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# A follow-up study of the 1947-1950 graduates of the business department of the Arlington High School.

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Thesis

A FOLLOW-UP STUDY OF THE 1947-1950 GRADUATES  
OF THE BUSINESS DEPARTMENT OF THE  
ARLINGTON HIGH SCHOOL

Submitted by

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(B. C. S., Northeastern University, 1925)

In partial fulfillment of the requirements for  
the degree of Master of Education

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## CHAPTER I

### INTRODUCTION

#### Statement of the Problem

The purpose of this investigation was to determine how well the business education curriculums of the Arlington High School, Arlington, Massachusetts, had prepared the 1947-1950 graduates for their initial jobs and to study the implications of the findings for curriculum revision.

#### Analysis of the Problem

In order to accomplish the purposes for which this study was made, answers to the following questions were sought.

1. How many graduates attended schools of higher learning after graduation from high school?
2. Was study beyond high school in the field of business?
3. Were the graduates employed in the kinds of positions for which they received training in high school?
4. What was the nature of the positions and the duties performed in the positions held by the graduates?
5. What were the sources from which the business

department graduates secured their initial jobs?

6. How much time elapsed between graduation and initial employment in the field for which graduates were trained?

7. Which subjects taken in high school were of most value to the graduates in their work?

8. Which subjects taken in high school were of least value to the graduates in their work?

9. What subjects might be added to the high school business education curriculum as shown by the needs of the graduates?

10. What suggestions for the improvement of the business curriculums did the graduates have to offer?

11. Are the business education curriculums of the high school properly adjusted to the needs of the local business area?

12. Do the employers of the graduates of the high school feel that the graduates are satisfactory employees?

13. Do the graduates of the business education department have the skills, knowledges, and attitudes required by their employers?

14. What can the business education department of the high school do to make these graduates better employees?

15. How may the high school improve its service to the employers of these graduates?

The responsibility of the school does not end with the graduation of its students. This premise is recognized by educational authorities.

Dame<sup>1</sup>, writing on the business education program in the secondary school, made the following statement:

Schools providing vocational preparation for business have not fulfilled their complete responsibility to their pupils if they do not follow their students on the job . . . .

Follow-up is more than a paper study, however; it should be a continuous function. The purposes of follow-up may be summarized as follows:

1. Assisting those prepared in business subjects to make satisfactory job adjustments.
2. Furnishing a basis for remedial work as carried on in evening or part-time courses.
3. Furnishing a basis for analyzing the need for courses that lead to job promotion and the development of in-service courses of this type.
4. Serving as a background in determining desirable types of training.
5. Helping to determine the degree to which the vocational business-training program is either strong or weak in meeting the needs of the community.
6. Assembling information about possible jobs as well as successes and failures in jobs.

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<sup>1</sup>Dame, J. Frank, "There is an Adequate Selection, Guidance, Placement, and Follow-up Plan," The Bulletin of the National Association of Secondary School Principals, vol. 33, No. 165, November, 1949, p. 63.

Follow-up is the responsibility of the schools providing vocational training in business writes Enterline<sup>1</sup>:

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Schools that provide vocational business training and that place their trainees in jobs are not completing their responsibility if they do not follow up to ascertain whether the trainees make progress and are well-adjusted on the job.

Tonne<sup>2</sup> indicates that schools fail in their job if they make no effort to determine the results of their teaching:

If one of the aims of education is to prepare for successful economic living, the schools fail in achieving their goal if they dismiss their graduates without ascertaining whether the results of this training have proved successful.

More than ten years ago Pavan<sup>3</sup> brought out that too little attention was given to evaluating the results of the training of former graduates when she wrote:

Too little recognition has been given to the importance of studying former graduates against the background of their educational training and guidance, to the need of evaluating the results of this training and guidance so as to chart procedures that should contribute to better educational and occupational adjustment.

The importance of follow-up studies of graduates is

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<sup>1</sup>Enterline, H. G., "Guidance, Placement, and Follow-up in Business Education," Trends of Thought in Business Education, Monograph 72, South-Western Publishing Company, Cincinnati, 1949, p. 26.

<sup>2</sup>Tonne, Herbert A., Chairman, New York Committee, "Business Education for Tomorrow," Fourteenth Yearbook, Eastern Commercial Teachers' Association, Philadelphia, 1941, p. 41.

<sup>3</sup>Pavan, Ann, "What Can Follow-up Studies Contribute to Business Education?" Journal of Business Education, November, 1939, p. 10.

pointed out by Lefever, Turrell, and Weitzel<sup>1</sup> when they state:

Returns from follow-up studies should prove a source of valuable information in connection with curriculum revision. Too often graduation is comparable to the pioneer days when hardy men sailed for China, Alaska, or some other far-off port. We frequently hear no more from the graduate unless, perchance, he returns years later "laden with silks or gold . . . ."

Secondary schools are greatly in need of accurate information concerning the vocational avenues which students follow from graduation to whatever economic and social station in life they finally attain. They should at least be in possession of data concerning the student's experiences during the five or six years following graduation . . . .

A knowledge of the activities of graduates for several years subsequent to leaving school might reveal the types of information and skills that are useful immediately upon graduation.

Lomax<sup>2</sup> has commented on several occasions relative to the need for follow-up of graduates. In one of his articles he made the following comment:

In our June, 1936, issue we raised the question of surveying the graduates of the 1936 class upon the theory that no school is really in a sound position to consider the reconstruction or broadening of its business curriculums with respect to their vocational functioning without knowledge of what is happening to the graduates and drop-outs of such curriculums.

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<sup>1</sup>Lefever, D. W., Turrell, A. M., Weitzel, H. I., Principles and Techniques of Guidance, Ronald Press, New York, 1941, p. 453.

<sup>2</sup>Lomax, Paul, "Surveying Your Graduates and Drop-outs," Journal of Business Education, May, 1937, p. 7.

Forrester<sup>1</sup>, commenting on and recommending the follow-up technique, writes:

So important are the continuing contacts between the school staff and the young people on their first jobs that strong recommendation is made for extending the practice of giving business teachers the time and opportunity for following up their pupils . . . .

Later, in the same study, Forrester<sup>2</sup> remarks:

Besides furnishing information about occupational opportunities, the following study provides for appraisal of results of teaching.

Carmichael<sup>3</sup> contends that the local survey is essential in building curriculums to fit the needs of the community:

The local survey finds out the needs in the local community. It determines the exact duties and practices which the business firms require of office workers in initial employment; it finds out the exact kinds of machines which are being used by local business firms; it secures information concerning the degree and kind of skills which are demanded of applicants who are just out of the local school; and it lists the kinds of experience which are expected of applicants for the jobs in the community.

The need for keeping pace with the business world is presented by Strong<sup>4</sup> in these words:

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<sup>1</sup>Forrester, Gertrude, Methods of Vocational Guidance, Harper Brothers, New York, 1944, pp. 379-380.

<sup>2</sup>Ibid., p. 414.

<sup>3</sup>Carmichael, V. H., "Research Needed in the Field of Office Machine and Clerical Instruction," The National Business Education Quarterly, Spring, 1942, pp. 22-23.

<sup>4</sup>Strong, Earl P., The Organization, Administration, and Supervision of Business Education, The Gregg Publishing Co., Cincinnati, 1944, pp. 250-251.

In the modern business world new methods and new subject matter are being developed almost daily. Schools need to keep their curriculum material constantly revised and reorganized in order to keep pace with these changes. Such reorganization of materials can be accomplished only through making periodic surveys and analyses. Business education, especially vocational business education, has not kept close enough to actual business practices . . . .

A careful survey of the occupations within geographic areas proves to be a sound basis for deciding upon the subjects to be offered. This needs to be constantly followed up with appraisal, re-appraisal, and revision of the program.

The remarks of Walters<sup>1</sup> are significant:

Curriculums are still too frequently based on tradition, on curriculums of other communities, or on the mere personal opinions of superintendents, principals, or heads of departments.

Provision should be made for revision of curriculum and course-of-study writes Enterline<sup>2</sup>:

Curriculum building is a continuous process. No business curriculum should be regarded as fixed or final. Objectives change with changing social and economic conditions, and curricula need to be revised accordingly.

This survey has been made for the purpose of determining (a) to what extent the graduates of the business department of the Arlington High School were able to use the instruction received in high school, (b) the degree to which the existing business curriculums had prepared the graduates to fill the

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<sup>1</sup>Walters, R. G., "Purposes and Kinds of Surveys," The Community Survey, Monograph 58, South-Western Publishing Co., Cincinnati, December, 1942, p. 5.

<sup>2</sup>Enterline, op. cit., p. 16.

initial jobs following graduation, and to meet the requirements of subsequent promotional opportunities.

Follow-up studies of the graduates of Arlington High School have been made for a number of years. These studies have included the graduates of all the curriculums offered by the high school and have been conducted by the guidance department of the high school for the purpose of evaluating the over-all guidance program of the school.

This study was confined to the business department graduates.

#### Delimitation of the Problem

This study was limited to the graduates of the accounting curriculum, the clerical training curriculum, and the stenographic curriculum of the Arlington High School.

Drop-outs of the business curriculums were not included in this study. The number was insignificant. The drop-outs did not complete the business curriculums and have been included in another study carried on by the guidance department of the high school.

This study was limited to the graduates of the business curriculums for the years 1947-1950, inclusive.

#### Definitions of Terms

Definitions of terms used in this study are quoted from

the Dictionary of Education<sup>1</sup>:

Course. Organized subject matter in which instruction is offered within a given period of time, and for which credit toward graduation or certification is usually given.

Curriculum. A systematic group of courses or sequence of subjects required for graduation or certification in a major field of study.

Follow-up. A plan by which the experiences or status of young people who have left school are investigated or surveyed, either for the purpose of assisting them in further adjustment or for securing facts to improve the plan of guidance for those still in school.

#### Organization of Chapters

The statement of the nature of the problem is presented in Chapter I. Chapter II explains the background of the study and contains a description of the area where the study was made. In Chapter III a review of related research, which served as a background in making the study, is presented. The procedures used in conducting this study are reviewed in Chapter IV. Chapter V presents the data from the survey report forms, tabulated, analyzed, and interpreted. In Chapter VI a summary of the findings of the study is formulated. The recommendations,

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<sup>1</sup> Good, C. V., Editor, Dictionary of Education, McGraw-Hill Book Company, Inc., New York and London, 1945.

based upon the findings of the study, are presented in Chapter VII.

## CHAPTER II

## BACKGROUND OF THE STUDY

This study was conducted for the business department of the Arlington High School. Arlington is a town, located in Middlesex County, situated adjacent to Cambridge, Massachusetts, and approximately six miles northwest of Boston.

Arlington is a community of approximately 3,500 acres, or 5 1/2 square miles. The population in the 1950 Federal Census was 43,984. Previous Federal Census reports indicate a steady population growth. The figures for 1920 show a population of 18,665; for 1930, 36,094 (a 93 per cent increase over a ten-year period); for 1940, 40,013 (an 11 per cent increase in the ten-year period); and for 1950, 43,984 (a 10 per cent increase in the ten-year period), and an increase of 135.65 per cent over the 30-year period. These figures are given for the purposes of showing the increase in the school population and the increase in the business department students of the high school.

Arlington was settled in 1630, originally called "Menotomy," an Indian name meaning "Swift Running Water." The name was changed to Arlington in 1867. It is rich in the Colonial history of this country, of Paul Revere, Lexington, and Concord.

Arlington is a community of homes of the upper middle class. It is chiefly a residential community of more than 8,000 dwellings,

homeowners and renters being about equally divided. Property valuation remains rather static, and assessments on homes are rather low.

No large industrial concerns are located within the community. One of the chief industries for many years was market gardening. Not many farms are found here now; many acres of former farm land provide the sites for new home construction which has been taking place during the past several years.

The types of manufacturing include dairy products, building materials, picture and mirror frames, machinery, and insecticides, numbering about 24 small manufacturing industries. More than 500 retail stores, garages, and filling stations are located here, including service and office buildings of the New England Telephone & Telegraph Company, the Arlington Gas Company, a trust company, a national bank, a savings bank, and a co-operative bank. Additional employment opportunities are provided by the Town Government employing about 300 persons.

The above represents the employment opportunities provided. The bulk of the employment opportunities available to Arlington graduates are located in Boston and Cambridge.

The occupational census shows the most important vocational levels as professional and semi-professional people, proprietors, managers and craftsmen, clerical, and sales. Beginning job opportunities are as retail store clerks, office clerks, stenographers, bookkeepers, bank clerks, and telephone operators.

There are no distinct racial problems. The population for the most part is native born. Of the parents of children born in this community during 1938, 61 per cent were born in the United States.<sup>1</sup>

The foregoing information indicates that the employment opportunities in this community for business department graduates are limited. The majority of graduates who secure positions in this area work in small offices and stores. At the time of this study, employment opportunities in the business area, which includes Boston, Cambridge, and other communities, were very good, although the competition from graduates of other high schools in this area, numbering close to 100 high schools, was keen.

The average enrollment of the high school during the period covered by this survey was above 1,500. The graduates of the high school during the period covered by this survey averaged 469. The business department graduates during the period covered by this survey averaged 131.

The faculty of the Arlington High School consists of a principal, a vice-principal, a dean of girls, a director of the vocational school, and 68 classroom teachers. Since the high school has an excellent rating, a "superior" student body, and a high salary schedule, the turnover of teachers

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<sup>1</sup>Community Statistical Abstracts, Bureau of Business Research, Boston University, College of Business Administration, Industrial Development Committee of New England Council, 1942.

is low, deaths and marriages being the cause for replacements.

At the time this study was made the high school offered a college preparatory curriculum, a business curriculum, a general curriculum, and a vocational (industrial) curriculum.

The college preparatory curriculum was in three divisions. College I was designed for students seeking admission to liberal arts colleges; College II, emphasizing mathematics, was planned for students seeking admission to engineering colleges; and College III was created for pupils planning to attend junior colleges, kindergarten training schools, schools of nursing, art schools or music schools.

The business curriculum was in three divisions, one emphasizing training in accounting, another emphasizing clerical training, and a third emphasizing training for work as a stenographer.

The general curriculum provided for those not qualified for training in other curriculums offered, and for those who began training in one of the other curriculums and who later failed because of inability to meet the requirements of the curriculum.

An extensive list of elective subjects was provided, including the following business subjects: bookkeeping I, business organization, business law (half year), consumer education (half year), economics (half year), economic geography, salesmanship (half year), and typewriting I and II.

Business organization, typewriting I, and typewriting II were provided for pupils in Grade 11 or Grade 12. Economics and business law were provided for pupils in Grade 12 only. No distinction as to grade level was made for the other elective business subjects.

The trend in the development of courses in education has been to provide a history of that phase of education under discussion. Arlington High School had its inception back in 1864<sup>1</sup>, several years before high schools were required by state law in Massachusetts. The Town of Arlington purchased Cotting Academy, which had been established as a private school for college preparation. The school was officially opened for students in 1865 with a total enrollment of 40 pupils, 30 of whom were girls, and a faculty of two. The first graduation was held in 1867 when four girls received diplomas. Five years later, in 1872, the graduation class numbered 13. No state inspection of schools existed at this time, control being invested in the local school committee.

About this time, it was brought out for the first time that perhaps some day the school might profitably include a business course in its curriculums. However, the Chairman of the School Committee, Judge William E. Parmenter, the Father of Arlington Schools, opposed the idea, and successfully upheld

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<sup>1</sup>Parker, Charles S., Town of Arlington Past and Present, Boston, 1907.

the ultimate value of a purely cultural, classical curriculum. Later a classical and a partially classical curriculum were provided.

Concession was made to the demand for more practicality in the course of study when in 1886 through the addition of an advanced course in mathematics provision was made to better prepare those students who were to enter business. For the first time recognition was given to preparation for business.

The school continued to be operated according to the out-dated examples of years before until 1890, when the first step toward modern education was the trial establishment of the office of "Superintendent of Schools."

A new high school was erected in 1894 and for the first time bore the name Arlington High School. With the new school came a change in the curriculum. In 1897 two curriculums differing distinctly from the classical or college curriculum were established in the school. Under the heading of "general" and "academical" they accomplished about the same purpose as our clerical and general curriculums of today.

At the time this study was undertaken, three different business curriculums were in effect at the Arlington High School. These curriculums were known as the accounting curriculum, the clerical-training curriculum, and the stenographic curriculum, and consisted of the following:

## #Accounting Curriculum

Grade 10	Periods per week	Points
Required:		
English II	5	5
Bookkeeping I	5	5
Economic Geography	5	5
Typewriting I	5	3
Physical Education	2	1
1 Elective		
Grade 11	Periods per week	Points
Required:		
English III	5	5
Bookkeeping II	5	5
Business Organization	5	5
Physical Education	2	1
1 or 2 Electives		
Grade 12	Periods per week	Points
Required:		
English IV	5	5
Bookkeeping III	3	3
Machine Practice	2	2
Economics and Business Law	5	5
U. S. History	5	5
Physical Education	1	1/2
1 Elective .		

# Requires ability and interest in bookkeeping.

∗ Required by the State of Massachusetts - may be taken in Grade 11 or Grade 12, in any curriculum.

## #Clerical-Training Curriculum

Grade 10	Periods per week	Points
Required:		
English II	5	5
Bookkeeping I	5	5
Economic Geography	5	5
Typewriting I	5	3
Physical Education	2	1
1 Elective		

Grade 11	Periods per week	Points
Required:		
English III	5	5
Business Organization	5	5
U. S. History	5	5
Physical Education	2	1
1 or 2 Electives - Typewriting II is recommended		

Grade 12	Periods per week	Points
Required:		
English IV	5	5
Clerical Training	5	5
Economics and Business Law	5	5
Machine Practice	5	5
Physical Education	1	1/2
1 Elective		

#Requires at least a grade of "C" in Typewriting I.

## #Stenographic Curriculum

Grade 10	Periods per week	Points
Required:		
English II	5	5
Bookkeeping I	5	5
Economic Geography	5	5
Typewriting I	5	3
Physical Education	2	1
1 Elective		
Grade 11	Periods per week	Points
Required:		
English III	5	5
Business Organization	5	5
Stenography I	5	5
Typewriting II	4	3
Machine Practice	1	1
Physical Education	2	1
1 Elective		
Grade 12	Periods per week	Points
Required:		
English IV	5	5
Economics and Business Law	5	5
Stenographic Practice	6	6
<sup>x</sup> Stenography II	5	5
U. S. History	5	5
Physical Education	1	1/2
1 Elective		

# Requires at least a grade of "C" in Typewriting I and English II, and this work is not recommended for pupils unless their marks are "B" in these two subjects.

<sup>x</sup> A grade of "C" in Typewriting II, English III, and Stenography I is required in order to continue in the Stenographic Curriculum.

Sixty points are required for a diploma.

Each full-year subject meeting daily and providing for homework is worth 5 points. One-half credit, or 3 points is given where no outside preparation is required.

Seventeen points promote to grade 11.

Thirty-seven points promote to grade 12.

No more than 26 points may be taken in any one year without special permission.

#### Description of Business Courses

Bookkeeping I 5 Periods 5 Points

The objectives of this course are to acquaint the pupil with the necessity and methods of record keeping. To develop the necessary skills and habits needed by all, neatness, accuracy, orderly arrangement, detail, and ability to analyze business transactions are stressed. Habits and skills are objectives rather than occupational competency.

Bookkeeping II - III 5 Periods 5 Points  
3 Periods 3 Points

These courses develop some degree of occupational competency or ground work for future study of accountancy. The keeping of increasingly complicated business records develops the skills and knowledges necessary for later use.

Business Machines - Accounting 2 Periods 2 Points

The purpose of the course is to acquaint the accounting pupils with such common types of machines as the Comptometer, Burroughs Calculator, Monroe Calculator, Remington Rand Adding Calculator, and others. The work is closely related to Bookkeeping III.

Business Machines - Clerical 5 Periods 5 Points

Business machine operators are needed in ever-growing numbers as more offices adopt new machine methods. The purpose of the course is to train the student to operate one machine competently, and to acquaint him with several other types of office machines. The pupil is helped to bridge the gap between school and office by

working on many actual business projects for other departments in the school and community. Some of the machines on which training is given are the Comptometer, Burroughs Calculator, Electric Typewriter, Mimeograph, Liquid Duplicator, Monroe Calculator, and Dictaphone.

Business Machines - Stenography I 1 Period 1 Point

Stenographers are expected to know how to operate the common types of office machines such as the Comptometer, Burroughs Calculator, and the Mimeograph. The purpose of this course is to acquaint the stenographic student with them.

Business Machines - Stenography II 1 Period 1 Point

The course is closely related to Stenographic Practice and includes training on such additional machines as the Dictaphone, Ediphone, Monroe Calculator, Electric Typewriter, Remington-Rand Calculator, and others.

Business Organization 5 Periods 5 Points

This course shows how business is organized and operated in a democracy. Setting up a business of one's own is discussed in detail. The major functions of a larger business, such as financing, purchasing, sales, traffic, production, and personnel are studied. An attempt is made to help the student with his choice of vocation.

Clerical Training 5 Periods 5 Points

This course is a refresher course in penmanship and simple arithmetic, to develop legibility in one and speed and accuracy in the other. Filing takes one third of the year and is of immeasurable value to clerical workers and for general business preparation. Personality development, office procedures, and an understanding of the knowledges required in office occupations are given detailed attention. The skills are of immediate use to the graduates both in gaining employment and in retaining a position.

Consumer Education (Half Year) 5 Periods 2 1/2 Points

In simplest terms, this course is a study of how to buy more for your money, a presentation of the principles of intelligent buying. The area of study includes such topics as "Buying Insurance," "Using Consumer Credit," "Effective Shopping," "Learning to Use Advertising," and many other matters of everyday consumer concern.

Economics (Half Year)

5 Periods 2 1/2 Points

The purpose of this course is to help the student to gain an intelligent understanding of the economic conditions which affect his daily life and to develop a socially desirable point of view.

He will gain an understanding of such economic problems and institutions as business cycles, unemployment, money and banking, and social security.

Economic Geography

5 Periods 5 Points

It is essential in these times of global relations that all should know the products, people, and processes of their own country and of other lands. The emphasis in this course is on the source of materials and products and the problems and processes involved in getting them into use. The pupil should finish with a better understanding of the material things used in the world around him.

Business Law (Half Year)

5 Periods 2 1/2 Points

This course has three aims: to give the student some fundamental information which will enable him to deal fairly with others in business; to give him protective knowledge of business law; to aid him to think clearly and come to fair and just decisions in business affairs.

Salesmanship (Half Year)

5 Periods 2 1/2 Points

A study of the subject from the standpoint of retail store selling, its personal requirements, and the activities involved in promoting the sale of products. The knowledge needed by beginners in sales work is stressed.

Stenography I

5 Periods 5 Points

This course is the study of Gregg shorthand, with occupational use as an objective.

Stenography II

5 Periods 5 Points

This course is sequential to Stenography I and furthers the study of Gregg shorthand for commercial use.

Stenographic Practice

6 Periods 6 Points

This course embraces transcription, advanced typing, filing, office machines, and the Ediphone and Dictaphone. Emphasis is placed on problems which may arise in business offices and their

solutions. All well known systems of filing are studied. Much actual practice is gained by doing related work for various departments of the school.

Typewriting I

5 Periods 3 Points

The one objective in this typewriting is to develop a usable skill in typing whether the future use is personal or commercial. Mastery of the keyboard and its application to proper set-up and arrangement are taught. Accuracy and technique are emphasized.

Typewriting II

4 Periods 3 Points

This is a course offered in sequence to Typewriting I and its main objective is to develop a skill which will be commercially useful. Speed, tabulation, and set-up are stressed.

The services of a guidance department are an integral part of the school program. The guidance department has been in effect since 1936. At the time the study was made the guidance department consisted of a full-time director and a full-time assistant-director; two part-time workers who were also classroom teachers (two periods a day), one of whom was a business department specialist; a secretary; pupil assistants; and the teaching force of the high school; which comprised an effective force in the guidance, placement, and follow-up of the pupils.

Through a 100 per cent follow-up study of each year's graduating class, together with printed questionnaires to employers, the guidance department is helping to gear the curriculum to actual needs outside school. This program of the guidance department has not distinguished between the graduates of the different curriculums of the school. The present study of the business department graduates has been made for the purpose of defining particularly the needs of the graduates of the business curriculums.

The guidance program extends from the kindergarten through high school and beyond. The interest in the graduates extends officially to the sixth year after graduation when the last formal check-up is made. The returns from this six-year follow-up have resulted in a 100 per cent response. The high annual response is attributed to the briefing the students have been given before they graduate.

Between kindergarten and the sixth grade, the guidance work is primarily a matter of accumulating and preserving the results of tests showing the progress of the individual at regular intervals. I. Q. tests for all are given in the second, fourth, and sixth grades. The work in the elementary grades is concerned primarily with individual adjustment--why the youngster does not conform.

In the junior high schools, one school period a week is devoted to group guidance in the seventh, eighth, and ninth grades. Here guidance teachers introduce pupils to a study of school, family, and social adjustment and a study of occupations. These teachers are expected to be trained or to have some experience in guidance. They teach other subjects in the junior-high curriculum.

In the ninth grade when the time has come to decide whether the pupil should prepare for college or terminate his formal education with high school, an intensive testing program begins.

Comprehensive tests for the purpose of determining aptitudes, interests, achievements, academic and occupational interests through self-appraisal are given in reading, arithmetic, mathematical facility, spatial relations, etc. These are compiled and plotted into a composite profile which is drawn by each boy and girl from his own test results.

On the basis of these tests he can see the things in which

he is good and the things in which he is not good. The high-school program is selected from the personal interviews which follow.

From this point on, the guidance is on an individual basis. An attempt is made to find the niche where each can put his best talents to fullest possible use.

The work is made more practical by constantly revising background information on actual needs out of school. As much importance is attached to having a well-adjusted garage mechanic or stenographer as to guiding college group students to the right institutions.

During the eleventh and twelfth grades "try-out" experiences, especially for the business course students, are provided. These are provided by an effective placement service. Opportunities are generally available for those who desire part-time (afternoon and Saturday) work in Arlington, Boston, and elsewhere. Such work is provided by banks, insurance companies, real estate concerns, department stores, and other similar types of business houses. Experiences include such types of work as filing, typing, stenography, machine operation, and selling.

The placement service of the guidance department extends the service of getting positions for students when they graduate, and also after they have been out of school for several years. The guidance department will not send anyone to a job unless he is qualified in the necessary technical skill he is to perform and

has the proper work habits and attitudes.

The following information has been selected from Rothney and Roens<sup>1</sup> with reference to the guidance program at the Arlington High School. It has not been quoted verbatim.

The guidance program was introduced in 1936. A survey of current practices through a study of all available printed and written material and reports and interviews with school administrators, supervisors, teachers, pupils, and selected graduates of the schools was made to discover some of the attitudes, traits, or practices, and offerings of the school system.

At that time there were 13 schools:

1 Senior High School - grades 10, 11, and 12

3 Junior High Schools - grades 7, 8, and 9

1 Junior High Industrial Arts section of the  
Junior High School

8 Elementary Schools

Total enrollment in 1936-1937 was 6979.

The average cost per pupil in average membership for the same year was \$94.92.

The average teacher-pupil load in this year was 29.4.

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<sup>1</sup>Rothney, John M. W., and Roens, Bert A., Guidance of American Youth, Harvard-University Press, Cambridge, 1950.

The Teacher-Pupil Load of the Arlington Schools in 1936 and 1937 was as follows:

	Number Pupils#	Number Teachers	Teacher Pupil Load
Senior High School	1619.3	61	26.5
Junior High School-1	604.4	20	30.2
Junior High School-2	420.4	14	30.1
Junior High School-3	740.4	24	30.9
Junior High School-I.A.	72.2	4	18.1
Elementary Schools	3500.4	113	30.9 <sup>x</sup>
	<u>6957.2</u>		

# Figures in this column represent average membership for the school year.

<sup>x</sup> Average

Although the size of a class may have little significant influence on educational efficiency, it is obvious the smaller the class the better acquainted the teacher can become with the abilities and personalities of her students. Class size, therefore, cannot be overlooked if we expect teachers to take an active part in the responsibility of educational and vocational guidance.

The chief criticism of the program of studies at this time was the undue importance given to the college and commercial courses.

No regular procedure existed for following up the students who went to work immediately after school, and, therefore, no evidence was available concerning the effectiveness of the instruction which had been provided for the business education pupils.

The facilities and equipment available for the teaching of the business curriculum subjects is an important factor in this study.

At the time of this study, all business subjects were taught in the same section of the high school building. Three typewriting rooms were contiguous to each other, and each contained 36 tables and 36 typewriters. Underwood, Remington, Royal, and L. C. Smith machines were used in the typewriting classes. Eight other rooms were used exclusively by the business department. Cabinets and large bulletin boards were found in each room, together with plenty of blackboard space.

The machine practice room contained the following equipment at the time of the study:

- 15 Comptometers
- 15 Burroughs Calculators
- 1 Ediphone
- 2 Mimeograph machines (Edison Dick) No. 435
- 2 Rexograph (liquid duplicator) machines
- 1 Munroe Calculator, electric, large
- 1 Burroughs Billing Machine
- 1 I B M electric typewriter
- 5 typewriters, manual

The accounting room contained at the same time:

- 1 Sundstrand calculator, manually operated
- 2 Remington calculators, electric
- 1 Burroughs Adding machine, electric

Auxiliary teaching aids included one 16 mm. Bell and Howell Projector; one 16 mm. Revere Projector; one slide and film-strip projector; one wire recorder, and a public address system with radio reception for outside programs that might be relayed to any or all of the rooms in the building.

The survey conducted annually by the guidance department of the high school includes the graduates of all curriculums, college,

general, vocational, and business. For seven years the guidance department was able to make a 100 per cent contact with the members of the June class.

The following tabulation provides a comparison of the classes for a seven year period:

	Class of 1944 (%)	Class of 1945 (%)	Class of 1946 (%)	Class of 1947 (%)	Class of 1948 (%)	Class of 1949 (%)	Class of 1950 (%)
Employed	40.4	35.1	39.9	40.7	41.2	40.6	46.6
Further Education	32.4	41.1	41.5	53.3	51.8	53.6	47.6
Armed Services	26.3	21.0	15.5	3.0	5.2	3.0	3.8
Miscellaneous	<u>.9</u>	<u>2.8</u>	<u>3.1</u>	<u>3.0</u>	<u>1.8</u>	<u>2.8</u>	<u>2.0</u>
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0

From the tabulation of the above returns the record on the following pages was made. The tabulations on the nine pages which follow show the status of the graduates of all curriculums, the distribution of the graduates of all curriculums in institutions of higher learning, and the employment distribution of the graduates of all curriculums within four months of the date of graduation from high school, for each of the four years covered by the study of the graduates of the business education department, 1947, 1948, 1949, and 1950.

FOLLOW-UP STUDY OF GRADUATES OF  
ALL CURRICULUMS

CLASS OF 1947

	Per Cent	Num- ber	Per Cent
<u>Further Education (Full-time).....</u>	53.3		
Colleges and Universities		127	27.4
Business Schools		44	9.5
Miscellaneous Schools		22	4.8
Preparatory Schools		16	3.4
Post Graduates		15	3.2
Junior Colleges		13	2.8
Nursing		10	2.2
<u>Employed.....</u>	40.7	189	40.7
Unemployed		8	1.7
<u>Armed Services.....</u>	3.0		
Army		7	1.5
Navy		3	.6
Marines		4	.9
<u>Miscellaneous.....</u>	1.3		
At Home		2	.4
Married		4	.9
<b>TOTALS</b>		464	100.0
 <u>Supplementary</u>			
Number of those employed who are taking part-time education	24		12.7 per cent of total employed
Number of students taking full or part-time education	271		58.4 per cent of total class

EMPLOYMENT DISTRIBUTION OF GRADUATES  
OF ALL CURRICULUMS

CLASS OF 1947

General Clerical Workers	38
Store Clerks	23
Stenographers	16
Machine Operators	15
Bookkeepers	11
Factory Workers	11
Typists	11
File Clerks	8
Shippers	7
Messengers	5
Gardeners	5
Billing Clerks	4
Telephone Operators	4
Truck Drivers	4
Apprentice Electricians	2
Carpenters	2
Cooks	2
Library Assistants	2
Mechanics	2
Receptionists	2
Seamstresses	2
Apprentice Linotype Operator	1
Art Worker	1
Confectioner	1
Dairy Worker	1
Dental Assistant	1
Florist	1
Nurse	1
Janitor	1
Lens Maker	1
Mason's Helper	1
Photographer	1
Refrigerator Repairman	1
Sprinkler Fitter	1

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FOLLOW-UP STUDY  
OF GRADUATES OF ALL CURRICULUMS

CLASS OF 1948

	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u> <u>Boys</u>	<u>No.</u> <u>Girls</u>
<u>Further Education (Full-Time)</u> .....	51.8				
Colleges and Universities		117	25.4	50	67
Business Schools		43	9.3	6	37
Preparatory Schools		22	4.7	22	--
Post Graduates		18	3.9	15	3
Nursing		11	2.4	--	11
Jr. Colleges		7	1.5	--	7
Miscellaneous		21	4.6	12	9
<u>Employed</u> .....	41.2	190	41.2	91	99
Unemployed		2	.4	2	--
<u>Armed Services</u> .....	5.2				
Army		10	2.2	10	--
Navy		13	2.8	13	--
Marines		1	.2	1	--
<u>Miscellaneous</u> .....	1.4				
At Home		3	.7	--	3
Married		3	.7	--	3
Total		461	100.0	222	239

Supplementary

No. of those employed who are taking part-time education... 20	10.5 per cent of total employed
No. of students taking full or part-time education.....259	56.2 per cent of total class

EMPLOYMENT DISTRIBUTION  
OF  
GRADUATES OF ALL CURRICULUMS

October 1948

General Office Workers	34
Office Machine Operators	22
Store Clerks	21
Stenographers	10
Bookkeepers	9
Laborers	9
Typists	8
Shippers	7
Stock Clerks	6
Truck Drivers	5
File Clerks	4
Messengers	4
Pressmen's Helpers	4
Telephone Operators	4
Apprentice Electricians	3
Gardeners	3
Apprentices	2
Apprentice Plumbers	2
Cabinet Makers	2
Cashiers	2
Mechanics	2
Seamstresses	2
Weather Researchers	2
Apprentice Cutter	1
Apprentice - Fur Business	1
Assistant Engineer	1
Auto Painter	1
Baker's Helper	1
Cab Driver	1
Dancing Teacher	1
Dental Assistant	1
Draftsman	1
Factory Worker	1
Fireman	1
Gas Station Attendant	1
Letter Carrier	1
Locker Room Steward	1
Machinist's Apprentice	1
Meat Cutter	1
Office Boy	1
Packer	1
Painter	1
Pin Boy	1
Psychiatric Aid	1
Receptionist	1
Time Keeper	1

FOLLOW-UP STUDY  
OF GRADUATES OF ALL CURRICULUMS

Class of 1949

	<u>Per Cent</u>	<u>Number</u>	<u>Per Cent</u>	<u>No. Boys</u>	<u>No. Girls</u>
<u>Further Education (Full time)</u>	53.6				
Colleges and Universities	14.4	31.2	92	52	
Business Schools	4.0	8.7	6	34	
Preparatory Schools	2.2	4.8	22	--	
Post Graduates	1.2	2.6	11	1	
Nursing	.7	1.5	--	7	
Junior Colleges	.4	.9	--	4	
Miscellaneous	1.8	3.9	14	4	
<u>Employed</u>	40.6	187	40.6	82	105
Unemployed	1.7	8	1.7	6	2
At home because of illness or other reason	1.1	5	1.1	2	3
<u>Armed Services</u>	3.0	14	3.0	14	-
Total	100.0	461	100.0	249	212
<u>Supplementary</u>					
Number of those employed who are taking part-time education	24	12.8	per cent of total employed		
Number of students taking full or part-time education	271	58.8	per cent of total class		

EMPLOYMENT DISTRIBUTION  
OF  
GRADUATES OF ALL CURRICULUMS

Class of 1949

General Office Workers	32
Office Machine Operators	23
Store Clerks	22
Typists	14
Stenographers	10
Messengers	7
Stock Clerks	7
Bookkeepers	7
Carpenters' Helpers	4
Construction Workers	4
File Clerks	4
Apprentice Printers	3
Draftsmen	3
Gardeners	3
Laundry Workers	3
Truck Drivers	3
Cashiers	2
Diet Kitchen Helpers	2
Factory Workers	2
Hospital Aides	2
Office Boys	2
Photographers	2
Sales Clerks - Office	2
Shipping Clerks	2
Waitresses	2
Advertising Assistant	1
Bricklayer's Helper	1
Bus Boy	1
Dental Assistant	1
Dental Technician	1
Elevator Operator	1
Interior Decorator	1
Mason	1
Parcel Post Clerk	1
Plumber's Helper	1
Porter	1
Poultry Farm Helper	1
Professional Ice Skater	1
Receptionist	1
Seamstress	1
Sheet Metal Worker	1
Taxi Driver	1
Telephone Operator	1
Teller	1
Waiter	1

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FOLLOW-UP STUDY  
OF GRADUATES OF ALL CURRICULUMS

Class of 1950

	<u>Per</u>	<u>Num-</u>	<u>Per</u>	<u>No.</u>	<u>No.</u>
	<u>Cent</u>	<u>ber</u>	<u>Cent</u>	<u>Boys</u>	<u>Girls</u>
<u>Further Education (Full time).....</u>	47.6				
Colleges and Universities	132	27.6	69	63	
Business Schools	27	5.6	8	19	
Junior Colleges	18	3.8	6	12	
Preparatory Schools	18	3.8	17	1	
Nursing	15	3.1	0	15	
Post Graduates	7	1.4	6	1	
Miscellaneous	11	2.3	10	1	
<u>Employed.....</u>	46.6	223	46.6	114	109
Unemployed	1.2	6	1.2	6	0
At home because of illness or other reason	.8	4	.8	0	4
<u>Armed Services.....</u>	3.8				
Army	9	1.9	8	1	
Navy	6	1.3	6	0	
Marines	3	.6	3	0	
Total		479	100.0	253	226

Supplementary

No. of those employed who are taking part-time education.... 23	10.3 per cent of total employed
No. of students taking full or part-time education.....251	52.4 per cent of total class

EMPLOYMENT DISTRIBUTION  
OF  
GRADUATES OF ALL CURRICULUMS

Class of 1950

General Office Workers	42
Retail Sales Clerks	24
Business Machine Operators	18
Stenographers	16
Stock Clerks	16
Auto Mechanics	10
Typists	6
Bookkeepers	5
Delivery Clerks	5
Factory Workers	5
File Clerks	5
Truck Drivers	5
Carpenters' Helpers	4
Cashiers	4
Machinists	4
Shipping Clerks	4
Telephone Operators	4
Messengers	4
Construction Workers	3
Office Boys	3
Printing Apprentices	3
Waiter and Waitresses	3
Diesel Mechanics' Helpers	2
Gas Station Attendants	2
Hospital Attendants	2
Laborers	2
Painters	2
Pin Boys	2
Platers	2
Plumbers' Apprentices	2
Radio and T. V. Servicemen	2
Receptionists	2
Apprentice Glazier	1
Bricklayer	1
Candy Packer	1
Cook	1
Gardener	1
Garment Cutter	1
Metal Worker	1
Photographer's Assistant	1
Repairman - Business Machines	1
Schedule Clerk	1
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## 1947-1950 GRADUATES ACCORDING TO CURRICULUMS TAKEN

Year	College Curriculums		General Curriculum		Vocational Curriculum		Business Curriculum		Total	
	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent
1947	220	47.4	106	22.8	--	--	138	29.8	464	100.
1948	192	41.6	141	30.6	6	1.3	122	26.5	461	100.
1949	203	43.	126	26.6	16	3.4	128	27.0	473	100.
1950	209	43.9	113	23.5	20	4.7	137	28.6	479	100.
Total	824	43.9	486	25.9	42	2.2	525	28.	1877	100.

Note: The college curriculums consist of College I, which averages about 23 per cent of the college group throughout the years; College II, which averages about 30 per cent of the college group throughout the years; and College III, which averages about 47 per cent of the college group throughout the years.

From the above table it will be noted that the business education department graduates average 28 per cent of the total graduates of the high school over the period of time covered by the study. In 1947, the highest per cent, 29.8, was graduated; the lowest was 26.5 per cent in the following year, 1948. The figures in this table show that the business education department graduates represent a good proportion of the graduates of the school.

## CHAPTER III

## REVIEW OF RELATED LITERATURE

Surveys and follow-up studies of graduates have been conducted in many communities throughout the country to determine the training needed for employment in business offices. A review of some of these studies is presented in this chapter as a background for the development of this study.

The studies to be reviewed have been confined to this section of the country in the belief that problems faced in various sections of the country differ in many instances. An attempt has been made to treat these studies in chronological order.

Walters<sup>1</sup> lists a number of surveys that have been conducted throughout the country, giving a brief summary of some of them. The first of these surveys mentioned was one conducted as early as 1914 in Boston, the area to be covered by the writer in his study. Walters has summarized the Boston study as follows:

One of the earliest investigations that attracted wide attention was that made by the Boston Chamber of Commerce in 1914. ("Report on Commercial Education to the Committee on Education," Special Report, Boston Chamber of Commerce, 1914.) This was one of several early studies that were made by businessmen's organizations rather than by educational authorities.

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<sup>1</sup>Walters, op. cit., p. 19

In this particular investigation, the facts were secured both from written testimony of individuals and from personal conferences with them. The vocational histories of 1165 employees were obtained. This was a comparatively small number considering the size of the city. Many employers, however, were unwilling to allow their employees to furnish the information desired. A large part of the investigation had to do with the wages of employees, a matter that is given comparatively small attention in more recent studies. It is probable that one of the reasons why employers were not more enthusiastic about the investigation was the fact that so much attention was given to the matter of wages.

Part of the investigation dealt with the high school subjects that had proved of value to employees. They were asked to state which six subjects had been of vocational use to them. The following table shows the number of times each of the subjects was named as having been of use:

Penmanship . . . . .	675
Arithmetic . . . . .	664
Bookkeeping . . . . .	446
Typewriting . . . . .	357
Shorthand . . . . .	221
Other subjects . . . . .	154

The fact that penmanship ranked first in 1914 is especially interesting considering the fact that the subject has been dropped from most high school courses in late years. On the other hand, recent surveys show that arithmetic which ranked second is still considered important.

A third of a century later, it is interesting to note the opinions expressed by about 20 executives in this section of the country in response to a questionnaire sent out in

connection with a talk given by James V. Toner<sup>1</sup>, President, Boston Edison Company, Boston, Massachusetts, before a group of teachers. Toner is a former high school business department teacher and professor of accounting at Boston University. His remarks are worth-while.

The following are a few of the sections of the questionnaire sent out by Toner and the responses received:

A. List in order of importance the subjects taught in the public schools which are most useful in your business.

The following is the summary of the responses:

1. English - (including spelling, penmanship, the ability to write and talk) was designated as first in order of importance in every answer.
2. Mathematics - (including arithmetic, rapid calculation, algebra, and geometry) was in second place in every answer.
3. Specific Skills - The great majority of the answers listed typing, shorthand, bookkeeping, filing, general clerical knowledge of business machines, and other specific skills, third in importance.
4. General Science - (Including physics and chemistry) was placed fourth in the answers.

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<sup>1</sup>Toner, James V., "The Executive Views Business," American Business Education, October, 1948, p. 21.

5. History - (including American, European, ancient, and industrial history) was mentioned in all of the answers, and was a close fifth in order of importance.

B. What are the five most important qualifications which you consider in selecting employees?

The following is the summary of the responses:

1. Character
2. Work habits
3. Health and personality
4. Basic education
5. Attitudes

C. What are the most common deficiencies noted in new employees coming directly from the schools?

These deficiencies were divided into two categories which were labeled "in preparation" and "in attitudes."

Deficiencies in preparation were summarized as:

1. Lack of ability to speak and write good English, including lack of ability to spell words properly.
2. Lack of ability in handling problems of simple arithmetic.
3. Lack of accuracy.
4. Poor work habits.

Defects in attitudes as set forth in the answers in the order of times mentioned are:

1. Lack of sense of responsibility
2. Lack of self-discipline
3. Indifference and poor attendance
4. Lack of respect for superiors
5. Lack of industry, enthusiasm, interest and loyalty
6. Unwillingness to study as a requisite for promotion

D. What suggestions would you make that would tend to improve the effectiveness of the schools in educating students for business?

The answers to this question were varied but were summed up in this manner.

1. Stress the fact that promotions in business are based upon ability to deliver the goods.
2. Think more the day's work than of the pay check.
3. More intensive courses in filing.
4. Closer integration between school authorities and business.
5. Factual concepts as to fair play between employer and employee.

Other studies in this chapter consist of those made by individuals and, with the exception of one study, have been made within an employment area that includes Boston and communities within a radius of 50 miles from Boston.

A survey that was directed to a selected group of businessmen, 60 in number, throughout the country was one

conducted by Carlson<sup>1</sup> to get the reactions of the businessmen relative to the employability of high school graduates. This questionnaire was carried out by means of the questionnaire and interview techniques. Carlson summarizes the findings as follows:

From the results of this tabulation it was surprising to note that the requirements for shorthand and typewriting proficiency were not unusually high. Shorthand requirements in these 60 firms varied from 90 to 110 words per minute for five minute dictation, a rate which shorthand teachers would consider only moderate speed for an advanced student. The requirements in typewriting, ranging from 40 to 60 words per minute for a ten minute test, was likewise a reasonable requirement.

These businessmen generally agreed that the high school teachers were teaching shorthand and typewriting adequately enough, as far as speed was concerned. They added, however, that teachers were speed-conscious and failed to set their standards high enough.

They agreed emphatically that speed without accuracy is valueless.

Businessmen, according to the findings of the study, also considered that the following traits needed to be emphasized to a greater extent in high school: "Sense of responsibility, office manners, courtesy, attitude toward their work, and a greater desire to work and earn advancement."

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<sup>1</sup> Carlson, Gunhild A., "Reactions of Selected (60) Businessmen Relative to the Employability of High School Business Course Graduates," Master's Thesis, Boston University, 1946.

A follow-up study of the graduates of a business department was made by Hogan<sup>1</sup> for the purpose of evaluating the business curriculum and for making suggestions for improving the courses of study. In this study, 868 graduates were mailed questionnaires; 512 responses were received.

The follow-up was an attempt to determine:

1. How many graduates secured positions in the type of work for which they were trained?
2. What school subjects were most valuable to the graduates?
3. What difficulties were encountered by the graduates when first employed?
4. Can the business curriculum be revised more effectively to meet the needs of future students?

The study showed that the majority of those taking shorthand and bookkeeping in high school were successful in securing those jobs upon graduation. Those enrolled in the clerical divisions were not so successful. Most of the students in all the divisions were doing office work at the time of the study.

A small percentage of the graduates furthered their education after leaving high school; a majority of those attended school on a part-time basis, studying business subjects; those who supplemented their high school training with study in business schools were successful in securing office jobs.

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<sup>1</sup>Hogan, Katherine, "A Follow-up Study of the Commercial Graduates of 1943-1947 of the B. M. C. Durfee High School, Fall River, Massachusetts," Master's Thesis, Boston University, 1948, pp. 116.

Most jobs were obtained through relatives or friends, or by personal application. The school had placed very few of the graduates.

Over 80 per cent of the graduates reported that they had encountered no difficulties in their initial employment. Some of the difficulties encountered by the remaining 20 per cent were in connection with the operation of various office machines, payroll work, spelling, punctuation, business letter writing, and grammar.

The most frequently performed duties were typewriting, filing, and answering the telephone.

More than 80 per cent of the graduates worked part-time while in high school.

Recommendations for improving the business curriculum as a result of the findings were made and included more business English for business students, a course in business ethics, some payroll work in the bookkeeping course, a course in office machines for stenographic students, and a placement bureau for students and graduates. All students should take at least one year of typewriting and the clerical course should be revised.

A survey was made by Ryan<sup>1</sup> to determine which skills and abilities were most commonly used by high school graduates in beginning jobs; and whether in the opinion of the graduates school preparation was adequate for reasonably satisfactory

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<sup>1</sup>Ryan, Mary A., "A Job-Activity Analysis and Follow-Up Study of the 1946-1948 Business Department Graduates of Nashua High School, " Master's Thesis, Boston University, 1949.

job adjustment.

A data sheet and check list were sent to 150 graduates of the business department; 134 responses were received.

After the responses were analyzed and summarized, the following conclusions were drawn:

1. Duties and office activities of a general clerical nature far outnumbered the specialized type of activities such as stenographic and book-keeping activities, in both number and degree of frequencies.

2. Typing and filing activities were the most numerous and the most commonly advocated for school training by the graduates.

3. The office machines most frequently used by the graduates were the Burroughs Adding Machine, the Monroe Calculator, and the Comptometer. Addition was the most frequent calculation on the Comptometer.

4. Duplication machine operation was not a frequent requirement of beginning jobs, although major emphasis was placed on this type of preparation in high school.

5. Answering the telephone, meeting callers, office housekeeping, and composing letters at the typewriter were activities frequently performed, although these did not receive major emphasis in the high school. The high school should provide training in these activities in the opinion of a majority of the graduates.

6. Employment was obtained in a wide variety of offices and business concerns although manufacturing types of businesses and large offices employed the greatest number of graduates.

7. Very few responses indicated that office activities tend to be specialized in the local community.

On the basis of the findings recommendations were made for improving the business education curriculum.

Noonan<sup>1</sup> made a follow-up study to determine how well the existing business curriculum had prepared the graduates to meet the requirements of business, and to obtain data which might be helpful in improving the business education program.

The questionnaire technique was used in this follow-up, 225 replies being received from 438 graduates, which represented a 51.3 per cent response.

The findings indicated that the business curriculum had prepared the graduates in the skills and abilities required to meet the demands of business in the beginning jobs. The majority were engaged in types of work for which they had been prepared.

Over one-third of those responding, 36.4 per cent, had sought either part-time or full-time advanced training in business.

A majority obtained jobs immediately upon graduation. The high school was instrumental in placing 38.1 per cent of the graduates; 28.3 per cent obtained their first positions through friends or relatives. Only a small percentage were required to take tests in order to secure their initial positions. About 20 per cent of those who worked in offices took dictation; 80 per cent spent some time daily in typewriting

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<sup>1</sup>Noonan, Mary M., "A Follow-up Study of the 1946 and 1947 Business Graduates of the X High School," Master's Thesis, Boston University, 1949, 47 pp.

activities. Almost 25 per cent performed bookkeeping activities; only one person carried out the complete bookkeeping cycle as assistant to the head bookkeeper. About 75 per cent spent some time in filing activities, the alphabetic and numeric systems predominating.

The adding machine was the most frequently used business machine next to the typewriter.

The three business subjects which proved to be of most value were typewriting, shorthand, and machine accounting. Others standing high on the list were arithmetic, bookkeeping, and filing.

Fourteen received training on the job that could have been received in school.

More adequate occupational information was the predominant suggestion of a large majority of the graduates. Other suggestions for improving the courses included more spelling, punctuation, and vocabulary training; more typing; a course in office procedures; more modern office machine equipment with more training on the machines.

On the basis of the findings it was recommended that a course in business ethics and manners, more business English, a separate course in transcription, and more time given to actual office procedures be provided. Further, provision for more specialization in stenography, bookkeeping, and the general clerical fields was an additional recommendation in the report.

The study made by McCrillis<sup>1</sup> was of the office practice graduates of the Laconia High School and of the opinions of a number of businessmen in the same area regarding the effectiveness of the training provided by the business department of the Laconia High School. This was an attempt to determine whether the graduates were using the skills and abilities the school tried to develop.

A questionnaire was sent to 133 graduates of the business course covering the years 1942-1946, and 120 completed responses were received. Forty-five businessmen were interviewed. A personal interview was used for the businessmen located in the community, and a questionnaire was sent to those outside the community. The questionnaire was completed by 41.

The results indicated that generally the beginning graduates were meeting the needs of business and that the business curriculum was adequate for training beginning workers. Many employers felt that added emphasis on the techniques of handling telephone calls was desirable. More training in simple mathematics and on business machines in connection with mathematical processes was needed. The skills and abilities which the school was teaching were being used.

Recommendations made as a result of the study were:

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<sup>1</sup>McCrillis, Ernestine A., "A One-Year Follow-up of the Office Practice Graduates of Laconia High School," Master's Thesis, Boston University, 1948, 56 pp.

1. Course in personal development should be taught. Demonstration used rather than reading assignments to adequately educate.
2. Actual telephone equipment needed where real situations could be set up. Skill and ease could be acquired through frequent practice and remedial work.
3. Additional calculating machines needed. Present equipment wholly inadequate for proper instruction and practice.
4. Rearrangement of parts of schedule to permit some students to take college English and secretarial practice simultaneously.
5. Pupils placed in courses compatible with aptitudes and interests, helped and guided in fields where their interests, aptitudes, and past performances indicated they can expect some success.

The study made by Sullivan<sup>1</sup> pertained to the co-operative and non-co-operative retailing courses given at Lowell High School. This study was interesting and important from the viewpoint of its timeliness in this area and the value which the results of the study might indicate with reference to the problem at Arlington High School.

In the study made by Sullivan, a check-list was used and sent to 219 graduates. Responses were received from 132. The information resulting from the survey was tabulated and evaluated for both the co-operative group and the non-cooperative group. The findings and recommendations resulting included:

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<sup>1</sup>Sullivan, Edward J., "A Study of the Effectiveness of the Retail Training at Lowell High School Through a Follow-up Study of the Graduates," Master's Thesis, Boston University, 1950, 111 pp.

1. That a more scientific selection of students for the course be instituted, selection to be based on interest in, aptitude for, and ability to profit from the study.
2. That a community survey be conducted to determine job opportunities in retailing and the extent to which merchants would co-operate in an expanded co-operative retail selling program.
3. Separate program for boys and girls; a homogeneous grouping of students in 11th and 12th year.
4. That non-co-operative course be used as a basic course in preparation for the co-operative course in 12th year; that it serve as an alternate course in 12th year; and that it be made more vocational in character.
5. That additional equipment in the form of cash registers and audio-visual equipment should be provided.

A rather comprehensive study was made by Thatcher<sup>1</sup> which consisted of a job-activity analysis and follow-up study, much along the line of the study made by Ryan, to determine the activities and duties most frequently performed by office workers and to determine the effectiveness of the business education program then in effect.

A number of subordinate problems were considered and information was obtained for the purpose of clarifying the major problem.

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<sup>1</sup>Thatcher, Carolyn A., "A Job-Activity Analysis and Follow-up Study of 1947, and 1948, and 1949 Graduates of the Business Department of Gardner High School, Gardner, Massachusetts," Master's Thesis, Boston University, 1950, 78 pp.

The questionnaire technique of research was used by the author in making the study. A data sheet and check list were sent to 157 business education graduates. The data sheet was used to obtain information necessary to analyze the problem; the check list, for the purpose of determining the relative frequency of performance of job activities. A total of 89 activities was contained in the check list, divided among such major activities as typewriting, bookkeeping, stenography, office machines, filing, and general office activities.

A high percentage of replies was received, 151 responses, equalling 96 per cent. The responses were tabulated, analyzed, and the following conclusions were made after the returns were summarized:

- 76.0 per cent were doing office work at the time of the study
- 49.6 per cent of those doing office work secured employment before graduation
- 47.8 per cent secured employment within six months
- 2.6 per cent secured employment within a year
- 37.0 per cent obtained their first job through the school
- 78.0 per cent were with the original employer
- 9.0 per cent secured additional business training

A large percentage (87 per cent to 97 per cent of each class) felt high school business training was adequate for success on the job.

There was unanimity in the desire for school placement service beyond the initial job.

28.0 per cent suggested changes or improvements in the business course as offered. The two suggestions which outranked all others were: more machine training; more practice in shorthand, dictation, transcription.

The recommendations suggested for revision of the business curriculum were as follows:

1. Typewriting teachers should plan content of typewriting courses to develop skill in performing typing activities most frequently performed by office workers. Ability to compose at typewriter should be developed early in course so students will be proficient by graduation. Typewriting department should have at least one electric typewriter with which to become acquainted.
2. Two years of bookkeeping should be sufficient to provide students with thorough knowledge of bookkeeping cycle and develop adequate skill in performing bookkeeping activities on the job. One year of bookkeeping for clerical workers.
3. Stenographic course little or no revision. Since school has commenced teaching the new Gregg Shorthand Simplified, more time will be available to develop greater skill in taking dictation and transcription. Only those showing marked ability should be encouraged to continue--others should take the clerical practice course.
4. Filing ranked highest in total frequency. More training should be offered in this area. A clerical practice course should be organized for the 12th grade including instruction in filing and general office activities and drill in arithmetic.
5. Separate office machine laboratory. More students should be encouraged to take advantage of the opportunity of learning these activities.

## CHAPTER IV

## METHOD OF PROCEDURE

Many factors were considered before determining the methods to be followed in making this study. The purpose of the study, the size of the school, the number of graduates of the business department, the employment area, and the results of previous studies made in this vicinity were taken into consideration in developing the procedures.

The procedures followed in developing the study were:

1. Permission was obtained from the superintendent of schools and the principal of the high school to use the records of the school. The assistance and co-operation of the director of guidance and the personnel of the guidance department were obtained, and the records of former studies made by the guidance department were used.

2. A number of studies made in recent years were reviewed and abstracted to furnish a background for this study. These included monographs, theses, and reports of studies made in this region.

3. With the objectives of the study in mind, a questionnaire and check list were prepared. An attempt was made to keep the questionnaire as simple as possible. For reasons

of simplicity, and as a psychological measure, the questionnaire was called a survey report.

4. After the questionnaire was constructed it was tried out on a number of graduates for the purpose of determining weaknesses in the instrument. The questionnaire was then revised and presented to a seminar in business education for further suggestions, and was then mimeographed.

5. A letter of transmittal was prepared to send with the questionnaire.

6. A list of the graduates was compiled. The program cards of the 1950 graduates were used, and the permanent record cards of the graduates of previous years were used.

7. The survey report form was sent to 525 graduates of the business education department. No follow-up postal card or letter was used because of the high response received from the graduates. However, a few telephone calls were made to those graduates of the class of 1950.

8. The data received weretabulated and analyzed. The form for tabulating the information had been set up before the questionnaire had been sent out.

9. The letter of transmittal and questionnaire were sent to a group of 120 employers, the names of whom were obtained

from the responses of the graduates. A follow-up letter was sent to the employers.

10. The data were summarized, conclusions were drawn on the basis of the findings, and recommendations were made.

## CHAPTER V

## ANALYSIS OF INFORMATION

The survey report was used to obtain information relative to the type of work which the graduates were doing; the medium through which employment was secured; the duties which the graduates performed in the initial positions in which they were employed; the degree to which their high school training had been of value to them in the positions held since graduation; and the indications of job satisfaction, or job success as determined by the courses which they had taken in high school.

TABLE I

## RETURNS FROM SURVEY REPORT OF GRADUATES

Number Sent	Number Received	Per Cent of Returns
525	475	90.5

Table I shows that 475 graduates, or 90.5 per cent of the graduates over a four-year period, responded to the survey report. No time limits were set. The study covered a period of about four months. The reason for this was to obtain the essential information on the graduates of the classes of 1947, 1948

and 1949, and then to allow sufficient time for the graduates of the 1950 class to have the opportunity to obtain positions, further their education, or make some other choice.

TABLE II  
RESPONSE TO QUESTIONNAIRE BY CLASSES

Class	Number Sent	Number Received	Per Cent of Returns
1947	138	126	91.3
1948	122	102	83.6
1949	128	110	86.0
1950	137	137	100.0
Total	525	475	90.5
Percentage of Returns			

As shown in Table II, the graduates of the class of 1950 returned the greatest number of questionnaires. The greatest percentage of returns came from the same class. The response from each class was over 83 per cent. The unusually high response, 100 per cent, from the class of 1950 may be attributed to the briefing received before graduation and the telephone follow-up pursued to obtain this response.

Table III shows the status of the graduates who responded to the questionnaire. Seventy-three and one-half per cent were

TABLE III  
DISTRIBUTION OF GRADUATES ACCORDING TO STATUS AT TIME  
OF STUDY

Status	Number	Per Cent
Working full time	349	73.5
Attending school full time	72	15.1
Married	32	6.8
Nursing training	8	1.7
Military Service	9	1.9
Miscellaneous	5	1.0
Total	475	100.0

working full time. This is not a large percentage; however only three graduates, included under "Miscellaneous," were not working. As shown in the reports submitted by them, they had never worked because of sickness. The other two, included under "Miscellaneous," were in religious training.

Of the married group, numbering 32, seven had never worked. They were married within a few months after graduation. Some of the married group worked for a few months and others for nearly three years.

The classification "Attending school full time" includes all attending school on a full-time basis, except those attending nursing schools and those in religious orders.

A breakdown of the information contained in Table III showing the number of graduates and the percentages of the whole by year of graduation is given in Table IV.

TABLE IV  
DISTRIBUTION OF GRADUATES BY CLASSES  
ACCORDING TO STATUS AT TIME OF STUDY

Status	1947		1948		1949		1950	
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent
Working	100	79.4	72	70.0	80	72.2	97	70.8
Attending School	5	4.0	16	15.7	18	16.3	33	24.0
Married	17	13.5	7	7.1	6	5.5	2	1.5
* Miscellaneous	4	3.1	7	7.1	6	5.5	5	3.7
Total	126	100.0	102	100.0	110	100.0	137	100.0

\*As the number of graduates in "Nursing training" and "Military service" represented only a small per cent of the total, the two groups were merged under the heading of "Miscellaneous."

Of the relatively large number, 72, attending school at the time of the study, 33, or 24 per cent, were graduates of

the class of 1950. This per cent compares favorably with a yearly average of above 50 per cent for all graduates of the school for the years 1947 through 1950 as shown by the guidance department report in Chapter II of this study.

The five members of the class of 1947 attending school full time were pursuing four year collegiate courses in business.

The over-all average of 73.5 per cent working full time, as shown in Table III, is a low average for the responses received. This may in part be attributed to the high percentage attending school, and in part to the number who were married, 6.7 per cent of the total.

No attempt was made to tabulate figures on the number who had held full-time office jobs but at the time of the study were full-time students. Some did return to school after holding full-time office jobs. No effort was made to include those who had full-time office jobs and who were later married. The period of time worked before marriage was from a few months to over two years.

In order to determine the adequacy of the training in business being offered at the Arlington High School, the graduates were asked if they had obtained additional training in schools or colleges beyond high school. Table V indicates the numbers and percentages of those receiving additional training beyond high school. Of the total number of respondents, 151, or 31.8 per cent, had received training in educational institutions

beyond high school. The information is given by classes and shows the number receiving full-time and part-time training.

TABLE V  
RESPONDENTS WHO RECEIVED ADDITIONAL TRAINING  
AFTER HIGH SCHOOL

Class	Full-time Training	Part-time Training	Total By Years	Per Cent
1947	21	8	29	22.7
1948	33	7	40	39.0
1949	22	9	31	28.0
1950	37	14	51	37.2
Total	113	38	151	31.8

As shown in Table VI, 317 of the 349 respondents who were working were doing office-type work at the time of the study. Others were engaged in work not classified as office-type. Table VI indicates that a large percentage, 90.8 per cent, of the respondents who were working were engaged in the type of work for which they had been prepared in high school. Telephone operators were not included in the classification of office-type positions. Telephone operators were represented by 10 of the 32 graduates not engaged in office-type occupations. Others not engaged in office-type occupations included

those who were waitresses, hairdressers, printers, gas station attendants, packers, shippers, farmers, truck drivers, plumbers, and machine operators.

TABLE VI  
NUMBER DOING OFFICE WORK AT TIME OF STUDY

Occupation	Number	Per Cent
Office type jobs	317	90.8
Other jobs	32	9.2

Five additional respondents were girls, the remainder, 17, were boys. It might be noted here that the number of boys taking the business curriculums is very small. No boys take the stenographic curriculum. A few boys take the clerical curriculum, --one in 1950, one during the present year, and four during 1949. The largest number of boys takes the accounting curriculum. Very few of these take positions in office-type jobs upon graduation from high school.

As shown in Table VII, the greatest percentage doing office work was from the class of 1949, which indicates 93.75 per cent. The class of 1947 was next to the class of 1949, with 93 per cent. All classes show an average in excess of 88 per cent.

TABLE VII  
 NUMBER OF EACH CLASS DOING OFFICE OR CLERICAL WORK

Class	Number Working Full Time	Number Doing Office Work	Per Cent
1947	100	93	93.0
1948	72	63	87.5
1949	80	75	93.75
1950	97	86	88.65
Total	349	317	90.80

The 317 responses reported in Table VII as the number doing office work were tabulated to show the types of office jobs held by the graduates.

Table VIII shows the office-type occupations held by those graduates employed full time. The greatest number, 113, was employed as general office clerks. The titles of the positions used in Table VIII were in general taken from the titles submitted by the respondents as applied to the first jobs held after graduation.

Next in order, following initial employment as a general office clerk, the greatest number was employed as calculating machine operators. Thirty-eight respondents were employed as calculating machine operators. Stenographers were represented

by 33 respondents and were followed, according to the greatest number of respondents, by those employed as typists, file clerks, retail store clerks, billers, clerk receptionists, and messengers.

TABLE VIII  
OFFICE-TYPE OCCUPATIONS OF RESPONDENTS BY CLASSES

Occupation	1947	1948	1949	1950	Total
General Office clerk	28	15	25	45	113
Calculating Machine operator	11	14	8	5	38
Stenographer	15	6	1	11	33
Typist	4	4	6	4	18
File Clerk	3	1	4	5	13
Billor	5	1	4	2	12
Clerk-receptionist	3	3	2	2	10
Messenger or page	4	1	5	-	10
IBM Key Punch operator	-	2	2	3	7
Bookkeeper	4	3	-	-	7
Bookkeeping machine operator	1	3	2	-	6
Bank clerk	3	-	-	2	5
Stock clerk	1	-	2	2	5
Dictating machine operator	-	3	1	-	4
Reproduction operator	1	-	2	-	3
Cashier	1	-	1	1	3
Check teller	-	-	2	-	2
Mail clerk	1	1	-	-	2
Claims clerk	-	-	2	-	2
Parcel post tracer	1	-	1	-	2
Addressograph operator	-	-	-	1	1
Clerk-librarian	1	-	-	-	1
Payroll clerk	-	1	-	-	1
Audit clerk	-	-	1	-	1
Check sorter	-	1	-	-	1
Appraisal clerk	-	-	1	-	1
Parts manager	-	1	-	-	1
Budget interviewer	-	-	1	-	1
Salesman	-	1	-	-	1
Retail Sales Clerk	6	2	2	3	13
Total	93	63	75	86	317

TABLE IX  
 NUMBER OF DIFFERENT JOBS HELD BY 317 GRADUATES DOING  
 OFFICE-TYPE WORK

Number of Employers	Number of Respondents	Per Cent
1 Employer	287	90.5
2 Employers	24	7.6
3 Employers	5	1.6
6 Employers	1	.3
Total	317	100.0

Included in the survey report was the opportunity to indicate the number of different employers for whom the graduates had worked. The aim of this part of the survey was to determine the ability of the graduates to adapt themselves to the conditions of business.

Table IX shows that 90.5 per cent of 317 graduates employed in office-type positions at the time of the study were working with the original employer; 24, or 7.6 per cent, had one other employer; and 5, or 1.6 per cent, had two other employers. One girl had worked for six employers. Two of these positions were temporary positions held between more permanent jobs. The high percentage of graduates remaining with the original employer gives ample indication that the

graduates had adjusted satisfactorily to business, and that the employers were satisfied with the quality of work of the graduates.

The girl who held six positions was employed as a mail clerk, a general office clerk, an accounts-payable bookkeeper, and finally as a biller, a position which she has now held for a year. (Five of the positions were held within the period of one year.) It would appear that she might now have adapted herself in business. She was a graduate of the class of 1948.

A large number of those having had two employers were employed locally in their initial positions. Preferring employment in Boston was the reason given for the change.

From Table X it will be noted that a 32.4 per cent of the graduates were employed before graduation from high school. This may be attributed to two factors. Many students taking the business curriculums work part-time in offices during the afternoon after attending school. This work provides them with the opportunity to obtain practical business experience. Many of these positions are secured through the placement section of the school. Although these part-time jobs are not supervised directly by the school, a plan is in effect between the school and the employer, whereby the part-time worker must be an efficient office worker and at the same time show an above average record in school studies. Almost all this group is given employment permanently when graduated. This group, together with others of the

business department who are about to graduate, is provided with the opportunity for engaging in school-approved full-time employment in office positions beginning with the final school term, provided the average of their school grades for the year is "B" or better.

A number of students take advantage of this plan. Business concerns appear to approve of the plan, and the school placement bureau is able to provide the students with the experience necessary to adjust them to life in a business office.

TABLE X  
PERIOD OF TIME ELAPSING BETWEEN GRADUATION AND EMPLOYMENT

Employment Obtained	Number	Per Cent
Before graduation	113	32.4
Immediately upon graduation	138	39.5
Within one month	56	16.0
Within two months	17	5.0
Within four months	12	3.4
Within six months	4	1.2
Within one year	7	2.0
Other	2	.5
Total	349	100.0

Table X shows that 113, or 32.4 per cent, of the 349 respondents who were employed in all types of positions obtained

their first jobs before graduation; 71.9 per cent had obtained jobs immediately upon graduation, and 87 per cent had obtained employment within one month after graduation. Others did not desire employment until after the summer months, some attending school for several months before seeking their first jobs.

The information contained in Table X and that which follows in Table XI shows the effectiveness of the placement work done by the school. The graduates were asked to indicate the means

TABLE XI  
SOURCES FROM WHICH GRADUATES OBTAINED FIRST POSITIONS

How First Job Obtained	Number	Per Cent
School placement service	182	52.1
Relative or friend	76	21.9
Personal application to employer	56	16.0
Employment Agency	12	3.4
Newspaper ad	6	1.7
Other sources	17	4.9
Total	349	100.0

by which they obtained their first job. The figures tabulated in Table XI show that of the graduates employed in full-time positions, 182, or 52.1 per cent, obtained their first job through the school placement service. Relatives or friends aided in obtaining 76, or 21.9 per cent, of the initial jobs of the respondents. A small number obtained their initial job

through newspaper advertisements. The heading of "Other sources" referred to business schools, which obtained positions for some of the graduates after they had completed courses there.

TABLE XII  
NON-OFFICE TYPE OCCUPATIONS OF RESPONDENTS BY CLASSES

Occupation	1947	1948	1949	1950	Total
Telephone operator	1	4	1	4	10
Shipper	1	1	1	-	3
Truck driver	1	2	-	-	3
Waitress	-	-	-	2	2
Gas station attendant	-	-	-	2	2
Farmer	1	-	1	-	2
Chocolate dipper	-	-	-	1	1
Apprentice printer	-	-	-	1	1
Machine operator	-	-	-	1	1
Packer	1	-	-	-	1
Inside dairyman	1	-	-	-	1
Sprinkler fitter	1	-	-	-	1
Plumber	-	1	-	-	1
Hairdresser	-	1	-	-	1
Professional skater	-	-	1	-	1
Corsetiere	-	-	1	-	1
Total	7	9	5	11	32

Of the 349 responding to the survey and working at the time of the study, 32 were found to be employed in non-office type jobs as shown in Table VI.

In order to fully determine the value of the training provided by the business education department a tabulation of the occupations of these 32 was made in Table XII. A division was made as to classes: 11 of the number were graduated in the most recent class, 1950. The others were divided, five in the class

of 1949, nine in the class of 1948, and seven in the class of 1947. Sixteen of these were boys and sixteen were girls. Ten of the girls were employed as telephone operators, two as waitresses, one each as a chocolate dipper, a hairdresser, a professional skater, and a corsetiere. Two of the girls employed as telephone operators were graduates of the stenographic curriculum, two were graduates of the accounting curriculum, and six were graduates of the clerical training curriculum. The other six girls in non-office positions were graduates of the clerical training curriculum. The girl employed as a professional skater would not have received a salary as an office worker that she started with as a skater, \$75.00 per week and expenses.

Of the 16 boys employed in non-office type positions, 15 graduated from the accounting curriculum, and one from the clerical training curriculum.

TABLE XIII

## DISTRIBUTION OF GRADUATES AS TO TYPE OF BUSINESS CURRICULUM TAKEN

Curriculum	Number	Per Cent
Clerical training	288	54.86
Stenographic	162	30.86
Accounting	75	14.28
Total	525	100.00

To properly determine the value of the training provided by the business education department of the Arlington High School, a measurement of the effectiveness of this training as applied to the different business curriculums followed by the graduates was necessary. Table XIII shows the distribution of the graduates

for the period covered by the study for each of the three curriculums, the clerical training curriculum, the stenographic curriculum, and the accounting curriculum. The clerical training curriculum graduated 54.86 per cent of the total of 525 graduates, the stenographic curriculum 30.86 per cent, and the accounting curriculum 14.28 per cent.

These figures were broken down in Table XIV to show the distribution of the graduates for each of the three curriculums for the years covered by the study. In each of the four years, the clerical training curriculum graduated the largest number. In 1948, as shown by Table XIV, the number graduated from the clerical training curriculum was the highest. In 1948, about two-thirds of the graduates of the business education department were graduates of the clerical training curriculum.

TABLE XIV

DISTRIBUTION OF GRADUATES AS TO TYPE OF BUSINESS CURRICULUM  
TAKEN BY YEARS

Curriculum	1947	1948	1949	1950	Total
Clerical training	66	78	70	74	288
Stenographic	51	27	40	44	162
Accounting	21	17	18	19	75
Total	138	122	128	137	525

TABLE XV  
DISTRIBUTION OF GRADUATES OF BUSINESS CURRICULUMS BY SEX

Year	Curriculum					
	Clerical Boys	Training Girls	Stenographic Boys	Stenographic Girls	Accounting Boys	Accounting Girls
1947	8	58	0	51	14	7
1948	5	73	0	27	9	8
1949	7	63	0	40	12	6
1950	1	73	0	44	14	5
Total	21	267	0	162	49	26

A further subdivision of the graduates of the business education department was made as to the number of boys and the number of girls to determine whether the curriculums as taken were of equal value to the boys and girls.

Table XV shows the distribution of boys and girls by curriculums for each of the years covered by the study. The boys represented a small proportion of the graduates of the business education department, representing but 13.3 per cent of the total. The largest number of boys was graduated from the accounting curriculum where they outnumbered the girls about two to one. No boys were graduated from the stenographic curriculum, and 21 boys, or 30. per cent of the 70 boys, were graduated from the clerical-training curriculum. Forty-nine boys, or 70.0 per cent of the 70 boys, graduated from the accounting curriculum.

TABLE XVI  
 RESPONSES TO QUESTIONNAIRE BY BOYS, BY CLASSES, AND CURRICULUMS

Year	Number Sent		Number Received	
	Clerical Curriculum	Accounting Curriculum	Clerical Curriculum	Accounting Curriculum
1947	8	14	6	7
1948	5	9	3	6
1949	7	12	3	7
1950	1	14	1	14
Total	21	49	13	34

Table XVI shows a total of 70 questionnaires were sent to boys, 21 to graduates of the clerical-training curriculum and 49 to graduates of the accounting curriculum. No boys graduated from the stenographic curriculum. Thirteen of the 21 graduates of the clerical-training curriculum responded, and 34 of the 49 graduates of the accounting curriculum responded. A 100 per cent response was received from the 1950 graduates.

Table XVII shows the status of the boys graduating from the business curriculum. The purpose of this table was to indicate whether the training given by the business education department was of value to the boys.

Table XVII shows that of the 13 graduates of the clerical-training curriculum who responded, four were engaged in office-type positions. Two were engaged in non-office type positions,

five were in the military services, and two were attending higher schools of learning.

TABLE XVII

## STATUS OF BOYS GRADUATING FROM THE BUSINESS CURRICULUMS

Status	Clerical Curriculum	Accounting Curriculum
Office Type jobs	4	7
Non-office type jobs	2	14
School	2	12
Military service	5	1
Total	13	34

Three of the four graduates of the clerical-training curriculum who were working in office-type positions, were employed as bank clerks and one was employed as a general office clerk.

Table XVII shows that of the 34 graduates of the accounting curriculum responding, seven were engaged in office-type positions, 14 in non-office type positions, 12 were attending higher schools of learning studying accounting, and one was in military service. Of the seven graduates of the accounting curriculum employed in office-type work, one was employed as a parts manager in an automobile concern, three were employed as stock clerks, two were employed as sales clerks, and one as a cashier. No boys were employed in bookkeeping or accounting positions.

TABLE XVIII  
HIGH SCHOOL SUBJECTS OF MOST VALUE TO GRADUATES IN  
ORDER OF VALUE

Subject	First Choice	Second Choice	Third Choice	Fourth Choice	Fifth Choice	Total
Typewriting	103	108	49	26	20	306
English	64	54	57	45	12	232
Filing	25	44	52	39	22	182
Machine Practice	44	22	46	33	17	162
Bookkeeping	27	11	19	22	15	94
Clerical Training	9	26	27	25	2	89
Shorthand	29	28	12	5	3	77
Penmanship	5	16	18	16	12	67
Arithmetic	5	5	16	13	7	46
Business Law	1	0	5	12	17	35
Business Organization	0	0	8	2	4	14
Economics	0	1	2	7	3	13
Salesmanship	4	1	2	0	0	7
Economic Geography	0	0	3	2	2	7
Consumer Education	0	0	0	0	1	1
<b>Total</b>	<b>316</b>	<b>316</b>	<b>316</b>	<b>247</b>	<b>137</b>	<b>1332</b>

In order to determine the effectiveness of the training offered by the business education department, the respondents were asked to list in the order of importance the five subjects taken in high school that were of most value to them in the work they had done since leaving high school. Of the 475 responding to the survey, 316 answered this part of the questionnaire, the others leaving this section blank. Some of the respondents supplied but three choices.

Typewriting received the greatest total of choices, 306; the largest number of first choices, 103; and the largest

number of second choices, 108. English received the second greatest total of choices, 232; the second largest number of second, third, and fourth choices. The other subjects of most value following in the order of choice were filing, machine practice, bookkeeping, clerical training, shorthand, and penmanship. A total of 15 subjects was listed, consumer education receiving one choice as a fifth subject. Penmanship which received a total of 67 choices and arithmetic which received a total of 46 choices are taken in the subject listed as clerical training. No effort was made to include either penmanship or arithmetic with clerical training, which received a total of 89 choices because filing is also included as part of the subject matter of the course, clerical training. Filing is also studied in the stenographic curriculum as part of the subject matter of the course known as stenographic practice.

TABLE XIX

## HIGH SCHOOL SUBJECTS OF LEAST VALUE TO THE GRADUATE

Subject	First Choice	Second Choice	Third Choice	Fourth Choice	Fifth Choice	Total
History	62	32	19	10	2	125
Business Organization	16	19	9	19	8	71
Economic Geography	18	14	14	11	13	70
Economics	10	16	15	9	9	59
Business Law	9	9	9	19	5	51
Foods	13	8	12	5	5	43
Physical Education	6	6	15	5	2	34
Bookkeeping	5	8	11	3	6	33
Sewing	5	9	4	3	3	24
Machine Practice	6	8	4	2	2	22
Shorthand	7	4	5	1	4	21
Chorus	3	4	5	5	3	20
Typewriting	2	3	4	4	0	13
Home Management	1	1	2	2	2	8
Music	-	1	2	1	3	7
French	-	-	1	2	3	6
Algebra	-	1	1	1	2	5
Salesmanship	-	3	-	1	-	4
Spanish	-	-	1	1	2	4
Biology	-	-	-	1	2	3
Clerical Training	1	1	-	-	-	2
Art	-	-	1	1	-	2
Drawing	-	-	-	1	1	2
Nutrition	-	-	-	1	1	2
Total	164	147	134	108	78	631

Table XIX lists the subjects selected by the 475 responding to the survey as of least value to the graduates in their work since leaving high school. Although 316 submitted choices of subjects of most value to them, only 164 respondents submitted one or more choices of subjects of least value to them. A total of 24 subjects was submitted as being of little or no

value to the graduates responding. Ten of the subjects selected as of little or no value were business department subjects. English was not listed as a subject with this grouping. History was first by a sizable margin. History was selected by the largest number of respondents as of least value to them in their work. One hundred sixty-four graduates responded to this section of the survey; one hundred twenty-five chose history as of least value, 62 of the respondents listing the subject as their first choice.

Business organization was the second subject listed of least value, receiving 71 choices, and closely followed in third place by economic geography with a total of 70 choices. Other business subjects listed in the order of choice were economics with 59, business law with 51, bookkeeping with 33, machine practice with 22, shorthand with 21, typewriting with 13, salesmanship with 4, and clerical training with 2. Filing was the only business department subject not listed.

TABLE XX  
ADEQUACY OF SCHOOL TRAINING FOR JOBS HELD

Year	Training Adequate	Training Inadequate	No Answer	Total
1947	114	1	11	126
1948	81	2	19	102
1949	83	7	20	110
1950	116	4	17	137
Total	394	14	67	475

In answer to the question "Do you feel your high school preparation was adequate for success on jobs held since graduation?" Table XX shows that 39 $\frac{1}{4}$  answered "yes" and 11 $\frac{1}{4}$  answered "no." Sixty-seven did not answer the question. Of those answering the question, as shown by Table XX, a very large per cent indicated that the training they had received in high school was adequate for success. Only one graduate of the class of 1947, the group which had been out of school the longest, indicated that the training received was not adequate. The graduate offered no comment as to why her high school business course was not adequate. She attended business college for two years after graduating from high school.

The two graduates of the class of 1948 who indicated that their high school training was not adequate were boys who had graduated from the accounting curriculum; and were not doing the type of work for which they were trained in high school.

Of the seven who graduated in 1949, and who felt that their high school training was not adequate, three were girls who had graduated from the stenographic curriculum, and one was a girl who had graduated from the clerical-training curriculum. Two of the boys indicated that they were not doing the type of work for which they had been trained in high school, and the other boy indicated that

there was no future in the job which he held as a stock clerk. The three girls who had graduated from the stenographic curriculum felt they had no opportunity for advancement doing the type of work they were engaged in doing. The girl who had graduated from the clerical-training curriculum stated that she was not getting enough pay and did not like to work on Saturday. She was employed in the office of a large department store in Boston.

Seventeen of the graduates of the class of 1950 who responded, did not answer the question as to adequacy of the high school training received. One of this number, a girl, was in the military service as a WAF; one was married shortly after graduation; two were working in office-type positions; and the others were full-time students. One of the latter group was studying to be a nurse and wrote, "I am studying for something I never intended to do." One girl answered "yes" and "no." Her answer was listed as "no." She is employed in an office position as a clerk and cashier. Three girls answered "no" to the question. Two are attending school, one, a business school, and the other, a four-year college for business training. The third girl to give a "no" answer is a graduate of the stenographic curriculum who began work a month before graduation in a position obtained for her by the school placement service. She has had

a promotion from an initial position as file clerk to stenographer. She is attending business school part time.

As part of the study, an opportunity was provided the respondents to list any subjects not taken in high school for which they later found a need. Table XXI shows the subjects indicated by the respondents by classes. No subjects were listed by the class of 1947. Shorthand topped the list with nine; bookkeeping, machine practice and spelling followed with four each; filing, English, and languages came next, with three each. A total of nineteen subjects was listed. The high school offers appropriate courses in all but five of this number--anatomy, banking, meeting the public, office procedures, and human relationships. Two of the five subjects listed, office procedures and meeting the public, are included as part of the subject matter in the clerical training course and the stenographic practice course. The other 14 subjects listed are offered by the high school, but may not have been taken by the respondents, or the respondents may have taken one year of the subject rather than two or three years, for example, shorthand or bookkeeping.

An opportunity was provided for the graduates to make any suggestions they believed would help improve the business education department in the high school, based upon their work

TABLE XXI

SUBJECTS WHICH STUDENTS WISHED THEY HAD TAKEN  
OR WHICH THEY FELT SHOULD HAVE BEEN STRESSED

Subject	1947	1948	1949	1950	Total
Shorthand	-	2	2	5	9
Bookkeeping	-	2	1	1	4
Machine practice	-	2	1	1	4
Spelling	-	1	-	3	4
English	-	-	1	2	3
Filing	-	-	-	3	3
Languages	-	-	-	3	3
Office procedure	-	-	1	1	2
Typewriting III	-	-	1	1	2
Anatomy	-	-	-	1	1
Banking	-	-	-	1	1
Biology	-	-	-	1	1
Cooking	-	-	-	1	1
Dictaphone	-	-	-	1	1
Human Relationships	-	-	-	1	1
Mathematics	-	-	-	1	1
Meeting the public	-	-	-	1	1
Permanship	-	-	-	1	1
Salesmanship	-	-	-	1	1

experiences in business. The suggestions made were rather general and varied in their nature. These suggestions did not fall into any specific groups. Some of the suggestions overlapped with the subjects listed in Table XXI or were repeated by the respondents. The suggestions were noted but not compiled in any table. They are quoted here to give an indication of the improvements the respondents believed would be beneficial.

"Require bookkeeping in senior year with the stenographic course."

"I think that students who take the business course have

to take a lot of unnecessary subjects."

"The English course should be related more to accounting. During high school the English class was to me a 75 per cent loss. Fundamentals of English should be stressed more than English literature."

"Boys should be allowed to take stenography. If there are no teachers in the high school at present who will teach boys as well as girls, something ought to be done about it."

"I think all students should take college English. Business English was inadequate."

"English and spelling should be stressed more in the business course."

"More time should be devoted to speed dictation in the shorthand classes."

"Students should have more actual office practice. They should be allowed to go out to work for two weeks and then return to classes for two weeks, and alternate during part of the school year."

"Less stress should be placed on the difficulties of holding a position and more on the pleasantness and satisfaction of knowing you can do a job well if you work hard at it."

"More time should be spent on things pertaining only to business subjects, thus assuring the student of a foundation for work in business after high school."

"More mathematics should be given with the accounting course."

"Special courses in banking should be offered. A large number of the graduates of the business department go to work in banks after they finish school."

"The secretarial course students should have penmanship as well as the clerical course students."

"Each student should have the opportunity to work in offices to adjust and adapt themselves to office work before graduation."

"The use of billing machines and interest tables should be required as part of the subject matter taught."

The few other comments or suggestions which were made were of the nature of those listed above. Some comments were criticisms of teachers and were disregarded. One suggestion seemed to stand out. Seven respondents suggested that a co-operative training program would be very helpful.

A large number stated they had no suggestion to make to improve the course and then made statements of which the following is typical. "No, I think Arlington High School has an excellent business education program. I know almost all business offices rate Arlington High very highly. I know that my training in comptometer is an example. If I hadn't taken this in high school I would have had to go to a school

to learn it for my work. At work here, all the girls were so surprised that I didn't have to go on to a business school to learn it."

To determine whether the graduates of the business education department of the Arlington High School were making satisfactory occupational adjustments, a letter and questionnaire was sent to the employers of these graduates. It was believed that the comments of the employers of these graduates would be very helpful in improving the quality of the training given in the business education department of the school. The names of the employers were obtained from the survey report form submitted by the graduates who responded to the survey report and who were employed, or had been employed and left employment to get married, return to school, accept another position, or who had for miscellaneous reasons severed connection with an employer.

Letters were sent to 120 employers of graduates working in office-type positions. Responses were received from 108 employers. A follow-up letter was sent to those employers who had not answered the original communication. As a result, seven additional returns were received, making a total of 115 responses, or 96 per cent, as shown by Table XXII. The response was excellent.

TABLE XXII  
 RETURNS FROM QUESTIONNAIRE TO EMPLOYERS

Number Sent	Number of Responses	Per Cent of Returns
120	115	95.83

The response indicated that businessmen and women appreciate the interest taken in the young men and women graduates, and, further, that these employers are anxious to co-operate with the schools.

A typical opinion was expressed by a personnel director of one of the large local insurance companies who wrote, "We are always glad to co-operate with you and your staff and feel very keenly that only by frank discussion of our mutual problems can we expect the school to send us young ladies who have training in clerical skills, and a desire to learn and perform their job well."

The following remarks from the personnel director of a large hospital employing several of the graduates also indicated his interest in the study: "I am particularly impressed with your follow-up work of your graduates. I am new in Massachusetts and it is rather gratifying to receive a contact such as this so early in my orientation period."

The nature of the questions was such that the responses required comment rather than a "yes" or "no" answer, or a check mark.

In answer to the question as to whether the young graduates were satisfactory workers. Table XXIII indicates that 100 per cent of the employers indicated that the graduates of Arlington High School were satisfactory employees.

TABLE XXIII

## EMPLOYER INDICATION OF WORKER SATISFACTION

Number of Employers	Satisfactory Workers	Unsatisfactory Workers	Per Cent
115	115	0	100

On the basis of replies, it may be assumed that the business education department graduates of the school are satisfactory employees. In many of the letters the employers expressed an opinion similar to that of the assistant-treasurer of a large publishing house who wrote: "Miss \_\_\_\_\_ came to us directly from your school in 1949 and quickly fitted into our work. At present she is maintaining a complex and efficient internal cost control system covering a hundred different production operations. We have found her most efficient and co-operative, and she has assumed and faithfully carried on highly responsible duties for us. This speaks well not only for her character and ability, but for the quality of your school, and we are happy to let you know this."

Another typical letter, referring to a graduate of the business education department from the class of 1947, was "I

think in this particular case that if we have positions open we would like nothing better than to have pupils of her type and ability to fill our positions. She is well-trained, of good character, and a very desirable employee." The letter was received from the office manager of a large specialty store in the retail shoe trade.

TABLE XXIV  
EMPLOYER INDICATION OF SKILLS POSSESSED BY GRADUATES  
OF ARLINGTON HIGH SCHOOL

Number of Employers	Having Essential Skills	Not Having Essential Skills
115	109	6

In answer to the question, "Do our pupils have the skills, knowledges, and attitudes you expect?", the responses indicated that the graduates of the business education department of the Arlington High School have the skills expected in typewriting, shorthand, filing, bookkeeping, and business machine operation; the knowledges of office procedures expected; and the necessary attitudes and personality traits expected by businessmen and business women.

Table XXIII showed that 115 businessmen indicated that the graduates were satisfactory workers. Table XXIV indicates that six of the graduates did not possess the necessary skills, and knowledges, however. In preparing the table, it was felt

that the comments offered by the respondents would indicate that there were some discrepancies. Two of the respondents indicated deficiencies in spelling. The remarks applied to the same girl who had worked for each of the respondents.

One employer wrote that improvement was needed in penmanship; one, that workers could be more accurate, a common deficiency; one, that workers lack experience in answering the telephone; and one indicated deficiencies in grammar and punctuation.

Comments by employers on the deficiencies noted above were, "ability to spell should be keen--girls admit they could be more proficient in spelling. This aspect of scholastic training could very well be given more serious consideration." And, "Although we find no fault with her work as a high school graduate, our suggestion regarding pupil training is that more stress should be given to the subject of English (spelling and grammar)."

In answer to the question as to how the business education graduates of the Arlington High School could become better employees, employers were in agreement on two major areas for improvement. They did not refer to Arlington High School graduates in particular, but to office workers in general. Five employers urged more emphasis on grammar, punctuation, and spelling. The other area suggested for improvement was the need for punctuality and good attendance records. Five employers

emphasized the need for punctuality and good attendance.

A letter from the secretary of a large educational institution employing a number of Arlington High School graduates is quoted as illustrating a type of suggestion received from an employer as to how the high school could provide better employees. "May I take this opportunity to say that our experience in the past with Arlington High School graduates has been consistently good. They seem to have a thorough training in their particular skills, and their attitude toward their work and their responsibility to the group with which they are connected and the school is good. There is one general skill I would like to have training on which probably would have to start before high school. How can we train these young people to read aloud with accuracy and intelligence? We have a great deal of reading back of manuscripts and frankly it's a good many years since we have had a girl who is able to do this part of her work well. I give this thought to you at this time for what it is worth."

The assistant manager of an insurance company office wrote as follows with regard to punctuality. "Two suggestions have come to my attention. The first is to stress the need for punctuality. To us, tardiness seems inexcusable, and is the sign a good many times of an otherwise careless, inefficient employee--and continued delinquency in that respect does make a very unfavorable impression on employers.

"The second point that needs emphasizing to the current crop of applicants is that they are not doing a company a favor to work for it. It is a 50-50 proposition. The applicant promises to give his services in return for the salary the company contracts to pay . . . . . So many of the younger fry appear to feel that they are doing us a favor to be present during office hours and do resent, in varying degrees, being expected to apply themselves to the task at hand with maximum diligence."

A total of 16 employers made comments, the six other employers' suggestions were: "all should take shorthand," "help over initial stages or process or adjustment," "more responsibility needed, develop greater interest in doing job well and not in the money," "they have to be spoken to too often," "develop ability to speak forcefully in selling," "too many want to start at the top of the ladder; teach them to stick to one thing 'til they learn to do that better than anyone else."

In answer to the question, "How may the Arlington High School and the Guidance Department improve its service to you?" the comments indicated that the school and the guidance department placement service was doing an effective job. Of the 115 answers received, 20 respondents did not answer the question. The comments from the 95 who answered were more than favorable.

The following comment received from the supervisor of employment for one of the large insurance companies was a typical one: "We find that the students from your school have worked out very satisfactorily in our organization and that Arlington High School does a good job of appraising the individual whom they refer to us for placement." This company employed 11 of the 86 graduates of the business education department in 1950 who are engaged in office-type employment. Twenty-seven additional graduates of the business education department in the other three years covered by this study are employed by this company.

"Your placement office has always been accurate in their recommendation in 'selling' a candidate to be hired. If all schools had and maintained as high a standard of service, we would be happy." was the comment from the personnel officer of another employer.

CHAPTER VI  
SUMMARY OF THE FINDINGS

An attempt was made in this study to determine how well the business education curriculums in effect at the Arlington High School at the time of the study had prepared the graduates of the business education department for initial employment, proper job adjustment, and success in the positions following graduation.

The reports of 90 per cent of the graduates of the business education department who were contacted in the study indicate the following:

1. Responses were received from 475 of the 525 graduates contacted. This was a 90.5 per cent response.

2. High school is terminal education for the majority.

Fifteen per cent were attending school full time--

72 of the 475 respondents

Additional business training was obtained by 151 of

475 respondents, which represented 31.8 per cent.

3. A majority of the graduates were employed in office-type positions: 317 of the 475 respondents, or 66.7 per cent, indicated they were doing office-type work.

Ninety and eight-tenths per cent of those working were doing office-type work. This figure was represented by 317 of 349 respondents who were working in all types of jobs.

Thirty-two of 475 respondents, or 6.7 per cent, were engaged in non-office type positions.

Thirty-two of 475 respondents, or 6.7 per cent, were married.

Twenty-two of 475 respondents, or 4.9 per cent, were engaged in miscellaneous pursuits--8 in nursing training, 9 in military service, 2 in religious orders, and 3 were at home.

4. The placement service of the high school did a satisfactory job in obtaining employment for the graduates.

One hundred eighty-two of 349, or 52.1 per cent, obtained their first office job through the school.

One hundred thirteen of 349, or 32.4 per cent, secured employment before graduation.

One hundred thirty-eight of 349, or 39.5 per cent, obtained immediate employment.

Fifty-six of 349, or 16 per cent, secured employment within one month after graduation.

Seventeen of 349, or 5 per cent, secured employment within two months after graduation.

Twenty-three of 349, or 6.6 per cent, secured employment within one year of graduation.

5. Two hundred eighty-seven, or 90.5 per cent, of the 317 in office-type positions were with their original employer.

Twenty-four, or 7.6 per cent, of the 317 in office-type positions, had had two employers.

6. A large majority felt that their high school training was adequate for success in the jobs held since graduation.

Four hundred sixty-one, or 97 per cent, of the 475 graduates responding stated their high school training was adequate.

Thirty-five, or 7.4 per cent of the 475 graduates responding, suggested improvements in the subject matter offered, as follows:

- 7 introduce co-operative training program
- 6 more machine training
- 4 more English and spelling
- 3 more bookkeeping
- 3 more speed dictation in shorthand
- 2 more time on business subjects only
- 2 more mathematics
- 2 secretarial students should have penmanship
- 1 too many subjects now taken
- 1 boys allowed to take shorthand
- 1 less stress placed on difficulties of holding a job
- 1 special course in banking
- 1 use of billing machines and interest tables
- 1 training in answering telephone

7. Boys represented a small proportion of the graduates of the business curriculums as compared to the boy graduates of the school as a whole.

Seventy, or 13.3 per cent, of the 525 graduates of the business education curriculums were boys.

Nine hundred fifty-six, or 50.9 per cent, of the 1877 graduates of all curriculums were boys.

## CHAPTER VII

## RECOMMENDATIONS FOR BUSINESS CURRICULUM REVISION

Based upon the findings of this study of the graduates of the business education department of the Arlington High School, the following recommendations are submitted for consideration. The recommendations are made for the purpose of improving the business curriculums of the school in order that they may better serve the needs of the graduates in preparing them to meet the requirements of initial job employment, and for success in their future business vocations.

1. Two years of bookkeeping should be sufficient to provide the students with a thorough knowledge of bookkeeping to enable them to perform the skills required in bookkeeping positions. Forty-nine boys and 26 girls were graduated from the accounting curriculum in the period covered by the study. Four of these were employed as bookkeepers. Of the 19 graduates of the accounting curriculum in 1950, 14 boys and five girls, none are employed in bookkeeping positions. Seven of the boys are attending higher schools of learning to study accounting. A similar situation prevails in the other years covered by the study.

While one of the aims of bookkeeping is that it should be taught for vocational purposes for those who intend to take advanced training in accounting, a three-year course in high

school bookkeeping should not be prescribed for this purpose, especially when accounting as taught in higher schools of learning begins with bookkeeping fundamentals.

2. A need for retail training exists, not only for those graduating from the business education curriculums but also for those graduating from the other school curriculums. The table in Chapter II containing the employment distribution of graduates for the school as a whole, shows that in 1950, 24 were employed as retail store clerks; in 1949 (p.37), 22 were employed as retail store clerks; in 1948 (p. 33), 21 were employed as retail store clerks; and in 1947 (p. 31), 23 were employed as retail store clerks. A number of these were graduates of the business education curriculums. The course of study provided by the school, at the time this study was made, provided for a half course in salesmanship, meeting five periods of forty-five minutes, each week for one-half year. More training should be provided in this area. This training should be given in merchandising and in personality development.

3. Business organization ranked highest on the list of business education subjects of least value to the graduates. Seventy-one graduates indicated that the subject was of little or no value to them in their work since high school. Fourteen indicated it was of some value to them. Consideration should be given to the matter of dropping business organization as a

required subject, or examining and revising the course to better meet the needs of students. Courses in the merchandising field where a distinct need appears to exist might be considered.

4. Economic geography ranked a close second to business organization in the group of business education subjects of least value to the graduates. Seventy graduates indicated that it was of little or no value to them since leaving high school. This subject was next to last in the list of subjects found to be of value to the graduates. Seven graduates have found it to be of some value to them. As set up, at the time this study was made, economic geography was a full-year course, meeting five periods a week. The period of time devoted to this subject should be reduced to four periods a week. One period a week now devoted to economic geography could be advantageously given to a course in consumer education, or to the subject matter of consumer education included as part of the course of study in economic geography.

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GUIDANCE DEPARTMENT  
ARLINGTON HIGH SCHOOL  
ARLINGTON, MASSACHUSETTS

September, 1950

To the Members of the Class of 1950:

We are interested in learning what the Class of 1950 is doing now. It is the policy of the high school to write each year to two groups of graduates, classes out of high school one year and six years. The purpose of this survey is to evaluate and improve the school program in the light of what the graduates are doing.

Will you please fill out the enclosed card today? If you are registered at a school which has not yet begun, please give the name of the school and indicate the course you have elected. If you are not satisfied with your present employment, we shall be glad to let you know about other openings which come to our attention. It would be helpful if you will describe your work in detail, listing the skills you use, such as typing, filing, bookkeeping, stenography, and also include the names of any office machines you operate, such as the mimeograph, comptometer, adding machine and transcribing machine. Please list this information on the enclosed reply card.

This is our seventh annual survey. We have had a 100 per cent response in the past and we are counting on your prompt co-operation. Please fill out the reply card now and mail it at once. As soon as you can, thereafter, fill out the survey report form and return it in the enclosed addressed envelope.

Very truly yours,

/s/ Bert A. Roens

Bert A. Roens  
Director of Guidance

BAR-MAD  
Enc.

1. Note: Letters sent out over name of director of guidance to insure larger per cent of returns and to provide a central location for returns.

GUIDANCE DEPARTMENT  
ARLINGTON HIGH SCHOOL  
ARLINGTON, MASSACHUSETTS

October, 1950

A Message to Employers of Arlington High School  
Graduates:

From a survey of the graduates of the class of 19\_\_ , we find that the students listed below are working for your organization. In order to help us determine whether or not we are properly training and placing our students, we are making this follow-up. We invite your constructive criticism of the training given at Arlington High School. Such information is very valuable for the purpose of improving the course of study given in our business education curriculum.

Will you co-operate with us in the matter by giving us confidential answers to the attached questions? Please answer even though the boy or girl has left your employ.

Your comments on these questions and other topics of mutual interest to the school and to the employer will be most welcome. It will help in planning a more co-operative service to the pupils, to you, and to the community. If we could have 100 per cent reply to our letter, we would feel that employers want to help us improve our training.

May we count on your prompt reply?

Co-operatively yours,

Bert A. Roens  
DIRECTOR OF GUIDANCE

QUESTIONNAIRE  
ARLINGTON HIGH SCHOOL GRADUATES

1. Are the graduates of Arlington High School satisfactory workers?

2. Do they possess the necessary skills, knowledges, and attitudes you expect?

3. How could the business education graduates of Arlington High School be made better employees?

4. How may the Arlington High School and the Guidance Department improve its service to you?

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ARLINGTON PUBLIC SCHOOLS  
ARLINGTON 74, MASSACHUSETTS

Guidance Department  
High School Building

October 27, 1950

Dear Sir:

We are writing you again concerning the survey of Arlington High School Graduates. Our records indicate that (Name of Graduate) is employed by your organization. In order to help us determine whether or not we are properly training and placing our students, it is our policy to follow-up our boys and girls. We invite your criticism of the training given to them at this school.

Will you co-operate with us in this matter by giving us confidential information to the following questions? Please answer even though the boy or girl is no longer employed by your organization.

1. Are the graduates of the Arlington High School satisfactory workers?
2. Do they possess the necessary skills, knowledges, and attitudes you expect?
3. How could the business education graduates of Arlington High School be made better employees?
4. How may the Arlington High School and the Guidance Department improve its service to you?

We have had a 90 per cent response to our original questionnaire sent to you and other employers several weeks ago. We should greatly appreciate it if we may hear from you soon.

Sincerely yours,

Bert A. Roens  
DIRECTOR OF GUIDANCE



8. List in the order of importance the five subjects taken in high school which have been of most value to you in your work

a \_\_\_\_\_ b \_\_\_\_\_ c \_\_\_\_\_  
d \_\_\_\_\_ e \_\_\_\_\_

9. List in the order of importance the five subjects taken in high school which have been of least value to you in your work

a \_\_\_\_\_ b \_\_\_\_\_ c \_\_\_\_\_  
d \_\_\_\_\_ e \_\_\_\_\_

10. Do you feel your high school preparation was adequate for success on jobs held since high school? Check ( ) Yes \_\_\_ No \_\_\_

11. List any subject(s) which were not offered, or which you did not take, during attendance at Arlington High School, for which you have since felt a need.

a \_\_\_\_\_ b \_\_\_\_\_ c \_\_\_\_\_

12. As a result of your work experiences do you have any suggestions for the improvement of the business education program at Arlington High School?