.7 per cent; occasionally by 14, or 24.1 per cent; and

TABLE XIV

BUSINESS COURSES RATED NO JOB VALUE BY THE  
58 GRADUATES FROM NATHAN HALE HIGH SCHOOL  
LISTED IN DECLINING ORDER

Course	1965	1966	1967	Total	Per Cent
Forkner Shorthand	1	4	3	8	38.1
Accounting	0	0	4	4	36.9
Gregg Shorthand	2	2	3	7	35.0
Business Law	7	6	6	19	32.8
Bookkeeping	5	2	6	13	24.1
Business Arithmetic	5	5	4	14	24.1
Business English	5	2	1	8	13.8
Secretarial Service	0	0	1	1	12.5
Retailing	1	0	0	1	11.0
Office Machines	2	0	0	2	7.4
Typewriting	2	2	0	4	6.9
Office Practice	2	1	0	3	5.2
Business Procedures	0	0	0	0	0.0

never by 14, or 24.1 per cent. Envelopes were addressed frequently by 32, or 55.2 per cent; occasionally by 16, or 27.6 per cent; and never by 10, or 17.2 per cent. Tabulating was performed frequently by 21, or 36.2 per cent; occasionally by 13, or 22.4 per cent; and never by 24, or 41.4 per cent. Twenty-five, or 43.1 per cent of the graduates have frequently typed from handwritten copy; 19, or 32.7 per cent, occasionally; and 14, or 24.1 per cent, never. Composing at the typewriter was required frequently by 18, or 31.0 per cent; by 13, or 22.4 per cent, occasionally; and never by 27, or 46.5 per cent. Carbon copies were made frequently by 31, or 53.4 per cent; occasionally by 13, or 22.4 per cent; and never by 14,



or 24.1 per cent. Fourteen, or 24.1 per cent, of the graduates took dictation and transcribed frequently on the job; 5, or 8.6 per cent, performed this duty occasionally; and 39, or 67.2 per cent, never. Seventeen, or 29.3 per cent, have frequently served as a receptionist; 18, or 31.0 per cent, occasionally; and 23, or 39.6 per cent, never. Letters were composed frequently by 16, or 27.5 per cent; occasionally by 18, or 31.0 per cent; and never by 24, or 41.4 per cent. The telephone has been used frequently by 31, or 53.4 per cent; occasionally by 21, or 36.2 per cent; and never by 6, or 10.3 per cent. Incoming mail has been handled by 33, or 56.9 per cent, frequently; by 13, or 22.4 per cent, occasionally; and by 12, or 20.7 per cent, never. The handling of outgoing mail has been performed frequently by 33, or 56.9 per cent; occasionally by 11, or 18.9 per cent; and never by 14, or 24.1 per cent. Thirty-two, or 55.2 per cent, of the graduates have frequently filed using the alphabetic method; 10, or 17.2 per cent, occasionally; and 16, or 27.6 per cent, have never done this on the job. Numeric filing has been used by 23, or 39.6 per cent, frequently; by 7, or 12.0 per cent, occasionally; and never used by 28, or 48.3 per cent. The geographic method has been used frequently by 6, or 10.3 per cent; occasionally by 2, or 3.4 per cent; and never by 50, or 86.2 per cent. Other filing methods have been used frequently by 6, or 10.3 per cent; occasionally by 1, or 1.7 per cent; and never by 51, or 87.9 per cent.

Twenty-three, or 39.6 per cent, of the graduates have used arithmetic without the aid of a machine on the job frequently; 20, or 34.8 per cent, occasionally; and never by 15, or 25.9 per cent. Banking has been performed frequently by 18, or 31.0 per cent; occasionally by 6, or 10.3 per cent; and never by 34, or 58.6 per cent. Eleven, or 18.9 per cent, have frequently shipped goods on the job; 12, or 20.7 per cent, occasionally; and never by 35, or 60.3 per cent. Eleven, or 18.9 per cent, have frequently received goods on the job; 18, or 31.0 per cent, occasionally; and 29, or 50.0 per cent, have never performed this duty. Merchandise has frequently been ordered by 11, or 18.9 per cent; occasionally by 14, or 24.1 per cent; and never by 33, or 56.9 per cent. Ten, or 17.2 per cent, of the graduates have frequently been involved with the controlling of stock; 5, or 8.6 per cent, only occasionally; and never by 43, or 74.1 per cent. Four, or 6.9 per cent, have frequently trimmed windows; 3, or 5.1 per cent, only occasionally; and never by 51, or 87.9 per cent. Packages have been wrapped frequently by 5, or 8.6 per cent; occasionally by 8, or 13.8 per cent; and never by 45, or 77.6 per cent.

Five, or 8.6 per cent, have frequently marked merchandise; 10, or 17.2 per cent, occasionally; and 43, or 74.1 per cent, never. Five, or 8.6 per cent, have frequently delivered goods; 4, or 6.9 per cent, occasionally; and 49, or

84.5 per cent, have never delivered goods. Stock has been arranged frequently by 6, or 10.3 per cent; occasionally by 10, or 17.2 per cent; and never by 42, or 72.4 per cent. Nine, or 15.5 per cent, of the graduates have frequently sold goods; 7, or 12.0 per cent, occasionally; and 42, or 72.4 per cent, never. Four, or 6.9 per cent, have frequently composed advertising; 3, or 5.1 per cent, occasionally; and 51, or 87.9 per cent, never. Money is handled frequently on the job by 27, or 46.5 per cent; occasionally by 11, or 18.9 per cent; and never by 20, or 34.5 per cent. Bookkeeping is performed frequently by 17, or 29.3 per cent; occasionally by 15, or 25.9 per cent; and never by 26, or 44.8 per cent. Invoices are typed frequently by 13, or 22.4 per cent; occasionally by 8, or 13.8 per cent; and never by 37, or 63.8 per cent. Programming for the computer has been done frequently and occasionally each by 2, or 3.4 per cent, of the graduates. It has never been done by 54, or 93.1 per cent. Only 3, or 5.1 per cent, have frequently operated a computer. None of the graduates have done this occasionally. Fifty-five, or 94.8 per cent, have never operated a computer on the job.

Duties performed frequently. Table XVI lists the same duties as Table XV but is only dealing with the "frequent" section of that table. It shows the duties performed frequently by the greatest percentage of graduates down to the lowest percentage. As is shown in the table, only seven

TABLE XV

DUTIES PERFORMED ON THE JOB BY THE 58 GRADUATES  
FROM NATHAN HALE HIGH SCHOOL

Duty	Frequently					Occasionally					Never				
	1965	1966	1967	Total	Per Cent	1965	1966	1967	Total	Per Cent	1965	1966	1967	Total	Per Cent
	Typing letters	10	10	10	30	51.7	4	3	7	14	24.1	3	8	3	14
Addressing envelopes	10	11	11	32	55.2	6	4	6	16	27.6	1	6	3	10	17.2
Tabulating	10	5	6	21	36.2	4	5	4	13	22.4	3	11	10	24	41.4
Typing from handwritten copy	9	9	7	25	43.1	4	6	9	19	32.7	4	6	4	14	24.1
Composing at typewriter	8	7	3	18	31.0	2	4	7	13	22.4	7	10	10	27	46.5
Making carbon copies	11	12	8	31	53.4	4	2	7	13	22.4	2	7	5	14	24.1
Taking dictation and transcribing	4	7	3	14	24.1	2	0	3	5	8.6	11	14	14	39	67.2
Serving as a receptionist	4	7	6	17	29.3	7	6	5	18	31.0	6	8	9	23	39.6
Composing letters	8	6	2	16	27.5	2	6	10	18	31.0	7	9	8	24	41.4
Telephoning	9	12	10	31	53.4	6	7	8	21	36.2	2	2	2	6	10.3
Handling incoming mail	11	11	11	33	56.9	4	4	5	13	22.4	2	6	4	12	20.7
Handling outgoing mail	10	10	13	33	56.9	3	4	4	11	18.9	4	7	3	14	24.1
Filing:															
Alphabetic	9	12	11	32	55.2	5	3	2	10	17.2	3	6	7	16	27.6
Numeric	6	10	7	23	39.6	3	2	2	7	12.0	8	9	11	28	48.3
Geographic	1	1	4	6	10.3	1	0	1	2	3.4	15	20	15	50	86.2
Other	0	2	4	6	10.3	1	0	0	1	1.7	16	19	16	51	87.9

TABLE XV (continued)

Duty	Frequently					Occasionally					Never				
	1965	1966	1967	Total	Per Cent	1965	1966	1967	Total	Per Cent	1965	1966	1967	Total	Per Cent
Shipping goods	2	4	5	11	18.9	5	3	4	12	20.7	10	14	11	35	60.3
Receiving goods	4	3	4	11	18.9	5	6	7	18	31.0	8	12	9	29	50.0
Ordering merchandise	4	4	3	11	18.9	5	7	2	14	24.1	8	10	15	33	56.9
Controlling Stock	1	4	5	10	17.2	1	3	1	5	8.6	15	14	14	43	74.1
Trimming windows	0	3	1	4	6.9	0	0	3	3	5.1	17	18	16	51	87.9
Wrapping packages	1	3	1	5	8.6	2	2	4	8	13.8	14	16	15	45	77.6
Marking merchandise	0	3	2	5	8.6	4	3	3	10	17.2	13	15	15	43	74.1
Delivering goods	0	3	2	5	8.6	3	1	0	4	6.9	14	17	18	49	84.5
Arranging stock	0	3	3	6	10.3	5	2	3	10	17.2	12	16	14	42	72.4
Selling goods	2	4	3	9	15.5	2	2	3	7	12.0	13	15	14	42	72.4
Composing advertising	1	2	1	4	6.9	1	0	2	3	5.1	15	19	17	51	87.9
Handling money	9	9	9	27	46.5	4	3	4	11	18.9	4	9	7	20	34.5
Bookkeeping	3	6	8	17	29.3	4	7	4	15	25.9	10	8	8	26	44.8
Typing invoices	5	5	3	13	22.4	1	4	3	8	13.8	11	12	14	37	63.8
Programming for computer	2	0	0	2	3.4	0	2	0	2	3.4	15	19	20	54	93.1
Operating computer	3	0	0	3	5.1	0	0	0	0	0.0	14	21	20	55	94.8
Using arithmetic (without machine)	6	8	9	23	39.6	4	10	6	20	34.8	7	3	5	15	25.9
Banking	5	8	5	18	31.0	0	1	5	6	10.3	12	12	10	34	58.6

duties were performed frequently by over half of the graduates. They are as follows: handling incoming mail, handling outgoing mail, addressing envelopes, alphabetic filing, telephoning, making carbon copies, and typing letters. Seven duties were performed by less than ten per cent of the graduates. They are as follows: wrapping packages, marking merchandise, delivering goods, trimming windows, composing advertising, operating a computer, and programming for a computer.

Duties never performed. Table XVII shows the duties never performed on the job by some of the graduates. The duties connected with the computer seem to never be done by the greatest number of graduates.

Duties performed occasionally. Table XVIII shows the duties performed occasionally by the graduates on the job. Eight duties were performed occasionally by more than 25 per cent of the graduates. They were as follows: telephoning, using arithmetic (without machine), typing from handwritten copy, serving as a receptionist, composing letters, receiving goods, addressing envelopes, and bookkeeping.

Office machines. Table XIX shows the frequency with which the graduates use different office machines on the job. The telephone was used frequently by 40, or 68.9 per cent; occasionally by 11, or 18.9 per cent; and never by 7, or 12.1

TABLE XVI

DUTIES PERFORMED FREQUENTLY ON THE JOB BY THE 58  
GRADUATES FROM NATHAN HALE HIGH SCHOOL  
IN ORDER OF OCCURENCE

Duty	1965	1966	1967	Total	Per Cent
Handling incoming mail	11	11	11	33	56.9
Handling outgoing mail	10	10	13	33	56.9
Addressing envelopes	10	11	11	32	55.2
Alphabetic filing	9	12	11	32	55.2
Telephoning	9	12	10	31	53.4
Making carbon copies	11	12	8	31	53.4
Typing letters	10	10	10	30	51.7
Handling money	9	9	9	27	46.5
Typing from handwritten copy	9	9	7	25	43.1
Numeric filing	6	10	7	23	39.6
Using arithmetic (without machine)	6	8	9	23	39.6
Tabulating	10	5	6	21	36.2
Composing at typewriter	8	7	3	18	31.0
Banking	5	8	5	18	31.0
Serving as a receptionist	4	7	6	17	29.3
Bookkeeping	3	6	8	17	29.3
Composing letters	8	6	2	16	27.5
Taking dictation and tran- scribing	4	7	3	14	24.1
Typing invoices	5	5	3	13	22.4
Shipping goods	2	4	5	11	18.9
Receiving goods	4	3	4	11	18.9
Ordering merchandise	4	4	3	11	18.9
Controlling stock	1	4	5	10	17.2
Selling goods	2	4	3	9	15.5
Arranging stock	0	3	3	6	10.3
Geographic filing	1	1	4	6	10.3
Other filing method	0	2	4	6	10.3
Wrapping packages	1	3	1	5	8.6
Marking merchandise	0	3	2	5	8.6
Delivering goods	0	3	2	5	8.6
Trimming windows	0	3	1	4	6.9
Composing advertising	1	2	1	4	6.9
Operating computer	3	0	0	3	5.1
Programming for computer	2	0	0	2	3.4

TABLE XVII

DUTIES NEVER PERFORMED ON THE JOB BY THE 58  
GRADUATES FROM NATHAN HALE HIGH SCHOOL  
IN DECLINING ORDER

Duty	1965	1966	1967	Total	Per Cent
Operating computer	14	21	20	55	94.8
Programming for computer	15	19	20	54	93.1
Composing advertising	15	19	17	51	87.9
Trimming windows	17	18	16	51	87.9
Other filing method	16	19	16	51	87.9
Geographic filing	15	20	15	50	86.2
Delivering goods	14	17	18	49	84.5
Wrapping packages	14	16	15	45	77.6
Controlling stock	15	14	14	43	74.1
Marking merchandise	13	15	15	43	74.1
Arranging stock	12	16	14	42	72.4
Selling goods	13	15	14	42	72.4
Taking dictation and transcribing	11	14	14	39	67.2
Typing invoices	11	12	14	37	63.8
Shipping goods	10	14	11	35	60.3
Banking	12	12	10	34	58.6
Ordering merchandise	8	10	15	33	56.9
Receiving goods	8	12	9	29	50.0
Numeric filing	8	9	11	28	48.3
Composing at typewriter	7	10	10	27	46.5
Bookkeeping	10	8	8	26	44.8
Tabulating	3	11	10	24	41.4
Composing letters	7	9	8	24	41.4
Serving as a receptionist	6	8	9	23	39.6
Handling money	4	9	7	20	34.5
Alphabetic filing	3	6	7	16	27.6
Using arithmetic (without machine)	7	3	5	15	25.9
Typing letters	3	8	3	14	24.1
Typing from handwritten copy	4	6	4	14	24.1
Making carbon copies	2	7	5	14	24.1
Handling outgoing mail	4	7	3	14	24.1
Handling incoming mail	2	6	4	12	20.7
Addressing envelopes	1	6	3	10	17.2
Telephoning	2	2	2	6	10.3



TABLE XVIII

DUTIES PERFORMED OCCASIONALLY ON THE JOB BY THE 58  
GRADUATES FROM NATHAN HALE HIGH SCHOOL  
IN ORDER OF OCCURENCE

Duty	1965	1966	1967	Total	Per Cent
Telephoning	6	7	8	21	36.2
Using arithmetic (without machine)	4	10	6	20	34.8
Typing from handwritten copy	4	6	9	19	32.7
Serving as a receptionist	7	6	5	18	31.0
Composing letters	2	6	10	18	31.0
Receiving goods	5	6	7	18	31.0
Addressing envelopes	6	4	6	16	27.6
Bookkeeping	4	7	4	15	25.9
Typing letters	4	3	7	14	24.1
Ordering merchandise	5	7	2	14	24.1
Tabulating	4	5	4	13	22.4
Composing at the typewriter	2	4	7	13	22.4
Making carbon copies	4	2	7	13	22.4
Handling incoming mail	4	4	5	13	22.4
Shipping goods	5	3	4	12	20.7
Handling outgoing mail	3	4	4	11	18.9
Handling money	4	3	4	11	18.9
Alphabetic filing	5	3	2	10	17.2
Marking merchandise	4	3	3	10	17.2
Arranging stock	5	2	3	10	17.2
Wrapping packages	2	2	4	8	13.8
Typing invoices	1	4	3	8	13.8
Numeric filing	3	2	2	7	12.0
Selling goods	2	2	3	7	12.0
Banking	0	1	5	6	10.3
Taking dictation and transcribing	2	0	3	5	8.6
Controlling stock	1	3	1	5	8.6
Delivering goods	3	1	0	4	6.9
Trimming windows	0	0	3	3	5.1
Composing advertising	1	0	2	3	5.1
Geographic filing	1	0	1	2	3.4
Programming for computer	0	2	0	2	3.4
Other filing method	1	0	0	1	1.7
Operating computer	0	0	0	0	0.0

per cent. The switchboard was used by 5, or 8.6 per cent, frequently; 3, or 5.2 per cent, occasionally; and never by 50, or 86.2 per cent. Twenty-seven, or 46.5 per cent, of the graduates frequently used the manual typewriter; 13, or 22.4 per cent, occasionally; and 18, or 31.0 per cent, never. The electric typewriter was used frequently by 28, or 48.3 per cent; occasionally by 8, or 13.8 per cent; and never by 22, or 37.9 per cent. Thus, 40, or 68.9 per cent, of the graduates have used the manual typewriter on the job while only 36, or 62.1 per cent, have used the electric typewriter.

The stencil duplicator was used by 5, or 8.6 per cent, frequently; by 8, or 13.8 per cent, occasionally; and never by 45, or 77.6 per cent. The spirit process duplicator was used frequently by 6, or 10.3 per cent; occasionally by 2, or 3.4 per cent; and never by 50, or 86.2 per cent. The mimeoscope was used frequently by only 1, or 1.7 per cent; by 2, or 3.4 per cent, occasionally; and never by 55, or 94.8 per cent. Six, or 10.3 per cent, of the graduates have frequently used the dictaphone; 7, or 12.1 per cent, occasionally; and never by 45, or 77.6 per cent. The ediphone was used frequently and occasionally each by only 1, or 1.7 per cent. Fifty-six, or 96.6 per cent, have never used the ediphone on the job. Fifty-six, or 96.6 per cent, of the graduates indicated the same frequency for the soundscriber. Two, or 3.4 per cent, of the graduates frequently used other transcribing machines.

Only 1, or 1.7 per cent, has used them occasionally; and 55, or 94.8 per cent, indicated that they have never used them on the job. All three who checked that they have used transcribing machines other than those named on the questionnaire stated that the machine they used was an I.B.M. The addressing machine was used frequently by 3, or 5.2 per cent; occasionally by 7, or 12.1 per cent; and never by 48, or 82.8 per cent. Ten, or 17.2 per cent, have frequently used a cash register; 4, or 6.9 per cent, occasionally; and never by 44, or 75.9 per cent. The check protector was used frequently by 9, or 15.5 per cent; occasionally by 2, or 3.4 per cent; and never by 47, or 81.0 per cent. The postage meter was used frequently by 13, or 22.4 per cent; occasionally by 7, or 12.1 per cent; and never by 38, or 65.5 per cent. Twenty-eight, or 48.3 per cent, of the graduates have frequently used a photocopy machine; 6, or 10.3 per cent, occasionally; and never by 24, or 41.4 per cent. The letter-opening machine was used frequently by 4, or 6.9 per cent; occasionally by 5, or 8.6 per cent; and never by 49, or 84.5 per cent. Four, or 6.9 per cent, of the graduates indicated that they have frequently used a bookkeeping-posting machine on the job; 54, or 93.1 per cent, have never used this machine. The billing machine was used frequently and occasionally each by 56, or 96.6 per cent.

The ten-key adding-listing machine was used frequently by 29, or 50.0 per cent; occasionally by 14, or 24.1 per cent;

and never by 15, or 25.9 per cent. The full-key adding-listing machine was used frequently by 15, or 25.9 per cent; occasionally by 7, or 12.1 per cent; and never by 36, or 62.1 per cent. Four, or 6.9 per cent, have used a full-key, key driven calculator frequently; none occasionally; and never was checked by 54, or 93.1 per cent, of the graduates. The rotary calculator was used frequently by 5, or 8.6 per cent; occasionally by 7, or 12.1 per cent; and never by 46, or 79.3 per cent. The ten-key, printing calculator was used frequently by 3, or 5.2 per cent; occasionally by 3, or 5.2 per cent; and never by 52, or 89.7 percent.

Five machines dealing with electronic data processing were also surveyed. The key punch or verifier was used frequently by 1, or 1.7 per cent; occasionally by 3, or 5.2 per cent; and never by 54, or 93.1 per cent. The key punch sorting machine was used frequently by only 1, or 1.7 per cent; occasionally by 5, or 8.6 per cent; and never by 52, or 89.7 per cent. Unit record keeping was used by 1, or 1.7 per cent, frequently; 2, or 3.4 per cent, occasionally; and never by 55, or 94.8 per cent. Three, or 5.2 per cent, have frequently used a computer on the job. Fifty-five, or 94.8 per cent, have never used it.

Office machines used frequently. Table XX shows the office machines used frequently on the job by the graduates in the order of per cent of frequency. Only five machines

TABLE XIX

FREQUENCY OF USE OF OFFICE MACHINES ON THE JOB BY THE 58  
GRADUATES FROM NATHAN HALE HIGH SCHOOL

Machine	Frequency					Occasionally					Never				
	1965	1966	1967	Total	Per Cent	1965	1966	1967	Total	Per Cent	1965	1966	1967	Total	Per Cent
Telephone	13	15	12	40	68.9	3	3	5	11	18.9	1	3	3	7	12.1
Switchboard	0	3	2	5	8.6	1	1	1	3	5.2	16	17	17	50	86.2
Manual typewriter	8	10	9	27	46.5	6	4	3	13	22.4	3	7	8	18	31.0
Electric typewriter	7	11	10	28	48.3	2	4	2	8	13.8	8	6	8	22	37.9
Stencil duplicator	0	4	1	5	8.6	5	1	2	8	13.8	12	16	17	45	77.6
Spirit process duplicator	0	2	4	6	10.3	2	0	0	2	3.4	15	19	16	50	86.2
Mineoscope	0	1	0	1	1.7	0	1	1	2	3.4	17	19	19	55	94.8
Dictaphone	2	2	2	6	10.3	4	2	1	7	12.1	11	17	17	45	77.6
Ediphone	1	0	0	1	1.7	1	0	0	1	1.7	15	21	20	56	96.6
Soundscriber	1	0	0	1	1.7	1	0	0	1	1.7	15	21	20	56	96.6
Other transcribing machine	1	1	0	2	3.4	1	0	0	1	1.7	15	20	20	55	94.8
Addressing machine	0	3	0	3	5.2	3	2	2	7	12.1	14	16	18	48	82.8
Cash register	2	3	5	10	17.2	3	0	1	4	6.9	12	18	14	44	75.9
Check protector	1	4	4	9	15.5	1	1	0	2	3.4	15	16	16	47	81.0
Postage meter	4	4	5	13	22.4	2	2	3	7	12.1	11	15	12	38	65.5
Photocopy machine	8	12	8	28	48.3	3	1	2	6	10.3	6	8	10	24	41.4
Letter opening machine	1	2	1	4	6.9	2	1	2	5	8.6	14	18	17	49	84.5
Bookkeeping-posting machine	0	3	1	4	6.9	0	0	0	0	0.0	17	18	19	54	93.1

TABLE XIX (continued)

Machine	Frequently					Occasionally					Never				
	1965	1966	1967	Total	Per Cent	1965	1966	1967	Total	Per Cent	1965	1966	1967	Total	Per Cent
Billing machine	0	1	0	1	1.7	0	0	1	1	1.7	17	20	19	56	96.6
Adding-listing machines:															
Ten-key	11	9	9	29	50.0	2	6	6	14	24.1	4	6	5	15	25.9
Full-key	7	3	5	15	25.9	3	2	2	7	12.1	7	16	13	36	62.1
Calculators:															
Full-key, key driven	2	1	1	4	6.9	0	0	0	0	0.0	15	20	19	54	93.1
Full-key, rotary	1	2	2	5	8.6	3	2	2	7	12.1	13	17	16	46	79.3
Ten-key, non-printing	1	1	0	2	3.4	1	0	0	1	1.7	15	20	20	55	94.8
Ten-key, printing	0	3	0	3	5.2	0	1	2	3	5.2	17	17	18	52	89.7
Electronic data processing:															
Key punch or verifier	1	0	0	1	1.7	3	0	0	3	5.2	13	21	20	54	93.1
Key punch sorting	1	0	0	1	1.7	3	2	0	5	8.6	13	19	20	52	89.7
Key punch tabulating	0	0	0	0	0.0	1	0	0	1	1.7	16	21	20	57	98.3
Unit record keeping	0	1	0	1	1.7	1	1	0	2	3.4	16	19	20	55	94.8
Computer	3	0	0	3	5.2	0	0	0	0	0.0	14	21	20	55	94.8

were used by over 40 per cent of the graduates. They were as follows: telephone; ten-key, adding-listing machine; electric typewriter; the photocopy machine; and the manual typewriter.

Office machines never used. Table XXI shows the office machines never used on the job by the graduates arranged in order--the greatest number to the least. Twelve machines were never used on the job by more than 90 per cent of the graduates. They were as follows: key punch tabulator; ediphone; soundscriber; billing machine; mimeoscope; other transcribing machines; ten-key, non-printing calculator; unit record keeping machine; computer; bookkeeping-posting machine; full-key, key driven calculator; and the key punch or verifier.

Office machines used occasionally. Table XXII shows the office machines used occasionally on the job by the graduates. Only three machines were used occasionally by more than ten graduates. They were the ten-key, adding-listing machine; manual typewriter; and the telephone.

TABLE XX

OFFICE MACHINES USED FREQUENTLY ON THE JOB BY THE  
58 GRADUATES FROM NATHAN HALE HIGH SCHOOL  
IN ORDER OF PER CENT OF OCCURENCE

Machine	1965	1966	1967	Total	Per Cent
Telephone	13	15	12	40	68.9
Ten-key adding-listing machine	11	9	9	29	50.0
Electric typewriter	7	11	10	28	48.3
Photocopy machine	8	12	8	28	48.3
Manual Typewriter	8	10	9	27	46.5
Full-key adding-listing machine	7	3	5	15	25.9
Postage meter	4	4	5	13	22.4
Cash register	2	3	5	10	17.2
Check protector	1	4	4	9	15.5
Spirit process duplicator	0	2	4	6	10.3
Dictaphone	2	2	2	6	10.3
Switchboard	0	3	2	5	8.6
Stencil duplicator	0	4	1	5	8.6
Full-key, rotary	1	2	2	5	8.6
Letter opening machine	1	2	1	4	6.9
Bookkeeping-posting machine	0	3	1	4	6.9
Full-key, key driven calculator	2	1	1	4	6.9
Addressing machine	0	3	0	3	5.2
Ten-key, printing calculator	0	3	0	3	5.2
Computer	3	0	0	3	5.2
Other transcribing machine	1	1	0	2	3.4
Ten-key, non-printing calculator	1	1	0	2	3.4
Mimeoscope	0	1	0	1	1.7
Ediphone	1	0	0	1	1.7
Soundscriber	1	0	0	1	1.7
Billing machine	0	1	0	1	1.7
Key punch or verifier	1	0	0	1	1.7
Key punch or sorting	1	0	0	1	1.7
Unit record keeping	0	1	0	1	1.7
Key punch tabulating	0	0	0	0	0.0



TABLE XXI

OFFICE MACHINES NEVER USED ON THE JOB BY THE 58  
GRADUATES FROM NATHAN HALE HIGH SCHOOL

Machine	1965	1966	1967	Total	Per Cent
Key punch tabulating	16	21	20	57	98.3
Ediphone	15	21	20	56	95.6
Soundscriber	15	21	20	56	96.6
Billing machine	17	20	19	56	96.6
Mimeoscope	17	19	19	55	94.8
Other transcribing machine	15	20	20	55	94.8
Ten-key, non-printing calculator	15	20	20	55	94.8
Unit record keeping	16	19	20	55	94.8
Computer	14	21	20	55	94.8
Bookkeeping-posting machine	17	18	19	54	93.1
Full-key, key driven calculator	15	20	19	54	93.1
Key punch or verifier	13	21	20	54	93.1
Ten-key, printing calculator	17	17	18	52	89.7
Key punch sorting	13	19	20	52	89.7
Switchboard	16	17	17	50	86.2
Spirit process duplicator	15	19	16	50	86.2
Letter opening machine	14	18	17	49	84.5
Addressing machine	14	16	18	48	82.8
Check protector	15	16	16	47	81.0
Full-key, rotary calculator	13	17	16	46	79.3
Stencil duplicator	12	16	17	45	77.6
Dictaphone	11	17	17	45	77.6
Cash register	12	18	14	44	75.9
Postage meter	11	15	12	38	65.5
Full-key, adding-listing machine	7	16	13	36	62.1
Photocopy machine	6	8	10	24	41.4
Electric typewriter	8	6	8	22	37.9
Manual typewriter	3	7	8	18	31.0
Ten-key, adding-listing machine	4	6	5	15	25.9
Telephone	1	3	3	7	12.1

TABLE XXII

OFFICE MACHINES USED OCCASIONALLY ON THE JOB BY THE  
58 GRADUATES FROM NATHAN HALE HIGH SCHOOL  
IN ORDER OF PER CENT OF OCCURENCE

Machine	1965	1966	1967	Total	Per Cent
Ten-key adding-listing machine	2	6	6	14	24.1
Manual typewriter	6	4	3	13	22.4
Telephone	3	3	5	11	18.9
Electric typewriter	2	4	2	8	13.8
Stencil duplicator	5	1	2	8	13.8
Dictaphone	4	2	1	7	12.1
Addressing machine	3	2	2	7	12.1
Postage meter	2	2	3	7	12.1
Full-key adding-listing machine	3	2	2	7	12.1
Full-key, rotary	3	2	2	7	12.1
Photocopy machine	3	1	2	6	10.3
Letter opening machine	2	1	2	5	8.6
Key punch sorting	3	2	0	5	8.6
Cash register	3	0	1	4	6.9
Switchboard	1	1	1	3	5.2
Ten-key, printing	0	1	2	3	5.2
Key punch or verifier	3	0	0	3	5.2
Spirit process duplicator	2	0	0	2	3.4
Mimeoscope	0	1	1	2	3.4
Check protector	1	1	0	2	3.4
Unit record keeping	1	1	0	2	3.4
Ediphone	1	0	0	1	1.7
Soundscriber	1	0	0	1	1.7
Other transcribing machine	1	0	0	1	1.7
Billing machine	0	0	1	1	1.7
Ten-key, non-printing	1	0	0	1	1.7
Key punch tabulating	1	0	0	1	1.7
Bookkeeping-posting machine	0	0	0	0	0.0
Full-key, key driven	0	0	0	0	0.0
Computer	0	0	0	0	0.0

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to follow-up the graduates from Nathan Hale High School in Seattle, Washington, of 1965, 1966, and 1967 who hold Business Education Proficiency Cards in an effort to determine the effectiveness and usefulness of the Business Education curriculum. This chapter will present the summary, conclusions, and recommendations.

#### I. SUMMARY

1. Thirty-four of the 58 respondents were employed full time. Eighteen of the graduates were enrolled in some post-secondary educational institution full time. Thus, 52 of the 58 respondents gave their occupational status as one of those two categories.
2. Forty of the 58 respondents have obtained some form of formal education since high school. All of the institutions but one are located in the state of Washington. Most of the graduates who had formal education beyond high school did so at institutions other than four-year colleges.
3. A majority of the graduates used a placement service to locate their present position. Door-to-door

searching, by family or friends, and colleges were checked by seven graduates each.

4. The personal interview was used in applying for present employment by 41 graduates. Only 19 were required to take a pre-employment test.
5. More than half of the graduates rated Typewriting, Secretarial Service, Office Machines, Office Practice, Business English, and Retailing as having much job value. Forty-five per cent of the graduates who took Gregg Shorthand, as compared to 33.0 per cent of those who took Forkner Shorthand, rated the course as being of much job value.
6. The handling of incoming and outgoing mail was performed more frequently than any other duty on the job. Alphabetic filing and addressing envelopes were the next most often checked as duties performed frequently. Telephoning and several of the duties performed in connection with the typewriter were next. Handling money was indicated as being a job requirement frequently by 46.5 per cent. Eighteen graduates reported being asked to frequently compose at the typewriter. Twenty-five frequently typed from handwritten copy.

7. The telephone was checked more often as being used frequently on the job than any other machine listed. The manual typewriter was used by 40 of the graduates; the electric typewriter by 36. The mimeoscope was used by only three of the 58 graduates who returned their questionnaires. The cash register was used by 14 of the respondents. Thirty-four used the photocopy machine. Electronic data processing equipment was used by very few graduates.

## II. CONCLUSIONS

On the basis of the analysis of the data gathered in this study, the following conclusions are made:

1. The Business Education curriculum at Nathan Hale High School does adequately prepare the students vocationally.
2. It is possible for students at Nathan Hale High School to earn one or more Business Education Proficiency Cards and at the same time take the required college-entrance courses.
3. The personal interview is often all that is required when the applicant has earned a Business Education Proficiency Card.

4. Typewriting, Secretarial Service, Office Machines, Office Practice, Business English, and Retailing appear to be the business subjects making the greatest contribution to the preparation of those earning the proficiency card.
5. Neither form of shorthand appears to be successfully training the graduates for vocational use based on the appraisal of the graduates.
6. There is a greater need for training students on the manual typewriter than there is on the electric typewriter.
7. Students in the Business Education Department at Nathan Hale High School should be permitted more training on photocopy equipment.
8. There does not appear to be a need for electronic data processing equipment in the Department of Business Education at Nathan Hale High School, at this time.

### III. RECOMMENDATIONS

Based on this study, the following recommendations are made:

1. The Business Education Department at Nathan Hale High School should continue to offer a Business Education Proficiency Card which demands a pattern of required courses.

2. The vocational aspect of the Business Education Department at Nathan Hale High School should continue to be emphasized.
3. More time should be devoted to providing students with information on how to go about finding employment and how to conduct themselves in a job-seeking interview.
4. The Business Education Department at Nathan Hale High School should reexamine the course content in Accounting and Business Arithmetic in an effort to make the learnings more useful in a vocational setting.
5. Some effort should be made to screen the students selecting shorthand to be sure that they possess the ability to meet the speed requirements necessary for vocational use.
6. The Business Education program should include some instruction on the handling of mail and more time devoted to the proper use of the telephone.
7. Training on the use of the cash register and the development of the ability to make accurate change should be emphasized.
8. The use of the manual as well as the electric typewriter should continue to be included in the program.

9. Training in the use of the photocopy machines, as well as all other standard office equipment, should continue to be required.
10. The use of electronic data processing equipment should not be included in the Business Education program at this time.
11. The typing program at Nathan Hale High School should emphasize the typing of envelopes, carbon copies, letters, and typing from handwritten copy. The opportunity for composing at the typewriter should be provided often.
12. Accounting teachers at Nathan Hale High School should conduct a follow-up study of graduates who have taken Accounting to determine what, if any, changes should be made in the course content or teaching procedure to improve its vocational value.
13. Surveys should be made frequently of the local business community to determine its current employment needs.
14. Follow-up studies of Nathan Hale Proficiency Card holding graduates should be made at regular intervals as well as studies of all graduates to evaluate the school curriculum.



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APPENDIX

## APPENDIX A

### COMMENTS OF GRADUATES RETURNING QUESTIONNAIRE

The graduates who returned the questionnaire were asked to make any suggestions or comments they wished concerning the strengths and weaknesses of their high school training. Some of their comments were as follows:

I could never have been to the position I am now if I had had to take business courses in college or business school after graduation. The training I had in high school has been invaluable to me.

In using the electric typewriter in college I was able to increase my speed more than fifty per cent.

So many of the high school courses are far too unrealistic and unbasic for the actual working life. Especially Business English, Business Arithmetic, and Business Law. Business Law was an extremely interesting course to me, but I felt it lacked the most value to the business world I entered into. Office Machines and Office Practice seemed helpful at the time, but with just taking tests on machines, you soon forgot complete operations of any of these machines. Not enough time was spent on each machine and there were not enough kinds of machines compared to the business world. Filing was way too incomplete.

I appreciated being able to work at my own speed. I was able to complete quickly the things that came easily and then go back for more practice on the difficult without interfering with the class schedule. I felt I was receiving specialized training all the way. When I was interested in something, I was encouraged to learn it to the fullest extent. I'm really grateful for the opportunities given.

More information should be given on office procedures such as phone manners--how to be subtle, how to take a complaint or calm down an irate customer, and the best ways to smooth over a bad situation that is obviously the company's fault. More knowledge should be given as to the executive secretarial position--including how to

compose a good business letter. It might be a good idea to have a businessman from a bank or insurance company (any company that hires many young girls) come in and talk to the business majors on the importance of attendance, dress, neatness of work, and generally what he likes or looks for when hiring girls. The shorthand classes should deal more with transcribing of notes. Even though you can take dictation at 100 words per minute, it doesn't mean you can transcribe it. I got a lot of speed drill in high school, but found that once I was using it in an office it was difficult to read some of my notes. Possibly a class just for third or fourth semester (second for Forkner) shorthand students dealing with just dictation and transcribing to be taken along with the class for speed building would be helpful. I feel all classes taken in school helped me greatly to secure jobs. I have always been able to get good work at nice companies with my education. I feel, however, that additional training is necessary if a person wants to be more than a \$400 to \$450 a-month girl.

More students should be made aware of the importance of some type of business course no matter what future plans they may have made. The use of the slide rule in Business Arithmetic would be profitable.

I think Seattle Public Schools have the best Business Education system. I only hope any person who does not plan to go to college or Business School will take advantage of what is offered them in high school. What really impressed my employers when I applied for my job was my three Statement of Proficiency Cards. I have only one real suggestion. My first job with the bank required little or no experience. They do hire many girls fresh out of high school. When these girls come in, they dress like they are still in high school and act very immature. I'm always looking back and hoping I never acted that way! I may not have all the education I need at this time, and I hope some day to take some Data Processing courses, but I am very thankful for the education I received at Nathan Hale High School.

More time spent on dictaphone training, use of the adding machines, and spelling would help.

The job that I am in now has no need for any of the courses I took in high school.

The more practice you get in transcription and typing business letters, the better! Electric typewriters

would be excellent in the schools if there were enough for all the students to use enough to get used to the feel of them. Office Practice should be expanded and given more time if possible. I feel that especially for girls, the secretarial classes given in high school are invaluable in terms of preparation for jobs. Typewriting is nearly a necessity.

I didn't pay much attention to the Bookkeeping classes I took. I didn't think I'd ever use it as I wanted to be a secretary. Now I'm a credit manager and use bookkeeping everyday. Just goes to show everything comes in handy!

Although a salesclerk, my shorthand was very helpful when using the telephone. My ability to use the typewriter has been very helpful for personal correspondence. My training in Retail Selling greatly helped me to raise myself at Frederick & Nelsons. When I left, I had for some time been in charge of my own portion of my department--even so far as to advise the buyer.

In my work typing is essential, shorthand is optional, and the Forkner training I had has aided me immeasurable. The principles involved in Forkner are easily recalled--with very little practice I'm able to use it in my work. I feel that the Business English course has aided me a great deal, but I think it should have had more emphasis placed on it. It was an excellent class and is very useful not only in my work but in the everyday business correspondence which is necessary.

The subjects that helped me the most were my typing, shorthand, and business English. I am a secretary at Pacific Finance and what I learned in the above courses was more than helpful in looking for a job.

My first comment is that nowadays shorthand is essential, at least in government work, for a higher salary and all-around better job. I feel the courses offered at Hale are adequate, but it is the teacher that really comes through and gets the student interested enough to do a decent job. For what it's worth, there are many, many jobs available here in Washington, D. C. for part-time summer work and for work upon completion of college. There a wide variety of secretarial jobs just waiting to be taken, so if there are any Hale students interested enough to really be on their own after graduation, I would strongly suggest looking into the possibilities back here. It's an exciting city.

What I learned in Business Arithmetic and Business Law is almost exactly parallel to the General Business 101 course I took at the University of Washington last quarter--keep up the good work. I cannot think of any particular weakness. All my courses were helpful to me both during my 14 months of work and now in my school experience. I am studying to be a teacher of business in high school. I hope to come back to Hale to teach someday.

Forkner Shorthand didn't help. No one else teaches it for extension work.

The Business Law class has been of little value for me since I wasn't in need of it in my secretarial job over the summer. I have since used my Shorthand, Typing, Office Machines, Business English, and Arithmetic in college. I use shorthand for taking notes in class and this past school year, I have been secretary-treasurer to Inter-Hall Council--a student government organization at Western. I would highly recommend making Business English a graduation requirement. True, in freshman English classes we wrote nothing but compositions, but if it hadn't been for my spelling and punctuation which I learned in Business English, my C and B in my two classes could have been lower. I know of many cases in which this happened. This class is also a good review for a high school senior pursuing any career.

My work doesn't allow me to make full use of my high school business subjects, but they are helpful in other ways and always will be useful.

I have had no need yet to use the training I received in high school on the job but have used the typing training and a few business machines in my school work.

I was an airplane mechanic the past two summers, thus the business courses taken at Nathan Hale had no relationship to my job. Therefore, that is why the courses were marked "no value". I am certain, however, that once I enter into more of the business world atmosphere, the above courses will be very valuable.

Shorthand (Gregg) was taught--in such a manner that I learned it well enough to retain it and use it constantly. All of the courses I took were well taught.

It is obvious to me that the courses I took in high school are a great benefit as an all-around basic background.



The only change of any significance I could suggest would be that the Retailing course should be a more comprehensive one semester course.

I feel it is very important that I took those courses I have marked "much value." They have become the most important courses in my life. Without typewriting I'd be lost; Shorthand comes in very handy for notetaking; Office Practice has turned out to be one of the most important. I am studying to be a teacher, and without the courses I took at Hale I would be in trouble. I have to know how to run all the machines, especially the mimeograph and stencil duplicator. Also, having these courses to my credit, it always helps in getting jobs. An employer is always impressed with a person who knows how to do and run all the possible things in an office or business situation. I am happy I took those courses and received a Statement of Proficiency Card because it has proved to be (and will be) very beneficial to me in my chosen profession and when looking for summer employment.

My school training has helped considerably. If I hadn't taken the courses I did, I would not be working where I presently am.

Possibly more emphasis could be put on applications to real situations. Base the curriculum on more of the on-the-job setting.

I feel that I have received excellent high school training that has helped me greatly in acquiring my present position. I enjoyed every one of the subjects I took and do not regret that I took some courses not involved in my job. I greatly appreciated the well-rounded business courses offered at Hale which gave me the opportunity of deciding what particular field I would like to go into. I am presently employed as a stenographer and feel that aside from the typing class, business English is the most valuable business course I have taken.

More typing!

Everyone of the above classes were taught very well, and many of them should be taught to every student whether an employer, employee, or those of home life, these classes are all beneficial.

I think all the classes I took were useful. I am going to be moving up in a few months, so my shorthand and some other skills will be used more then.

The courses in typewriting should contain more information on the care of the typewriter and instructions on cleaning it. There should be more information on the various ways of setting up margins because when changing to another typing class in a different area, they teach a completely different way.

APPENDIX B

QUESTIONNAIRE

Part One -- General

1. Please check one of the following to best express your present occupational status.
- a. In school full time
  - b. In school part time
  - c. Housewife
  - d. Employed for wages full time
  - e. Employed for wages part time
  - f. Unemployed and seeking full-time employment
  - g. Unemployed and not seeking full-time employment
  - h. Operate own business
  - i. In military service

2. Please indicate in the space provided any formal education you have had since leaving high school (Extension, Correspondence course, Business college, or other college or university).

<u>Dates</u>		<u>Name of School</u>	<u>Work Taken</u>
From	To		

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3. If you are employed part or full time, please answer the following questions:

- a. How many hours do you work in an average week? \_\_\_\_\_
- b. How long have you worked at your present job?  
(in months) \_\_\_\_\_
- c. How did you find your present job?
  - 1) Someone at Nathan Hale? \_\_\_\_\_ Who? \_\_\_\_\_
  - 2) Door-to-door searching? \_\_\_\_\_
  - 3) Classified advertisements? \_\_\_\_\_
  - 4) Family or friends? \_\_\_\_\_
  - 5) Placement service? \_\_\_\_\_
  - 6) Other (Please specify)? \_\_\_\_\_

d. Which of the following did you use to obtain your present job?

- 1) Letter of application  
 2) Data sheet  
 3) Personal interview  
 4) Test

e. What is your employer's name and address?

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### Part Two -- Curriculum

Please check the business courses taken in high school and indicate their job value to you by placing a check mark in the appropriate column.

	No. of Semesters	Much Value	Little Value	No Value
Accounting	_____	_____	_____	_____
Bookkeeping	_____	_____	_____	_____
Business Arithmetic	_____	_____	_____	_____
Business English	_____	_____	_____	_____
Business Law	_____	_____	_____	_____
Business Procedures	_____	_____	_____	_____
Forkner Shorthand	_____	_____	_____	_____
Gregg Shorthand	_____	_____	_____	_____
Office Practice	_____	_____	_____	_____
Office Machines	_____	_____	_____	_____
Retailing	_____	_____	_____	_____
Secretarial Service	_____	_____	_____	_____
Typewriting	_____	_____	_____	_____

Any suggestions or comments you wish to make concerning the strengths and weaknesses of your high school training would also be appreciated.

Part Three -- Duties Performed

Please place a check in the appropriate column to indicate the frequency of performance of the listed duties on jobs you have held since high school graduation.

<u>Duty</u>	<u>Frequently</u>	<u>Occasionally</u>	<u>Never</u>
Typing letters	_____	_____	_____
Addressing envelopes	_____	_____	_____
Tabulating	_____	_____	_____
Typing from handwritten copy	_____	_____	_____
Composing at typewriter	_____	_____	_____
Making carbon copies	_____	_____	_____
Taking dictation and transcribing	_____	_____	_____
Serving as a receptionist	_____	_____	_____
Composing letters	_____	_____	_____
Telephoning	_____	_____	_____
Handling incoming mail	_____	_____	_____
Handling outgoing mail	_____	_____	_____
Filing:			
Alphabetic	_____	_____	_____
Numeric	_____	_____	_____
Geographic	_____	_____	_____
Other	_____	_____	_____
Using arithmetic (without machine)	_____	_____	_____
Banking	_____	_____	_____
Shipping goods	_____	_____	_____
Receiving goods	_____	_____	_____
Ordering merchandise	_____	_____	_____
Controlling stock	_____	_____	_____
Trimming windows	_____	_____	_____
Wrapping packages	_____	_____	_____
Marking merchandise	_____	_____	_____
Delivering goods	_____	_____	_____
Arranging stock	_____	_____	_____
Selling goods	_____	_____	_____
Composing advertising	_____	_____	_____
Handling money	_____	_____	_____
Bookkeeping	_____	_____	_____
Typing invoices	_____	_____	_____
Programming for computer	_____	_____	_____
Operating computer	_____	_____	_____
Other major duties (list)	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

## Part Four -- Office Machines Used

Please place a check in the appropriate column to indicate the frequency of use of machines you have operated on the job since leaving high school.

<u>Machine</u>	<u>Frequently</u>	<u>Occasionally</u>	<u>Never</u>
Telephone	_____	_____	_____
Switchboard	_____	_____	_____
Manual typewriter	_____	_____	_____
Electric typewriter	_____	_____	_____
Stencil duplicator	_____	_____	_____
Spirit process duplicator	_____	_____	_____
Mimeoscope	_____	_____	_____
Dictaphone	_____	_____	_____
Ediphone	_____	_____	_____
Soundscriber	_____	_____	_____
Other transcribing machine:			
Brand _____	_____	_____	_____
Addressing machine	_____	_____	_____
Cash register	_____	_____	_____
Check protector	_____	_____	_____
Postage meter	_____	_____	_____
Photocopy machine	_____	_____	_____
Letter opening machine	_____	_____	_____
Bookkeeping-posting machine	_____	_____	_____
Billing machine	_____	_____	_____
Adding-listing machines:			
Ten-key	_____	_____	_____
Full-key	_____	_____	_____
Calculators:			
Full-key, key driven	_____	_____	_____
Full-key, rotary	_____	_____	_____
Ten-key, non-printing	_____	_____	_____
Ten-key, printing	_____	_____	_____
Electronic data processing:			
Key punch or verifier	_____	_____	_____
Key punch sorting	_____	_____	_____
Key punch tabulating	_____	_____	_____
Unit record keeping	_____	_____	_____
Computer	_____	_____	_____
Other major machines used:			
List: _____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

APPENDIX C

LETTER TO GRADUATES

14048 Corliss Avenue North  
Seattle, Washington 98133  
February 20, 1968

Miss Sally Graduate  
12345 - 40th N. E.  
Seattle, Washington 98125

Dear Sally:

A study is being conducted to determine the extent to which the Business Education Department is fulfilling the needs of the business students from Nathan Hale High School.

In order for this study to be completed your help is needed. Please fill out the enclosed form and return it in the stamped, addressed envelope that is also enclosed. You may be sure that your comments will be treated confidentially.

Your cooperation and assistance will be greatly appreciated.

Sincerely,

Don T. Smith

Enclosures: Questionnaire  
Envelope