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THE EFFECTIVENESS OF SECONDARY SCHOOL CURRICULAR OFFERINGS IN THE OCCUPATIONAL ACTIVITIES OF GRADUATES WHO DO NOT ATTEND ACCREDITED INSTITUTIONS OF HIGHER LEARNING

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FOREWORD

I am pleased to publish as the July issue of the department bulletin the dissertation of Theodore O. Hall, Superintendent of Schools of Greenville, Kentucky, submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy, University of Kentucky. He has given his consent for this use of his study.

As indicated by Superintendent Hall the purpose of this study is (1) to present evaluations of present-day curricular offerings in secondary schools by pupils who did not attend college following graduation, but who have had an opportunity to test to some extent the values of such offerings in their activities after they left school; and (2) to furnish, on the basis of the evaluations made by these pupils, at least fairly reliable data upon which school authorities might justify changes in curricular offerings in high school or changes in emphasis in the presentation of the offerings now given.

Because it is believed this study will be helpful to the school forces of the state, I sincerely urge that it be given careful study by all those who have the responsibility of making curricula for the school districts of the state.

J. W. Brooker,

Superintendent Public Instruction

THE EFFECTIVENESS OF SECONDARY SCHOOL CURRICULAR OFFERINGS IN THE OCCUPATIONAL ACTIVITIES OF GRADUATES WHO DO NOT ATTEND ACCREDITED INSTITUTIONS OF HIGHER LEARNING

DISSERTATION

A dissertation submitted in partial fulfillment
of the requirements for the degree of Doctor of Philosophy
at the University of Kentucky

By
Theodore O'Connell Hall
Greenville, Kentucky

Lexington, Kentucky
1943

CONTENTS

LIST OF TABLES

LIST OF FIGURES

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The writer is most grateful also to the principals of the Kentucky high schools for furnishing the names and addresses of the graduates included in this study, and to the graduates whose replies to the questionnaire made the study possible.

The interest of Superintendent of Public Instruction John W. Brooker, Frankfort, Kentucky, and the encouragement given by other members of the State Departmeent of Education are appreciated. The writer is also indebted to his secretary, Miss Mae Evelyn Yates, for invaluable assistance in the preparation of the final manuscript.

Finally, the writer wishes to express his deepest appreciation to his wife, Lorene Hall, and sons, Billy and Bobby, without whose moral support and forebearance this study would have been impossible.

CHAPTER I.

INTRODUCTION

As early as 1809, Governor Charles Scott in a message to the General Assembly of Kentucky emphasized the importance of public education in a statement of philosophy well worthy of citation. He said, "The people when properly informed are never wrong; though for the moment they may, by the designing or ambitious, be prejudiced or misled."[1] The Advisory Committee on Education, appointed by President Roosevelt to study education in the United States, in the *Report of the Committee,* made in 1938, places upon the schools the caring for of all "youth up to 20 years of age who can profit from specialized preparation for occupations of non-professional type."[2]

Horace Mann laid down broad principles for the growth and development of public education throughout subsequent years when he declared that education is a broad and functional process affecting the harmonious relation between man and nature, through (a) physical and health development, (b) a love and desire for truth, (c) the preservation of the accumulation of knowledge of ages past, (d) a preparation for present society, and (e) the bringing of enjoyment to those possessing it.[3]

In a more modern vein, Kilpatrick sees the necessity of education's meeting changing conditions by observing that—

a. The present time demands a new social outlook of education

b. Applied intelligence is needed more than ever in the affairs of public concern

c. Effectual intelligence needed is more of acquisitional learning than of original native ability

d. Hope for the upbuilding in intelligence, in general, can be had only as the teacher has such

e. Schools need to see their work in the new light[4]

Until recently the high school served primarily as an agency for the selection of the more able young people and for preparing them

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[1] *House Journal 1809.* Acts of the General Assembly of Kentucky, p. 13.

[2] Floyd W. Reeves, chairman. *Report of the Committee.* Government Printing Office, Washington, D. C., p. 100.

[3] John A. Neitz. "Horace Mann's Ideas on General Methods in Education." *Elementary School Journal,* 37:743, June 1937.

[4] William H. Kilpatrick. "First Things in Education." School and Society, 34:847, December 26, 1931.

for entrance to higher educational institutions.[5] Increased attendance in the high schools within the past quarter of a century, however, has created a demand on the part of the general public that the secondary school offer subject matter and activities which will better prepare the pupil to meet the problems of life whether or not he attend an institution of higher learning following his graduation from high school.

The Problem

The problem with which this study is concerned chiefly is the answer to the question: How effective are the curricular offerings studied in high school in the lives and vocations of high-school graduates who do not attend college following their graduation but enter upon their vocational activities? At the outset it is fully recognized that no single study, no matter how thorough, can determine the full answer to this question. Its implications are too broad, and its solution involves too many factors, known and unknown, to be encompassed in one investigation.

The general purpose of this study, therefore, will be:

1. To present evaluations of present-day curricular offerings in secondary schools by pupils who did not attend college following graduation, but who have had an opportunity to test to some extent the values of such offerings in their activities after they left school
2. On the basis of the evaluations made by these pupils to furnish at least fairly reliable data upon which school authorities might justify changes in curricular offerings in high school or changes in emphasis in the presentation of the offerings now given

Scope of the Study

This study is concerned with the graduates of the 1937 classes in certain Kentucky high schools who did not attend accredited institutions of higher learning following their graduation from high school. Only graduates of secondary schools which were members of the Southern Association of Colleges and Secondary Schools are considered.

Figure 1 shows that the schools selected were well distributed over the state and therefore may be thought of as representative schools. In order that the typical graduate might be reached, no high schools in the larger cities where vocational schools are located, or where there are opportunities for specific apprentice training outside of school, are included. Hence high schools in the following cities

[5] Howard A. Campion. *The Vocational Schools of Essex County, New Jersey.* National Occupational Conference, New York, 1939. p. 29.

Figure 1. Location of the 53 Kentucky High Schools in This Study from Which the 1,073 Graduates Come

are omitted from this investigation: Louisville, Covington, Lexington, Paducah, Ashland, and Newport.

The classes of 1937 were chosen for this study for two reasons:

a. The year 1937 marked the nearest return to normal conditions of any year since the depression began in 1929, and

b. The elapsed time since 1937 is sufficiently long to permit employment of most of those graduates who might hope to have employment, but short enough to enable reasonable contact to be made with them.

Definition of Terms

Definitions of curriculum are almost as varied as the number of educators writing about it. In the present investigation the definition of curriculum by Eells will probably best apply—"All the experiences that pupils have while under the direction of the schools; it includes both classroom and extra-classroom activities, work as well as play."[6]

Eells defines *course of study* as "that part of the curriculum organized for classroom use."[7] It is with the effectiveness of the subjects in the courses of study as defined by Eells that the present study deals, primarily as applied to pupils who graduate from secondary schools and enter upon life activities without further schooling.

Curricular offerings means the subjects offered in secondary schools as shown in the questionnaire and tables.

Data Sheet is the questionnaire used in this investigation.[8]

Graduates, unless specifically indicated otherwise, means those high-school graduates to whom the questionnaire was sent.

Source of Data

The principal source of data for use in this study is a questionnaire sent out to 1,073 graduates from the high-school classes of 1937 who did not enroll in accredited institutions of higher learning following their graduation. The questionnaire in simple detail was designed to ascertain the following facts:

a. Evaluations by the graduates of secondary school curricular offerings on the basis of the contributions these offerings made to the activities of the graduates after they left high school;

b. Suggested changes that the graduates would make in subjects offered in the ordinary high-school cirriculum;

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[6] Walter C. Eells. "How Does Your School Rate?" *Nations Schools,* 22:18, December 1938.

[7] *Ibid.*

[8] See Appendix A for copy of questionnaire.

c. The occupational status of the graduates following their graduation, and also at the time of their filling out the questionnaire four years later; and

d. Vocational choices of the graduates, not taking into consideration present handicaps which might prevent the realization of these choices.

Of a total of 1,073 questionnaires sent out, 453 replies were received and used. One hundred nine additional letters were returned from the postoffices of the addresses with notations that the persons so addressed had moved and their present addresses were unknown. Nearly one-half, 511, of the letters sent out were unaccounted for. Thus 42.2 per cent of the questionnaires sent out were returned and used in the study. A second follow-up letter, together with an intensive effort to make contact with the 511 not accounted for, undoubtedly would have increased the number of replies received from the questionnaire. This was deemed inadvisable because such an effort would have had to be made after the entry of the United States into war, and the replies thus obtained would have affected the data already secured because of this extraordinary factor.

As a part of his method in securing data Fraser[9] in his follow-up study of non-college going graduates in two Jersey City high schools, used a letter questionnaire. He received a 30 per cent return on his first request and a total of only 40 per cent after two follow-up requests had been made. The current investigation, as indicated above, shows a return of 42.2 per cent on the original request and one follow-up letter.

Limitations of the Study

The writer at this point wishes to call attention to certain limitations of this study.

1. There is no sure way of knowing what the replies would have been from those graduates who failed to return the questionnaire, although the replies from the follow-up letter did not vary significantly from those to the first request.

2. Although graduates for the school year 1936-37 were chosen because this year marked possibly the nearest return to normal conditions of any year since the depression, which began in 1929, it must be remembered that another abnormal condition was fast approaching as a result of the war in Europe and the defense program of the United States. This probably accounts for the increase in the number of graduates in the military service in 1941 over 1937.

[9] Thomas A. Fraser. *Follow-up of Non-College Going Graduates of Commercial, General, and College Preparatory Curricula in Two Jersey City High Schools* (Doctor's Dissertation). New York University, 1939. pp. 19-20.

3. Recognition is also noted of the fact that the evaluations of curricular offerings by the high-school graduates are largely subjective and are no doubt influenced by (a) the graduate's like or dislike of his teacher, (b) by the general attitude of the graduate toward the school which he attended, (c) by the attractiveness of the subject itself, and (d) by the quality of teaching.

4. The reader will also bear in mind that this investigation undertakes to present curricular evaluations upon the basis of the practical value of such offerings in the vocational activities of the graduates following graduation from high school.

In justification of a study of this type, which admittedly is based largely on the subjective opinions of former pupils, it may be stated that according to the best thought on curriculum revision all persons, directly or indirectly concerned with the schools, should have a part in such an undertaking. Since the graduates replying to the questionnaire have been directly concerned with secondary schools and were at the time of replying to the questionnaire attempting to apply in their vocations the knowledge gained in the study of subject matter in their high schools, it would appear that their opinions have merit. This study assumes that they do.

Procedure

To determine the feasibility of a study of this nature, the writer selected seven high schools within reach of his home. Each high school was visited, and through personal conferences with the principal of each school the names and addresses of the graduates of the classes of 1937 who did not attend college were secured. The questionnaire was then mailed to each graduate.

Fifty-three replies were received from a hundred questionnaires sent out, but only forty-seven were sufficiently filled out to be used. These were checked and tabulated in the same manner as the questionnaires used in the current study. The data obtained in the preliminary survey were not significantly different from those used in the principal investigation here.

Since the preliminary survey included secondary schools which were not members of the Southern Association of Colleges and Secondary Schools, having only two member schools, and in order that the study might be fairly representative of the better high schools of the state as a whole, it was decided to expand the scope of the study to include schools from every section of Kentucky and only those schools which were members of the Southern Association of Colleges and Secondary Schools.

As it was evidently impossible to visit each school throughout the state because of limitations on time and travel, the extension of the scope of the investigation necessitated a change in procedure in the procurement of data. Accordingly, in order to obtain the names and addresses of the graduates, a letter[10] was mailed to all the principals of the high schools accredited by the Southern Association of Colleges and Secondary Schools in Kentucky, except those in the larger cities previously indicated as omitted from this study, requesting the names and addresses of the members of the graduating classes of 1937 who did not attend institutions of higher learning. A stamped self-addressed envelope was enclosed with each letter.

From this request sufficiently explicit replies were received to justify the mailing of the questionnaire to the graduates of fifty-three schools as shown in Table 1. Replies were received from several other principals but were not used, since in some instances the addresses of the graduates were not given, and in other cases no distinction was made between those enrolled in college and those not enrolled.

[10] See Appendix A for copy of letter sent to principals.

TABLE 1

Returns on Questionnaires Sent to the Graduates

Name of School	Number Sent Out	Number Returned	Per Cent Returned	Returned	
				Male	Female
Barbourville	7	1	14.3	0	1
Benham	28	15	53.6	7	8
Bowling Green	11	4	45.4	2	2
Butler (Princeton)	21	12	57.1	4	8
Campbellsville	20	6	30.0	2	4
Catlettsburg	41	11	26.8	7	4
Central City	25	16	64.0	7	9
Columbia	14	8	57.1	4	4
Corbin	51	23	41.5	8	15
Dayton	29	9	31.0	2	7
Elizabethtown	19	8	42.1	4	4
Fairdale	10	4	40.0	2	2
Frankfort	25	10	40.0	5	5
Franklin	17	9	52.9	3	6
Fulton	12	7	58.4	3	4
Garth (Georgetown)	13	5	38.4	2	3
Greenville	8	4	50.0	0	4
Harlan	16	6	37.5	2	4
Harrodsburg	30	15	50.0	6	9
Hazard	11	8	72.7	2	6
Hickman	14	3	21.4	2	1
Hopkinsville	40	12	30.0	6	6
Horse Cave	8	3	37.5	2	1
Irvine	22	10	45.4	1	9
Lancaster	11	5	45.5	3	2
Lebanon	10	3	30.0	1	2
Leitchfield	7	2	28.5	1	1
Ludlow	23	13	52.0	10	3
Lynch	15	6	40.0	2	4
Madisonville	31	20	64.5	9	11
Mayfield	35	18	51.4	8	10
Mays Lick	8	1	12.5	0	1
Middlesboro	32	6	18.7	3	3
Midway	4	2	50.0	1	1
Minerva	15	5	33.3	3	2
Morganfield	21	14	66.6	7	7
Monticello	10	6	60.0	5	1
Mt. Sterling	16	9	56.2	5	4
Nicholasville	15	3	20.0	1	2
Owensboro	74	15	20.3	2	13
Owenton	16	3	18.8	0	3
Paintsville	33	13	39.4	7	6
Paris	9	5	55.5	3	2
Prestonsburg	33	9	27.2	4	5
Providence	17	3	17.6	1	2
Raceland	9	6	66.6	3	3
Russell	19	8	42.1	2	6
Russellville	18	10	55.5	3	7
Simon Kenton	20	5	25.0	2	3
Somerset	24	14	58.2	3	11
Springfield	12	6	50.0	3	3
Stanford	18	14	77.7	4	10
Versailles	26	14	53.8	6	8
Unclassified		6		4	2
Total	1,073	453		189	264
Average	20.3	8.6	42.2	3.6	5.0

As replies were received from the principals, the questionnaire, to which was attached a letter,[11] was mailed to each graduate. After two months a second letter[12] attached to the same questionnaire was sent to those who did not reply to the first request. A stamped self-addressed envelope accompanied each letter.

As a partial check on the validity of the information received from the graduates, the questionnaires were arranged in groups of one hundred in order of their receipt. Subject matter ratings for the first hundred questionnaires received were then tabulated. When the second hundred were received, these in like manner were tabulated and checked against the first hundred.[13] This was done for each succeeding hundred questionnaires until all had thus been tabulated and checked against preceding tabulations.

These tabulations and checkings showed no significant changes as the total number of questionnaires grew. While it can not be stated definitely that the 453 replies were truly representative of the whole number of graduates to whom the questionnaires were sent, there appears at least as much evidence that they are representative as there is that they are not.

While it is true that Reid[14] concluded that "replies from respondents can not be considered representative of non-respondents," he further says:

> In every survey involving mail questionnaires, there should be provision for at least one follow-up questionnaire so that any bias in the answers of the original respondents can be partially corrected by answers from a second group of respondents, and so that some estimate of the probable answers of the non-respondents can be made from the two groups of respondents.[15]

It will be observed that in the current study a follow-up letter was sent to all non-respondents to the first request. The replies to the follow-up letter were checked against the replies of the first respondents without significant changes being noted. This study, therefore, goes further than the recommendation of Reid, who suggests the choice of a representative sample to whom follow-up letters are sent rather than sending the follow-up letters to all non-respondents.[16]

Erick L. Lindman, research assistant of the Seattle Public Schools, points out that the reasons why graduates do not reply to questionnaires are: (a) that they do not wish to cooperate, or (b) that they can not be located. He thinks the superior pupil will reply more readily than the poor pupil. He further concludes that his

[11] See Appendix A for copy of first letter sent to the graduates.
[12] See Appendix A for copy of second letter sent to the graduates.
[13] See Appendix A for comparative table.
[14] Seerley Reid. "Respondents and Non-respondents to Mail Questionnaires." *Educational Research Bulletin*, 21:90, April 15, 1942.
[15] Reid. *Op. cit.*, p. 95.
[16] *Ibid.*

study in the adequacy of follow-up proceedings "tends to increase our confidence in statistics for all graduates derived from a study of those who replied to the inquiry."[17]

An analysis of the information contained in Table 1 reveals that the range in the number of questionnaires sent to the graduates of individual schools is from 4 for Minerva to 74 for Owensboro, while the per cent of replies from graduates replying from each school ranges from 12.5 for Mays Lick to 77.7 for Stanford.

Ludlow shows the greatest proportion of boys to girls with 10 boys and 3 girls, while from Owensboro the ratio of boys to girls replying is 2 to 13. Corbin with 15 girls replying furnished the greatest number of girls from any school. No replies were received from boys from Barbourville, Greenville, Mays Lick, or Owenton; but at least one reply was received from girls from each school.

Geographically the replies with reference to individual schools are well distributed over the state. The eight schools with the highest percentage of replies are: Stanford 77.7, Hazard 72.7, Morganfield 66.6, Raceland 66.6, Madisonville 64.5, Monticello 60.0, Somerset 58.2, and Columbia 57.1. The eight with the lowest percentage of replies are: Mays Lick 12.5, Barbourville 14.3, Providence 17.6, Middlesboro 18.7, Owenton 18.8, Nicholasville 20.0, Owensboro 20.3, and Hickman 21.4. Thus it will be observed that the schools with the highest percentages of replies, as well as those with the lowest percentages, are not confined to any particular section of the state but are comparatively evenly distributed.

Summary

This chapter may be briefly summarized as follows:

1. This study undertakes to present evaluations of high-school curricular offerings by pupils who have had opportunities to test the values of such offerings in their vocations following graduation from high school.
2. The graduates of the classes of 1937 were chosen because—
   a. The year 1937 marked the nearest return to normal social and economic conditions of any year since the beginning of the depression in 1929; and
   b. The lapse of four years since the date of graduation was considered sufficient time for the graduates to have reasonable opportunity to find employment.
3. Out of a total of 1,073 questionnaires sent out, 453 were returned properly filled out; 109 were returned unopened with

[17] Erick L. Lindman. "The Adequacy of Follow-up Proceedings." *Occupations*, 19:33-35, October, 1940.

notations by postmasters that the addressees had moved and their present addresses were unknown; and 511 were unaccounted for.

4. Of the total number of questionnaires sent out 42.2 per cent were returned and used in this study.
5. The 53 schools included in this study are scattered rather uniformly throughout the state of Kentucky.
6. Table 1 shows that the respondents to the questionnaire are fairly evenly distributed geographically on the basis of the per cent of replies received from graduates of individual schools.

CHAPTER II.

EVALUATION OF CURRICULAR OFFERINGS

As previously stated, one division of the questionnaire was designed to give the graduates an opportunity to evaluate the subjects they studied in high school in the light of the usefulness to which the knowledge of those subjects had been put in helping solve the problems of actual life situations after the graduates had left school. Adams[1] studied the reactions of high-school pupils to high-school subjects. He used a questionnaire for this purpose. His study included all the pupils in the high schools studied, and he sent the questionnaires to the principals of the high schools, who in turn had the pupils fill them out. The present study differs from that by Adams in that this investigation involves only graduates who have been out of school for four years, and the questionnaries were sent directly to them by the investigator.

In the study by Adams certain evaluations of high-school subjects were indicated by the pupils when they listed the subjects they would like to take but could not get and the subjects they would like to leave out of the curriculum. In Adams' study the pupil in making his evaluations had not had an opportunity to test the value of the subjects in life itself after leaving school, while the evaluations made by the graduates in this study were made upon the basis of the application of knowledge gained from subject matter study toward the solving of vocational problems.

The Importance of Subject Matter in Curricula

One of the biggest problems that faces curriculum makers is the selection of subject matter and the classification of that subject matter into curricula which will be best adapted to meet the needs of pupils as they must enter upon their vocations when they finish their schooling. A survey in Kentucky, sponsored by the General Education Board in 1920, concluded that only three general types of curricula were then in operation in secondary schools—English, classical, or scientific.[2] These curricula were rather exclusive, not offering commercial subjects or many electives, but designed almost purely for preparing pupils to enter college. Only in a very few large cities

[1] Jesse E. Adams. "Reaction of High-School Pupils to High-School Subjects." *School Review*, 35:354-362 and 417-427, May and June 1927.

[2] *Public Education in Kentucky*. General Education Board, New York, 1921. pp. 126-131.

did the survey note commercial courses, and manual training courses for boys and home economics courses for girls in the regular high-school courses of study. In rural sections about the only tendency to meet possible individual needs was the presence of Smith-Hughes agricultural courses in some schools.

Even as far back as 1927, Douglas,[3] discussing the question of subject matter for secondary schools, recognized the need for an expanded curriculum with more specifically related subject offerings when he asserted:

> Aside from teaching, little value can be ascribed to the academic subjects for vocational purposes. To be sure they contribute to vocational efficiency, but it is not often that the job itself makes primary demands upon facility in oral or written expression, ability in mathematics, or knowledge of history. . . . The same statement can be made with reference to modern languages.

An analysis of the data in the succeeding pages of the present investigation will show that the opinions of the graduates as indicated in their replies to the questionnaire are in agreement with those expressed by Douglas. A substantial number of the graduates do not consider certain mathematics courses or foreign languages helpful to them in their work following graduation; and in this category, with the exception of American history, they also include most of the high-school history courses usually offered in Kentucky secondary schools today.

While it can not be said that the emphasis placed on certain subject-matter courses in Kentucky high schools is altogether determined by the ratings such courses are given by colleges and universities toward meeting matriculation requirements, the persistence of required languages, mathematics, and science courses in the curricula of the average high schools of the state strongly indicates the strength of the demands of the institutions of higher learning. The influence of college entrance requirements, together with that of tradition, probably has helped preserve a certain amount of generally desirable continuity and uniformity in the matter of curricular offerings in Kentucky high schools during the past two decades. Without these restraining influences no balance might have been kept in secondary schools between vocational and college-preparatory curricular offerings, especially in the smaller high schools. On the other hand these influences undoubtedly have delayed in the some instances the recognition of certain needed vocational educational processes which, had they been recognized at the proper time, might have added materially to the happiness and welfare of the vocationally-minded high-school graduate by increasing his vocational efficiency.

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[3] Aubrey A. Douglas. *Secondary Education*. Houghton, Mifflin Company, Boston, 1927. p. 575.

In the selection and emphasis of subject matter Billet[4] suggests that (a) subject matter should yield learning experiences which function in the pupils' present life, or represent tangible progress toward definite goals recognized by the pupils; (b) it should be usable in the broadest sense of the term; and (c) it should have appreciational value.

In contrast with the statements of Billet in 1940, Alexander Inglis,[5] late professor of Education at Harvard University, said in 1918:

> All things considered, it would appear to be reasonable that curriculums should be characterized by a relatively high degree of flexibility in the early grades of the secondary school, by a high degree of rigidity in the later grades, and by gradual transition from one status to the other.

The Report of the Committee of the Advisory Committee on Education in its report to the President in 1938 significantly avers:

> Such subjects as mathematics and foreign languages have long been held to be justified in the high school curriculum on the basis of their presumed value for college entrance. Recent studies, however, have shown clearly that no subject studied in high school possesses unique value as a preparation for successful work in college.[6]

With reference to the value of the linguistic-mathematical curriculum of the college preparatory school for young people who will not attend institutions of higher learning, the report further continues:

> It would at once appear that the linguistic-mathematical curriculum of the college preparatory school is no proper training for young people who will leave the full-time school at the age of 17, 18, or even 20.[7]

Need for Curriculum Revision

A committee of the American Council on Education in its report, *What the High Schools Ought to Teach,*[8] made in 1940, states that schools today through guidance and instruction are doing more than ever before to aid youth in getting started on their vocational careers. It lays emphasis on a four-point program based upon (a) reading, (b) work experiences, (c) social studies, and (d) personal problems; such as health, family life, etc.

The report offers certain criticisms of the conventional subjects by suggesting that (a) English composition has degenerated into a

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[4] Roy O. Billet. *Fundamentals of Secondary-School Teaching.* Houghton, Miffin Company, Boston, 1940. pp. 168-169.

[5] Alexander Inglis. *Principles of Secondary Education.* Houghton, Miffin Company, Boston, 1918. p. 679.

[6] Reeves. *Op. cit.*, p. 99.

[7] Reeves. *Op. cit.*, p. 98.

[8] Ben G. Graham, chairman. *What the High Schools Ought to Teach.* American Council on Education, Washington, D. C., 1940.

series of formal drills and exercises; (b) highly specialized applications in algebra and plane geometry should be avoided; (c) courses in general language should be offered instead of specific foreign language subject matter; and (d) too often natural science subjects are taught as an encyclopedic list of research findings.

The report makes the following observation:

> In the last analysis, the revision of the curriculum will depend on the individual secondary schools. Unless the members of school faculties become convinced that changes in the contents and methods of teaching are necessary, progress will be impossible. Unless classrooms become centers of experimentation, little will be accomplished.

Fraser[9] in his study of non-college going graduates of two Jersey City high schools recommends that—

1. The commercial curricula should be revised in order to bring bring them closer to the needs of the present day;
2. A clerical curriculum should be organized in the schools;
3. Skill subjects should be placed in the twelfth grade so as to bring the period of training closer to the period of application;
4. Guidance departments should be organized in the schools.

Recognition of the possible failure of the secondary-school curriculum to function properly in Kentucky is implied in the *Report of the Kentucky Educational Commission,*[10] which in 1933 stated that there was a need for a comprehensive study inquiring into causes for secondary-school pupils leaving school.

Rating of Curricular Offerings

The first division of the questionnaire listed the subjects ordinarily offered in the high schools of Kentucky, together with blank spaces in which the graduates could write in the subjects they had taken in high school which might not be included in the list. Before each subject was a blank line for rating. On this blank line the graduates were requested to rate only the subjects they had in high school by placing the figure *1* before those subjects which they felt had been of "great help" to them in their work after leaving school, the figure *2* before those which had been of "some help," and the figure *3* before those which had been of "little or no help."

Table 2 shows the number of times each subject was checked and also the number of times it was rated *1*, *2*, and *3*. The subjects are arranged in Table 2 according to the number of times they were

[9] Fraser. *Op. cit.*, p. 227.
[10] James H. Richmond, chairman. *Report of the Kentucky Educational Commission.* State Department of Education, Frankfort, Kentucky, V. 1, No. 8, 1933. p. 83.

rated, English heading the list, being rated 426 times, while German, rated only one time, is at the bottom. Of a total number of ratings of 5,869 the average per subject is 154.4. Health, rated 155 times, is nearest the average of any subject.

TABLE 2

How the Graduates Rated the Curricular Offerings Taken in High School

Subject	Ratings by the Graduates			
	Total Rating Each Subject	Great Help	Some Help	Little or No Help
English	426	398	27	1
Algebra	401	114	162	125
Plane Geometry	367	80	104	183
Arithmetic	363	321	38	4
American History	361	75	160	126
General Science	304	89	134	81
Biology	292	67	115	110
Ancient History	224	20	63	141
Typewriting	217	156	39	22
Latin	214	28	63	123
Bookkeeping	197	135	44	18
Civics	192	46	89	57
Home Economics	173	119	28	26
Shorthand	159	77	42	40
Health	155	99	43	13
General History	152	23	59	70
Modern History	140	29	48	63
Physical Education	121	52	44	25
Chemistry	116	37	43	36
Business Training	115	82	29	4
Economics	114	40	48	26
French	106	7	29	70
Physics	103	34	39	30
Social Science	101	32	47	22
Commercial Law	97	29	43	25
Agriculture	89	33	28	28
English History	84	13	23	48
Sociology	83	28	34	21
Medieval History	75	10	18	47
Solid Geometry	63	14	24	25
Other Subjects	57	24	21	12
Other Business Subjects	51	34	15	2
Manual Training	47	29	13	5
Vocations	42	14	15	13
Trigonometry	39	12	11	16
Shop	22	16	4	2
Spanish	6	0	2	4
German	1	0	1	0
Total	5,869	2,416	1,789	1,664
Average	154.4	63.6	47.1	43.8

Figure 2 shows the per cent of times each subject was rated, based on a total of 5,689 ratings of all subjects by the graduates. Thus it will be observed that English received the greatest number of ratings, 7.26 per cent of the total number of ratings for all subjects, while German, at the bottom of the list, received only .02 per cent of the total number of ratings, being checked only one time. Spanish, rated 6 times, received .1 per cent of the total ratings.

German, although rated only one time and then marked *2*, is listed in Table 2 and Figure 2; so is Spanish which is rated six times. Since, however, German and Spanish were rated less than ten times each, they are omitted from the remainder of the tables and figures in this study.

No account is taken in this investigation of possible errors in the marking of subjects unless the errors were so obvious as to admit of no doubt. For example, in a few instances the subjects were merely checked and no figures at all were used. In each instance of this kind, no tabulation on that part of the questionnaire was made.

It would be well to remember also that *English* in most, if not all, instances refers to the study of English courses over a period of four years. *Algebra* may mean the study of this subject for one year, one and one-half years, or two years. Other subjects, such as solid geometry and civics are usually studied for one semester only.

It will be noted that in Table 2 English is rated 426 times out of a possible 453. Since English is generally a required high-school subject, this discrepancy can be explained partly by the fact that in a few cases the pupils evidently misunderstood the instructions of the questionnaire and rated the *2's* and *3's*, omitting the *1's* entirely, and in other cases they rated the *1's* only. In many instances no reason is apparent why certain graduates rated only a part of the subjects which they evidently took in high school, since in a few cases less than the number of subjects necessary for graduation were rated.

The first six subjects listed in Table 2 in order are English, algebra, plane geometry, arithmetic, American history, and general science. Each of these subjects was rated more than three hundred times. These are required subjects in many Kentucky high schools, although the actually required subjects for all schools are probably English and algebra, both of which were rated more than four hundred times. The fact that English was rated only 426 times out of a possible total of 453—the number of questionnaires returned—validates, to some extent at least, the assumption that the total number of ratings given each of the six subjects named above is less than the actual number of times these subjects were taken in high school. This would apply to all the other subjects as well.

Subject	Per Cent
English	7.26
Algebra	6.83
Plane Geometry	6.25
Arithmetic	6.18
American History	6.15
General Science	5.18
Biology	4.99
Ancient History	3.80
Typewriting	3.70
Latin	3.63
Bookkeeping	3.36
Civics	3.27
Home Economics	2.94
Shorthand	2.71
Health	2.64
General History	2.59
Modern History	2.39
Physical Education	2.06
Chemistry	1.99
Business Training	1.97
Economics	1.94
French	1.81
Physics	1.76
Social Science	1.70
Commercial Law	1.65
Agriculture	1.52
English History	1.43
Sociology	1.41
Medieval History	1.30
Solid Geometry	1.07
Other Subjects	.99
Other Bus. Subjects	.87
Manual Training	.81
Vocations	.71
Trigonometry	.66
Shop	.37
Spanish	.10
German	.02

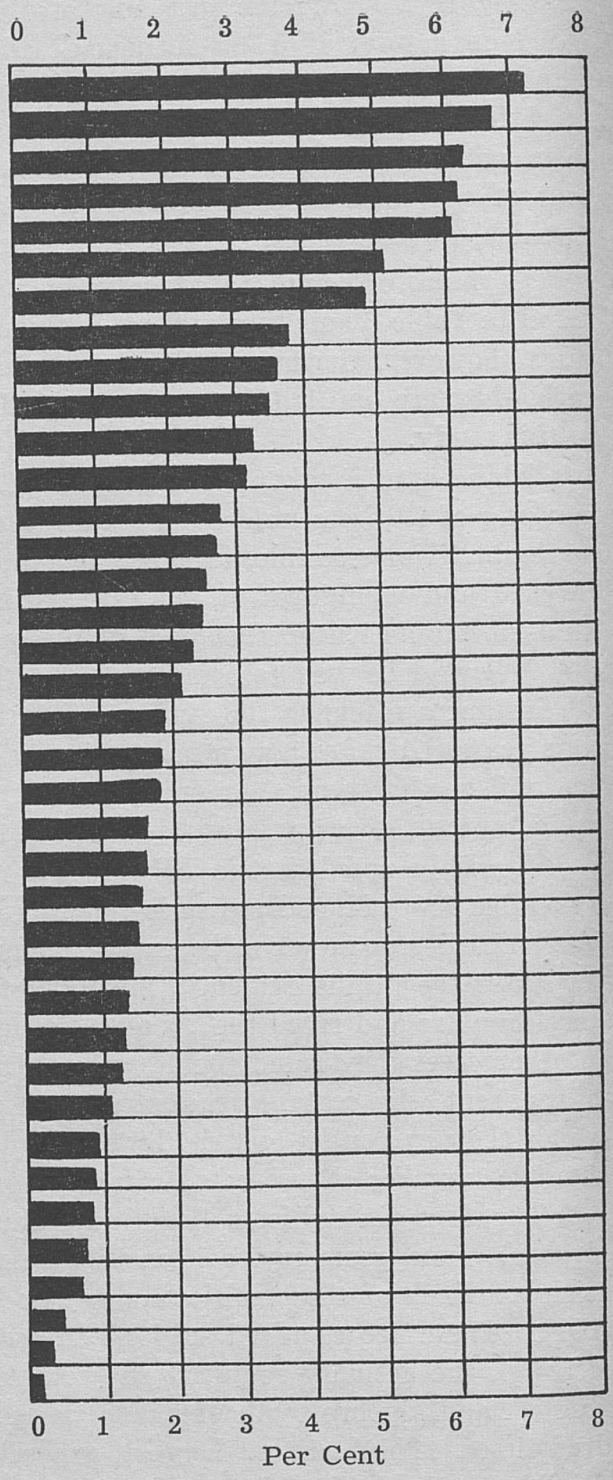

Figure 2. Per Cent of Times Each Curricular Offering was Rated.

The reader will constantly bear in mind that the graduates were requested to rate the subjects listed in the questionnaire on the basis of their value in the experiences of the graduates after they left school. The respondents to the questionnaire, therefore, evidently gave their ratings from a vocational viewpoint largely. The truth of this assertion is supported by the fact that the twelve subjects receiving the highest percentage of ratings of "great help," as presented in Table 3, are vocational in nature with the possible exception of English and arithmetic, and these could be so considered, for that matter.

Below are listed the twelve subjects with the highest percentages as of "great help," together with the per cent of the total ratings for each subject so rated.

Subject	Per Cent
English	93.4
Arithmetic	88.4
Shop	72.7
Typewriting	71.9
Business Training	71.3
Home Economics	68.8
Bookkeeping	68.5
Other Business Subjects	66.7
Health	63.9
Manual Training	61.7
Shorthand	48.4
Physical Education	42.9

Table 3 also shows that the twelve subjects rated lowest in the per cent of times rated as of "great help" consist of foreign language, history, and mathematics courses. Again agreement is seen by the graduates with the contention of the President's advisory committee which in 1938 in the *Report of the Committee*[11] criticizes the "linguistic-mathematical" curriculum for high-school pupils who will not attend institutions of higher learning following their graduation from high school.

It is interesting to note also that of the six subjects listed in Table 2 as having been rated more than three hundred times each, English and arithmetic are included among the twelve subjects receiving the highest ratings as of "great help," while American history and plane geometry are among the twelve receiving the lowest ratings. The other two subjects, general science and algebra, rank below the median in the per cent of subjects rated "great help," as shown in Table 3.

Although American history was rated "great help" only in 20.8 per cent of the total number of times it was rated, nearly one-half, 44.3 per cent, of the graduates considered it of "some help" to them

[11] Reeves. *Op. cit.*, p. 98.

TABLE 3

Curricular Offerings Rated by the Graduates as Being of "Great Help," "Some Help," and of "Little or No Help"

Subject	Number Rated			Per Cent Rated		
	Great Help	Some Help	Little or No Help	Great Help	Some Help	Little or No Help
English	398	27	1	93.4	6.4	.2
Arithmetic	321	38	4	88.4	10.5	1.1
Business Training	82	29	4	71.3	25.2	3.5
Other Business Subjects	34	15	2	66.7	29.4	3.9
Health	99	43	13	63.9	27.7	8.4
Shop	16	4	2	72.7	18.2	9.1
Bookkeeping	135	44	18	68.5	22.3	9.2
Typewriting	156	39	22	71.9	17.9	10.2
Manual Training	29	13	5	61.7	27.7	10.6
Home Economics	119	28	26	68.8	16.2	15.0
Physical Education	52	44	25	42.9	36.3	20.8
Other Subjects	24	21	12	42.1	36.8	21.1
Social Science	12	47	22	31.7	46.5	21.8
Economics	40	48	26	35.1	42.1	22.8
Shorthand	77	42	40	48.4	26.4	25.2
Sociology	28	34	21	33.7	41.0	25.3
Commercial Law	29	43	25	29.9	44.4	25.7
General Science	89	134	81	29.3	44.1	26.6
Physics	34	39	30	33.0	37.9	29.1
Civics	46	89	57	24.0	46.3	29.7
Chemistry	37	43	36	31.9	37.1	31.0
Vocations	14	15	13	33.3	35.7	31.0
Algebra	114	162	125	28.4	40.4	31.2
Agriculture	33	28	28	37.0	31.5	31.5
American History	75	160	126	20.8	44.3	34.9
Biology	67	115	110	22.9	39.4	37.7
Solid Geometry	14	24	25	22.9	38.1	39.7
Trigonometry	12	11	16	30.8	28.2	41.0
Modern History	29	48	63	20.7	34.3	45.0
General History	23	59	70	15.2	38.8	46.0
Plane Geometry	80	104	183	21.8	28.3	49.9
English History	13	23	48	15.5	27.3	57.2
Latin	28	63	123	13.0	29.5	57.5
Medieval History	10	18	47	13.4	24.0	62.6
Ancient History	20	63	141	8.9	28.1	63.0
French	7	29	70	6.6	27.4	66.0

in their work following graduation. It is found, therefore, that American history was considered "helpful" by nearly two-thirds, or 65.1 per cent, of all the graduates who rated it, and of "little or no help" by 34.9 per cent, or a little more than one-third of the pupils who studied it in high school.

When it is remembered that the graduates were urged to rate the subjects studied in high school on the basis of their vocational worth in the positions held by them after leaving school, the reason for the apparent low rating of American history becomes clearer. Since it would be rather difficult to show specifically how American history could be of definite help in many vocational activities, the low rating given this subject by the graduates does not justify the conclusion that American history is of little value as a secondary-school curricular offering even for vocationally trained graduates. This may be said also, with reservations, concerning the foreign language, history, and mathematics courses which rank low in the per cent of times they are rated as of "great help."

Further analysis of Table 3 reveals that the graduates apparently recognize the general educational values of American history, algebra, general science, biology, and plane geometry even if they do not consider them of "great help" vocationally. For if the percentages rated "great help" are combined with those rated "some help," it will be found that American history is considered "helpful" by 65.1 per cent of the graduates rating it, algebra by 68.8 per cent, general science by 73.4 per cent, biology by 62.3 per cent, and plane geometry by 50.1 per cent. Further recognition by the graduates of the need for studying courses not considered purely vocational is shown later in this investigation with the presentation of subjects which the graduates would add to the high-school program.

Among the vocational subjects which did not rate high is agriculture. Table 3 shows that, while slightly more than one-third of the 89 graduates who rated agriculture considered it of "great help" to them in their work, almost one-third rated it as of "little or no help." The low rating given agriculture is not difficult to explain when it becomes known that only 14 out of the 89 rating agriculture took up farming immediately after graduation, and four years later only 15 were engaged in this occupation. Most high-school agriculture courses are rather specifically related to the occupation of farming and therefore evidently did not offer much specific training which could be effectively utilized in those other occupations in which 74 of the graduates who rated agriculture were engaged at the time of replying to the questionnaire.

It will be well to observe that vocations rated low, as indicated in Table 3. The term *vocations* is the name usually applied to certain high-school courses of an exploratory nature which are offered to acquaint pupils with fundamental facts relating to vocations in general. Of the 453 graduates who replied to the questionnaire only 42 indicated that they had studied vocations. About one-third found the subject of "great help"; about one-third found it of "some help"; while the remaining one-third found it of "little or no help."

With reference to bookkeeping, business training, typewriting and other commercial subjects which show high percentages as of "great help" or helpful, it will be seen that a far greater proportion of graduates rating these subjects entered upon related occupations following graduation than did those who rated agriculture. For example, 145 graduates were engaged in clerical work soon after graduation, and four years later 120 were still so employed.

Home economics was rated as of "great help" by more than 60 per cent of the 173 who took the subject in high school. It is of interest to note that 98, or 56.6 per cent of the number rating home economics, were housekeepers.

Curricular Offerings to be Added to the High-School Program

In order to give the graduates more opportunity to express subject-matter choice, space was provided in the questionnaire in which the graduates were requested to list any subjects which they would add to those to be rated. Adams[12] asked that the pupils name the subjects they would like to take but could not get. He attempted to learn the subject choices of pupils who were in school and for whom the school did not provide the subjects of their choice. In the current investigation the graduates were asked to list the subjects which they would add to the high-school program.

Table 4 lists the subjects, or subject matter, that the graduates think should be added to those listed in the questionnaire. The graduates, for the most part did not name actual subjects but rather suggested types of courses. In keeping with the general trend shown in the ratings of subjects in Table 3, those subjects that have a vocational or practical value head the list in Table 4.

That the graduates are conscious of the need for general cultural subjects is also shown by suggestions for "more music," "more art," "aesthetic subjects," "psychology," etc. More than half of the courses which the graduates would add to the high-school program, as

[12] Adams. *Op. cit.*, pp. 354-362, 417-427.

TABLE 4

Curricular Offerings the Graduates Would Add to Those Named in the Questionnaire

Subject	Times Indicated	Per Cent of Total
More Vocational Subjects	48	12.7
Spelling	46	12.2
More Business Courses	27	7.1
Penmanship	21	5.6
More Music	19	5.0
Military Science	17	4.6
More Art	16	4.2
Special Trades	15	3.9
More Courses in English	15	3.9
Courses in Religion	14	3.7
Public Speaking	12	3.2
Advanced Home Economics	12	3.2
Aesthetic Subjects	11	2.9
Courses in Psychology	11	2.9
More Social Science Subjects	10	2.7
Courses in Pennmanship	10	2.7
Advanced Arithmetic	10	2.7
Courses in Shop	8	2.2
Courses in Industrial Geography	6	1.6
Courses Relating to Sex	6	1.6
Courses in Etiquette	5	1.3
Marriage Instruction	5	1.3
Current Events Courses	5	1.3
Anatomy	5	1.3
Aviation Courses	4	1.0
Radio Courses	4	1.0
More Foreign Languages	3	.7
Courses in Printing	3	.7
Cooperative Subjects	2	.5
More Grammar Courses	2	.5
Courses in Reading	1	.3
Birth Control	1	.3
International Politics	1	.3
South American History	1	.3
More Advanced Chemistry Courses	1	.3
More History Courses	1	.3
Total	378	100.0

presented in Table 4, concern social relationships. It is of interest to observe that "courses in religion" were requested by fourteen. Eleven would add "aesthetic courses"; six would add courses "relating to sex"; ten would add "more social science subjects"; eleven suggest "courses in psychology"; five each would add courses in "etiquette," "marriage instruction," and "current events."

It is clearly evident from the data presented in Table 4 that at least some of the graduates replying to the questionnaire are interested in education for happy adjustment as well as for vocational

efficiency. Excerpts from unsolicited letters and comments from the graduates quoted in Appendix B of this study further substantiate the above statement.

The graduates would revise even the vocational courses now offered in high school in order to meet present-day needs. This fact is indicated in the suggestions by the graduates that there should be added to the present high-school program "aviation courses," "radio courses," "courses in printing," "military science," and "special trades."

Curricular Offerings to be Dropped from the High-School Program

Blanks were provided in the questionnaire in which the graduates were asked to write in the names of any subjects which they would drop from the high-school program. Table 5 lists the subjects which the graduates think should be dropped.

The graduates were more specific in the actual naming of subjects in Table 5 than they were in Table 4. German heads the list of subjects in the number of times indicated to be dropped from the high-school curriculum, although only one person stated that he had studied German in high school. The position of German as the most unpopular subject was influenced, no doubt, by the sympathies of the graduates with the enemies of Germany in the European war rather than by its possible value as a subject contributing to the larger life of the student after leaving high school. All the other subjects in Table 5 were studied in high school and are assigned their proper places in the evaluations of curricular offerings.

Table 5 agrees with Table 3 to the extent that those subjects standing highest in the list that the graduates would drop from the high-school program are also those subjects that were rated as of "little or no help" to the graduates after leaving high school. Again in Table 5, with the exception of American history, we find the list headed by foreign language, mathematics, and history courses.

An analytic observation of Table 5 reveals that the last six subjects from the bottom of the list of subjects which the graduates would drop from the high-school program are: music, American history, industrial geography, extra-curricular subjects, shorthand, and bookkeeping. Each of these subjects was indicated only one time. It it not clear why these subjects should be included at all. It may be that the graduates because of poor teaching or for other reasons personally disliked the subjects.

While there is no significant agreement between this study and

TABLE 5

Curricular Offerings the Graduates Would Drop from Those Named in the Questionnaire

Subject	Times Indicated	Per Cent of Total
German	54	14.8
Latin	38	10.5
French	35	9.8
Spanish	34	9.3
Plane Geometry	30	8.1
Ancient History	30	8.1
Solid Geometry	24	6.6
Medieval History	22	6.1
Trigonomentry	21	5.9
Algebra	11	3.0
Chemistry	6	1.6
Some Histories*	6	1.6
Vocations	5	1.3
English History	5	1.3
Commercial Law	5	1.3
Physics	4	1.1
Physical Education	4	1.1
Social Science Subjects	4	1.1
Economics	4	1.1
Biology	4	1.1
Sociology	3	.8
Modern History	3	.8
Home Economics	2	.6
Agriculture	2	.6
Civics	2	.6
Music	1	.3
American History	1	.3
Industrial Geography	1	.3
Extra-curricular Subjects	1	.3
Shorthand	1	.3
Bookkeeping	1	.3
Total	364	100.0

*This item does not refer to any specific history courses but lists the number of times the graduates indicated that "some histories" should be dropped from the program.

that by Adams[13] regarding subjects that pupils would add to the high-school curriculum, there is agreement with reference to the subjects they would drop. Adams lists in order plane geometry, Latin, algebra, and general history as subjects that the pupils in his study would drop from the high-school curriculum. Table 5 of the present investigation lists Latin, plane geometry, certain history courses, and algebra. Table 5 names thirty-one subjects that the graduates have checked one or more times as non-essential and indicate that they should be dropped.

[13] Adams. *Op. cit.*, pp. 354-362, 417-427.

Summary

This chapter presents evaluations of curricular offerings in Kentucky secondary schools by the graduates in reply to the first division of the questionnaire. It also lists in detail (a) curricular offerings which the graduates would add to those listed in the questionnaire and (b) those which they would drop.

An analysis of the information contained in this chapter reveals the following facts:

1. Of a total of 5,869 ratings of subjects by the graduates, the subjects were rated as of "great help" 2,416 times, as of "some help" 1,789 times, and as of "little or no help" 1,664 times.
2. English heads the list of subjects considered as of "great help" by the graduates, being placed in this category 93.4 per cent of the total number of times it was rated. Arithmetic follows second with 88.4 per cent. At the bottom of the list are Spanish and German, neither of which was considered of "great help" by any graduate. French received the lowest rating of any subject checked in this category, only 6.6 per cent of the total number of ratings of this subject being checked as of "great help."
3. Excluding German, which was checked only one time, social science ranks first among the subjects which the graduates considered as of "some help" to them in their work. Social science was checked as of "some help" 46.5 per cent of its total ratings; while civics follows next with 46.3 per cent. English with 6.4 per cent is at the bottom of the list as of "some help."
4. Vocational subjects generally rate high among the subjects considered of "great help" by the graduates, while certain mathematics and history courses tend to rate low.
5. Of the first twelve subjects rated as of "great help" only two, English and arithmetic, might be considered academic or college preparatory. All the others are vocational in nature.
6. It will be observed that the order in which the subjects are listed as of "little or no help" is almost the exact reverse of the listing which ranks in order the subjects as of "great help."
7. In the rating of subjects as of "little or no help" the graduates place Spanish first with 66.7 per cent of the total number of times it was checked. French is next in order with 66.0 per cent. Again English is at the bottom, being rated as of "little or no help" only .2 per cent of the total number of times it was checked.

8. Generally speaking, foreign language courses are not considered of much value by the graduates in their occupational pursuits.

9. Among the courses that the graduates would add to the high-school program, subjects of a practical nature stand highest; such as, more vocational subjects, spelling, more business courses, and penmanship.

10. While the graduates, as a general rule, would add more courses of a vocational nature to the high-school program, recognition of the need for courses in general education is noted in requests of the graduates that subjects; such as, music and art be added.

11. In suggesting additions to the high-school program the graduates name courses rather than specific subject titles.

12. The graduates are more specific in naming the subjects which they would drop from the high-school program. German, Latin, French, and Spanish, in order named, head the list of subjects the graduates would drop. This foreign language group is followed by mathematics and history courses in the following order: plane geometry, trigonometry, ancient history, solid geometry, medieval history, and algebra. All of the above-named subjects were checked 11 times or more and constitute 82.2 per cent of the total number of checkings in Table 5.

13. Data presented in this chapter indicate clearly that the graduates are in general agreement with the declaration of the President's Advisory Committee on Education in the *Report of the Committee;*[14] namely, that linguistic-mathematical college preparatory curricula are of little value to pupils who do not attend college following graduation from high school.

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[14] Reeves. *Op. cit.*, p. 98.

CHAPTER III.

OCCUPATIONAL STATUS OF THE GRADUATES

In this study the reader should keep in mind that the most influential factor in the evaluation of secondary-school curricular offerings by the graduates was the occupations they followed after they left school. As shown from comments by the graduates in Appendix B, some of them considered much of their high-school training of little or no help, either because of poor guidance in the selection of subject matter or because of the general nature of subject-matter courses offered in their respective high schools.

One graduate said:

> I find that most of the subjects I studied in high school have been of help to me in some way or other. But at the end of my four years in high school I had no more idea of what I wanted to do in life or what position I would even like to accept.[1]

Another commented:

> I think a fellow should be trained to do some kind of work—not just mixed up till he can't do anything.[2]

In recognition of these possible conditions the questionnaire contained the following questions:

a. What occupation did you accept immediately following graduation?
b. How did you secure your job following graduation?
c. What are you doing now?
d. Are you engaged now in the occupation of your choice?
e. If not, why?
f. What would you like to do?

Positions Accepted by the Graduates Following Graduation from High School

A project study of the high-school graduates of the Plainville High School, Plainville, Connecticut, convinced Hoefler[3] that almost all of the graduates wanted to work, but that their ordinary efforts to obtain employment were not efficient enough to enable them to secure jobs. The writer's study presumed that most of the graduates desired

[1] See Appendix B, page 118.
[2] See Appendix B, page 121.
[3] L. A. Hoefler. "Fifty out of Sixty Want to Work." *English Journal (H. S. Edition)*, 25:136, February 1936.

employment, and the results obtained apparently show that this presumption was well founded. No attempt is made in the present investigation, however, to determine to what extent the graduates were employed in jobs for which they had had some specific training. One such study by Mitchell[4] revealed that about 58 per cent of the graduates of the class of 1936 of Newton High School, Newton, New Jersey, were employed one year later in positions for which they had received specific training.

Table 6 indicates the types of positions secured by 395 graduates out of the 453 who returned the questionnaires. The table also shows that fifty-two stated that they were unemployed. The total number replying to this question was 447. Six failed to answer this question.

At the top of the list of positions named in Table 6 are the store clerks. Seventy-four, or 16.55 per cent, of those replying to the question were thus employed. Store clerks include all persons who say that they were employed in any sales capacity in stores. Stenographers, bookkeepers, secretaries, and clerks are classified as general clerical. This is the next largest group in Table 6 and comprises 15.88 per cent of the total number replying.

Fifty-two, or 11.63 per cent of all who replied to this question indicate that they were unemployed for some time after graduation from high school. This percentage is somewhat lower than that of Wright's follow-up study in 1934.[5] She found in a follow-up study of 2,500 graduates from eight Minnesota high schools that 22.30 per cent were unemployed about one year after their graduation from high school. It will be remembered, however, that Wright's study was made during the depths of the depression, and that it included eight large high schools which graduated an average of more than 300 pupils each in 1934.

A small follow-up study of two hundred high-school graduates of a class of 1936 by Boller[6] revealed 25 per cent unemployed about one year after graduation.

In recent years among the surveys of the status of high-school graduates, one by Anderson and Berning[7] shows the following:

1. About one-third of the graduates secured full-time employment within one year after graduation; one-third continued their education; and one-third were either unemployed or had part-time employment only.

[4] John Mitchell. "A Follow-up Study of 1936 Graduates." *Journal of Business Education*, 13:17, December 1937.
[5] Barbara H. Wright. "A Follow-up of 1934 Graduates." *Occupations*, 15:42-45, October 1936.
[6] G. D. Boller. "A Follow-up of Recent Graduates." *Business Education World*, 17:674-675, May 1937.
[7] G. Lester Anderson and T. J. Berning. "What Happens to High School Graduates?" *Education Digest*, 7:9-11, January 1942.

TABLE 6

Occupational Status of Graduates Immediately Following High-School Graduation

Position Accepted	Male	Female	Times Indicated	Per Cent of Total
Store Clerk	46	28	74	16.55
Clerical (General)	21	50	71	15.88
Unemployed	2	50	52	11.63
Common Laborer	28	15	43	9.62
Enrolled in Special Schools	2	38	40	8.94
Keeping House	0	28	28	6.26
Salesman	10	4	14	3.13
Farming	13	1	14	3.13
Waiter (Waitress)	1	10	11	2.46
Managerial	10	0	10	2.26
Telephone Operator	0	9	9	2.02
Beautician	0	6	6	1.32
Automobile Mechanic	6	0	6	1.32
Service Station Attendant	4	1	5	1.12
In Military Service	5	0	5	1.12
General Mechanic	5	0	5	1.12
Coal Miner	5	0	5	1.12
Practical Nursing	1	3	4	.89
Truck Driver	4	0	4	.89
Steam Engineer	3	0	3	.67
U. S. Government Service	2	1	3	.67
Bricklayer	3	0	3	.67
Cashier	0	3	3	.67
Baker	3	0	3	.67
Music Teacher	0	3	3	.67
Teaching Mechanics	1	2	3	.67
Photographer	2	0	2	.45
Domestic Service	1	1	2	.45
National Youth Administration	1	1	2	.45
Newspaper Apprentice	2	0	2	.45
Civilian Conservation Corps	1	0	1	.22
Motion Picture Machine Operator	1	0	1	.22
Bus Driver	1	0	1	.22
Dental Assistant	0	1	1	.22
Printer	1	0	1	.22
Laundry Operator	1	0	1	.22
Postoffice Employe	1	0	1	.22
Employe on Highway	1	0	1	.22
Watchmaker	1	0	1	.22
Painter	1	0	1	.22
Junior Chemist	1	0	1	.22
Plumber	1	0	1	.22
Total	192	255	447	99.91

2. Scholastic success bore little relation to employment in the labor market.
3. There was a clear relationship between the status of the young people one year after graduation and the socio-economic status as indicated by the father's occupation.

4. Of those employed full time, 45 per cent held clerical positions while 14 per cent were laborers.
5. About 1 in 5 had been trained in school for his job.
6. The high-school curriculum is still in the main college preparatory.

As a result of a survey of the graduates of his school, Welsh[8] revised his commercial curriculum by adding a course in selling and also a general clerical course not requiring shorthand.

How the Positions Were Secured

In the writer's study on how they secured their positions following their graduation from high school, the graduates listed fourteen methods as given in Table 7. Some of these methods listed could be combined with others, since there appears to be some overlapping, but for the sake of accuracy the actual replies of the respondents are maintained as nearly as possible.

Boller[9] found that his respondents secured their first positions through (a) recommendations of the school, (b) with the aid of a friend or relative, (c) through employment agencies, (d) by personal application in answer to advertisements, (e) by personal application not in answer to advertisements, and (f) through other sources.

TABLE 7

How the Graduates Secured Their Positions Following Graduation

How Positions Were Secured	Times Indicated	Per Cent of Total
By Application (Wrtten and Oral)	139	54.42
Through Friends or Acquaintances	47	15.36
Offered Position by Employer	36	11.76
Through Influence of Kinsfolk	26	8.50
Through Employment Bureau	16	5.22
Following Apprentice Training	16	5.22
After Passing Examination	9	3.00
Given Position on Trial	4	1.30
In Reply to Advertisements	4	1.30
Through "Pull"	3	.98
Operating Own Business	3	.98
Through Works Progress Adminstration	1	.32
Through Certifying Office	1	.32
"By the Proper Approach"	1	.32
Total	306	100.00

[8] E. J. Welsh. "We Follow-up Our Graduates." *Nations Schools,* 29:49-50, April 1942.
[9] Boller. *Op. cit.,* pp. 674-675.

Analysis of Table 7 reveals that the methods used by the graduates in the writer's study are not dissimilar from those by Boller.

It will be seen in Table 6 that 395 graduates were employed soon after leaving school, while only 306 told how they secured their jobs as indicated in Table 7. Eighty-nine of the respondents, therefore, failed to indicate the methods they used in securing employment after leaving school.

The methods used by the graduates in securing employment are similar to those employed generally, except that three were frank enough to say they had "pull," and one stated that he obtained employment by "the proper approach." No further explanation was given of what was meant by these terms.

Present Occupational Status of the Graduates

In order to determine any changes that might have occurred in the occupational status of the graduates during the four years following their graduation from high school, they were asked to name the type of work they were doing at the time they filled out the questionnaire. Table 8 shows the type of employment followed, the number under each type, the per cent of the total for each type of position named, and the number employed under each type according to sex. Table 6 lists forty-one types, while Table 8 lists forty-two.

Comparisons of Tables 6 and 8 reveal changes in the rankings of positions listed in these tables. For instance, in Table 6 housekeepers numbered twenty-eight and represented 6.26 per cent of the total and ranked sixth from the top, while Table 8 shows that four years later housekeepers had advanced to the top of the positions held, and were checked ninety-eight times, or 22.53 per cent of the total number listed in this table. General clerical positions increased in number from seventy-one in Table 6 to eighty-three in Table 8, and the percentage of the total numbers increased from 15.88 to 1909.

An increase of from five in Table 6 to twenty-one in Table 8 in the number of graduates in military service apparently is the result of the effective selective service laws of the federal government and its defense program. There is a decrease during the four years in the number of unemployed. In 1937 fifty-two graduates indicated that they had no employment, but in 1941 only eighteen stated that they were unemployed.

Table 6 reveals that forty graduates stated that they were enrolled in special schools, while this category disappears entirely from Table 8. Respondents were tabulated as enrolled in special schools when they stated that they were taking short business courses

TABLE 8

Occupational Status of the Graduates at the Time They Filled Out the Questionnaire

Position Named	Male	Female	Times Indicated	Per Cent of Total
Keeping House	0	98	98	22.53
Clerical (General)	20	63	83	19.09
Store Clerk	18	19	37	8.51
Common Labor	29	7	36	8.26
In Military Service	20	1	21	4.83
Unemployed	1	17	18	4.14
Farming	13	2	15	3.45
Salesman	14	0	14	3.22
In Civil Service (Federal)	8	4	12	2.76
Managerial	8	2	10	2.29
General Mechanic	8	1	9	2.07
Operating Own Business	5	3	8	1.83
Teaching	1	7	8	1.83
Truck Driver	5	3	8	1.83
Beautician	0	6	6	1.38
Telephone Operator	0	5	5	1.15
National Youth Administration	0	5	5	1.15
Coal Miner	5	0	5	1.15
Works Progress Administration	2	2	4	.92
Service Station Attendant	3	1	4	.92
Baker	1	2	3	.69
Practical Nursing	0	2	2	.46
Employe on Highway	2	0	2	.46
Watchman (Guard)	2	0	2	.46
Electrician	2	0	2	.46
Civilian Conservation Corps	1	0	1	.23
Skating Rink Attendant	1	0	1	.23
Photographer	1	0	1	.23
Bus Driver	1	0	1	.23
Waitress	0	1	1	.23
Dental Assistant	0	1	1	.23
Bricklayer	1	0	1	.23
Federal Bureau of Investigation	1	0	1	.23
Tennessee Valley Authority	1	0	1	.23
Watchmaker	1	0	1	.23
Radio Mechanic	1	0	1	.23
Draftsman	1	0	1	.23
Boxing Instructor	1	0	1	.23
Cashier	1	0	1	.23
Funeral Director	1	0	1	.23
Recreational Director	0	1	1	.23
Plumber	1	0	1	.23
Distiller	1	0	1	.23
Total	182	253	435	99.98

or were enrolled in correspondence schools or in beauty culture schools, etc. Eleven graduates stated that they were waitresses or waiters in restaurants soon after they left high school, but four years later only one indicated that she was employed in this capacity.

Table 8 shows that only ten types of positions are listed under which ten or more graduates were employed at the time the questionnaires were filled out. A consolidation of the employment status of all respondents to the questionnaire is presented in Table 9 which lists the first ten types of employment status named in Table 8 and combines all the others into an unclassified category. Table 9 gives the number of replies received under each category, together with the percentage each category is of the total number of questionnaires returned by each group.

A study of the occupational status of 564 graduates by Cramer,[10] covering the years from 1932 to 1938 inclusive, gives general results not far at variance with those revealed by the present study. Differences in the classifications of types of positions in Cramer's study and in this investigation may account to some degree for the differences in percentages shown in each study.

For example, Cramer found that 24.70 per cent of the graduates in his study were homemakers, while Figure 4 of this study shows 22.53 per cent of those replying keeping house. Unemployment in Cramer's study numbered 8.62 per cent of the whole, but in the current investigation only 4.14 per cent were unemployed. Laborers number 6.86 per cent in Cramer's study, but 8.26 per cent in this study.

TABLE 9

Employment Status of the Graduates at the Time of Replying to the Questionnaire

Status of Employment	Male	Female	Number of Replies Received	Per Cent of Total Replies Received
Housekeeping	0	98	98	22.53
Unclassified*	51	40	91	20.92
Clerical (General)	20	63	83	19.09
Store Clerk	18	19	37	8.51
Common Labor	29	7	36	8.26
In Military Service	20	1	21	4.83
Unemployed	1	17	18	4.14
Farming	13	2	15	3.45
Salesman	14	0	14	3.22
Civil Service	8	4	12	2.76
Managerial	8	2	10	2.29
Total	182	253	435	100.00

* *Unclassified* means all the graduates employed in positions listed in Table 8, where the number listed under each position is under ten.

[10] Buel B. Cramer. "Following-up High School Graduates." *Occupations*, 18:182-186, December 1939.

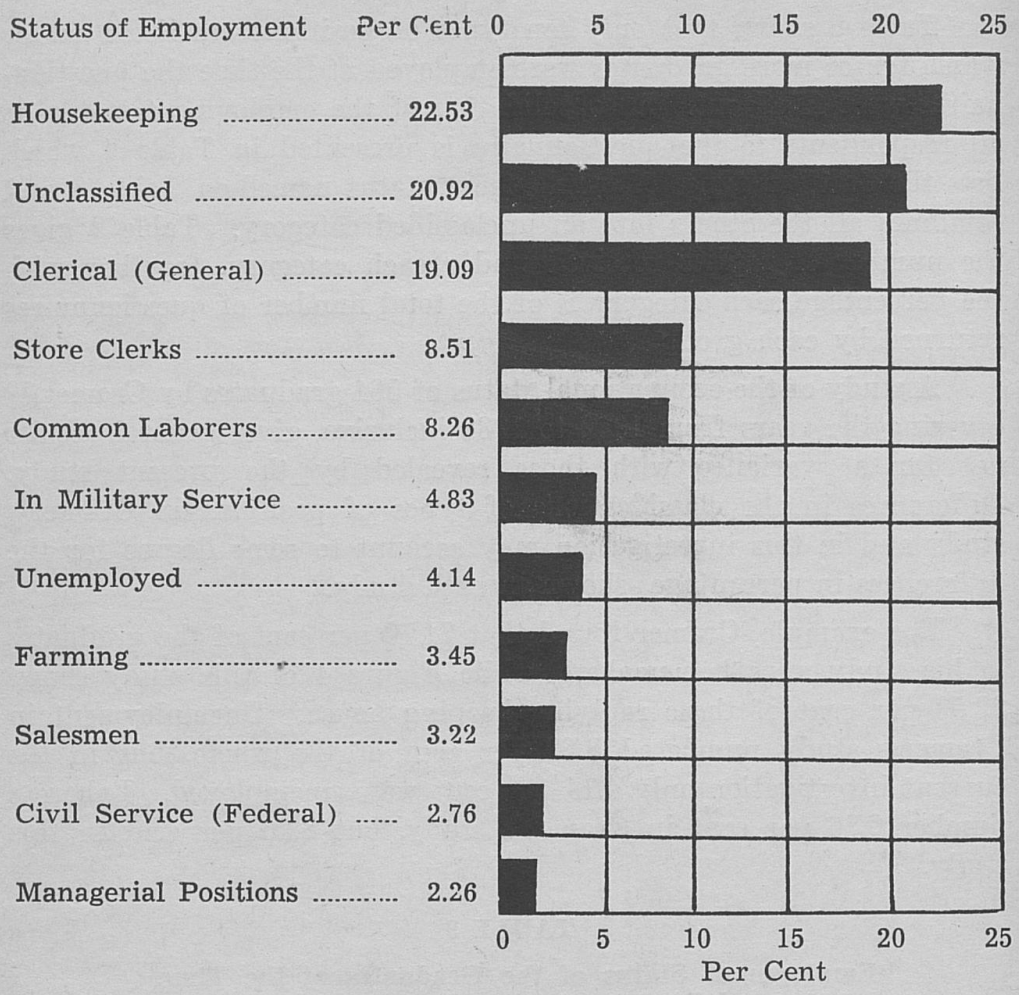

Figure 4. Per Cent of Graduates in Each Occupational Group.

An occupational follow-up study in a small California high school by Christensen[11] gives in general the same results regarding occupational status as are shown in the present study if allowances are made for differences in classification of the types of occupations. Christensen's study showed 39.3 per cent housekeepers instead of 22.53 found in this study. In business and commercial pursuits he names 23.2 per cent, while the writer found 20.9 per cent in business when clerical positions are combined with those in which the respondent operated his own business. This investigation shows that 8.26 per cent of the graduates replying classified themselves as laborers, while Christensen's study showed 7.0 per cent in this classification.

In a class of 227 graduates in 1937, Stevens[12] found in a high school in a city of 50,000 that, of the 48 per cent of boys and 26 per

[11] Alfred Christensen. "Follow-up in a Small High School." *California Journal of Secondary Education*, 17:16-20, January 1942.

[12] Raymond B. Stevens. "Experience of High-School Pupils after Graduation." *School Review*, 50:24-31, January 1942.

cent of girls who did not go to college, 12 per cent were engaged in business; 33 per cent held clerical positions; 29 per cent worked in shops; 12 per cent held service jobs; and 14 per cent were common laborers. He makes this observation: "Our educational facilities are but poorly geared to the actual needs of the average boy and girl and fail to come anywhere near a meaningful ideal of universal education."

Metter,[13] in a study involving about 3,000 high-school graduates from seven high schools, found that slightly over 30 per cent were non-college graduates. His list of jobs held by the pupils included in his study in general agrees with those named in this investigation. He suggests that two years added to the present high-school curriculum might be better than too much specialization within the present four-year curriculum. He also observes that college entrance requirements decidedly affect present-day high-school curricula.

Curricular Offerings Rated by Certain Occupational Groups

Figures 5 to 15 present graphically the per cent of ratings given each curricular offering by the occupational groups named in Table 9 and Figure 4. The percentage rating for each curricular offering is based upon the total number of ratings received for all the curricular offerings rated by the particular group named. It will be noted that with the exception of Figures 5 and 6 the figures are arranged in the same order with respect to the number in each occupational group as they are in Table 9 and Figure 4. Table 9 shows 91 in the "unclassified group" while Figure 5 shows 109 in this grouping.

Table 9 and Figure 4 present the replies of those who stated definitely their unemployment status. Eighteen of the 453 replies received gave no indication of the employment status of those replying and therefore are not included in Table 9 nor in Figure 4, although they are included in Figure 5 since these eighteen rated the curricular offerings in their questionnaires. The placing of these eighteen in Figure 5 makes a total of 109 included in this figure instead of 91 as reported in Table 9. The "unclassified group" therefore is first in the list of preceding figures, although "Housekeepers" comes first in Table 9 and Figure 4.

[13] Harry L. Metter. "When the High School is a Finishing School." *School Executive*, 59:15-17, May 1940.

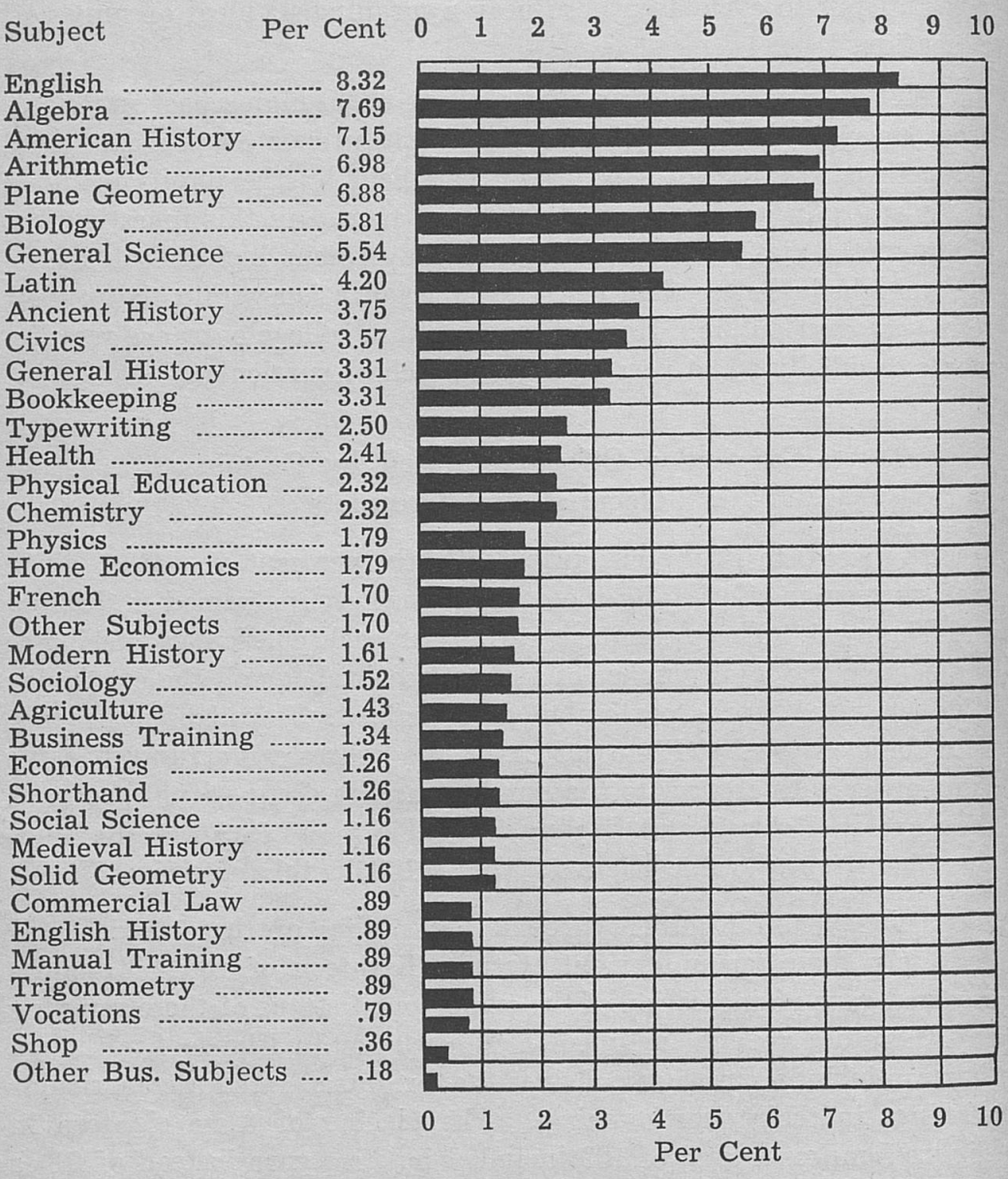

Figure 5. Per Cent of Curricular Offerings Rated by 109 Graduates of the Unclassified Group.

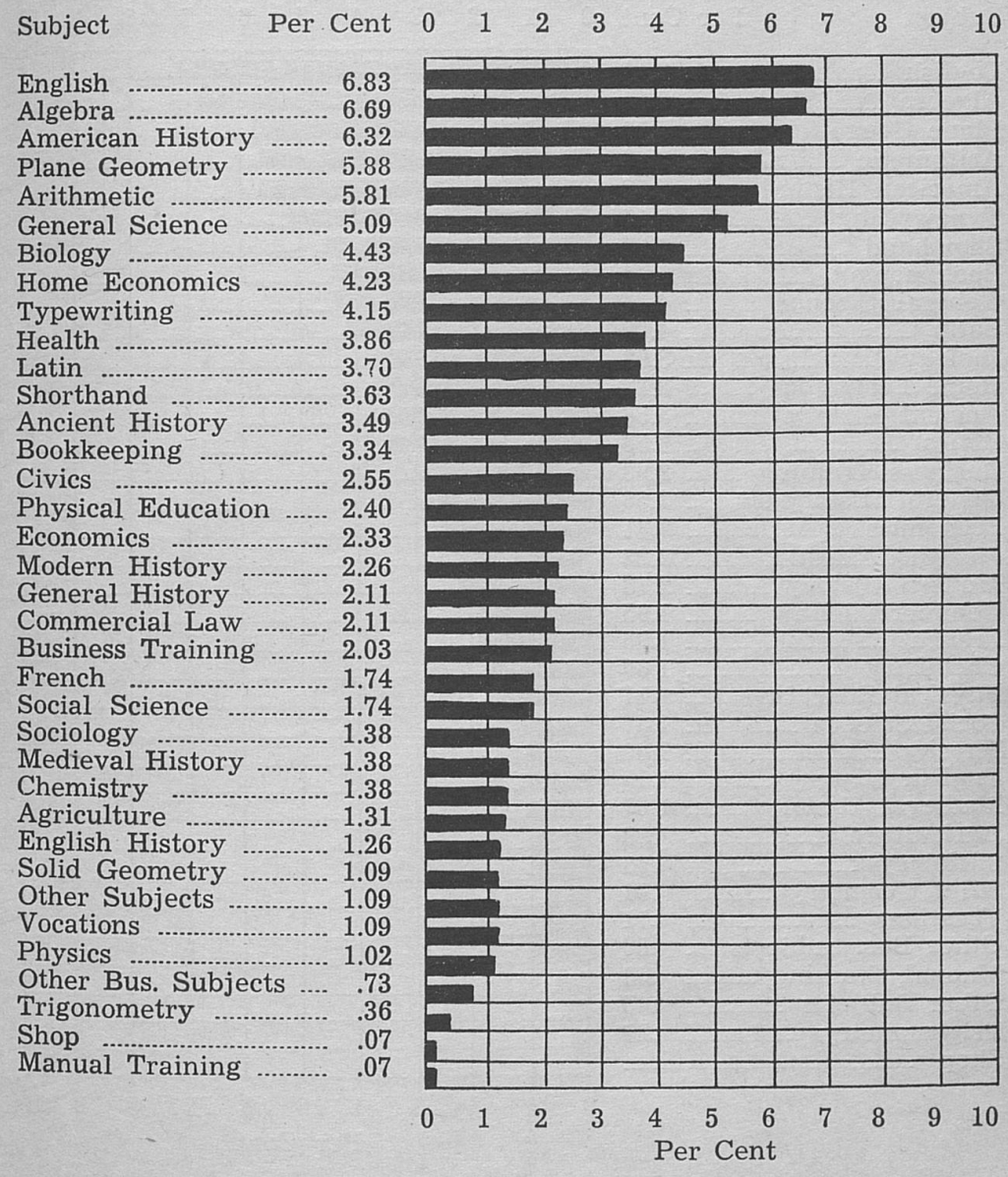

Figure 6. Per Cent of Curricular Offerings Rated by Ninety-Eight Graduates Who are Housekeepers.

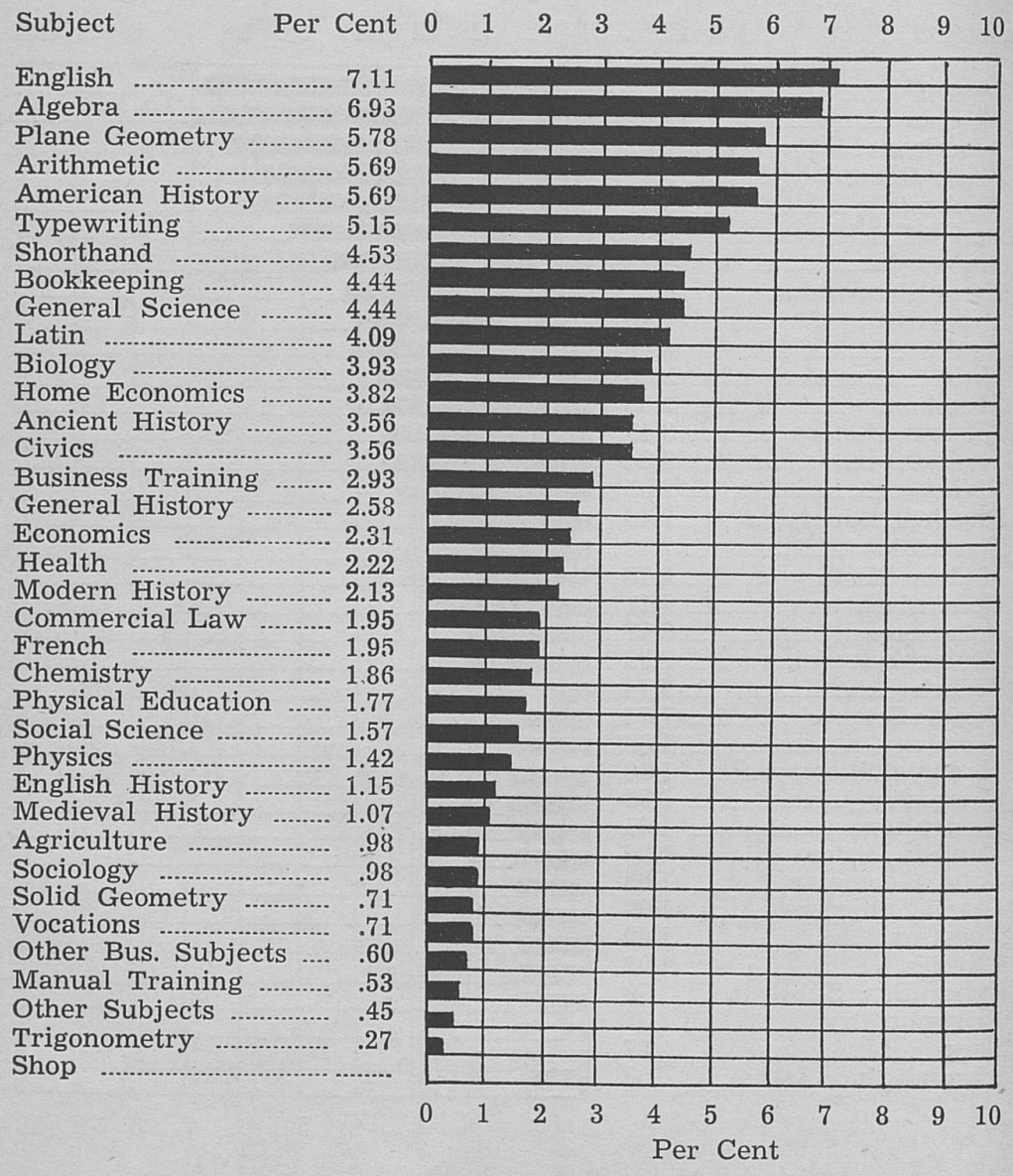

Figure 7. Per Cent of Curricular Offerings Rated by Eighty-Three Graduates Who are Holders of Clerical Positions.

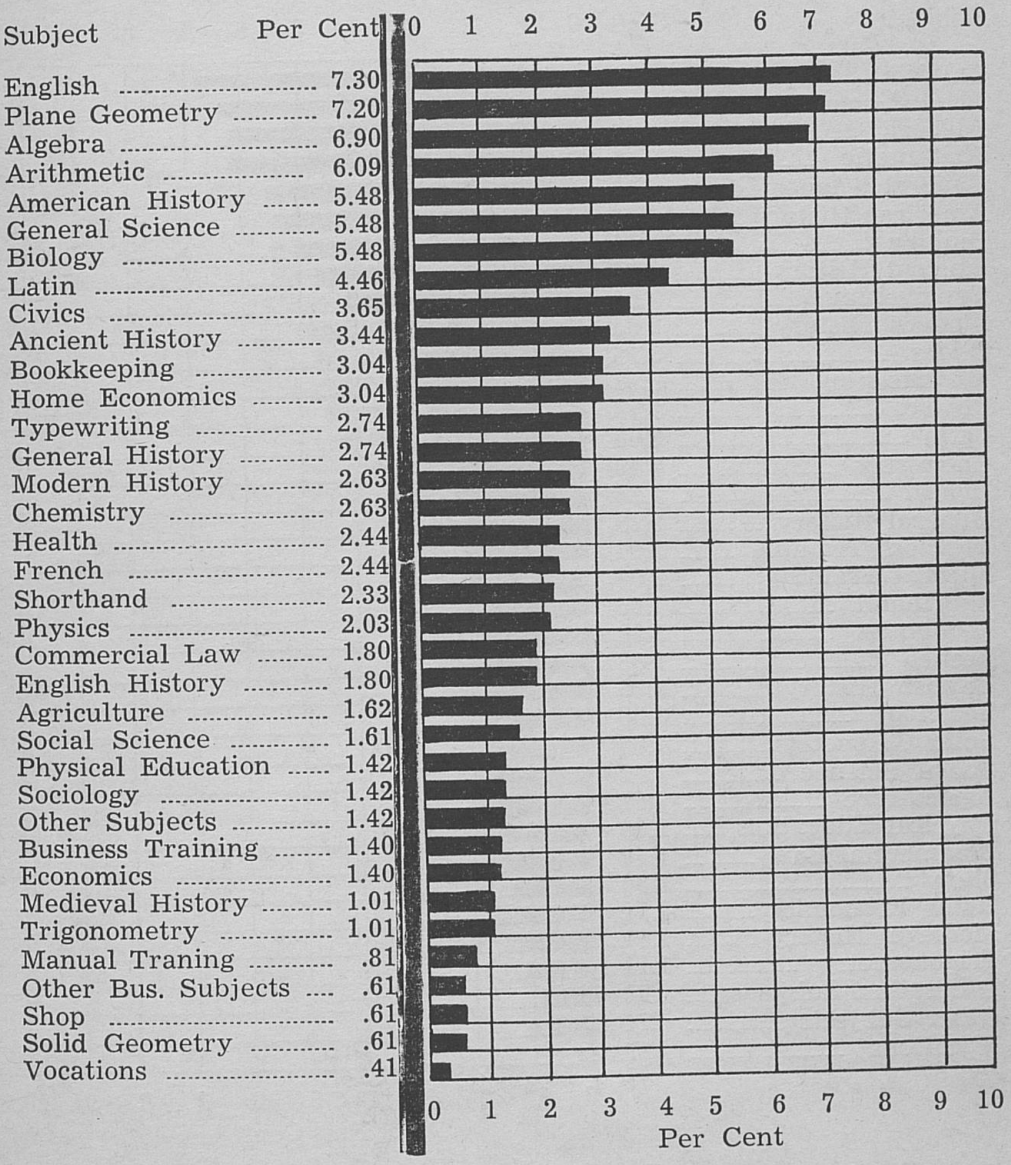

Figure 8. Per Cent of Curricular Offerings Rated by Thirty-Seven Store Clerks.

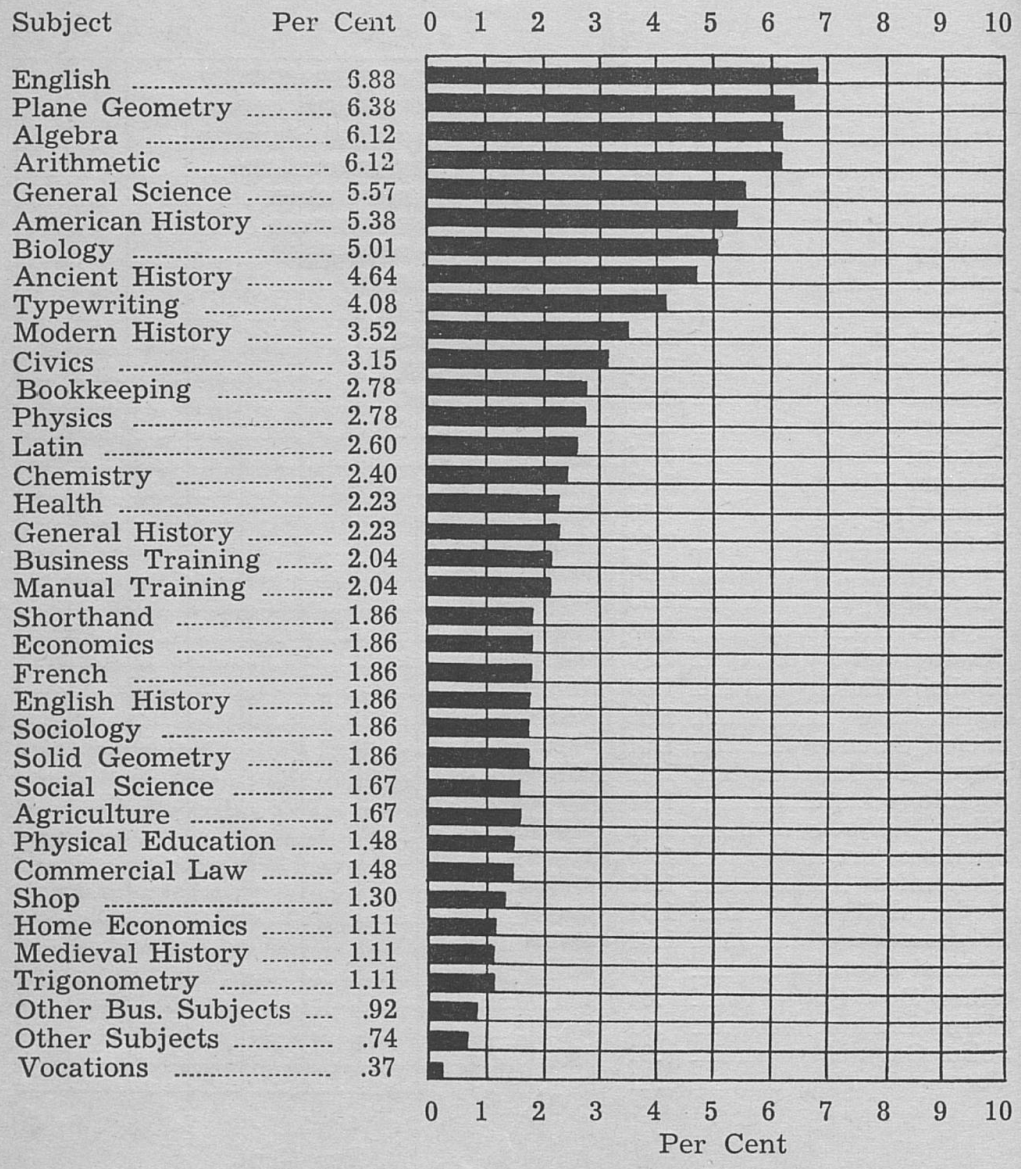

Figure 9. Per Cent of Curricular Offerings Rated by Thirty-Six Common Laborers.

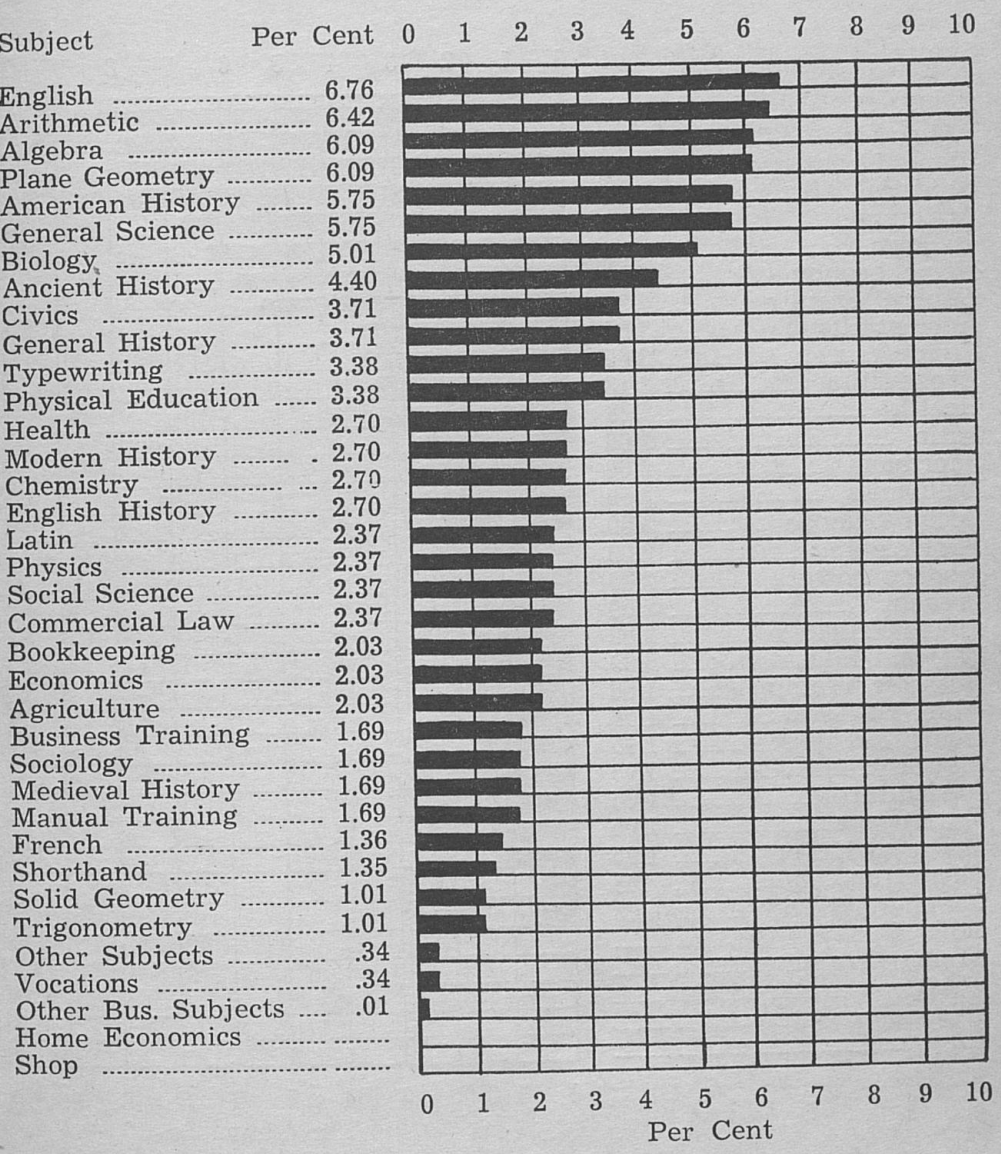

Figure 10. Per Cent of Curricular Offerings Rated by Twenty-One Persons in the Military Service.

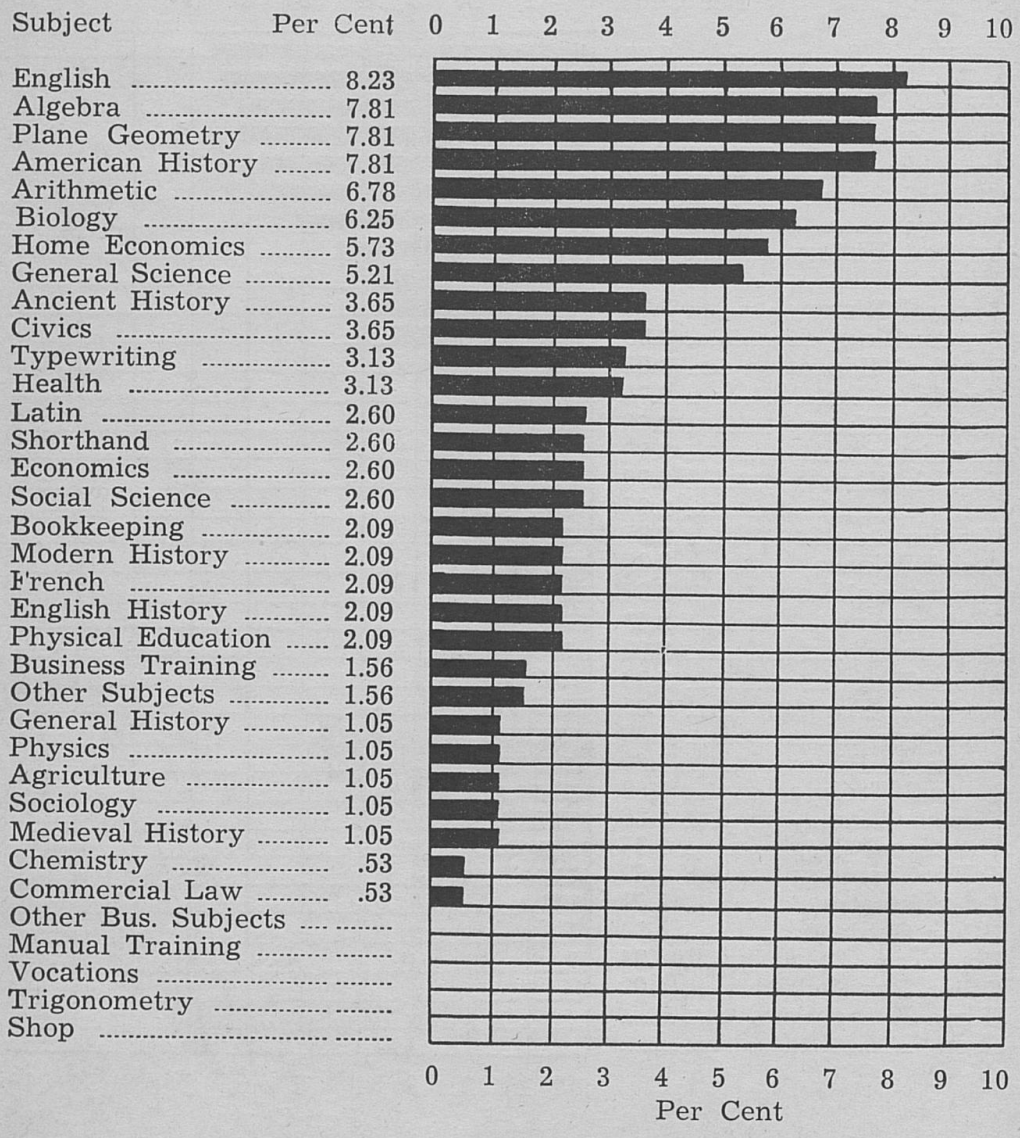

Figure 11. Per Cent of Curriculur Offerings Rated by Eighteen Unemployed.

Subject	Per Cent
Arithmetic	7.42
English	7.39
Plane Geometry	7.39
American History	7.39
Biology	6.90
Algebra	6.41
Ancient History	4.92
General Science	4.44
Latin	3.45
Modern History	3.45
Civics	2.95
Physics	2.95
Sociology	2.95
Bookkeeping	2.46
Business Training	2.46
Economics	2.46
French	2.46
Social Science	2.46
Typewriting	1.97
General History	1.97
Chemistry	1.97
Shop	1.97
Agriculture	1.92
Medieval History	1.48
Solid Geometry	1.48
Shorthand	.99
Health	.99
English History	.99
Manual Training	.99
Trigonometry	.99
Home Economics	.49
Commercial Law	.49
Physical Education	
Other Subjects	
Other Bus. Subjects	
Vocations	

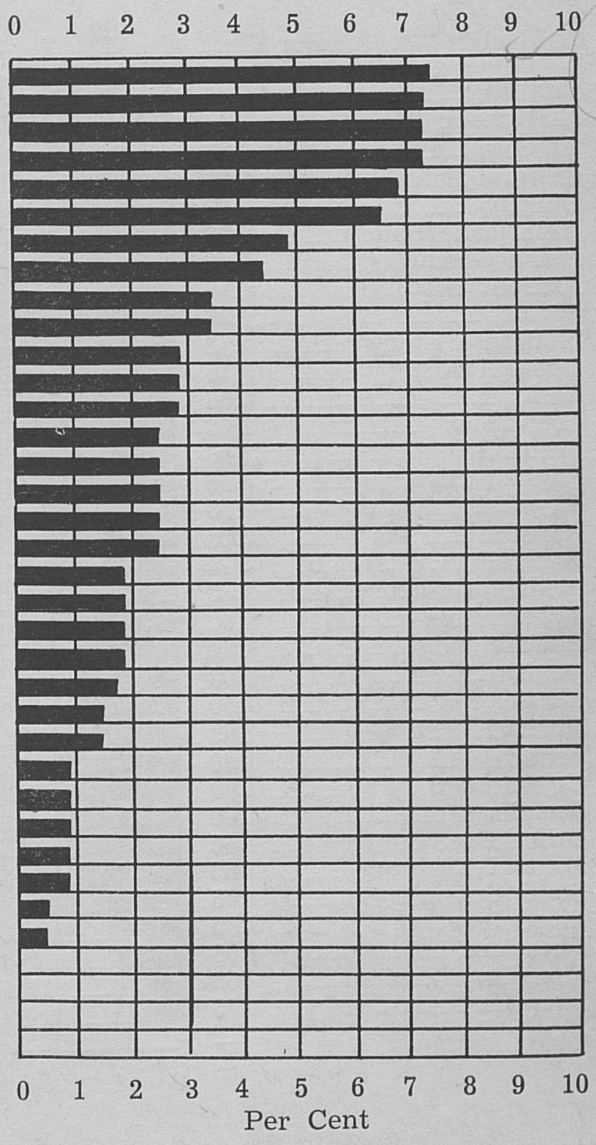

Figure 12. Per Cent of Curricular Offerings Rated by Fifteen Farmers.

Subject	Per Cent
English	7.44
Arithmetic	7.44
Algebra	6.38
General Science	6.38
Biology	6.38
American History	5.86
Plane Geometry	5.32
Ancient History	4.26
Civics	4.26
Modern History	3.72
General History	3.19
Latin	2.66
Economics	2.66
Social Science	2.66
English History	2.66
Physical Education	2.13
Physics	2.13
Agriculture	2.13
Medieval History	2.13
Typewriting	1.60
Bookkeeping	1.60
Health	1.60
Chemistry	1.60
Business Training	1.60
French	1.60
Commercial Law	1.60
Sociology	1.60
Other Bus. Subjects	1.60
Manual Training	1.60
Solid Geometry	1.05
Trigonometry	1.05
Vocations	1.05
Shorthand	.53
Shop	.53
Home Economics	

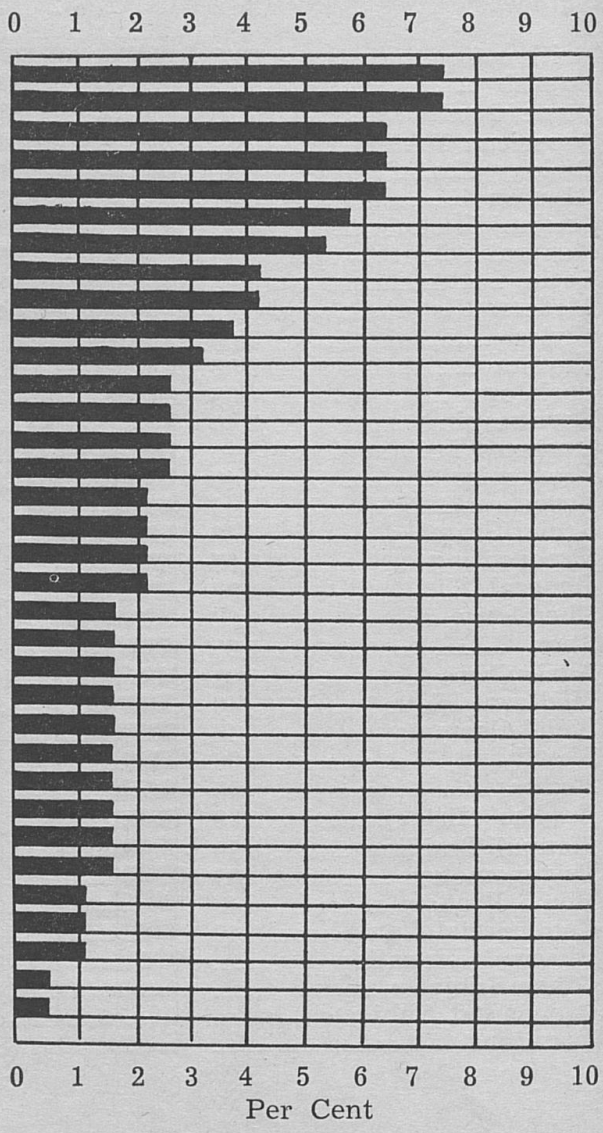

Figure 13. Per Cent of Curricular Offerings Rated by Fourteen Salesmen.

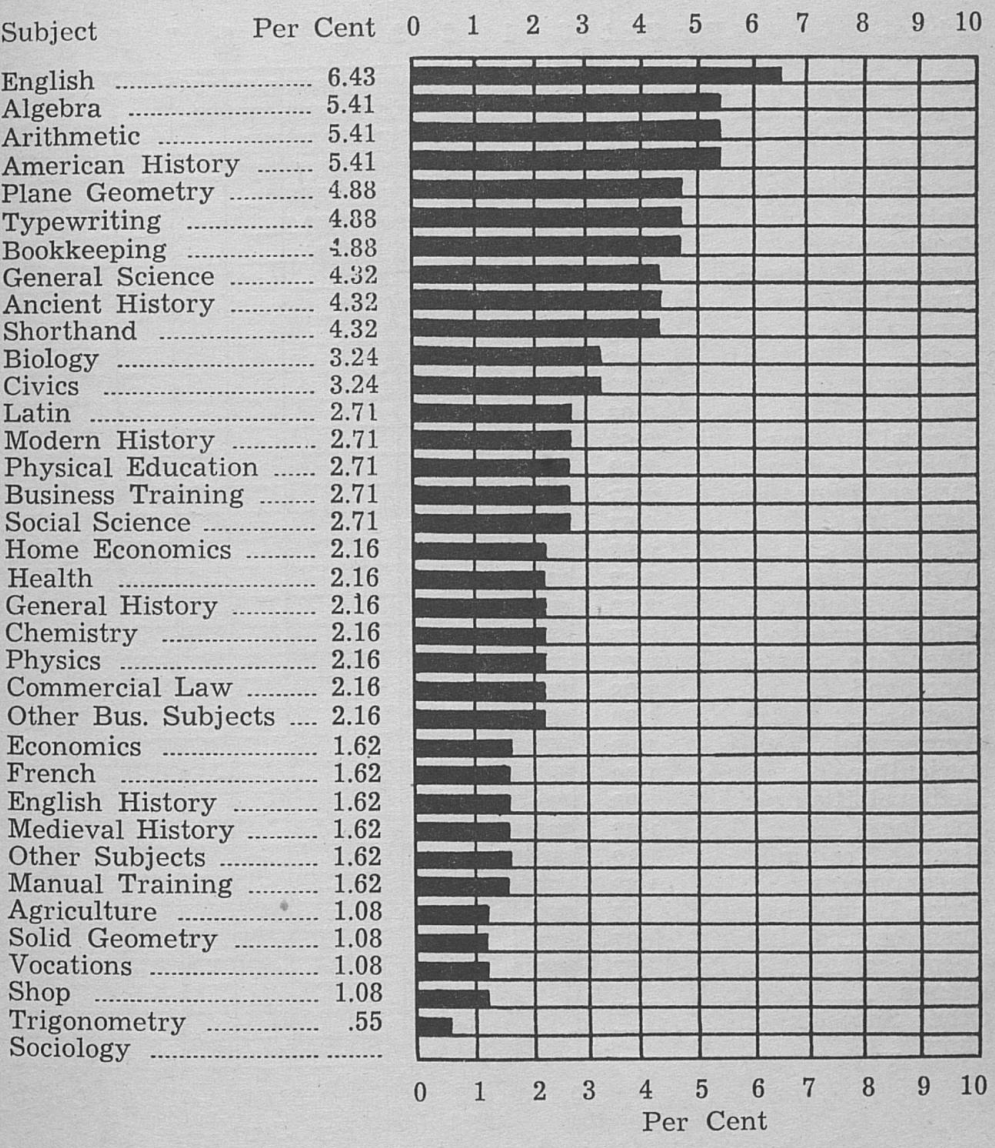

Figure 14. Per Cent of Curricular Offerings Rated by Twelve Graduates in the Federal Civil Service.

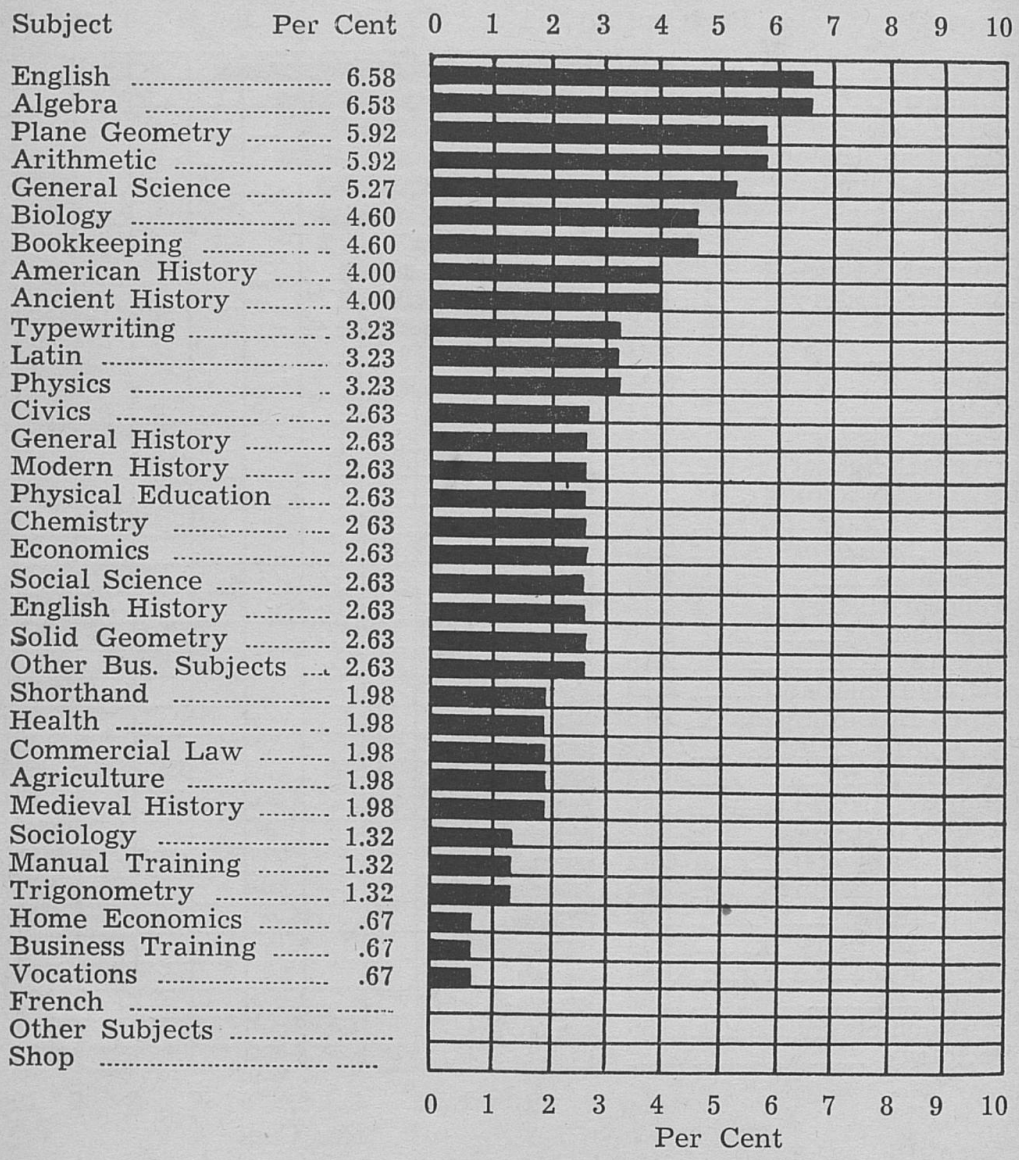

Figure 15. Per Cent of Curriculur Offerings Rated by Ten Graduates Holding Managerial Positions.

Comparisons with reference to Figures 5 to 15 reveal interesting, if not significant, facts. English leads in the total per cent of curricular offerings rated by each group except farmers, salesmen, and managers. The farmers rated arithmetic the greatest number of times, 7.42 per cent, while English, plane geometry, and American history received percentage ratings of 7.39 each. English tied for first place with arithmetic in the ratings by salesmen, each receiving 7.44 per cent of the total ratings from this group. The holders of managerial positions gave English and algebra the same percentage rating, 6.58.

Figure 2 (page 250), which presents the per cent of times each curricular offering was rated by all the graduates replying to the questionnaire, placed in order from high to low as the first six offerings: English, algebra, plane geometry, arithmetic, American history, and general science. At least five of the above-named curricular offerings occur in the first five offerings listed in Figures 5 to 15. This would seem to indicate that in most Kentucky high schools these offerings are either required, or the number of offerings for some of the high schools is so limited as to make the study of these offerings necessary for graduation.

There is evidence, however, that some of the groups used discrimination in the selection of evidently elective offerings when they had an opportunity to do so. For example, home economics received 4.43 per cent of the total ratings by housekeepers and occupies sixth place from the top of the list of offerings rated in Figure 6. Typewriting is listed in sixth place by holders of clerical positions with a rating of 5.15 per cent, while shorthand and bookkeeping follow in order with percentage ratings of 4.53 and 4.44 respectively. As shown in Figure 8, the first vocational offering which might be considered as definitely related to this occupational group is bookkeeping and is given eleventh position, being rated 3.04 per cent of the total ratings made by this group. Vocational offerings were not studied by many of the group listed as "Common Laborers" as presented in Figure 9. For instance, agriculture received 1.67 per cent of the total ratings given by this group and shop only 1.30 per cent.

A careful observation of the listings in Figure 10, which shows the per cent of curricular offerings rated by persons in the military service, reveals that this group apparently chose more wisely than did some of the others in the offerings studied in high school. English, mathematics, science, and social science courses show the greatest percentage of ratings.

All the other groups as presented in Figures 5, 11, 12, 13, 14, and 15, show heavy emphasis on the generally required subjects as

presented in Figure 2 with apparently little regard to the vocational aspects of the offerings in the matter of selection. Two reasons might be assigned for this: (a) the inability of the pupil to decide upon any particular vocation while yet in school, and (b) the lack of a good guidance program in the school itself.

A summary of Figures 6 to 15, showing the range of subjects by occupational groups is presented in Table 10. The range of subjects as shown in Figure 5 for the "unclassified group" are omitted from Table 10, since this group includes the unemployed as well as positions in which less than ten graduates were employed.

TABLE 10.

Summary of Figures 6 to 15 Showing Range of Subjects Rated by Occupational Groups

Subject	House-Keepers	Clerks	Store Clerks	Laborers	Military	Unemployed	Farmers	Salesmen	Civil Service	Managers
English	1	1	1	1	1	1	2	1	1	1
Algebra	2	2	3	3	3	2	6	3	2	2
Plane Geometry	4	3	2	2	4	3	3	7	5	3
Arithmetic	5	4	4	4	2	5	1	2	3	4
American History	3	5	5	6	5	4	4	6	4	8
General Science	6	9	6	5	6	8	8	4	8	5
Biology	7	11	7	7	7	6	5	5	11	6
Ancient History	13	13	10	8	8	9	7	8	9	9
Typewriting	9	6	13	9	11	11	19	20	6	10
Latin	11	10	8	14	17	11	9	12	13	11
Bookkeeping	14	8	11	12	21	17	14	21	7	7
Civics	15	14	9	11	9	10	11	9	12	13
Home Economics	8	12	12	31	0	7	31	0	18	31
Shorthand	12	7	19	20	29	14	26	33	10	23
Health	10	18	17	16	13	12	27	22	19	24
General History	19	16	14	17	10	24	20	11	20	14
Modern History	18	19	15	10	14	18	10	10	14	15
Physical Education	16	23	25	28	12	21	33	16	15	16
Chemistry	26	22	16	15	15	29	21	23	21	17
Business Training	21	15	28	18	24	22	15	24	16	32
Economics	17	19	29	21	22	15	16	13	25	18
French	22	21	18	22	28	19	17	25	26	34
Physics	32	25	20	13	18	25	12	17	22	12
Social Science	23	24	24	26	19	16	18	14	17	19
Commercial Law	20	20	21	29	20	30	32	26	23	25
Agriculture	27	28	23	27	23	26	23	18	31	26
English History	28	26	22	23	16	20	28	15	27	20
Sociology	24	29	26	24	25	27	13	27	0	28
Medieval History	25	27	30	32	26	28	24	19	28	27
Solid Geometry	29	30	35	25	30	0	25	30	32	21

TABLE 10.

Summary of Figures 6 to 15 Showing Range of Subjects Rated by Occupational Groups—(Continued)

Subject	Housekeepers	Clerks	Store Clerks	Laborers	Military	Unemployed	Farmers	Salesmen	Civil Service	Managers
Other Subjects	30	34	27	35	32	23	0	0	29	0
Other Business Subjects	33	32	33	34	34	0	0	28	24	22
Manual Training	36	33	32	19	27	0	29	29	30	29
Vocations	31	31	36	36	33	0	0	32	33	33
Trigonometry	34	35	31	33	31	0	30	31	35	30
Shop	35	0	34	30	0	0	22	34	34	0

Curricular Offerings for Certain Occupational Groups

On the basis of evaluations of secondary-school curricular offerings by the graduates included in this study, the high-school subjects listed below are given for the various occupational groups named. The subjects are arranged in order of importance according to the evaluations made by the graduates of each group. Only the ten subjects receiving the highest rating are included. Again the writer emphasizes the fact that the evaluations are made by the graduates on their felt worth from a vocational standpoint, and not from the standpoint of the evident worth of the subjects in contributing toward good citizenship or life in general. The listings which follow indicate the ratings as given by the occupational groups.

CIVIL SERVICE EMPLOYES

Subject	Subject
English	Shorthand
Arithmetic	Latin
Typewriting	Home Economics
Bookkeeping	Health
Business Training	Algebra

COMMON LABORERS

Subject	Subject
English	Algebra
Arithmetic	Bookkeeping
Physical Education	Health
Typewriting	Social Science
Plane Geometry	Home Economics

FARMERS

Subject	Subject
Agriculture	Bookkeeping
Arithmetic	Typewriting
English	Biology
General Science	Civics
Business Training	Chemistry

GENERAL CLERKS

Subject	Subject
English	Business Training
Typewriting	Other Business Training
Arithmetic	Economics
Shorthand	Home Economics
Bookkeeping	Commercial Law

HOUSEKEEPERS

Subject	Subject
English	Bookkeeping
Home Economics	Physical Education
Arithmetic	Economics
Health	Modern History
Typewriting	Business Training

MANAGERIAL POSITIONS

Subject	Subject
English	Physical Education
Arithmetic	Other Business Subjects
Bookkeeping	Commercial Law
Typewriting	Latin
Health	Economics

PERSONS IN MILITARY SERVICE

Subject	Subject
English	Typewriting
Arithmetic	Health
Algebra	Physical Education
Plane Geometry	Social Science
Bookkeeping	Sociology

SALESMEN

Subject	Subject
English	Bookkeeping
Arithmetic	Modern History
Algebra	Commercial Law
Plane Geometry	Manual Training
General History	Vocations

STORE CLERKS

Subject	Subject
English	Typewriting
Arithmetic	Home Economics
Bookkeeping	General History
Business Training	Chemistry
Physics	Civics

Occupational Choices of the Graduates

Cramer says, "A graduate may be considered adjusted if he is contented with his occupational status."[14]

Table 11 presents the answers to the question: Are you engaged now in the occupation of your choice?

TABLE 11.

Replies of the Graduates to the Question: "Are You Engaged Now in the Occupation of Your Choice?"

Answer	Male	Female	Number of Replies	Per Cent of Total
Yes	92	167	259	57.2
No	86	58	144	31.8
Not Replying	11	39	50	11.0
Total	189	264	453	100.0

Table 11 reveals that 259, or 57.2 per cent of the graduates, were satisfied with their present occupational status; 144, or 31.8 per cent, were not satisfied; and 50, or 11.0 per cent, did not answer the question at all.

Causes for Dissatisfaction

The graduates were asked to state the reasons, if any, why they were dissatisfied with their occupations at the time they filled out the questionnaire. Out of a total of 144 who stated that they were not satisfied with their jobs 140 gave reasons for this dissatisfaction. Only four failed to state any reason at all.

[14] Cramer. *Op. cit.*, p. 183.

Worthington[15] found the following factors preventing high-school pupils from engaging in occupations of their choice:

a. Lack of finance
b. Poor scholarship
c. Illness or death of a parent
d. Greater interest in another occupation
e. Lack of proper training
f. Lack of guidance
g. Depression or Federal law
h. Illness or death
i. Business reverses of father
j. Inferiority complex

In their study of the employment of the graduates of the Lancaster High School in depression years Super and Wright[16] name certain factors which affect the choice of jobs as follows:

a. Interest or ability
b. High income
c. Secure income
d. Clean job
e. Opportunity
f. Family
g. Adult advisors
h. Teachers
i. Friends of one's own age

It will be observed that the factors listed above do not always affect the choice of jobs adversely as do those indicated by Worthington. Super and Wright found that four of the above factors affected the choice of the men studied while only one affected the choice of the women. All the women were affected in their choices because of "interest or ability," while 58 per cent of the men were influenced for this reason. "Security of income" accounted for 11 per cent of the men; 22 per cent were affected because of "opportunity"; and the remaining 11 per cent were influenced by their "teachers."

The reasons given by the graduates in the writer's study for not being satisfied with their present positions as shown in Table 11 do not differ greatly from those stated by Worthington as preventing high-school pupils from engaging in occupations of their choice.

[15] Edward H. Worthington. *Vocational and Educational Choices of High School Pupils: In Relation to Their Subsequent Careers* (Doctor's Dissertation), University of Pennsylvania, 1938.

[16] Donald E. Super and Robert D. Wright. "From High School to Work in the Depression Years." *School Review*, 49:17-26, 123-130, January and February 1941.

Forty-three, or 30.72 per cent, of the 140 graduates replying to the questionnaire see the need for more training; 21.43 per cent are employed in positions in which there is no opportunity for advancement; 19.29 per cent need funds for further schooling; 15.71 per cent dislike their present jobs but do not say why; 7.15 per cent dislike their present positions because the pay is too low; and the remaining 5.70 per cent give minor reasons for being dissatisfied.

It appears significant that the realization of the need for further training should represent such a large factor in the dissatisfaction of the graduates with their present positions. If this factor should be combined with that of "lack of funds for further training," the two reasons for dissatisfaction would represent exactly one-half of all the number giving any reason at all. If to these two causes were added "lack of opportunity for advancement," 70 per cent of the total number of respondents would be included in these three categories.

It is apparent from the data presented in Table 12 that the chief cause for dissatisfaction with present positions among the graduates is the realization of the insufficiency of training for their particular jobs or the wrong type of training received.

TABLE 12.

Reasons Given by the Graduates for Not Being Satisfied with Their Present Positions

Reasons Given	Number Replying	Per Cent of Total
Need for Further Training	43	30.72
Lack of Opportunity for Advancement	30	21.43
Lack of Funds for Further Training	27	19.29
Dislike of Present Job	22	15.71
Low Pay in Present Position	10	7.15
"Drafted"	4	2.86
Have a Baby to Care For	2	1.42
Physically Unfit for Present Job	1	.71
"To Beat the Draft"	1	.71
Total	140	100.00

What the Graduates Would Like to Do

In anticipation of the fact that some of the graduates might state that they were satisfied with their present positions, as indeed they might be, but that their aspirations might lead them to do something else if all handicaps were removed, they were asked the simple question: What would you like to do?

The replies to this question as reported in Table 13 reveal a wide divergence in both types of positions and numbers choosing each type from those shown in Tables 6 and 8. Only in the matter of secretarial positions do the number and percentages approach comparison. Table 13 reveals that 45, or 22.39 per cent, of a total of 201 graduates replying want to do "secretarial work." Table 6 shows that 15.88 per cent of a total of 447 were actually engaged in clerical work soon after graduation from high school; and four years later, as reported in Table 8, the percentage in this category had increased to 19.09 per cent of a total of 435.

Reasons for the large number choosing "secretarial work" as their desired vocation are not apparent on the surface. Factors which may have influenced this choice are:

1. Curricular offerings in high schools giving definite training for this type of occupation
2. Comparative short period of training necessary
3. Steady and continuous employment in this type of job
4. Regular pay at stated intervals

Table 12 reveals how widely schools are missing their mark in attempting to train pupils to fit themselves happily into their desired vocational situations. Some of the reasons for the inability of schools to do this undoubtedly are:

a. Curricula which do not meet the needs of the pupils, and which are too rigid to admit readily of internal change;
b. Lack of adequate funds for schools to provide adequate curricula or to expand present curricula;
c. Poor teaching of the subject matter now comprising high-school courses of study; and
d. The failure of school people to recognize the aspirations of the individual pupil in relation to his possible contributions to the society of which he is a member.

TABLE 13.

What the Graduates Would Like to Do

Position Named	Male	Female	Times Indicated	Per Cent of Total
To Do Secretarial Work	8	37	45	22.39
To Be a Graduate Nurse	0	9	9	4.47
To Operate Own Business	6	0	6	3.00
To Be an Accountant	5	1	6	3.00
To Be a Mechanic	6	0	6	3.00
To Be a Salesman	5	0	5	2.48
To Be a Machinist	5	0	5	2.48
To Be a Laborer	5	0	5	2.48
To Attend College	3	2	5	2.48
To Be an Aviator	5	0	5	2.48
To Be a Teacher	0	5	5	2.48
To Be a Technical Engineer	4	0	4	2.00
To Be a Radio Engineer	4	0	4	2.00
To Be a Lawyer	4	0	4	2.00
To Be an Electrician	3	0	3	1.49
To Be an Interior Decorator	1	2	3	1.49
To Be a Housekeeper	0	3	3	1.49
To Be a Commercial Painter	1	2	3	1.49
To Be an Electrical Engineer	3	0	3	1.49
To Be a Practical Nurse	0	3	3	1.49
To Study Aviation	2	0	2	1.00
To Be a Beautician	0	2	2	1.00
To Be a Waitress	0	2	2	1.00
To Be an Art Teacher	0	2	2	1.00
To Be a Civil Engineer	2	0	2	1.00
To Be a Librarian	0	2	2	1.00
To Be a Writer	0	2	2	1.00
To Be a Farmer	2	0	2	1.00
To Be a Steam Engineer	2	0	2	1.00
To Be a Dentist	1	1	2	1.00
To be a Draftsman	2	0	2	1.00
To Be a Hostess	0	2	2	1.00
To Do Personnel Work	1	1	2	1.00
To Teach Physical Education	0	2	2	1.00
To Be an Army Engineer	2	0	2	1.00
To Be in Civil Service	2	0	2	1.00
To Be a Foot Specialist	1	0	1	.50
To Be a Hospital Attendant	1	0	1	.50
To Be an F.B.I. Man	1	0	1	.50
To Be an Engraver	1	0	1	.50
To Operate a Control Tower	1	0	1	.50
To Be an Inventor	1	0	1	.50
To Be a Traveling Companion	0	1	1	.50
To Be a Railroad Employe	1	0	1	.50
To Sell Insurance	1	0	1	.50
To Be a Tobacco Buyer	1	0	1	.50
To Be a Concert Organist	1	0	1	.50
To Be a News Reporter	0	1	1	.50
To Be a Statistician	1	0	1	.50
To Be a Postmaster	1	0	1	.50
To Manage a Department Store	1	0	1	.50
To Be a Newspaper Illustrator	0	1	1	.50
To Be a Baker	1	0	1	.50
To Be an Architect	1	0	1	.50

TABLE 13.

What the Graduates Would Like to Do—(Continued)

Position Named	Male	Female	Times Indicated	Per Cent of Total
To Be a Minister	1	0	1	.50
To Operate a Shop	1	0	1	.50
To Be an Agriculturist	1	0	1	.50
To Coach Athletics	1	0	1	.50
To Be a Musician	1	0	1	.50
To Be a Laboratory Technician	1	0	1	.50
To Be a Radio Operator	1	0	1	.50
To Teach Science	1	0	1	.50
To Be an Automobile Salesman	1	0	1	.50
To Be an Athletic Director	1	0	1	.50
To Manage a Small Restaurant	1	0	1	.50
To Be a Home Demonstration Agent	0	1	1	.50
To Be a Missionary	0	1	1	.50
To Be a Physician	1	0	1	.50
To Be a Commercial Photographer	1	0	1	.50
To Be an Undertaker	1	0	1	.50
To Be a Model	0	1	1	.50
To Be a Buyer for a Department Store	0	1	1	.50
To Be a Pattern Maker	1	0	1	.50
Total	114	87	201	100.18

Summary

This chapter gives in detail data concerning the occupational status of the graduates included in this investigation soon after graduation from high school and four years later when they replied to the questionnaire. Methods used in securing their positions following graduation are also presented. Information is also presented concerning the choices of occupations by the graduates and regarding their state of satisfaction with their occupational status at the time of replying to the questionnaire.

In anticipation of the possibility that some of the graduates might be satisfied with their occupational status under present conditions but would change that status if unrestricted choice were given them, this question was asked: What would you like to do? The wide distribution of choices in reply to this question seems to justify its inclusion in the current study.

Among the facts apparent from an analysis of data presented in this chapter are the following:

1. Apparently the most influential factor in the evaluation of high-school curricular offerings by the graduates was the type of occupation followed by them after graduation from high school.

2. Of a total of 453 replies received, 6 failed to answer the question regarding occupational status soon after graduation from high school, and 52 out of the 447 replying indicated that they were unemployed.
3. Forty-one different types of employment were secured immediately after graduation by 395 graduates.
4. Nearly one-third, 32.4 per cent, of the total number of graduates employed were store clerks or held general clerical positions.
5. Eighty-nine of the 395 graduates listed as employed failed to tell how they secured their first employment, while 306 indicated the methods they used in securing their first jobs.
6. For the most part, the graduates obtained employment through ordinary methods commonly used; such as, (a) personal application, (b) through friends and acquaintances, (e) offer of positions by employer, (d) through the influence of kinsfolk, (e) following apprentice training, and (f) after passing examinations.
7. Of the 453 graduates returning the questionnaire 417 were employed at the time of replying, with only 18 unemployed. The employment status of the 18 who did not reply is unknown.
8. The number of graduates in the military service increased from 5 soon after graduation to 21 four years later. This suggests the influence of the federal selective service laws and the national defense program.
9. Almost one-third, 31.8 per cent, of the total number employed at the time of replying to the questionnaire stated that they were not satisfied with their positions; 57.2 per cent indicated that they were satisfied; and 11.0 per cent made no reply to this inquiry.
10. Need for further training was given as a reason for not being satisfied with their positions by 43 graduates, who represent 30.7 per cent of all the replies received from this request.
11. Of a total of 140 replies received, 94.0 per cent stated dissatisfaction for their present positions for one of the following reasons:
    a. Need for further training
    b. Lack of opportunity for advancement
    c. Lack of funds for further training
    d. Dislike of present position
12. The graduates show a wider divergence in choice of the types of occupations in which they would like to engage than is indicated in the types in which they are actually engaged.

CHAPTER IV.

GENERAL SUMMARY, CONCLUSIONS, AND SUGGESTIONS

This study has been projected on the assumption that secondary-school curricula should be organized and placed in operation in high schools for the specific purpose of making available the widest possible opportunities for the training of all pupils of high-school age. It is believed that high-school pupils should be able to adjust themselves as happily as possible through the satisfying of their individual needs and in the contributing of their best efforts to society after their formal schooling has ended. It is recognized that, under the present type of school organization in Kentucky, subject matter, or curricular offerings, is the pool of accumulated knowledge from which the pupil must receive the major portion of whatever guiding principles the school may offer for the solving of the problems of life.

Since high-school curricula touch so vitally the lives of the pupils, and because curricular offerings are the core around which secondary-school activities are generally built at this time, an investigation which gives the graduates an opportunity to evaluate the high-school curricular offerings which he studied in school and later is using in life situations would seem to have definite value. The writer believes that such evaluations, although they may be subjective and limited, are well worth knowing.

General Summary

This study undertakes to present evaluations of the high-school curricular offerings of the average Kentucky high school by pupils who did not attend college following graduation, but who had an opportunity to test the values of such offerings in their vocations after they left school. Graduates of the class of 1937 were chosen because (a) the year 1937 marked the nearest return to normal economic conditions of any year since the beginning of the depression in 1929, and (b) the lapse of four years since the graduation of this class was considered sufficient time for the graduates to have reasonable opportunities to find employment.

Fifty-three widely scattered high schools in Kentucky are included in this investigation. All of the high schools were members of

the Southern Association of Colleges and Secondary Schools. High schools in the larger cities where vocational schools were located or where there were definite opportunities for apprentice training were purposely omitted from this study.

The names and addresses of 1,073 graduates were obtained from the principals of 53 high schools. To each of these graduates was mailed a questionnaire to which was attached a letter explaining the purpose of the investigation. Two months later the same questionnaire with a second letter was sent to all those who failed to reply to the first request. A total of 453 replies was received and used in the study. The returns, therefore, represent 42.2 per cent of the original number of questionnaires sent out.

The questionnaire was designed to secure (a) an evaluation of subjects taken in high school by the graduates and (b) information concerning the occupational status of the graduates soon after they left school and four years later when they replied to the questionnaire. The questionnaire also asked the graduates to tell how they obtained employment after leaving school and whether or not they were satisfied with their present positions.

On the basis of data gathered from the replies to the questionnaire and other information presented in this study, a general summary of this investigation includes certain facts.

1. Of a total of 1,073 questionnaires sent out, 453 or 42.2 per cent were returned and used in the study.
2. The graduates rated the curricular offerings named in the questionnaire 5,869 times. Of this number the graduates rated subjects of "great help" 2,416 times, as of "some help" 1,789 times, and as of "little or no help" 1,664 times.
3. English and arithmetic stand at the top of first place ratings; while foreign language, history and mathematics courses, except arithmetic, in general rate low.
4. Apparently the most influential factor in the valuation of the curricular offerings was the type of occupation of the graduates.
5. There was a decline in the unemployment among the graduates from 11.63 per cent in 1937 to 4.14 per cent four years later.
6. Nearly one-third of those who received employment soon after graduation held clerical positions or were store clerks.
7. In 1937, five graduates were in the military service, but this number had increased to 21 by 1941.
8. The number of housekeepers was 28 in 1937 but 98 in 1941.

9. Almost one-third, 31.8 per cent, of the total number employed at the time of replying to the questionnaire said that they were not satisfied with their jobs.
10. Need for further training was given more times than any other reasons why certain graduates were not satisfied with their present occupations.
11. A wide divergence in choices is indicated between the types of occupations in which the graduates are actually engaged and the types in which they would like to engage.

General Conclusions

While no claim is made that the results of this investigation offer conclusive evidence as to the value of any secondary-school curricular offering in the vocational activities of the graduates who do not attend college, there appears to be sufficient evidence to warrant careful study and consideration by those charged with providing curricula for this type of pupils.

The information contained in this study seems to justify the following conclusions:

1. The graduates included in this investigation agree with the President's Advisory Committee on Education in its statement in the *Report of the Committee*[1] that linguistic-mathematical college preparatory curricula are of little value to pupils who will never attend college.
2. Generally speaking, the graduates consider foreign languages and mathematics and history courses, except arithmetic and American history, of little help to them in their work.
3. Facts presented in this investigation would appear to justify the statement that Kentucky school authorities in general have given too little thought toward the development of high-school curricula designed to meet better the needs of pupils whose formal education will end with graduation from high school.
4. Certain evidences apparent in this study seem to bear out conclusions of other studies that college entrance requirements are still among the determining factors in high-school curriculum revision and in the emphasizing of certain subject matter courses in secondary schools.
5. Facts are revealed which indicate that the graduates' choices of vocations or professions are much broader than they can hope

[1] Floyd W. Reeves, chairman. *Report of the Committee*. Government Printing Office, Washington, D. C., 1938. p. 98.

to attain through the types of education generally provided for in the average conventional Kentucky high school.

6. There is evidence to show that the graduates recognize the need for science courses, art courses, literature courses, and aesthetic training even though they may not be able to determine just how such courses could contribute directly in their vocational pursuits.
7. It is significant that realization of the need for further training and lack of funds for further training should be given as reasons for dissatisfaction with present positions by one-half of the graduates who expressed dissatisfaction with their present occupational status.

General Suggestions

Under present world conditions with almost the whole of civilization involved in a total war, the writer recognizes the danger of making suggestions and recommendations concerning public education. On the other hand, the need for purposeful planning for our public schools is even greater now than in peace time. It will be generally admitted that the speed of recovery of this nation from war to peace-time pursuits will depend to a large degree upon the wisdom in planning by those intrusted with this task in whatever capacity they may serve.

After the war there will return from battle fields and great defense industries men and women, many of whom will be highly trained in special skills essential in war but useless in peace. School people should begin now to consider and plan programs of readjustment training.

In addition to programs of readjustment training of adults concerned with the war effort, school people will also have to revise, possibly drastically, current public school curricula to meet new conditions which will arise and which already are appearing. The children and youth of this nation will, no doubt, be more dependent than ever before upon the elementary and secondary schools for training, not only for adjustment, but for their very existence itself.

That our Kentucky high schools have not met fully the needs of their pupils in the past is shown by the great number of pupils who enroll in the ninth grade but never finish the twelfth. For example, out of a membership of 25,198 pupils in the ninth grade in 1932-33,[2] slightly more than 50 per cent, or 13,391, were in the twelfth grade

[2] James H. Richmond. *Report of the Superintendent of Public Instruction.* Department of Education, Frankfort, Kentucky, Vol. I, No. 10, December 1933. p. 41.

in 1936-37[3] in Kentucky high schools. Evidence of the failure of the holding power of high schools throughout the state and nation is also seen in the establishment of the National Youth Administration and the Civilian Conservation Crops by the Federal Government.

In presenting the suggestions and recommendations which follow the writer makes no claim that they are the only ones that could or should be made as a result of this study. They are given as a result of careful observations based upon information secured from this investigation and from other studies similar to this one in some respects.

1. It is suggested that there is need for a state-wide follow-up study covering a period of several years of all high-school graduates who end their formal schooling upon graduation from high school. Such a study should treat fully the causes of maladjustments in occupational pursuits.

2. The ratings of curricular offerings by occupational status groups of the graduates, as presented on pages 280-284 of this investigation, should prompt re-evaluation of curricular offerings in local high schools by school authorities. Pupils should be advised to take elective offerings more closely related to their post-school occupational choices rather than to make the haphazard selections which in many cases they are making now.

3. Facts presented in this study suggest that many guidance programs in our schools, where such programs exist at all, are of little value. In the establishment and administration of any guidance program, it is suggested that it would be well for school people to remember that a pupil poorly placed after leaving school is not much better off than if he were not placed at all. This investigation shows that nearly one-third of the employed graduates in this investigation were dissatisfied with their occupational status.

4. Since "need for further training" and "lack of funds for further training" are given by one-half of the dissatisfied graduates as causes for dissatisfaction with their present occupational status, it would seem obvious that local high school authorities should by every available means undertake to obviate these causes as completely as possible. Such an undertaking would require a case study of each pupil and would, of a necessity, take into consideration the capacity of the pupil for further training and the possibilities of overcoming his financial difficulties.

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[3] James H. Richmond. *Report of the Superintendent of Public Instruction.* Department of Education, Frankfort, Kentucky, Vol. V, No. 10, December 1937. p. 53.

5. The great diversity of occupational choices of the graduates, as reported in Table 12, prompts the suggestion that curricula should be devised for high schools which would contain general subject matter offerings considered basal to all pupils and elective offerings related to the occupations desired by the pupils after leaving school. Such curricula would probably necessitate a complete reorganization of our smaller high schools. This could be done with improvement of transportation facilities through the establishment in a given transportation area of special secondary schools emphasizing certain occupational training in the place of some of the traditional schools now extant. For instance, in a given transportation area, one school would maintain the traditional college preparatory curriculum; another would emphasize industrial training; another commercial education; another home making, etc. Regular transportation routes could permit a pupil anywhere in the transportation area to attend the school which offered the subject matter designed to train him for his chosen occupational pursuits. Aside from transportation costs and the costs of initial physical equipment for setting up such schools, the costs of administration of these schools would probably be less than the administrative costs of the same number of traditional high schools in the same area today, since much overlapping and and duplication would be avoided.

BIOGRAPHY

Primary Sources

Adams, Jesse E. "Reaction of High-School Pupils to High-School Subjects." *School Review,* 35:354-362, 417-427, May and June 1927.

Anderson, G. Lester and Berning, T. J. "What Happens to High School Graduates?" *Education Digest,* 7:9-11, January 1942.

Billet, Roy O. *Fundamentals of Secondary-School Teaching.* Houghton, Mifflin Company, Boston, 1918. pp. 168-169.

Boller, George D. "A Follow-up of Recent Graduates." *Business Education World,* 17:674-675, December 1939.

Campion, Howard A. *The Vocational Schools of Essex County New Jersey.* National Occupational Conference, New York, 1939. p. 29.

Christensen, Alfred. "Following-up in a Small High School." *California Journal of Secondary Education.* 17:16-20, January 1942.

Cramer, Buel B. "Following-up High School Graduates." *Occupations,* 18:182-186, December 1939.

Douglas, Aubrey A. *Secondary Education.* Houghton, Mifflin Company, Boston, 1927. p. 575.

Eells, Walter C. "How Does Your School Rate?" *Nations Schools,* 22:18, December 1938.

Fraser, Thomas A. *Follow-up of Non-College Going Graduates of Commercial, General, and College Preparatory Curricula in Two Jersey City High Schools* (Doctor's Dissertation). New York University, 1939.

Graham, Ben G. *What the High Schools Ought to Teach.* American Council on Education. Washington, D. C., 1940.

Hoefler, A. A. "Fifty of Sixty Want to Work." *English Journal (High School Edition),* 25-136, February 1936.

House Journal 1809. Acts of the General Assembly of Kentucky, p. 13.

Inglis, Alexander. *Principles of Secondary Education.* Houghton, Mifflin Company, Boston, 1918. p. 679.

Kilpatrick, William H. "First Things in Education." *School and Society,* 34:845, December 26, 1931.

Lindman, Erick L. "The Adequacy of Follow-up Proceedings." *Occupations,* 19:33-35, October 1940.

Metter, Harry L. "When the High School is a Finishing School." *School Executive,* 59:15-17, May 1940.

Mitchell, John A. "A Follow-up Study of 1936 Graduates." *Journal of Business Education,* 13:17, December 1937.

Neitz, John A. "Horace Mann's Ideas on General Methods in Education." *Elementary School Journal,* 37:743, June 1937.

Public Schools in Kentucky. General Education Board, New York, 1921. pp. 126-131.

Reeves, Floyd W., Chairman, *Report of the Committee.* Government Printing Office, Washington, D. C., 1938. p. 100.

Reid, Seerley. "Respondents and Non-respondents to Mail Questionnaires." *Educational Research Bulletin,* 21-90, 95 April 15, 1942.

Richmond, James H. *Report of the Kentucky Educational Commission.* Department of Education, Bulletin I, No. 8, Frankfort, Kentucky, 1933.

Richmond, James H. *Report of the Superintendent of Public Instruction.* Department of Education, Frankfort, Kentucky, Vol. I, No. 10, December 1933. p. 41.

Richmond, James H. *Report of the Superintendent of Public Instruction.* Department of Education, Frankfort, Kentucky, Vol. V, No. 10, December 1937. p. 53.

Stevens, Raymond B. "Experiences of High School Pupils After Graduation." *School Review*, 50:24-31, June 1942.

Super, Donald E. and Wright, Robert D. "From High Schools to Work in Depression Years." *School Review*, 49:17-26 and 123-130, January and February 1941.

Welsh, E. J. "We Follow-up Our Graduates." *Nations Schools*, 29:49-50, April 1942.

Worthington, Edward H. *Vocational and Educational Choices of High School Pupils: In Relation to Their Subsequent Careers* (Doctor's Dissertation). University of Pennsylvania, 1938.

Secondary Sources

Adams, Jesse E. and Taylor, William S. *An Introduction to Education and the Teaching Process*. The Macmillan Company, New York, 1935. pp. 590-592.

Arndt, Karl J. R. "Should Americans Teach Foreign Languages?" *School and Society*, 42:127, July 1935.

Breed, Frederick S. "Generalization in Spelling." *Elementary School Journal*, 37:733, June 1937.

Brink, William G. *Directing Study Activities in Secondary Schools*. Doubleday, Doran & Company, Garden City, New York, 1937.

Bobbitt, Franklin. "Objectives of Education." *School Executives Magazine*, 54:99, December 1934.

Bostick, Prudence. "A High School Core Curriculum." *Curriculum Journal*, 9:204, May 1938.

Caswell, Hollis L. and Campbell, Doak S. *Readings in Curriculum Development*. American Book Company, Cincinnati, Ohio, 1937.

Chamberlain, Leo M. *The Teacher and School Organization*. Prentice-Hall, Inc., New York, 1936. pp. 389-412.

Cooke, Dennis H., Hamon, R. L., and Proctor, A. M. *Principles of School Administration*. Educational Publishers, Inc., Minneapolis, Minnesota, 1938. p. 273.

Curry, William B. "Education Versus College Entrance Requirements." *Junior-Senior High School Clearing House*, May 1931. p. 531.

Curtin, F. D. *Some Values Derived From Extensive Reading of General Science*. Teachers College, Columbia University, New York, Contributions to Education No. 163, 1924.

Davis, H. L. *The Utilization of Potential College Ability Found in the Graduates of Kentucky High Schools* (Doctor's Dissertation). University of Kentucky, Lexington, Kentucky, June 1940.

Dyde, W. F. *Public Secondary Education in Canada*. Teachers College, Columbia University, New York, Contributions to Education No. 345, 1929.

Evaluations of Secondary Schools (General Report). Cooperative Study of Secondary School Standards, 744 Jackson Place, Washington, D. C., 1939.

Ginn, Susan B. "The Employment of Boston High School Graduates." *School and Society*, 41:876-877, June 29, 1935.

Goetch, Helen. "The Relation of Parental Income to College Opportunity." *School Review*, 48:26-33, January 1940.

Hopkins, L. T. "A High School Core Program." *Curriculum Journal*, 9:208, May 1938.

Humphrey, D. W. "Views of an English Visitor." *Nations Schools*, 24:55, August 1939.

Johnston, J. B. "Who Should go to College." *Vocational Guidance Magazine*, 9:309, 1930.

Kilzer, L. R. "Vocational Choices of High School Seniors." *Educational Administration and Supervision*, 21:576-581, November 1936.

Kroger, Robert and Louttit, C. M. "Influence of Father's Occupation on Vocational Choices of High School Boys." *Journal of Applied Psychology*, 19:203-213, April 1935.

Maurer, C. L. and Neulen, L. H. "Do Our High Schools Prepare Students Only for College?" *Educational Administration and Supervision*, 28:131-135, February 1942.

Monroe, Paul. *Principles of Secondary Education*. The Macmillan Company, New York, 1918.

Mort, Paul R. *The Individual Pupil*. The American Book Company, Cincinnati, Ohio, 1928, pp. 88-89.

Perkins, Keith J. "And Then—What?" *School Executives Magazine*, 58:31, December 1938.

Wiley, George M. Jr. *The Redirection of Secondary Education*. The Macmillan Company, New York, 1940.

Williams, L. A. *The Making of High-School Curricula*. Ginn and Company, Boston, 1928.

Williamson, E. G. and Darley, J. G. "A Study of Occupational Choices of High School Seniors in Minnesota from 1929-1933, Inclusive." *Journal of Applied Psychology*, 19:361-379, August 1935.

APPENDIX A

The Questionnaire

DATA SHEET

.....Name .....High School

.....Address Graduated.....19.....

1. On the line in front of the subjects listed below place the figure **1** before each subject that has been of great help to you in your work; place the figure **2** before each which has been of some help, and the figure **3** before those which have been of little or no help. Please rate only those subjects you have had in high school; leave the others blank. Write in the blank spaces subjects you have had which are not included in the list.

.....English	.....Physics	.....Eng. Hist.	.....Typewriting
.....Latin	.....Chemistry	.....Med. Hist.	.....Shop
.....French	.....Biology	.....Mod. Hist.	.....Civics
.....Spanish	.....Gen. Science	.....Man. Tr.	.....Sociology
.....German	.....Agriculture	.....Home Ec.	.....Economics
.....Algebra	.....Soc. Science	.....Shorthand	.....Vocations
.....Arithmetic	.....Amer. Hist.	.....Bus. Tr.	.....Phys. Ed.
.....Pl. Geom.	.....Gen. Hist.	.....Health	.....Com. Law
.....Sol. Geom.	.....Anc. Hist.	.....Bookkeeping	.....
.....Trig.	.....Other Bus. Subjects		.....
.....	.....	.....	.....

2. List any subjects that you think should be added to the high-school program:

   a..... b.....

   c..... d.....

3. List any subjects that you think should be left out of the high-school program:

   a..... b.....

   c..... d.....

   e..... f.....

4. What occupation did you accept immediately following your graduation? .....

5. How did you secure your job following graduation?.....

.....

.....

6. What are you doing now? .....

.....

.....

7. Are you engaged now in the occupation of your choice? .....

If not, why? .....

.....

.....

8. What would you like to do? .....

.....

.....

AFTER YOU HAVE FILLED OUT THIS SHEET, PLEASE PLACE IT IN THE ENCLOSED ENVELOPE AND DROP IT IN THE MAIL AS SOON AS POSSIBLE. **THANK YOU.**

Sincerely,

T. O. Hall

Letter to the Principals

Dear Friend:

As a partial fulfillment of requirements for a Ph.D. degree I am undertaking a study involving graduates of high schools in Kentucky which are members of the Southern Association of Colleges and Secondary Schools. This study involves ONLY the graduates of the spring of 1937 who DID NOT go to college.

I earnestly request that you write on a sheet of paper the present names and addresses of the graduates of your school at the 1937 commencement who DID NOT go to college. Put the sheet in the enclosed envelope, seal it, and drop it in the mail. That is all that is necessary.

For your further information may I say that this study will undertake to evaluate curricular offerings of Southern Association high schools in accordance with ratings given by graduates who did not attend college following graduation. It will also show what subjects should be added to and dropped from the offerings of high school in the judgment of those graduates. It is also hoped that something may be learned of the type of occupations followed by the graduates since 1937.

The enclosed letter from Dr. M. E. Ligon will express the interest of the Southern Association in this study. I am also authorized to state that Dr. John Brooker is much interested in the study in connection with the aim of the State Department of Education—THE IMPROVEMENT OF INSTRUCTION.

Personally you will confer upon me a great favor by enabling me to secure data upon a subject of importance but which I shall be unable to obtain without your cooperation.

Very sincerely yours,

T. O. Hall

First Letter Accompanying the Questionnaire

Dear Friend:

If you will carefully look over the attached Data Sheet and fill it out completely, you will materially aid us in helping solve one of our most difficult problems regarding our high schools. Hundreds of these sheets are being sent to graduates of our high schools who are not now in school. It costs eight cents to send out each one of these requests and receive the reply. Every one who fails to return the questionnaire causes needless expense and makes our total study more inaccurate.

Your reply to this request will not obligate you or involve you in any way. Only total figures will be used and each sheet will be kept strictly confidential. WE NEED YOUR HELP. May we not count on you? Just fill out the sheet, tear off this letter, put the sheet in the enclosed envelope and drop it in the mail. That is all. THANK YOU!

T. O. Hall

Follow-up Letter Accompanying the Questionnaire

Dear Friend:

A few weeks ago I sent you and many others the attached Data Sheet. For some reason you have not replied. Since we are very much in need of your reply to the enclosed questionnaire, may I urge that you PLEASE fill it out, put it in the enclosed envolope and drop it in the mail.

We want to make this study as accurate as possible in order that changes in the high-school courses may be made for the benefit of those attending school. If you are unemployed or if you are married and are keeping house, it is all the more important that we have your questionnaire.

PLEASE BEAR IN MIND that there is no obligation involved in filling out the questionnaire. Your name will not appear in the completed study and any comments you care to make will be kept strictly confidential as to your identity.

WE NEED YOUR HELP. Again may I ask whether or not we can count on you. THANK YOU VERY MUCH.

Sincerely,

T. O. Hall

TABLE A.

Comparative Evaluations of Curricular Offerings by the Graduates for the First and Third Hundred Replies to the Questionnaires

Subject	First Hundred	Third Hundred
	Of Great Help	Of Great Help
English	87	85
Latin	4	4
French	0	1
Algebra	24	23
Arithmetic	67	69
Plane Geometry	18	17
Solid Geometry	2	3
Trigonometry	2	2
Physics	6	9
Chemistry	7	9
Biology	17	14
General Science	19	17
Agriculture	7	8
Home Economics	26	26
Social Science	10	5
General History	3	4
English History	1	0
Medieval History	1	1
Modern History	6	6
Manual Training	4	10
Shorthand	19	18
Business Training	24	24
Health	21	19
Bookkeeping	30	29
Other Business Subjects	7	10
Typewriting	34	37
Shop	3	3
Civics	9	9
Sociology	4	4
Economics	5	8
Vocations	5	3
Physical Education	10	9
Commercial Law	7	8
Other Subjects	4	4

APPENDIX B

Comments of the Graduates

Below are given quoted letters and comments made by the respondents to the questionnaire. In keeping with the promise made in letters accompanying the questionnaire, the names of the persons making the comments are withheld.

Dear Mr. Hall:

I am glad that some one is getting interested in our high schools. I went to school four years and graduated with good grades, but I find that I am not able to do much. It seems that my school work don't fit in with what I have to do outside.

Sincerely yours,

Dear Mr. Hall:

In filling out the enclosed questionnaire I find that most of the subjects I studied in high school have been of help to me in some way or other. But at the end of my four years in high school, I had no more idea of what I wanted to do in life or what position I would even like to accept.

I was not the only one, my fellow students when asked what they intended to do after finishing school would answer that they didn't know. Now I wonder if it is the lack of training on the student's part or something missing in their training while in school. I could go on and on but this seems to be the greatest problem of many who are graduating today.

Sincerely yours,

Dear Sir:

I've found it rather hard to secure a job of any sort, practically impossible without experience. So that's why I filled out my sheet as I have. Those that have the privilege of going as far as high school should also have the privilege of taking such subjects which will be of benefit to them in the future.

I really consider subjects most important which require thought, such as geom., algebra, etc.

When I say that I'm not pleased with the position it's not that I don't love my baby, but that I'd like nothing better than to be able to support her and myself.

Mr. Hall:

My information in this Data will be of little help. For six months after graduation I worked as a grocery clerk. Then due to bad health I went to bed and have now been in bed going on four years. Therefore I haven't used my schooling very much. All my efforts have been used in trying to regain my health. I write this note so you will understand why I can not give you more data for which you are asking.

Dear Sir:

I consider English the most important subject in the grades, high school and college. Most of the students of today are not taught enough plain arithmetic, which is essential for every vocation.

Many boys and girls are talented, but without financial backing they are unable to achieve what they consider their highest ambition.

Sincerely,

I sincerely believe each child should be persuaded to decide on some trade that he or she wanted to follow as their life work. And should be trained with that in view. Too many youth have gone through school and come out without anything but sixteen credits. Don't get the impression that I am against the school system that is now in force. But it is a luxury that but few can afford.

I wouldn't take anything for my high school education. It is something that can't be taken away from anyone after they have received it. But from a financial viewpoint I can't see any help from it. Maybe it has indirectly and may continue to do so.

But to get back to the point I believe each one should take history and English. All the other subjects should be chosen in regard to the course to be followed in life. For myself I know that if I had spent four years studying a trade of my choice I would be better off than I am now.

Hoping this doesn't meet with disapproval I remain

Respectfully yours,

In my work not any subjects helps in my work itself only English. But no matter what job you hold if you have a little education it requires everyone should have at least a high school education. I will mark the subjects that have been of more help to me in everyday life.

The best of my knowledge is learning how to associate with the public and then in whatever business a man prefers let him build up to it.

I think a fellow should be trained to do some kind of work—not just mixed up till he can't do anything I finished high school—wasn't able to go to college—Now what can I do?

You please tell me. I would have been better off if I would have left high school off and joined the army. They do make a good soldier out of a fellow—where high school don't make you good at nothing.

Thanks,

Concerning question No. 2.

I think under Home Ec. one should learn more about the care of babies; because every girl wants a home of her own and babies, and what she learns in high school will really help later on.

While I was in high school I had a unit in "Care of Babies" and made a note book of the things I learned and collected. I saved that and when I wasn't sure on certain things I would look it up in my notebook.

I believe that more time should be given to Home Ec. It is more useful, for most girls, in later life.

Mr. Hall:

As for comments I have one. When I was in school they had no stenographic course of any type. . . . I am excepting a job in a small town next week. They cannot afford a bookkeeper, so I am to type and book keep. Also partime waitress.

Dear Sir:

I would like to say a few words about the questionnaire, I consider Home Ec. Course very valuable to me. I think every girl should take it, wheather she means to marry or not, it teaches her many useful things. I think English is the base of all education; by that I mean grammer, Literature, etc. Without good grammer, with a high school education, your time seems wasted. My algebra and geometry have not helped me in the least. Now everyone needs plain arithmetic, and I think that is enough, except those who are going to teach. Teachers must have more subjects than the average person.

To me, French & German should be required. In every day life, French is useful. All the French phrases in use today, menus, etc. all of them we should be able to understand. As for German it should be taught for our own benefit.

My mistake in high school was not taking typing shorthand and bookkeeping. Not long ago I could have had a good job in an office if I had any of those subjects. They should be required in every high school. . . .

Very truly yours,

Errors in grammar, spelling, capitalization and form in the letters and comments from graduates as quoted in Appendix B are not errors in printing but actually occur in the replies from the graduates.

BIOGRAPHICAL SKETCH

The writer of this dissertation was born in eastern Hart County, near Canmer, Kentucky, May 16, 1895. He attended the rural schools of Hart County and began teaching in the rural schools of the county in 1913. He enrolled in the Munford High School, Munfordville, Kentucky, in 1914. Until September 5, 1917, when he entered the United States Army, the writer would teach school in the fall and attend high school in the spring. Following his discharge from the Army on January 23, 1919, the writer again taught a rural school in the fall of that year. In the spring of 1920, he enrolled in Western Kentucky State Teachers College, Bowling Green, Kentucky, and graduated from that institution with an A. B. degree in June 1924. In September 1924, he began a two-year term as superintendent of schools at Uniontown, Kentucky, and in 1926 was elected superintendent of the Morganfield City Schools, Morganfield, Kentucky. Four years later, in 1930, he was elected superintendent of the Greenville Independent Schools, Greenville, Kentucky, which position he now holds.

In August 1930, the writer received an M. A. degree from George Peabody College for Teachers, Nashville, Tennessee. Since 1936 he has been enrolled in summer terms of the Graduate School of the University of Kentucky, pursuing work toward the degree of Doctor of Philosophy.

THEODORE O. HALL.