

**WHAT
HIGH
SCHOOL
PUPILS
STUDY**

**A National Survey of the
Scholastic Performance of Pupils
of Various Abilities**

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Foreword

THERE IS A GROWING APPRECIATION of the need for a greater supply of well-educated people, not only in the scientific and technological fields but also in the political, social, and cultural areas. The high school should play an important role in identifying and developing the specific abilities of each boy and girl so that each can make the greatest contribution possible to himself and to society. Some evidence of the effectiveness of the schools in this role can be secured from a study of the subjects and programs actually pursued by pupils judged to have differing academic aptitudes.

This bulletin, *What High School Pupils Study*, is a report of a study that was designed to gather national data on high school programs completed by graduates of 1958 who had varying academic abilities and who had been enrolled in schools of different sizes. It is expected that it will give information valuable in helping to develop better educational opportunities for pupils in communities throughout the United States.

Many persons throughout the country and in the Office of Education have contributed to the conduct of this survey and the preparation of the bulletin. Much credit is due the principals of high schools who responded to the questionnaire and to the request for transcripts of credit of their 1958 graduates included in the sample.

The work of equating mental ability scores was done by Dr. Kenneth F. McLaughlin, specialist for the appraisal of the individual, in the Guidance, Counseling, and Testing Section. Statistical assistance was given by Frank Lindensfeld, coordinator, and Dr. Mapheus Smith of the Division of Statistics and Research Services.

Since this national survey is the first of its kind, it cannot reflect trends or changes which have taken place in school programs. It can form the basis, however, for other studies of a similar nature to determine trends and changes which are developing at the present time.

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What High School Pupils Study

CHAPTER I

Background of the Study

EVENTS OF NATIONAL and international importance of the past two decades have emphasized the need for obtaining answers to a number of questions about American education. A basic question is concerned with the courses and programs of study actually pursued by high school pupils of various academic abilities in order to meet graduation requirements.

Information on the national level concerning the offerings and enrollments of high schools has been gathered periodically for the last 70 years. Such data reveal the number and percent of high school pupils enrolled in specific subjects or subject matter areas at any one period. They do not indicate the distribution or pattern of subjects pursued by pupils during their high school careers. The survey has been designed to gather these data.

This study has been conducted to help school and lay leaders answer some of the questions most frequently asked of them regarding the programs being conducted by our high schools. Among the many, common inquiries are: Is the time of the academically able pupils being spent on appropriate subjects in our high schools? How many credits for graduation does the typical pupil earn? The able pupil?¹ The less able? What proportion of a typical pupil's program is made up of academic subjects? The able pupil's? The less able? What curriculums enroll most pupils? Able pupils? Less able pupils? What types of programs are pupils in the small high school carrying as compared with pupils in the large high schools? Are the majority of the able pupils achieving in their schoolwork according to their abilities? Do able pupils earn the best marks? How do boys and girls compare in their achievement? In subjects carried? In credits earned?

Information in these areas on a national scale may help administrators and teachers in the evaluation and improvement of their

¹ In this bulletin able pupils are defined as those in the upper 25 percent academic ability group.

own school programs in terms of pupil academic abilities. It may also encourage a greater number of State departments of education to make similar surveys of the programs being carried on in schools under their supervision.

A preliminary report published in 1961 *High School Pupil Programs* (OE-33021), concerned itself with one phase of this study, the program patterns of pupils in the five academic areas (English, social studies, mathematics, science, and foreign language). It dealt only with the actual pupils in the sample and not with inflated figures to represent national totals. This final report includes national percentages and concerns itself with all areas of study for which credit toward graduation was received. Contained in the survey are the following data, in terms of school size, pupil ability, class rank, and sex:

1. Average credits per pupil in specific subject matter areas.
2. Average graduation credits per pupil.
3. Percentage of pupils receiving various amounts of credit in selected subject matter areas.
4. Overall program patterns of pupils.
5. Types of curriculums.
6. Education beyond the high school.

Although it is of greatest interest to determine what types of programs pupils of various ability levels completed, this study in no way tries to evaluate the quality of the various subjects or program patterns. Even in the same schools it is probable that subjects with identical course titles varied substantially in content if taught to pupils of different ability levels.

There is no intention of implying that, if able pupils completed programs heavily weighted with academic subjects, those programs were best for them.

The Questionnaire

Although this study is primarily concerned with high school pupil programs, it was necessary to obtain certain information regarding the schools attended by the pupils. For this purpose a questionnaire was developed. (See app. D.) This form included items about school organization, type of community served, 1957-58 high school membership, number of 1958 graduates, distribution of 1958 graduates according to intelligence quotient ranges, grades for which credits toward graduation were earned, number of Carnegie units required for graduation by required and elective subject matter areas, number of Carnegie units required for graduation in specific subject matter areas, and recent and anticipated changes in school programs.

Instructions for the selection and content of the pupil transcripts of credit were attached to the questionnaire. The procedures used in selecting the transcripts to be included is described in the section on the sample. If data about sex, date of birth, scholastic aptitude, class rank, type of curriculum, plans for college attendance, and work done in former high schools were not included on the transcripts, the school principals were asked to furnish it.

Scholastic Aptitude

This study is concerned with 1958 June graduates from public secondary schools in the United States. In order to determine the scholastic aptitude of these graduates, it was necessary to use the measures as reported on the pupil transcripts of credits. These measures were given in the form of intelligence quotients (IQ's), raw scores, or percentiles, and were obtained from various kinds of scholastic aptitude or intelligence tests administered to the pupils by their schools some time during their school careers, in most instances during their secondary school years.

It is well known that intelligence quotients obtained from different mental ability tests cannot be directly compared, since test variabilities as determined by standard deviations differ from test to test. In certain instances these differences in the variabilities are quite pronounced as is shown by Good's statement in which he says, "Standard Deviations, rarely published in the test manuals, vary from approximately 10 to 26; so a very bright youngster might have, taking extremes, an IQ of 130 on one test and an IQ of 178 on another. Or, a child might have an IQ of 80 on one test and be judged a bit subnormal and have an IQ of 48 on another and be classified as an imbecile."²

Thus, the intelligence quotients reported on the transcripts of credit could not be grouped together for analysis and interpretation without some adjustment. In making these adjustments in the intelligence test results, certain procedures were followed. To begin with, a decision was made to convert all scores to percentiles.³ This was done for two reasons: Percentile scores are rather easily understood and, also, intelligence quotients are quite easily converted into percentile scores, whereas percentile scores cannot be changed to intelligence quotients if sufficient information does not accompany the test from which they were obtained. Cutoff points for the 95th, 85th, 75th, and 25th percentiles were established. The 95th per-

² Warren R. Good. *Misconceptions about Intelligence Testing*. *University of Michigan School of Education Bulletin*. April 1954. No. 7, p. 119.

³ A percentile is a point on a 100-percent scale below which a given percent of the distribution lies. Thus, if a pupil is in the 95th percentile, it means that 95 percent of the pupils in his group fall below him.

centile designated the division point which was used to separate pupils in the upper 5 percent of the population according to ability from those in the lower 95 percent. In the same manner the 85th and 75th percentiles were used to separate pupils in the upper 15 percent and 25 percent of the population from those in the lower 85 percent and 75 percent respectively. The 25th percentile established the point separating the pupils in the upper 75 percent of the population in ability from those in the lower 25 percent. The pupils in the middle 50 percent of the population according to ability were those pupils falling below the 75th percentile decreased in number by those falling below the 25th percentile.

When national percentile norms were reported by the schools, those measures were used. In most instances, the schools reported IQ's obtained from the use of certain tests. If the published materials accompanying these intelligence tests also included percentile norms, there was no difficulty in converting the reported IQ's to percentiles. When these norms were not available, the intelligence quotients were converted by assembling information from the test materials and also from studies of comparability which had been done previously. Several studies proved extremely helpful in making these conversions, among these was *The Development of Procedures for Converting Intelligence Test Scores to a Common Scale*, prepared by John C. Flanagan and Paul A. Schwartz, under the sponsorship of the Pennsylvania Joint State Government Commission, and published in July 1958 by the American Institute for Research.

Two groups of mental ability tests were used by the schools. The first included those for which percentiles were reported: American Council on Education Psychological Examination for High School Pupils, Holzinger-Crowder Unifactor Test, and School and College Ability Test.

The second group included tests for which percentiles were not reported. These tests and the intelligence quotients or raw scores by percentiles are shown in table 1.

Carnegie Units

Carnegie units were used as a basis for evaluating all pupil programs in this report. Where other systems of recording subject completion on transcripts were used, the transcripts were reevaluated in terms of Carnegie units. One Carnegie unit was defined as representing a minimum class attendance of 120 clock hours during a school year in any major subject in the secondary school. For comparison purposes among schools, a "major subject" was construed to mean one ordinarily requiring preparation outside of class.

Table 1.—List of mental ability tests for which percentiles were not reported, giving intelligence quotients or raw scores by percentiles

Mental ability tests	Intelligence quotients by percentiles			
	95th ¹	85th ²	75th ³	25th ⁴
California Test of Mental Maturity.....	127	120	114	96
Detroit Advanced Intelligence Test.....	121	113	109	91
General Aptitude Test Battery.....	133	121	113	87
The Henmon-Nelson Tests of Mental Ability.....	125	115	111	92
Kuhlmann-Anderson Intelligence Tests.....	124	116	110	92
Kuhlmann-Finch Intelligence Tests.....	125	115	109	93
The Lorge-Thorndike Intelligence Tests.....	123	116	119	91
Otis Quick Scoring Mental Ability Tests.....	120	112	108	91
Otis Self-Administering Tests of Mental Ability.....	120	113	108	93
Philadelphia Test of Mental Ability.....	123	116	111	93
Pintner General Ability Tests.....	121	112	107	85
SRA Non-Verbal Form.....	139	128	122	103
SRA Test of Primary Mental Abilities.....	116	107	101	80
Terman-McNemar Test of Mental Ability.....	124	115	110	91
Ohio State University Psychological Tests:				
	Raw scores by percentiles			
<i>Form 21</i>				
For grade 9.....	63	48	42	28
For grade 10.....	80	60	49	30
For grade 11.....	90	69	56	31
For grade 12.....	108	86	72	37
<i>Form 22</i>				
For grade 9.....	68	53	45	29
For grade 10.....	88	67	56	32
For grade 11.....	103	79	65	35
For grade 12.....	109	87	73	38
<i>Form 25</i>				
For grade 9.....	58	45	39	26
For grade 10.....	68	54	45	29
For grade 11.....	87	66	55	31
For grade 12.....	101	78	69	35

¹ Upper 5 percent ability group. The 95th percentile means for example that 95 percent of the persons earned less than 127 IQ in the California Test of Mental Maturity or less than a total raw score of 108 in Form 21 of the Ohio State Psychological Test in Grade 12.

² Upper 15 percent ability group.

³ Upper 25 percent ability group.

⁴ Upper 75 percent ability group. Scores below this point are in the lower 25 percent ability group. Scores between the 75th percentile and the 25th percentile comprise the middle 50 percent ability group.

In order to meet the criterion for Carnegie units, certain arbitrary rules were observed concerning the assignment of credits to particular courses. The transcript editors were instructed to:

1. Assign one-half unit of credit for each full year typewriting except where classes met more than five periods per week.
2. Assign one-quarter unit of credit for each full year of physical education, except where classes met more than three periods per week. In this case, one-half unit of credit was assigned. If the school awarded no credit for physical education, and so indicated this on the transcript, no credit was assigned.
3. Assign one-quarter unit of credit for music classes (choir, band, glee club, etc., but not music history, theory, etc.) meeting three or fewer periods per week and one-half unit of credit for courses meeting more than three periods per week.
4. Assign one-half unit of credit per year for each home economics laboratory or industrial arts shop courses meeting 5 regular periods per week and 1 unit of credit for each course meeting 10 regular periods per week. Those home economics and industrial or trades courses clearly indicated as being vocational or clearly requiring outside of class preparation were considered to be the same as any academic course as far as credits were concerned.
5. Accept the school's assignment of credit in all cases not clearly covered above and where transcripts indicated close adherence to the Carnegie unit system. In instances where there were questions or where the Carnegie unit system was not used, appropriate Office of Education specialists in the various subject matter areas were consulted before credit was assigned.
6. Round all fractional or decimal credits to the nearest quarter credit. Where a fractional or decimal credit lay exactly halfway between quarter-credits (e.g., one-eighth or three-eighths credit), the next higher quarter credit was to be assigned.

Subject Titles

The transcripts of credits of high school pupils report only the titles or courses and do not ordinarily provide sufficient information to adequately assess their content except in a most general manner. For this reason, the titles were classified under the most appropriate general subject matter area. In a few instances, rather arbitrary assignments of specific courses to general areas had to be made. Assistance was sought from specialists in the various subject matter areas to help make these assignments. Occasionally, transcripts indicated an assignment of a course to an area other than the one under which it was ordinarily classified. Thus, some titles are to be found listed under more than one area. A complete list of titles is given in appendix C.

Special instructions regarding certain course titles were provided those responsible for coding the information. Courses were classified under vocational education only where there was a clear indication

given on the transcript that they were "vocational." Thus, "shop" would be classified under industrial arts while "vocational shop" would be classified under vocational education. Special school activities (pep club, projection club, etc.) were coded only in those cases where pupils earned credit toward graduation by participating in them. Combinations of courses falling under two or more different areas (e.g., art and speech) and courses that gave no clue as to subject matter area (e.g., elective) were coded under unclassified courses. A few schools sent transcripts with sequential courses numbered by semester rather than by year (e.g., English I and II for 9th-grade English, English III and IV for 10th-grade English, etc.). For coding purposes, these courses were considered identical to those with year by year numbers, and separate titles were not listed. No special distinction was made between Roman and Arabic numerals when used as parts of course titles (thus, English II and English 2 were considered the same).

Sampling Plan and Procedures

This study is concerned with the graduates from the 12th grades of public secondary schools of Continental United States during the spring of 1958.

Schools.—The study design provided for sampling public high schools with 12th-grade graduating classes. These schools were divided into three different size categories: 1 to 199 enrollment, 200 to 499 enrollment, and 500 and over enrollment. The sample was drawn from the last available complete survey of secondary schools by the Office of Education (1951 graduates). A more recent survey (1958 graduates) has subsequently become available, making it possible to compare the universe from which the sample was selected with the current universe. The original sample plan provided for the selection of 898 schools, or 4.5 percent of the schools on the 1952 list and 4.7 percent of the schools on the 1958 list. The list of schools from which the sample was drawn did not include certain schools in the actual 1958 population. These were new schools for the most part, therefore, transcripts of pupils graduating from these schools were not included in the study. The results of this study do not necessarily apply to pupils graduating from schools not in operation until after 1952.

As shown below, while the two larger size categories increased in actual numbers of schools between 1952 and 1958, the smallest size category decreased to such an extent that there was an actual 4-percent loss in total numbers.

WHAT HIGH SCHOOL PUPILS STUDY

<i>Enrollment category</i>	<i>Number in 1958¹</i>	<i>Number in 1958²</i>	<i>Percent change from 1958</i>
All schools.....	19, 993	19, 194	-4. 0
1-199.....	11, 528	8, 085	-29. 8
200-499.....	5, 327	6, 105	14. 6
500 and over.....	3, 138	5, 003	59. 4

¹ Based on data gathered by the U.S. Office of Education for the Bulletin entitled, *Statistics of Public Secondary Day Schools 1951-52*, by Walter H. Gaumnitz.

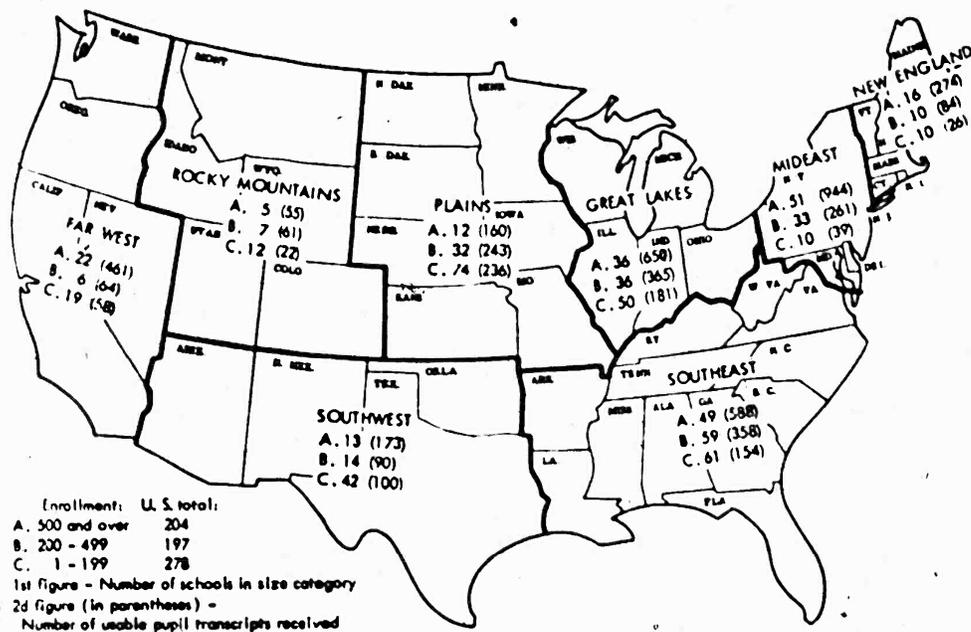
² Based on data gathered by the U.S. Office of Education for the bulletin entitled, *Statistics of Education in the United States, 1958-59 Series*, by Edmund A. Ford and Virgil R. Walker.

Two major factors contributed to the large increase in the number of schools having 500 or more enrollment; the consolidation of many of the smallest size schools into units falling into the larger size category, and the construction of large suburban high schools as entirely new units not replacing older ones. It would also be expected that some schools moved into the larger size category by virtue of increased enrollment. This latter factor might account for much of the increase in the 200 to 499 enrollment schools. The nearly 30 percent loss in the smallest size category might then be accounted for in terms of consolidation and movement into larger size groups through increased enrollment. Indeed, consolidation of two or more schools into a single unit results in a net loss of schools.

Pupils.—Schools in the 1 to 199 and 200 to 499 enrollment-size categories were asked to send a transcript of every fifth pupil beginning with the third on the alphabetical list of its June 1958 graduates. The schools with 500 and over enrollment were asked to send a transcript of every tenth graduate beginning with the third. There were 7,392 transcripts received of which 5,647 were usable. The usable transcripts represented 0.42 percent of the actual number of graduates from public high schools in Continental United States. The total number of transcripts received and the number and percent of usable transcripts from each size category are shown in table 2. This table shows the distribution of the transcripts by region. The distribution of schools and usable transcripts in the sample by geographic region is given in figure 1.

Usable transcripts in this report include only those on which 4 years of credit were recorded and usable mental ability test results were included. A comparison of the rejected transcripts with usable transcripts shows that there was little difference between the two groups in regard to class rank, curriculums, credits earned, and program patterns.

Figure 1.—Distribution of schools and usable transcripts in sample, by region: Continental United States, 1958



National Estimates.—In order to provide national estimates regarding high school pupil programs, weighting factors were applied to the raw statistical data from each of 24 groups of schools. One factor was used for each of the three size categories of schools within each of the eight regions. The formula used for the calculation of the factors was:

$$\text{Weighting factor} = \frac{1}{\frac{\text{Number of responding schools in size category in region.}}{\text{Actual number of schools of size category in region.}}} \times \text{Fraction of 1958 graduating transcript requested.}$$

National estimates of graduates or credits for each size school were obtained by adding the totals derived for each region by application of the weight fraction to the data from the separate regions. An estimate of total, regardless of school size, was then obtained by adding the estimated totals for the three separate school sizes.

Limitations of the Study.—There are several cautions regarding this study that should be given special attention. These reflect the limitations inherent in the survey and statistical techniques employed.

1. The sample was selected in such a manner as to provide national estimates. No attempt should be made to generalize results to specific regions or schools. It should also be emphasized that the reported data were weighted in order to provide percentage distributions rather than estimated numbers of individuals.

Table 2.—Distribution of public secondary schools in sample supplying transcripts, and number and percent of usable transcripts, by region and school enrollment: Continental United States, 1958

Region	Secondary schools with enrollment of—											
	500 and over				200-499				1-199			
	Number of schools	Total transcripts received	Usable transcripts ¹ Number	Percent of all transcripts	Number of schools	Total transcripts received	Usable transcripts ¹ Number	Percent of all transcripts	Number of schools	Total transcripts received	Usable transcripts ¹ Number	Percent of all transcripts ²
1	3	8	4	5	6	7	8	9	10	11	12	13
United States—	204	4,324	3,305	76.4	197	1,956	1,526	78.0	278	1,112	816	73.4
New England.....	16	344	274	79.6	10	90	84	93.3	10	31	26	84.9
Mideast.....	51	1,181	944	79.9	33	320	261	81.6	10	49	39	79.5
Great Lakes.....	36	764	650	85.1	36	407	365	89.7	50	228	181	79.4
Plains.....	12	277	160	57.8	32	306	243	79.4	74	281	236	84.0
Southeast.....	49	738	588	79.9	59	530	358	67.5	61	250	154	61.6
Southwest.....	13	271	173	63.8	14	150	90	60.0	42	152	100	65.8
Rocky Mountain.....	5	83	55	66.3	7	83	61	73.5	12	32	22	68.8
Far West.....	22	666	461	69.2	6	70	64	91.4	19	89	58	65.2

¹ Includes transcripts reporting 3 years of credit as well as those not including ability measurements.

² A "usable transcript" is one which includes a pupil's credits for grades 9-12 (4 years of credit) as well as a record of 1 or more of the ability tests listed on page 128.

2. No judgment should be made regarding course content except in a most general manner. As the list of course titles in appendix C indicates, there is little uniformity among schools in such titles. Since the placement of specific course titles under the various general subject matter areas had to be made rather arbitrarily in some cases, it would be expected that there will be a few instances where the classification was incorrect in terms of actual course content.
3. No attempt should be made to equate credits or Carnegie units earned with time spent in class. While Carnegie units are based to a certain extent on time, the actual class time spent in certain areas, especially nonacademic, for a given amount of credit will greatly exceed the time spent in other areas for the same credit. Thus, for example, while the percentage of total credits earned in physical education is relatively small, the percentage of class time spent could be as much as is spent in an academic subject area.
4. No special significance should be attached to small differences in percentages when comparing groups of pupils. The size of the sample, the varying rates of response, and the judgmental decisions made while editing transcripts would tend to cause considerable variations.
5. Extreme caution should be exercised in interpreting the data on ability levels and class rank. The assignment of pupils to particular ability levels was based on the reported results of many tests given under many differing conditions. Practices regarding the class rank of pupils also vary considerably from one school to another.

Sampling Error.—As the sample data have been inflated to a universe different from that from which the sample was originally drawn, quantitative estimates of sampling error would be inappropriate. However, on a qualitative basis, small numbers or percentages, as well as small differences between cells, are subject to relatively large sampling variability.

Response.—There were two kinds of nonresponse affecting the results of this study, that pertaining to schools and that pertaining to transcripts. The response pertaining to schools is shown in table 3. Most of the school nonresponse problem arises either from the consolidation of school districts or from a district's failure to supply the data requested.

The response rate in the 1 to 199 enrollment category was lower than that of the other 2 enrollment groups. This rate was largely accounted for by the low response rates of the two southern regions (Southeast, 52.1 percent, and Southwest, 62.7 percent). Highest rates of response were from regions in the northeastern (New England and Mideast) and western (Rocky Mountains and Far West) parts of the country. Interpretation of the data reported in this study regarding particular regions should take into account the regional variations in the response rate.

The transcript response rate was dependent upon the proportion of usable transcripts provided by the responding schools.

Table 3.—Number of public high schools in sample, and the number and percent of response, by school enrollment and region: Continental United States, 1958

Region	School enrollment											
	500 and over				200-499				1-199			
	Number of schools in population ¹	Number of schools in sample	Number of schools responding	Response rate	Number of schools in population ¹	Number of schools in sample ²	Number of schools responding	Response rate	Number of schools in population ¹	Number of schools in sample ²	Number of schools responding	Response rate
1	2	3	4	5	6	7	8	9	10	11	12	13
United States—	5,003	244	204	83.6	6,105	243	197	81.1	8,085	411	278	67.6
New England.....	296	17	16	94.1	230	10	10	100.0	226	10	10	100.0
Mideast.....	1,185	61	51	83.6	578	34	33	97.1	193	14	10	71.4
Great Lakes.....	965	49	36	73.5	1,208	43	36	83.7	1,163	64	50	78.1
Plains.....	317	17	12	70.6	1,753	34	32	94.1	2,348	102	74	72.5
Southeast.....	1,326	58	49	84.5	2,414	86	59	68.6	1,921	117	61	52.1
Southwest.....	296	13	13	100.0	530	20	14	70.0	1,452	67	42	62.7
Rocky Mountains.....	111	6	5	83.3	156	8	7	87.5	455	17	12	70.6
Far West.....	507	23	22	95.7	236	8	6	75.0	327	20	19	95.0

¹Total schools in region in 1958 according to 1959 Survey of Secondary Schools, U.S. Office of Education.

²Sample adjusted to provide for 4 schools changing from 1-199 enrollment to 200-499 enrollment groups. This adjustment was made before the estimating weights were calculated.

Nonsampling Error.—Three classes of nonsampling error should be considered in this study: (1) Errors caused by misunderstanding of instructions by school personnel, (2) errors caused by reporting of mutually noncomparable measurements (e.g., credits earned, class ranking, ability), and (3) errors caused by inaccurate reporting of data.

Whenever the returns from a particular school clearly indicated a misunderstanding, followup letters were sent seeking a clarification of the items concerned. The problems corrected in this manner included transmission of transcripts of nongraduates or of pupils graduating at times other than during the spring of 1958, and incomplete transcripts. Even with these efforts, a few returns undoubtedly contained information based upon a misunderstanding of instructions.

A more serious source of error was the wide variety of standards and instruments used by schools for determining graduation credits, class rank, and ability. As previously pointed out, arbitrary assignment of Carnegie units of credit had to be made on many transcripts from schools using other crediting systems. It would be expected that this procedure would tend to bias the data in the direction of those areas of the curriculum given greatest weight by the Carnegie system. A variety of methods of assigning class rank were also employed in the responding schools. While most schools reported rank for the graduating class as a whole, some principals reported class ranks for graduates in different curriculums. There were also indications that the class rank of a few students was assigned by guess. A review of the data showed a tendency for pupils to be ranked slightly higher, on the average, than could be expected if purely objective methods had been used.

The problem regarding the use of a variety of ability measurements has already been discussed. Although it can be argued that errors of this kind should tend to be self-canceling, the effects of such errors may cause some problems in interpreting apparent differences among the various ability groups. The differences found among the various ability levels in the credits earned for graduation might not be as great as would be found if all pupils had taken the same standardized mental ability test under controlled conditions.

Errors arising from inaccurate reporting of data were difficult to identify. Although the responses were edited for internal consistency and resulting discrepancies were corrected, many kinds of inaccuracies could not be found in this manner. For example, a number of transcripts were hand carried from permanent school records. There were undoubtedly instances where omissions of courses were made, or where figures were incorrectly carried.

The full effect of these kinds of errors on the results of the study cannot be measured with any degree of accuracy.

Continuing Education Beyond High School

Information regarding commitments made by the June 1958 high school graduates to continue their formal education was obtained either from the principal or from a notation to the effect that the pupils were going to attend some type of educational institution. The mere fact that a copy of the pupil's transcript of credits had been sent to one or more institutions was not considered a commitment on the part of the pupil to enter one of those institutions.

The data showed that 43 percent of the graduates planned specifically to continue their formal education. This education was to be obtained in various types of institutions, which, for convenience, were grouped into three categories: (1) Degree-granting institutions, including colleges and service academies; (2) junior colleges; (3) special purpose schools, including schools such as trade, beauty, barber, business, airlines, technical instructor, preparatory, and Bible.

Approximately 58 percent of the able graduates (upper 25 percent ability group) were committed to enter some type of degree-granting college. The proportion of the academically able pupils so committed was much greater than of the less able. In fact, $3\frac{1}{2}$ times as high a proportion of the pupils in the upper 25 percent ability group as in the lowest 25 percent were bound for college. Also, the proportion of pupils who made definite plans for college was three times as large in the upper one-third class rank as in the lower one-third.

The percentage of pupils who were committed to attend colleges or special purpose schools, however, did not differ much by academic ability or class rank.

In general, a slightly higher proportion of pupils in each academic level and class rank enrolled in the largest schools were committed to continue their education than were pupils in the smaller enrollment schools.

Related Studies

Interest in the area of high school pupil programs is evidenced by a growing number of studies conducted by various States and cities. As research increases, further information should be gained in this vital area.

Reviewed here are only a few of the many studies which have contributed in recent years to information on pupil programs and their relationship to pupil abilities and needs.

Connecticut.—The State Department of Education conducted a rather thorough study of public secondary education in Connecticut. Among the large volume of information the Department obtained, it

was found that 80 percent of the 1946 graduates with 120 IQ or more were planning to go to college. The findings presented in this State study have a bearing upon those given in chapter I of *What High School Pupils Study*.

Florida.—The State Department of Education conducted a survey to determine what the top 15 percent of the white high school graduates of 1959 studied. Some of the findings were:

1. 98.3 percent completed at least four courses in language arts.
2. 31.9 percent took at least four courses in social studies.
3. 46 percent carried at least three courses in social studies.
4. 65 percent completed at least four courses in mathematics.
5. 26.3 percent took at least three courses in mathematics.
6. 38.5 percent completed at least four courses in science.
7. 35.7 percent carried at least three courses in science.
8. 8.8 percent took at least four courses in each of the areas of English, social studies, mathematics, and science.
9. 14.4 percent took at least four courses in foreign language.
10. 50.4 percent carried at least two courses in foreign language.

These data are related to those found in chapter III, *Percent of Pupil Programs Devoted to Various Subject Matter Areas*, pages 109–118 of this survey.

Illinois.—The University of Illinois, under the leadership of Dr. Harold C. Hand, conducted a study of the 1957 high school graduates of public high schools in Illinois located outside of Chicago. Included in the stratified sample were 9 schools each with 250 or more graduates; 9, with 100–249 graduates; 7, with 50–99 graduates; and 21, with 49 or fewer graduates. All graduates in the group of smallest schools and half the graduates in the other groups were included in the survey. Some of the findings were:

1. Of the 1957 graduates, 26 percent (boys, 31 percent; girls, 22 percent) attended a 4-year college or university. Of those in the upper quartile in ability, 44 percent attended institutions of higher learning.
2. Proportionally, appreciably more of the boys than of the girls in each ability quartile matriculated at some 4-year college or university.

For those graduates who went on to 4-year colleges or universities the survey showed that:

1. Almost all graduates earned 50 percent or more of their high school credits in the academic areas, and 80 percent earned 75 percent of their credits in these areas. Of the graduates in the largest schools 88 percent as compared with 61 percent in the smallest schools devoted three-fourths of their high school credits to academic work.
2. Three-fourths completed four credits in English while one-fifth earned more than four credits.
3. Girls earned slightly more English credits than did the boys.
4. Nearly one-third had had no foreign language.

5. Three-fourths earned two or more credits in mathematics; half, three or more; and one-fourth, four or more.
6. Most of the mathematics taken was college preparatory.
7. One-half of the girls earned two credits in science while the same proportion of boys earned three credits.
8. The median graduate of the largest schools completed one less credit in science than did the median graduate in the smaller schools.
9. Three-fourths completed two or more credits in social studies.
10. None completed four credits in each of the areas of English, mathematics, science, and social studies.
11. Nine-tenths of the boys and nearly four-fifths of the girls carried no high school art. No graduates from the smaller schools had had art.
12. Over one-half of the boys and approximately one-fourth of the girls earned no music credit.
13. Girls completed more business education credits than did the boys.
14. One-fourth of the girls had had at least 1 year of home economics. One-half of the boys had had 1 year of industrial arts.
15. Almost all (99 percent) enrolled in health and physical education.
16. More than four-fifths had had 1 semester or less of driver training.

The *Continuing Education Beyond High School*, in chapter 1, and chapter 3 includes data having a bearing on the information reported in this study.

Maine.—The State of Maine conducted a survey of subjects taken in grades 9 through 12 by 1957 graduates. Graduates were grouped according to attendance in schools of various enrollments. In the areas of social studies, mathematics, science, and foreign language the percentage of the class taking separate courses was found but the percentage of pupils earning credits in the area was not given.

Some of the significant results obtained were:

1. Approximately 3 percent of all pupils in all schools carried driver education; 3 percent, four units of industrial arts; 1.2 percent, four units of vocational education; 10.8 percent, four units of home economics; and 98 percent, four units of English.
2. General mathematics was taken by 35 percent of the pupils and algebra by 52 percent.
3. Some foreign language was carried by 57 percent.
4. General science was carried by 83 percent and biology by 83 percent.
5. In all schools, 30.8 percent of the pupils were enrolled in the college preparatory curriculum; 30.7 percent in the general curriculum, 25.3 percent in the commercial, and 12.3 percent in the vocational.

The findings in this study pertain to those given in chapter III, *Enrollment in Curriculums*, pages 36 to 49, and *Percent of Pupil Programs Devoted to Various Subject Matter Areas*, pages 109 to 118, of this survey.

Maryland.—The Maryland State Department of Education and the University of Maryland, under the leadership of Dr. Orval Ulry, conducted a survey of programs and subjects taken by 1958 graduates of the Maryland public high schools. Among the findings which relate to the study, *What High School Pupils Study* are:

1. The major programs pursued were the academic, commercial, general, and vocational. The largest group of pupils (37 percent) pursued the academic program.
2. More pupils with IQ scores of 120 or above took the academic curriculum than any other.
3. The percentage of pupils taking the academic curriculum increased as the IQ score increased.
4. Of the seniors with IQ scores below 100, a larger number took the general course than any other course.
5. IQ scores of students taking the commercial curriculum were more normally distributed by IQ scores than for any other curriculum group.
6. Approximately 3 out of 5 pupils earned 20 or more units for graduation.
7. At least one course in college preparatory mathematics was taken by 65 percent of the pupils.
8. Biology was pursued by slightly more than 90 percent.
9. At least one college preparatory science course was taken by 94 percent of the boys and 95 percent, girls.
10. Chemistry was carried by 42 percent of the pupils and physics by 28 percent.
11. Some foreign language was taken by 48 percent of the pupils.
12. More pupils studied French than any other language. Latin was next in popularity and Spanish, third.
13. As students progressed along the usual sequence of science subjects, a slight increase in IQ range was apparent although the increase was less evident and less regular than in mathematics.
14. Of the academically talented, 80 percent indicated plans to continue education beyond high school.
15. The academically talented carried a rigorous program in terms of all academic subjects: Almost all carried at least 4 credits in English; approximately 44 percent carried 4 credits in social studies; 60 percent, 4 credits in academic mathematics; 46 percent, 3 credits in science; and 14 percent, 3 credits in foreign language.

These findings may be compared with the information given in chapter I and chapter III, *Enrollment in Curriculums*, pages 36 to 49; *Total Credits Earned*, pages 53 to 65; and *Credits Earned by Subject Matter Areas*, pages 65 to 109, of this publication.

Pennsylvania.—A study of the 1959 high school graduates was conducted by the State of Pennsylvania.

The following information was revealed as a portion of the results of this study:

1. The highest enrollment in the 85-99 IQ group is in the general curriculum, while the largest enrollment in the group with higher IQ's is in the college preparatory curriculum.
2. The percentage of pupils enrolled in the college preparatory curriculum was 38.3; in the general curriculum, 25.2; in the business, 25.1; and in the vocational, 11.4.
3. Smaller high schools (below 100) have a greater percentage of students taking vocational and business courses and the larger high schools, college preparatory and general.

These data correspond closely with those found in chapter III, *Enrollment in Curriculums*, pages 36 to 49, of this survey.

Cincinnati, Ohio.—A survey of subject area majors of 1957 graduates in the Cincinnati comprehensive high schools was made by the Department of Education. Some of the findings which have an implication for research are:

1. The subject areas in which the more capable pupils tend to major and which the less capable pupils tend to avoid are foreign language and mathematics.
2. The subject areas which the less capable pupils tend to select and the more capable pupils tend to avoid are business education, home economics, and industrial arts.
3. Typical able pupils tend to select the academic subjects which are considered intellectually rigorous.
4. School grades as given to pupils in the sample and intelligence were highly correlated.

This study gives additional weight to the data provided in chapter III, *Class Rank and Pupil Ability*, pages 25 to 36; *Enrollment in Curriculums*, pages 36 to 49; and *Percent of Pupil Programs Devoted to Various Subject Matter Areas*, pages 109 to 118, of this survey.

St. Paul, Minnesota.—The Department of Education conducted a survey of the "hard" and "soft" subjects taken by the 1958 graduates. They found that:

1. Of the 16 credits required for graduation, boys took 90.2 percent of them in the "hard" subjects including 25 percent in English, 22.4 percent in social studies, 21 percent in mathematics, 17.8 percent in science, and 4 percent in foreign language.
2. Of the 16 credits required for graduation, girls took 81 percent in the "hard" subjects including 25 percent in English, 22.4 percent in social studies, 15.2 percent in mathematics, 11.2 percent in science, and 7.2 percent in foreign language.

These data pertain to the area of concern covered in chapter III, *Percent of Pupil Programs Devoted to Various Subject Matter Areas*, pages 109 to 118, of this publication.

Tucson, Arizona.— The Tucson high schools conducted a survey of subjects taken by 1959 seniors ranking in the upper 15 percent in ability. Some of the results found were:

1. 100 percent of the pupils carried 4 or more years of English.
2. 50 percent of the pupils took 2 years of modern foreign language.
6 percent of the pupils carried 4 years of modern foreign language.
16 percent of the pupils completed 2 years of ancient foreign language.
3. 44 percent of the pupils carried 2 years of social studies and the same percentage carried 3 years.
4. 30 percent of the pupils took 4 years and 45 percent, 3 years of college preparatory mathematics.
5. 29 percent of the pupils carried 2 years and 37 percent, 3 years of science.
6. 38 percent of the pupils completed 1 year of business education.
7. 18 percent of the pupils carried 1 year of fine arts.
8. 30 percent of the pupils took 1 year and 17 percent, 2 years of industrial arts.
9. 48 percent of the girls and 68 percent of the boys completed 3 years of physical education.
10. 23 percent of the pupils carried 1 year of home economics.

The information found in this study is allied to that given in chapter III, *Percent of Pupil Programs Devoted to Various Subject Matter Areas*, pages 109 to 118, of this Survey.

CHAPTER II

High School Requirements and Offerings

QUESTIONNAIRE RETURNS provided some important information concerning the schools included in the sample. An inquiry as to the 1957-58 high school membership (number of pupils on active rolls) served as a check on the placement of schools in particular enrollment groups. Other data were used for editorial purposes and for checking internal consistency of the returns from each school.

The questionnaire inquiry returns provided important information concerning subject matter graduation requirements, which comprise an important factor influencing the programs completed by pupils. It also gave some indication regarding changes in graduation requirements and subject offerings made recently or being contemplated. The following sections give the information obtained in these two areas.

Graduation Credit Requirements

Schools were asked to indicate whether units required for graduation had to be earned by pupils in the last 3 or the last 4 years. Only 53 schools replied that their requirements were based on the last 3 years of work. These numbers were too small to report, but the trends that could be observed were very much the same as those found in the 4-year data.

Most of the schools required for graduation English, social studies, science, mathematics, and physical education, or a combination of physical education and health. Of the schools in each enrollment group, more than 60 percent required 4 years of English and almost all (approximately 94 to 100 percent) required at least three units; approximately 80 percent required two or more units of social studies; approximately 75 percent of the largest schools and more than 90 percent of the smallest schools required at least one unit in mathematics and one in science. (See table 4.) A greater proportion of the lowest enrollment schools than of the other two enrollment-size

schools required two units of mathematics and two units of science. This may be because small schools are likely to have fewer subject offerings than are large schools. Pupils attending the small schools, therefore, would tend to carry programs which are more similar than would the pupils in the large schools.

Physical education was required by a great many schools. In the highest enrollment schools 50 percent required some credit in physical education; in the middle and small enrollment schools the percentages were somewhat smaller. Many additional schools required physical education in combination with health and a few schools required it as an alternative to health or driver education. Thus, more than two out of three schools required some physical education credit for graduation. The most popular requirement seemed to be one credit in physical education. In addition, other schools may have made physical education a no-credit requirement. Such a requirement would not be indicated here since this study is concerned only with the number of credits required in the various areas.

Only a small fraction of schools required driver education. Those which did, in most instances, required only one-fourth or one-half credit. A few others may have required driver education as an alternative to health or physical education. The total number of schools making any requirement which included driver education was small.

Even smaller percentages of schools made requirements of any of the fine or industrial arts. Home economics showed up as a requirement in a greater number of schools. Some of the indicated requirements must not have been imposed upon all pupils, but may have been required of girls, only. Even though courses, such as home and family living, home economics for boys and girls, and home management, were required of all pupils by some schools, the number of credits required in such courses was small.

Changes in Offerings and Requirements

The replies to the inquiry regarding changes in graduation requirements indicated that the percentage of schools which had made or planned increases in requirements was much greater than the percentage which had made or planned decreases. (See table 5). However, the largest percentages of schools did not indicate that any change had been made or was being contemplated. These large percentages would tend to show that the majority of the schools were not attempting to enforce a more rigid program upon all their pupils nor were they contemplating doing so at this time.

Table 5.—Percent of public high schools reporting changes in number of units of required subjects, by school enrollment: Continental United States, 1958

School enrollment	Number of schools ¹	Percent of schools reporting			
		Total	Increase	Decrease	No change reported
1957-1958					
500 and over.....	169	100	36	2	62
200-499.....	182	100	² 37	² 2	62
1-199.....	275	100	² 34	² 3	65
1958-1959					
500 and over.....	169	100	23	1	76
200-499.....	182	100	28	1	71
1-199.....	275	100	20	(⁴)	80
1959-1960					
500 and over.....	169	100	35	2	63
200-499.....	182	100	² 35	² 2	64
1-199.....	175	100	² 32	² 2	67

¹ Number of schools in sample upon which estimates are based.

² Includes 1 school reporting both increase and decrease in required subject matter for the same year.

³ Includes 3 schools reporting both increase and decrease in required subject matter for the same year.

⁴ Less than 0.5.

Table 6.—Percent of public high schools reporting increases in offerings, by school enrollment and type of course: Continental United States, 1958

School enrollment	Number of schools ¹	Percent of schools reporting increases			
		None	Made during 1957-58	Made during 1958-59	Scheduled for 1959-60
In mathematics, science, and foreign language					
500 and over.....	204	41	44	40	48
200-499.....	197	40	58	33	51
1-199.....	278	36	51	32	53
In subjects other than mathematics, science, and foreign language					
500 and over.....	204	61	32	21	30
200-499.....	197	69	25	21	25
1-199.....	278	65	30	21	30

¹ Number of schools in sample upon which estimates are based.

NOTE.—Each school which reported changes may have indicated such in 1 or more of the last 3 columns.

1. Based on 182 schools reporting 4 years of requirements. 2. Includes 3 schools not reporting to item. 3. Based on 182 schools reporting 4 years of requirements. 4. Includes 3 schools not reporting to item.

The data show, however, the impact made by the intense public interest in having all pupils, especially the academically able, carry programs which offer a decided intellectual challenge. This influence is indicated by the large percentage of schools shown to have increased subject matter offerings or having made plans to do so, especially in mathematics, science, and foreign language. (See table 6.) Perhaps because the lowest enrollment schools had a comparatively narrow range of subjects the greatest proportion of these schools increased their offerings in mathematics, science, and foreign language. In fact, over 50 percent of these schools increased their offerings in these areas in 1957-58 and almost 90 percent had scheduled such expansion for 1959-60.

CHAPTER III

Pupil Ability and High School Programs

PUPIL PROGRAMS are analyzed by specific types of information, such as pupil rankings in class, academic abilities, sex, curriculums, and school enrollments, in order to determine what relationships exist between them. These analyses are shown in the sections concerning class rank and pupil ability, enrollment in curriculums, participation in academic and nonacademic programs, total credits earned, credits earned by subject matter areas, and percent of pupil programs devoted to various subject matter areas.

A small number of transcripts reported pupil credits for 3 years only. However, references in this survey are made to tables and graphs based upon the reports of 4 years of credit.

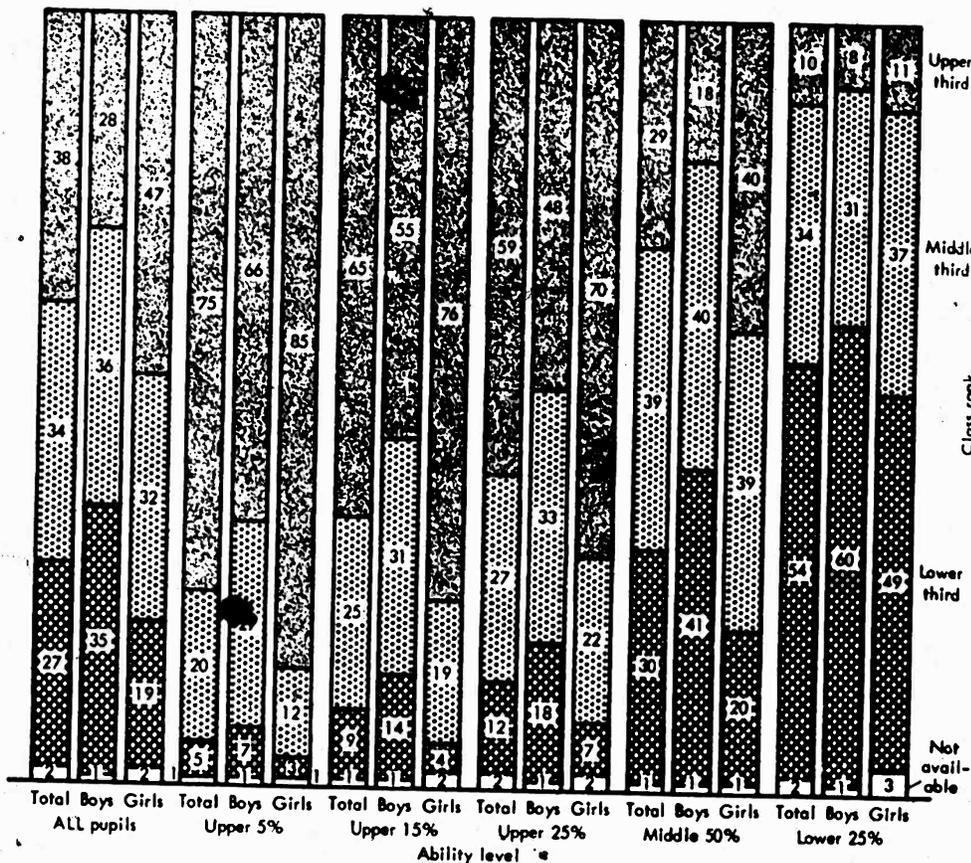
Class Rank and Pupil Ability

How do the distributions of boys and girls by ability and by class rank compare? Are high school pupils earning marks commensurate with their abilities? How is school enrollment related to the distribution of boys and girls of different abilities in class rank? This section concerns itself with these and similar questions.

In most instances the pupil's class rank was recorded on his transcript of credits. When it was not, it was requested as supplementary material. This information was not available, however, for approximately 1.5 percent of the pupils. Such a small percentage of non-response would not have materially influenced the data. For the distribution of usable transcripts of the 1958 high school graduates by sex, class rank, and ability level see table A in appendix A.

According to these returns, approximately 38 percent of the pupils were ranked in the upper one-third of their classes, 34 percent in the middle one-third, and 27 percent in the lower one-third. (Fig. 2 and table 7). This breakdown into class rank corresponds closely to the normal division into thirds. The graphs show clearly that as the

Figure 2.—Percent of high school pupils in each ability level, by class rank



ability of the pupils increased, the class rank tended to increase. Table 8 shows also that the upper one-third class rank included $1\frac{1}{2}$ times as high a proportion of pupils of upper 25 percent ability as did the total group; the lower one-third class rank had more than twice as high a percentage of the lower 25 percent ability group as did the total group.

Of the upper 25 percent ability group, almost 60 percent of the pupils ranked in the upper one-third of their classes, 27 percent in the middle one-third, and 12 percent in the lower one-third. (Fig. 2 and table 7.) Of the lower 25 percent ability group, 54 percent were ranked in the upper one-third. A lack of interest in the work was probably a large factor in poor achievement. Some pupils might not have had the opportunity to attend school regularly because of illness, home situation, or other reasons. Some of those, whose class rank was higher than their abilities would indicate, might not have had a true measure of their mental abilities, others might have pushed themselves unusually hard and still others might have been marked according to their achievement in relation to their needs and abilities. Standards of achievement differed from teacher to teacher and school

to school. Many other factors influencing the type of work done by pupils could be mentioned. A few of these which might have had a greater effect on one particular sex than on the other will be discussed later.

Table 7.—Percent of high school graduates in each ability level, by class rank, and school enrollment: Continental United States, 1958

[Figures in *italic* represent only a part of the upper 25 percent in pupil ability, and are included in the total for the 25 percent]

Pupil ability level	Percent of graduates, by class rank				
	Total ¹	Not available	Upper ¼	Middle ¼	Lower ¼
All schools					
All pupils	100	2	38	34	27
Upper 5 percent.....	<i>100</i>	<i>1</i>	<i>75</i>	<i>20</i>	<i>5</i>
Upper 15 percent.....	<i>100</i>	<i>1</i>	<i>65</i>	<i>25</i>	<i>9</i>
Upper 25 percent.....	<i>100</i>	<i>2</i>	<i>59</i>	<i>27</i>	<i>12</i>
Middle 50 percent.....	<i>100</i>	<i>1</i>	<i>29</i>	<i>39</i>	<i>30</i>
Lower 25 percent.....	<i>100</i>	<i>2</i>	<i>10</i>	<i>34</i>	<i>54</i>
School enrollment: 500 and over					
All pupils	100	1	39	34	26
Upper 5 percent.....	<i>100</i>	<i>(²)</i>	<i>76</i>	<i>19</i>	<i>5</i>
Upper 15 percent.....	<i>100</i>	<i>1</i>	<i>64</i>	<i>25</i>	<i>9</i>
Upper 25 percent.....	<i>100</i>	<i>1</i>	<i>59</i>	<i>28</i>	<i>12</i>
Middle 50 percent.....	<i>100</i>	<i>1</i>	<i>29</i>	<i>40</i>	<i>30</i>
Lower 25 percent.....	<i>100</i>	<i>2</i>	<i>10</i>	<i>32</i>	<i>56</i>
School enrollment: 200-499					
All pupils	100	2	37	33	29
Upper 5 percent.....	<i>100</i>	<i>3</i>	<i>74</i>	<i>18</i>	<i>6</i>
Upper 15 percent.....	<i>100</i>	<i>2</i>	<i>67</i>	<i>21</i>	<i>10</i>
Upper 25 percent.....	<i>100</i>	<i>2</i>	<i>58</i>	<i>26</i>	<i>14</i>
Middle 50 percent.....	<i>100</i>	<i>1</i>	<i>31</i>	<i>37</i>	<i>31</i>
Lower 25 percent.....	<i>100</i>	<i>2</i>	<i>11</i>	<i>38</i>	<i>50</i>
School enrollment: 1-199					
All pupils	100	2	39	35	24
Upper 5 percent.....	<i>100</i>	<i>0</i>	<i>75</i>	<i>23</i>	<i>2</i>
Upper 15 percent.....	<i>100</i>	<i>1</i>	<i>71</i>	<i>23</i>	<i>5</i>
Upper 25 percent.....	<i>100</i>	<i>2</i>	<i>63</i>	<i>26</i>	<i>9</i>
Middle 50 percent.....	<i>100</i>	<i>1</i>	<i>32</i>	<i>41</i>	<i>26</i>
Lower 25 percent.....	<i>100</i>	<i>2</i>	<i>7</i>	<i>38</i>	<i>52</i>

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5.

NOTE.—Percents do not necessarily add up to total because of rounding.

Table 8.—Percent of high school graduates in each class rank, by ability level, and school enrollment: Continental United States, 1958

[Figures in *italic* represent only a part of the upper 25 percent in pupil ability, and are included in the total for the 25 percent]

Class rank	Percent of graduates, by pupil ability level					
	Total ¹	Upper 5 percent	Upper 15 percent	Upper 25 percent	Middle 50 percent	Lower 25 percent
All schools						
All pupils	100	<i>11</i>	<i>27</i>	39	47	14
Not available.....	100	<i>5</i>	<i>20</i>	40	41	19
Upper 1/2.....	100	<i>21</i>	<i>46</i>	60	36	4
Middle 1/2.....	100	<i>6</i>	<i>19</i>	31	54	15
Lower 1/2.....	100	<i>2</i>	<i>9</i>	18	53	29
School enrollment: 500 and over						
All pupils	100	<i>12</i>	<i>29</i>	40	46	13
Not available.....	100	<i>2</i>	<i>20</i>	38	41	21
Upper 1/2.....	100	<i>23</i>	<i>48</i>	62	35	3
Middle 1/2.....	100	<i>7</i>	<i>22</i>	33	55	13
Lower 1/2.....	100	<i>2</i>	<i>10</i>	18	53	29
School enrollment: 200-499						
All pupils	100	<i>9</i>	<i>22</i>	36	46	18
Not available.....	100	<i>14</i>	<i>22</i>	46	37	17
Upper 1/2.....	100	<i>17</i>	<i>40</i>	56	39	5
Middle 1/2.....	100	<i>5</i>	<i>14</i>	28	51	21
Lower 1/2.....	100	<i>2</i>	<i>8</i>	18	51	32
School enrollment: 1-199						
All pupils	100	<i>8</i>	<i>23</i>	35	51	14
Not available.....	100	<i>0</i>	<i>16</i>	34	48	18
Upper 1/2.....	100	<i>15</i>	<i>42</i>	57	41	3
Middle 1/2.....	100	<i>5</i>	<i>15</i>	26	59	15
Lower 1/2.....	100	<i>1</i>	<i>5</i>	13	55	31

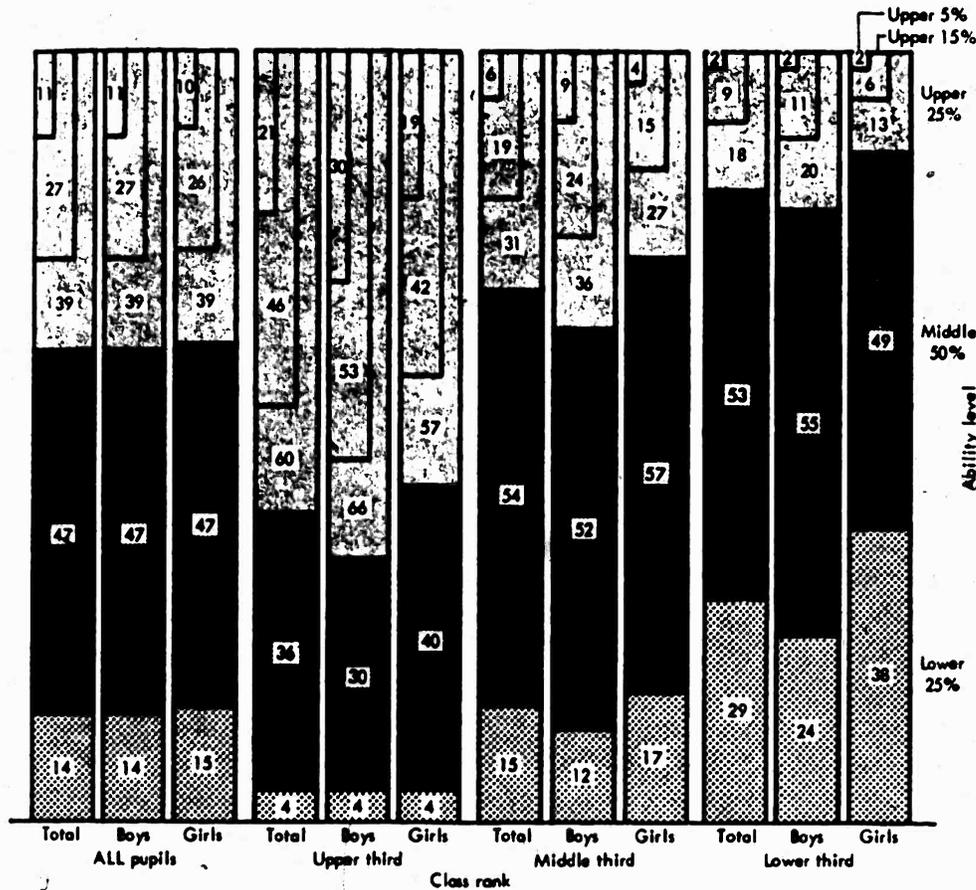
¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

NOTE.—Percents do not necessarily add up to total because of rounding.

In all the ability and class rank distributions greater percentages of boys than girls were found to be ranked low in comparison to their abilities. The study revealed rather an even ratio between the sexes, approximately 48 percent boys and 52 percent girls. (See table 9.) Much the same ratio continued in the various ability levels in all enrollment-size schools. The widest variation from this ratio existed

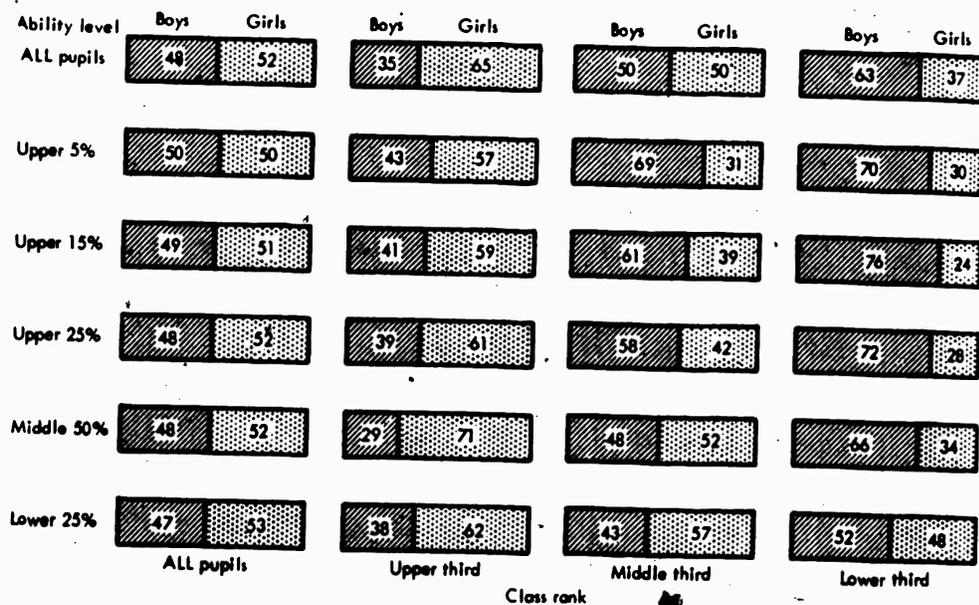
in the lower 25 percent ability level in the small schools where it was approximately 53:47. However, the ratios of boys to girls in the different class ranks were quite dissimilar from the one for the total group.

Figure 3.—Percent of high school pupils in each third of class, by ability level



As shown by figure 4 and table 9 the ratio of boys to girls ranked in the upper one-third of the class was approximately 1:2 and in the lower one-third of the class, almost 2:1. A greater proportion of girls in each ability group than boys ranked in the upper one-third of their classes and a greater proportion of boys of each ability level than girls ranked in the lower one-third. (See fig. 2 and tables 10 and 11.) However, figure 3 and tables 12 and 13 show that a higher proportion of the boys, ranked in each one-third of the class, was in the high-ability group than was true of the girls. This reinforces the assumption that boys, on the whole, had to have higher ability to rank as high in their classes as the girls. A higher proportion of girls than of boys who ranked in the middle and lower one-third of the class were of the lowest ability.

Figure 4.—Percent of high school pupils who are boys and girls in each ability level, by class rank



In most instances the different enrollment-size schools were quite consistent in the proportion of the total group in each class rank who were boys. (See table 9.) One exception was noted when comparing the low-enrollment schools with the higher enrollment schools in that a smaller proportion of the pupils in the lower 25 percent ability group who ranked in the upper one-third of the class were boys and a higher proportion who ranked in the lower one-third of the class were boys. Might this indicate that the narrower range of offerings in the smaller schools was less likely to satisfy the needs of the lower ability boys or more likely to meet the needs of girls?

There are many factors which might have affected the type of work done by boys as compared with that done by girls. As a rule, girls appear to be more conscientious about their schoolwork and sometimes drive themselves even beyond their strength in order to achieve good marks. They are usually more conforming and tend to adjust better than do boys to subjects which they feel may not be of much value to them. Some teachers, too, are inclined to consider a pupil's attitude and behavior in determining a mark for achievement. When this is true, boys who are not interested in their work and who show it in ways that do not promote good citizenship tend to receive lower marks than they would otherwise. Because girls mature earlier, their achievement in the elementary and junior high school grades, as a rule, tends to be superior to that of boys. As a result, many

boys develop the attitude that since girls just naturally earn better marks than they do there is no reason why they should work hard to attain a high level of achievement.

Table 9.—Percent of high school graduates in each ability level who are boys, by class rank, and school enrollment: Continental United States, 1958

[Figures in *italic* represent only a part of the upper 25 percent in pupil ability, and are included in the total for 25 percent]

Pupil ability level	Percent of pupils who are boys, by class rank				
	Total ¹	Not available	Upper ¼	Middle ¼	Lower ¼
All schools					
All boys	48	38	35	50	63
Upper 5 percent.....	<i>50</i>	<i>57</i>	<i>43</i>	<i>69</i>	<i>70</i>
Upper 15 percent.....	<i>49</i>	<i>21</i>	<i>41</i>	<i>61</i>	<i>76</i>
Upper 25 percent.....	48	38	39	58	72
Middle 50 percent.....	48	46	29	48	66
Lower 25 percent.....	47	21	38	43	52
School enrollment: 500 and over					
All boys	48	36	36	51	61
Upper 5 percent.....	<i>51</i>	<i>100</i>	<i>44</i>	<i>71</i>	<i>79</i>
Upper 15 percent.....	<i>49</i>	<i>10</i>	<i>42</i>	<i>61</i>	<i>77</i>
Upper 25 percent.....	49	29	40	58	72
Middle 50 percent.....	47	49	29	49	63
Lower 25 percent.....	45	21	40	41	49
School enrollment: 200-499					
All boys	48	40	35	46	67
Upper 5 percent.....	<i>45</i>	<i>38</i>	<i>44</i>	<i>52</i>	<i>43</i>
Upper 15 percent.....	<i>49</i>	<i>24</i>	<i>42</i>	<i>61</i>	<i>73</i>
Upper 25 percent.....	47	41	39	52	72
Middle 50 percent.....	48	42	29	44	71
Lower 25 percent.....	48	32	38	41	56
School enrollment: 1-199					
All boys	49	49	32	57	67
Upper 5 percent.....	<i>47</i>	<i>0</i>	<i>36</i>	<i>87</i>	<i>0</i>
Upper 15 percent.....	<i>44</i>	<i>100</i>	<i>32</i>	<i>69</i>	<i>78</i>
Upper 25 percent.....	46	100	34	65	68
Middle 50 percent.....	50	33	30	54	70
Lower 25 percent.....	53	0	13	54	60

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

Table 10.—Percent of high school graduate boys in each ability level, by class rank, and school enrollment: Continental United States, 1958

[Figures in *italic* represent only a part of the upper 25 percent in pupil ability, and are included in the total for 25 percent]

Pupil ability level	Percent of boys, by class rank				
	Total ¹	Not available	Upper ¼	Middle ¼	Lower ¼
All schools					
All boys	100	1	28	36	35
Upper 5 percent.....	<i>100</i>	<i>1</i>	<i>66</i>	<i>27</i>	<i>7</i>
Upper 15 percent.....	<i>100</i>	<i>1</i>	<i>55</i>	<i>31</i>	<i>14</i>
Upper 25 percent.....	<i>100</i>	<i>1</i>	<i>48</i>	<i>33</i>	<i>18</i>
Middle 50 percent.....	<i>100</i>	<i>1</i>	<i>18</i>	<i>40</i>	<i>41</i>
Lower 25 percent.....	<i>100</i>	<i>1</i>	<i>8</i>	<i>31</i>	<i>60</i>
School enrollment: 500 and over					
All boys	100	1	29	36	34
Upper 5 percent.....	<i>100</i>	<i>1</i>	<i>65</i>	<i>27</i>	<i>8</i>
Upper 15 percent.....	<i>100</i>	⁽²⁾	<i>54</i>	<i>31</i>	<i>15</i>
Upper 25 percent.....	<i>100</i>	<i>1</i>	<i>49</i>	<i>33</i>	<i>18</i>
Middle 50 percent.....	<i>100</i>	<i>1</i>	<i>18</i>	<i>41</i>	<i>41</i>
Lower 25 percent.....	<i>100</i>	<i>1</i>	<i>9</i>	<i>29</i>	<i>61</i>
School enrollment: 200-499					
All boys	100	1	27	32	40
Upper 5 percent.....	<i>100</i>	<i>2</i>	<i>71</i>	<i>21</i>	<i>6</i>
Upper 15 percent.....	<i>100</i>	<i>1</i>	<i>58</i>	<i>26</i>	<i>15</i>
Upper 25 percent.....	<i>100</i>	<i>2</i>	<i>48</i>	<i>29</i>	<i>22</i>
Middle 50 percent.....	<i>100</i>	<i>1</i>	<i>19</i>	<i>34</i>	<i>46</i>
Lower 25 percent.....	<i>100</i>	<i>1</i>	<i>9</i>	<i>32</i>	<i>58</i>
School enrollment: 1-199					
All boys	100	2	26	41	32
Upper 5 percent.....	⁽³⁾	⁽²⁾	⁽³⁾	⁽²⁾	⁽²⁾
Upper 15 percent.....	<i>100</i>	<i>2</i>	<i>52</i>	<i>36</i>	<i>10</i>
Upper 25 percent.....	<i>100</i>	<i>3</i>	<i>47</i>	<i>37</i>	<i>13</i>
Middle 50 percent.....	<i>100</i>	<i>0</i>	<i>19</i>	<i>44</i>	<i>36</i>
Lower 25 percent.....	<i>100</i>	<i>0</i>	<i>2</i>	<i>39</i>	<i>59</i>

¹ Based on boys reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5 percent.

³ Percents not computed where fewer than 50 transcripts were available.

NOTE.—Percents do not necessarily add up to total because of rounding.

Table 11.—Percent of high school graduate girls in each ability level, by class rank, and school enrollment: Continental United States, 1958

[Figures in *italics* represent only a part of the upper 25 percent in pupil ability, and are included in the total for 25 percent]

Pupil ability level	Percent of girls, by class rank				
	Total ¹	Not available	Upper ¼	Middle ¼	Lower ¼
All schools					
All girls	100	2	47	32	19
Upper 5 percent.....	<i>100</i>	<i>1</i>	<i>85</i>	<i>12</i>	<i>3</i>
Upper 15 percent.....	<i>100</i>	<i>2</i>	<i>78</i>	<i>19</i>	<i>4</i>
Upper 25 percent.....	100	2	70	22	7
Middle 50 percent.....	100	1	40	39	20
Lower 25 percent.....	100	3	11	37	49
School enrollment: 500 and over					
All girls	100	2	47	32	20
Upper 5 percent.....	<i>100</i>	<i>0</i>	<i>86</i>	<i>18</i>	<i>2</i>
Upper 15 percent.....	<i>100</i>	<i>2</i>	<i>74</i>	<i>20</i>	<i>4</i>
Upper 25 percent.....	100	2	69	22	6
Middle 50 percent.....	100	1	39	39	21
Lower 25 percent.....	100	3	11	34	52
School enrollment: 200-499					
All girls	100	2	46	34	18
Upper 5 percent.....	<i>100</i>	<i>3</i>	<i>78</i>	<i>16</i>	<i>6</i>
Upper 15 percent.....	<i>100</i>	<i>3</i>	<i>76</i>	<i>16</i>	<i>5</i>
Upper 25 percent.....	100	2	67	24	8
Middle 50 percent.....	100	2	42	39	17
Lower 25 percent.....	100	2	13	43	42
School enrollment: 1-199					
All girls	100	2	53	30	16
Upper 5 percent.....	(²)	(²)	(²)	(²)	(²)
Upper 15 percent.....	<i>100</i>	<i>0</i>	<i>85</i>	<i>13</i>	<i>2</i>
Upper 25 percent.....	100	0	77	17	6
Middle 50 percent.....	100	2	44	38	16
Lower 25 percent.....	100	4	14	38	45

¹ Based on girls reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Percents not computed where fewer than 50 transcripts were available.

NOTE.—Percents do not necessarily add up to total because of rounding.

Table 12.—Percent of high school graduate boys in each class rank, by pupil ability, and school enrollment: Continental United States, 1958

[Figures in *italics* represent only a part of the upper 25 percent in pupil ability, and are included in the total for 25 percent]

Class rank	Percent of boys, by pupil ability level					
	Total ¹	Upper 5 percent	Upper 15 percent	Upper 25 percent	Middle 50 percent	Lower 25 percent
All schools						
All boys.....	100	11	27	39	47	14
Not available.....	100	7	11	40	49	11
Upper 1/4.....	100	28	53	66	30	4
Middle 1/4.....	100	9	24	36	52	12
Lower 1/4.....	100	2	11	20	55	24
School enrollment: 500 and over						
All boys.....	100	13	30	41	46	13
Not available.....	(²)	(²)	(²)	(²)	(²)	(²)
Upper 1/4.....	100	28	55	68	28	4
Middle 1/4.....	100	9	26	38	52	10
Lower 1/4.....	100	3	13	22	56	23
School enrollment: 200-499						
All boys.....	100	8	23	35	47	18
Not available.....	(²)	(²)	(²)	(²)	(²)	(²)
Upper 1/4.....	100	22	49	62	32	6
Middle 1/4.....	100	5	19	32	50	19
Lower 1/4.....	100	1	8	19	54	27
School enrollment: 1-199						
All boys.....	100	7	21	33	52	15
Not available.....	(²)	(²)	(²)	(²)	(²)	(²)
Upper 1/4.....	100	17	42	60	39	1
Middle 1/4.....	100	8	18	30	56	15
Lower 1/4.....	100	0	8	14	58	28

¹ Based on boys reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix.

² Percents not computed where fewer than 50 transcripts were available.

NOTE.—Percents do not necessarily add up to total because of rounding.

Table 13.—Percent of high school graduate girls in each class rank, by pupil ability level, and school enrollment: Continental United States, 1958

[Figures in *italic* represent only a part of the upper 25 percent in pupil ability and are included in the total for 25 percent]

Class rank	Percent of girls, by pupil ability level					
	Total ¹	Upper 5 percent	Upper 15 percent	Upper 25 percent	Middle 50 percent	Lower 25 percent
All schools						
All girls	100	<i>10</i>	<i>28</i>	39	47	15
Not available.....	100	<i>3</i>	<i>28</i>	39	36	25
Upper ¼.....	100	<i>19</i>	<i>42</i>	57	40	4
Middle ¼.....	100	<i>4</i>	<i>15</i>	27	57	17
Lower ¼.....	100	<i>2</i>	<i>8</i>	13	49	38
School enrollment: 500 and over						
All girls	100	<i>11</i>	<i>28</i>	40	47	14
Not available.....	(²)	(²)	(²)	(²)	(²)	(²)
Upper ¼.....	100	<i>20</i>	<i>44</i>	58	38	3
Middle ¼.....	100	<i>4</i>	<i>17</i>	30	57	15
Lower ¼.....	100	<i>1</i>	<i>8</i>	13	50	37
School enrollment: 200-499						
All girls	100	<i>9</i>	<i>22</i>	37	46	18
Not available.....	(²)	(²)	(²)	(²)	(²)	(²)
Upper ¼.....	100	<i>15</i>	<i>38</i>	53	42	5
Middle ¼.....	100	<i>4</i>	<i>10</i>	25	53	22
Lower ¼.....	100	<i>3</i>	<i>8</i>	15	44	41
School enrollment: 1-199						
All girls	100	<i>8</i>	<i>28</i>	37	50	13
Not available.....	(²)	(²)	(²)	(²)	(²)	(²)
Upper ¼.....	100	<i>14</i>	<i>42</i>	55	42	3
Middle ¼.....	100	<i>2</i>	<i>11</i>	21	63	16
Lower ¼.....	100	<i>2</i>	<i>3</i>	13	50	37

¹ Based on girls reporting 4 years of credit and for whom mental ability measures were reported. For number of pupils from which percents were calculated see table A in appendix A.

² Percents not computed where fewer than 50 transcripts were available.

NOTE.—Percents do not necessarily add up to total because of rounding.

A study of the data on pupils for whom 3 years of credit were reported shows that, where the numbers of pupils were adequate, the trends indicated were similar to those of the 4-year reporting pupils.

* * *

A summary of the information gained from this study of class-rank and ability levels results in several significant findings among which are:

1. Generally, as the ability of pupils increased the class rank increased. However, there were many instances in which pupil achievement did not correspond with ability.
2. The ratio of boys to girls was approximately the same in each ability group as it was in the total group of boys and girls (12:13). This relationship held in each enrollment-size group of schools, as well as in all schools taken as a whole.
3. In the upper one-third class rank the ratio of boys to girls was approximately 1:2 and in the lower one-third it was almost 2:1 while in the total group the ratio was 12:13.
4. All ability and class-rank distributions showed a greater percentage of boys than of girls ranking lower than their abilities would indicate.
5. A greater proportion of the girls in the lower 25 percent in ability than of the boys in this ability group ranked in the upper one-third of their class.
6. In most instances the percentage distribution of boys or of girls of different ability levels by class ranks varied little by school enrollment size. In the lowest enrollment schools as compared with the larger schools, however, a smaller percentage of boys in the lowest ability group ranked in the upper one-third of the class, and a smaller percentage of boys ranked in the lower one-third of the class were in the upper 25 percent ability level.

Enrollment in Curriculums

Some schools offer only a single curriculum, called in various schools a constants-with-variables curriculum, made up of requirements common to all pupils, and electives. Beyond the requirements each pupil may elect, with the help of his counselor, other subjects to meet his needs and special abilities and develop competencies which will contribute most to our society.

Other schools have multiple-type curriculums or courses of study, as they are referred to by many school people, with a pattern of courses rather specifically outlined for each curriculum. Each curriculum is planned to satisfy the needs of a certain group of pupils, such as those who are college bound, those who plan to enter specific trades, or those who have no specific plans after graduation. Some of these curriculums are designated as college preparatory, vocational, or general. Each one contains requirements common to all pupils in

the school, specific requirements for pupils enrolled in that particular curriculum, and, usually, a suggested list of electives. Before enrolling in a particular curriculum, a pupil knows quite well what kind of courses he will need to carry during his high school career.

It is the purpose of this section to report the information obtained concerning the types of curriculums most of the pupils in this study elected and any relationship found between pupil ability and choice of curriculum. For the distribution of usable transcripts of 1958 high school graduates enrolled in each curriculum by size of school, upon which the findings in this section are based see table B in appendix A.

This information was obtained from the pupil transcripts of credit or the supplementary material received with the transcripts. Because there was reported such a wide variety of curriculums, it was felt advisable to group them under seven different headings as follows:

SINGLE

elective

GENERAL

mixed
nonregents
terminal

COLLEGE PREPARATORY (ACADEMIC)

academic—agriculture	college preparatory—nursing
academic—art	college preparatory—science
academic college entrance	college science
achievement	language arts
classical	language and science
college—agriculture	mathematics
college, general	mathematics—science—engineer-
college preparatory—academic	ing
college preparatory—arts	regents
college preparatory—commercial	science and mathematics
college preparatory—English	social studies—general academic
college preparatory—fine arts	teachers
college preparatory—music	

VOCATIONAL

distributive education—merchan-	vocational agriculture and gen-
dising	eral
diversified cooperation training	vocational arts
vocational	vocational—commercial

COMMERCIAL

accounting	general commercial
business	secretarial
business administration	secretarial—business

HOME ECONOMICS AND INDUSTRIAL ARTS

general and industrial arts	industrial education
home economics	shop
industrial	vocational

MISCELLANEOUS

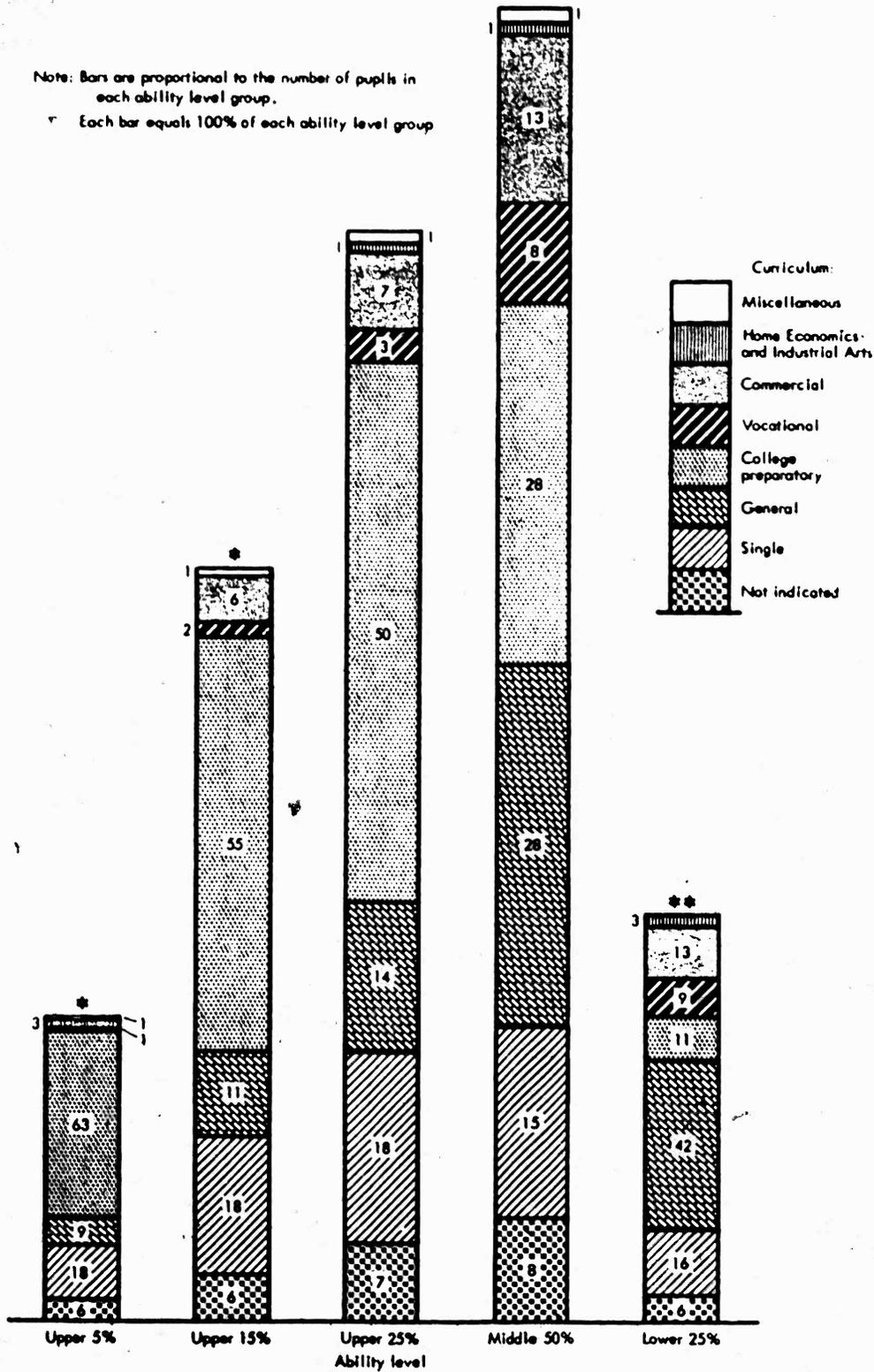
academic and business	general—vocational
auto mechanics	home economics—commercial
commercial and general	mechanical
commercial clothing	preflight
electricity	technical

Some arbitrary decisions were necessarily made in the grouping of a few of the curriculums. For instance, both vocational and non-vocational home economics curriculums were grouped under the heading, "Home economics and industrial arts." This was done because the number of pupils enrolled in the nonvocational home economics curriculums far outnumbered those enrolled in the vocational. Some readers might have preferred having all vocational curriculums, including vocational home economics, grouped with the vocational curriculums. The miscellaneous curriculums included some in which were taught vocational courses that did not satisfy Smith-Hughes requirements. Each of the combination curriculums, such as general-academic and general-commercial, was also placed in the miscellaneous curriculum group after some review had been made of the types of subjects carried by pupils enrolled. If, through the review, no particular pattern emerged, the curriculum was placed in the miscellaneous group.

Many more pupils were enrolled in the multiple-type curriculums than in the single curriculums. As the schools decreased in enrollment size, however, a greater percentage of their pupils were found in single curriculums. For instance, in the lowest enrollment schools at least 24 percent of the pupils were enrolled in the single curriculums while in the largest schools there were approximately 17 percent. (See table 14.) In the schools that reported only 3 years of credit on the pupil transcripts, the trend seemed to be reversed. These schools were usually senior high schools. In the largest schools 29 percent of the pupils were enrolled in the single curriculums and in the middle size schools, 15 percent. No small schools reported only 3 years of credit. Since less than 6 percent of all pupils were enrolled in the schools that reported only 3 years of credit, the percentage of pupils enrolled in the single curriculums in these large schools would have had little effect on the percentage of pupils enrolled in the single curriculums in all large schools.

Figure 5.—Percent of high school pupils in each ability level group, and in each curriculum

Note: Bars are proportional to the number of pupils in each ability level group.
 Each bar equals 100% of each ability level group



*Home economics and industrial arts less than 0.5 percent. **Miscellaneous less than 0.5 percent.

Table 14.—Percent of high school graduates in ability levels, by specific curriculums, and school enrollment: Continental United States, 1958

[Figures in *italics* represent only a part of the upper 25 percent in pupil ability, and are included in the total for 25 percent]

Pupil ability levels	Percent of graduates, by curriculums									
	Total	Not available	Single	General	College preparatory	Vocational	Commercial	Home economics and industrial arts	Miscellaneous	
All schools										
All pupils	100	8	18	24	33	6	10	1		1
Upper 5 percent.....	100	6	18	9	63	1	3	(C)		1
Upper 15 percent.....	100	7	18	11	55	2	6	(C)		1
Upper 25 percent.....	100	7	18	14	50	3	7	1		1
Middle 50 percent.....	100	8	15	28	28	8	13	1		1
Lower 25 percent.....	100	6	16	42	11	9	13	3		(C)
School enrollment: 500 and over										
All pupils	100	7	17	21	37	5	11	2		1
Upper 5 percent.....	100	7	19	4	66	1	5	0		1
Upper 15 percent.....	100	7	19	7	68	2	6	(C)		1
Upper 25 percent.....	100	8	19	9	54	2	7	1		1
Middle 50 percent.....	100	7	13	24	32	7	14	2		1
Lower 25 percent.....	100	6	10	44	11	9	15	4		1

	100	8	18	30	28	7	8	1	(¹)
School enrollment: 200-499									
All pupils.....	100								
Upper 5 percent.....	100	2	14	22	57	(²)	4	(²)	0
Upper 15 percent.....	100	2	12	21	54	4	7	(²)	(²)
Upper 25 percent.....	100	2	11	24	48	6	8	(²)	(²)
Upper 50 percent.....	100	6	16	35	22	10	11	1	(²)
Lower 25 percent.....	100	7	26	38	11	9	8	1	0
School enrollment: 1-199									
All pupils.....	100	18	24	33	15	5	5	1	1
Upper 5 percent.....	100	7	23	27	38	1	1	0	2
Upper 15 percent.....	100	8	26	31	50	2	3	0	1
Upper 25 percent.....	100	10	25	32	25	2	4	0	1
Middle 50 percent.....	100	13	24	33	14	7	7	1	1
Lower 25 percent.....	100	8	31	42	5	8	6	0	1

¹ Based on pupils reporting 4 years of credit. For number of pupils from which percents were calculated see table A in appendix A

² For distribution according to curriculum, of pupils with usable transcripts, see

table B in appendix A.

³ Less than 0.5 percent.

NOTE.—Percents do not necessarily add up to total because of rounding.

The most common curriculums and the percentage of pupils enrolled in each were: College preparatory (33 percent), general (24 percent), and single (18 percent). A number of the returns did not indicate the types of curriculums in which pupils were enrolled. In some instances it may have been that the schools had only one curriculum and therefore the staffs did not deem it necessary to indicate that fact. Had this been the situation the percentages of pupils enrolled in different curriculums would have been changed, but this would probably not have altered even the order of enrollment frequency.

The percentage of all pupils in each ability level, as well as the proportion of pupils in each curriculum within the different ability groups, are given in figure 5. As is shown, a majority of pupils in the upper ability groups were enrolled in the college preparatory curriculums. As pupil ability decreased, the percentage of pupils enrolled in the college preparatory curriculums also decreased. The data were more favorable than these proportions would indicate because approximately 18 percent of all pupils were enrolled in the single curriculums, and many of them probably were carrying very much the same patterns of courses as the pupils in the college preparatory curriculums.

The highest proportion (over 40 percent) of the lower ability pupils was enrolled in the general curriculums. In fact, the ratio of the pupils in the lowest one-fourth in ability enrolled in the general curriculums to those who were enrolled in the college preparatory curriculums was 4:1. In the smallest schools, alone, the ratio was 8:1. (See table 14.)

The distribution of pupils by ability in the single curriculums paralleled closely the distribution of all pupils by ability levels. The same was true with the distribution of pupils according to class rank and the distribution of all pupils according to ability levels. This is understandable since all pupils regardless of ability or class rank were placed in the single curriculum when that was the only curriculum offered in a school.

All curriculums, except the college preparatory, tended to have a higher proportion of pupils of the middle 50 percent and lower 25 percent ability groups than of the upper 25 percent.

Although the large schools enrolled more than five times as great a proportion of their upper 25 percent ability group in the college preparatory curriculums as they did in the general curriculums and the middle-size schools enrolled twice as great a percentage in the college preparatory curriculums as in the general curriculums, the smallest schools did not enroll even as large a percentage. In the distribution of pupils of various ability levels the small schools, when compared to the other two groups of schools, enrolled a smaller percentage of the most able and a higher percentage of the average students in college

preparatory curriculums. (See table 15.) As was noted before, the percentage of all pupils in small schools enrolled in college preparatory curriculums also was smaller than in the other two groups of schools. Part of the explanation for this may be that a higher proportion of pupils in these schools were enrolled in the single curriculums than were in the other two groups of schools. Also, it may be true that a smaller proportion of the able pupils in the low-enrollment schools were guided into the college preparatory curriculums because of a lack of opportunity or incentive to attend college or because a comparatively small fraction of former graduates had taken advantage of higher education opportunities. Other reasons may be found for the comparatively high percentage of able pupils in the general curriculums in the middle- and low-enrollment schools.

The percentage distribution of all pupils by ability levels when compared with the percentage distribution of pupils enrolled in various curriculums by ability levels (fig. 6) shows that the proportions of pupils differed rather markedly at times. For instance, the propor-

Figure 6.—Percent of high school pupils in each curriculum, by ability level

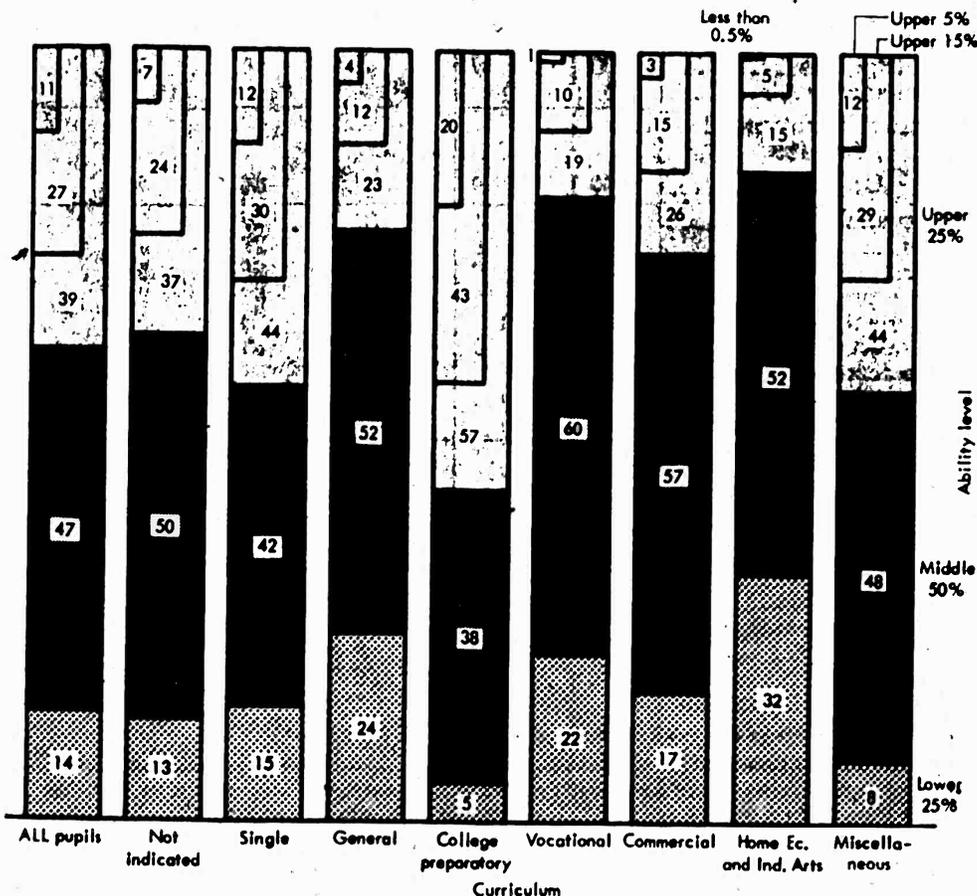


Table 15.—Percent of high school graduates in specific curriculums, by ability level, and school enrollment: Continental United States, 1958
 [Figures in *italics* represent only a part of the upper 25 percent in pupil ability and are included in the total for 25 percent]

Curriculums	Percent of graduates by pupil ability levels					
	Total ¹	Upper 5 percent	Upper 15 percent	Upper 25 percent	Middle 50 percent	Lower 25 percent
All schools						
All pupils².....	100	<i>11</i>	<i>27</i>	<i>39</i>	<i>47</i>	<i>14</i>
Not available.....	100	7	24	37	50	13
Single.....	100	<i>12</i>	<i>30</i>	<i>44</i>	<i>42</i>	<i>15</i>
General.....	100	4	12	23	52	24
College preparatory.....	100	<i>20</i>	<i>43</i>	<i>57</i>	<i>38</i>	<i>5</i>
Vocational.....	100	1	10	19	60	22
Commercial.....	100	3	15	26	57	17
Home economics and industrial arts.....	100	(³)	5	15	52	32
Miscellaneous.....	100	<i>12</i>	<i>29</i>	<i>44</i>	<i>48</i>	<i>8</i>
School enrollment: 500 and up						
All pupils.....	100	<i>12</i>	<i>29</i>	<i>40</i>	<i>46</i>	<i>13</i>
Not available.....	100	11	30	43	46	11
Single.....	100	<i>15</i>	<i>35</i>	<i>50</i>	<i>41</i>	<i>10</i>
General.....	100	2	10	18	53	28
College preparatory.....	100	<i>20</i>	<i>44</i>	<i>57</i>	<i>39</i>	<i>4</i>
Vocational.....	100	1	12	17	61	22
Commercial.....	100	3	14	24	58	18
Home economics and industrial arts.....	100	0	5	16	49	35
Miscellaneous.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
School enrollment: 200-499						
All pupils.....	100	<i>9</i>	<i>22</i>	<i>36</i>	<i>46</i>	<i>18</i>
Not available.....	100	4	10	18	56	26
Single.....	100	<i>8</i>	<i>17</i>	<i>25</i>	<i>45</i>	<i>29</i>
General.....	100	6	15	28	51	21
College preparatory.....	100	<i>16</i>	<i>40</i>	<i>59</i>	<i>34</i>	<i>7</i>
Vocational.....	100	(⁴)	11	24	58	21
Commercial.....	100	3	18	31	53	16
Home economics and industrial arts.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Miscellaneous.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
School enrollment: 1-199						
All pupils.....	100	<i>8</i>	<i>23</i>	<i>35</i>	<i>51</i>	<i>14</i>
Not available.....	100	4	17	32	59	11
Single.....	100	<i>8</i>	<i>25</i>	<i>35</i>	<i>48</i>	<i>17</i>
General.....	100	7	21	33	49	17
College preparatory.....	100	<i>18</i>	<i>42</i>	<i>52</i>	<i>43</i>	<i>5</i>
Vocational.....	100	1	8	15	64	19
Commercial.....	100	2	12	26	59	14
Home economics and industrial arts.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Miscellaneous.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² For distribution, according to curriculums, of pupils with usable transcripts see table B in appendix A.

³ Less than 0.5 percent. ⁴ Percents not computed where fewer than 50 cases were reported.

NOTE.—Percents do not necessarily add up to total because of rounding.

tion of upper ability pupils enrolled in the college preparatory curriculums was higher than it was in the group of pupils as a whole; it was approximately the same in the single curriculums as it was in the entire group; but it was lower in the remaining curriculums. The reverse was true when the proportion of lower ability pupils in the entire group of pupils was compared with those in the various curriculums.

There was comparatively little difference in the distribution of pupils in most curriculums by ability levels in schools of various size enrollments. (See table 15.) However, a slightly higher proportion of the pupils in the general and commercial curriculums and a smaller proportion in the college preparatory curriculum in the low-enrollment schools were able pupils than in the highest enrollment schools.

Tables 16 and 17 and figure 7 indicate much the same trends in pupil distribution in the various curriculums according to class-rank as were shown according to ability. There are a few differences. For instance, the commercial curriculums had a higher proportion of upper class rank pupils as compared with the normal class rank distribution than they had of upper ability pupils as compared with the normal ability distribution. This would seem to indicate that either these curriculums drew more of the good achievers to their programs or that pupils became better achievers in these curriculums even though they might have had lower ability.

Data from the schools reporting only 3 years of credit were similar to those obtained from the schools reporting 4 years.

* * *

A number of the important items of information were:

1. At least 75 percent of the graduates in the schools were enrolled in the multiple-type curriculums rather than the single curriculums.
2. According to enrollments of 1958 graduates, the most popular curriculums were the (1) college preparatory, (2) general, and (3) single, in that order.
3. As the academic abilities of pupils increased the percentage enrollments in the college preparatory curriculums increased and the percentage enrollments in the general curriculums decreased.
4. Approximately 50 percent of the pupils in the upper 25 percent ability group were enrolled in the college preparatory curriculums while only 11 percent of those in the lower 25 percent group were so enrolled.
5. More than 40 percent of all graduates, in the lower 25 percent in ability, were enrolled in the general curriculums.
6. Almost 40 percent of all graduates ranked in the lower one-third of their classes were enrolled in the general curriculums.
7. The proportion of upper ability pupils enrolled in the college preparatory curriculums was higher than it was in the group of pupils as a whole; it was approximately the same in the single curriculums as it was in the entire group; but it was lower in the remaining curriculums. The reverse was true when the proportions of lower ability pupils in the various curriculums and in the entire group of pupils were compared.

Table 16.—Percent of high school graduates in class rank, by specific curriculums, and school enrollment: Continental United States, 1958

Class rank	Percent of graduates, by curriculums									
	Total ¹	Not available	Single	General	College preparatory	Vocational	Commercial	Home economics and industrial arts	Miscellaneous	
AH schools										
All pupils ²	100	8	18	24	33	6	10	1	1	
Not available.....	100	38	12	12	20	1	11	3	1	
Upper 1/2.....	100	7	17	13	48	4	10	1	1	
Middle 1/2.....	100	7	19	26	30	6	10	1	1	
Lower 1/2.....	100	9	18	39	16	9	8	2	1	
School enrollment: 500 and over										
All pupils.....	100	7	17	21	37	5	11	2	1	
Not available.....	100	8	5	14	39	3	21	6	3	
Upper 1/2.....	100	7	17	9	53	3	10	1	1	
Middle 1/2.....	100	6	18	23	34	5	12	2	1	
Lower 1/2.....	100	9	16	36	19	9	9	2	1	
School enrollment: 200-499										
All pupils.....	100	8	18	30	28	7	8	1	(³)	
Not available.....	100	61	22	9	6	0	2	0	0	
Upper 1/2.....	100	4	15	18	44	6	12	1	(³)	
Middle 1/2.....	100	7	20	32	26	7	8	1	(³)	
Lower 1/2.....	100	5	20	46	12	10	5	2	1	
School enrollment: 1-199										
All pupils.....	100	18	24	33	15	5	5	1	1	
Not available.....	100	63	11	13	6	0	6	0	0	
Upper 1/2.....	100	18	25	27	21	3	4	(³)	1	
Middle 1/2.....	100	15	24	34	14	5	6	1	(³)	
Lower 1/2.....	100	13	24	45	6	7	4	1	1	

¹ Based on pupils reporting 4 years of credit. For number of pupils from which percentages were calculated see table A in appendix A.

² For distribution according to curriculums, of pupils with usable transcripts, see table B in appendix A. ³ Less than 0.5 percent.

NOTE.—Percentages do not necessarily add up to total because of rounding.

Table 17.—Percent of high school graduates in specific curriculums, by class rank, and school enrollment: Continental United States, 1958

Curriculums	Percent of graduates, by class rank				
	Total ¹	Not available	Upper ¼	Middle ¼	Lower ¼
All schools					
All pupils²	100	2	37	34	26
Not available	100	11	33	29	27
Single	100	2	36	36	26
General	100	1	20	37	42
College preparatory	100	2	54	31	13
Vocational	100	1	24	35	41
Commercial	100	3	38	38	21
Home economics and industrial arts	100	6	28	39	27
Miscellaneous	100	6	39	28	27
School enrollment: 500 and over					
All pupils	100	1	38	35	26
Not available	100	1	36	29	34
Single	100	1	37	37	25
General	100	1	17	38	45
College preparatory	100	2	54	31	14
Vocational	100	1	21	35	43
Commercial	100	3	36	39	22
Home economics and industrial arts	100	8	26	41	25
Miscellaneous	(³)	(³)	(³)	(³)	(³)
School enrollment: 200-499					
All pupils	100	4	36	33	28
Not available	100	31	19	30	20
Single	100	5	30	36	30
General	100	1	22	35	42
College preparatory	100	1	57	31	12
Vocational	100	0	30	33	38
Commercial	100	1	51	31	17
Home economics and industrial arts	(³)	(³)	(³)	(³)	(³)
Miscellaneous	(³)	(³)	(³)	(³)	(³)
School enrollment: 1-199					
All pupils	100	5	38	33	24
Not available	100	18	37	28	17
Single	100	2	40	34	24
General	100	2	31	35	32
College preparatory	100	2	55	33	10
Vocational	100	0	28	38	34
Commercial	100	6	33	39	22
Home economics and industrial arts	(³)	(³)	(³)	(³)	(³)
Miscellaneous	(³)	(³)	(³)	(³)	(³)

¹ Based on pupils reporting 4 years of credit. For number of pupils from which percents were calculated see table A in appendix A.

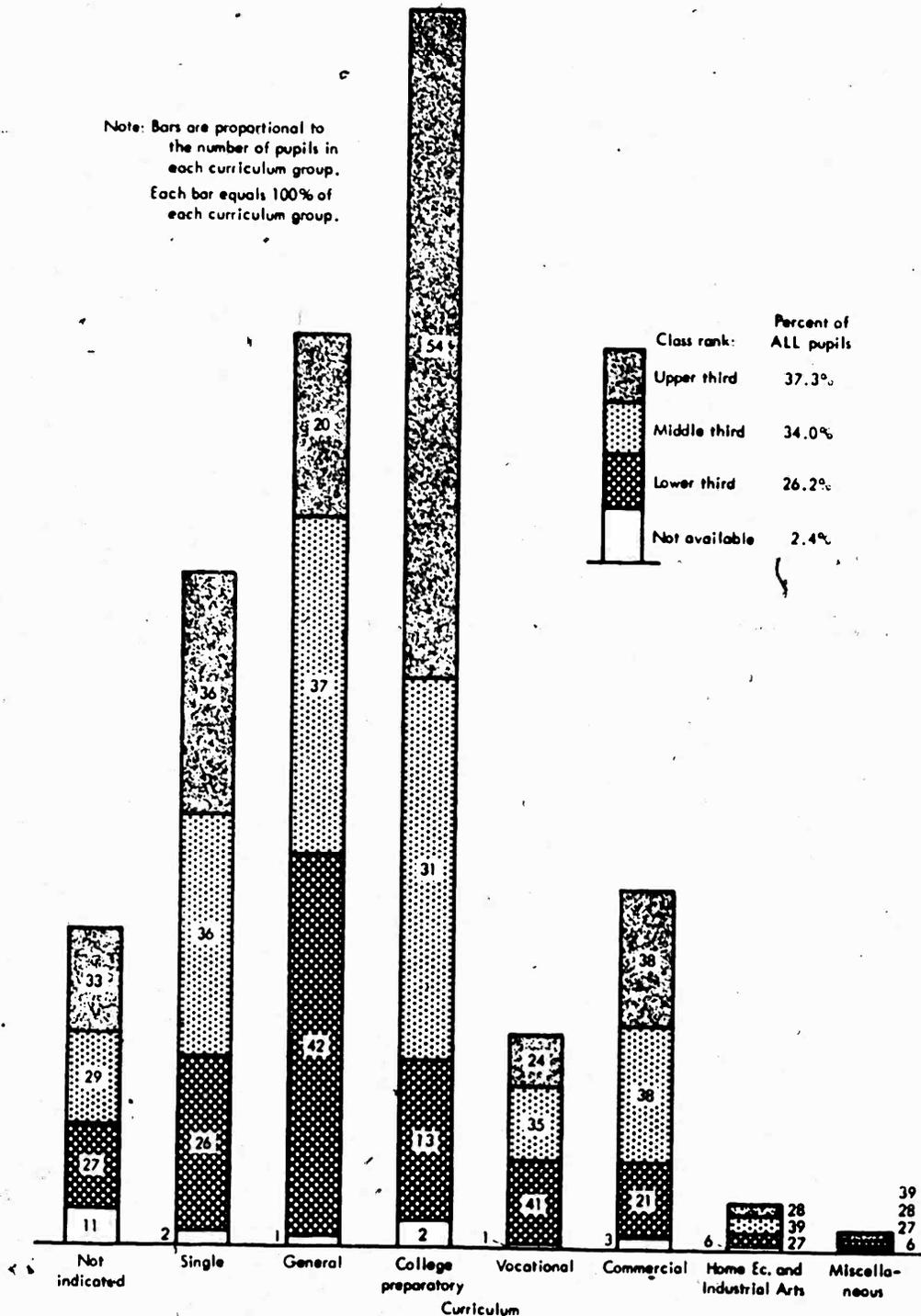
² For distribution, according to curriculums, of pupils with usable transcripts see table B in appendix A.

³ Percents not computed where fewer than 50 cases were reported.

NOTE.—Percents do not necessarily add up to total because of rounding.

Figure 7.—Percent of high school pupils in each curriculum, by class rank

Note: Bars are proportional to the number of pupils in each curriculum group. Each bar equals 100% of each curriculum group.



8. The percentage of pupil enrollment in the single curriculums was highest in the lowest enrollment schools. The percentage of pupil enrollment in the college preparatory curriculums was largest in the highest enrollment schools.
9. At least 54 percent of the upper 25 percent ability pupils in the highest enrollment schools were enrolled in the college preparatory curriculums.
10. In most of the curriculums the distributions according to class rank indicated approximately the same trends as did the distributions according to pupil ability.

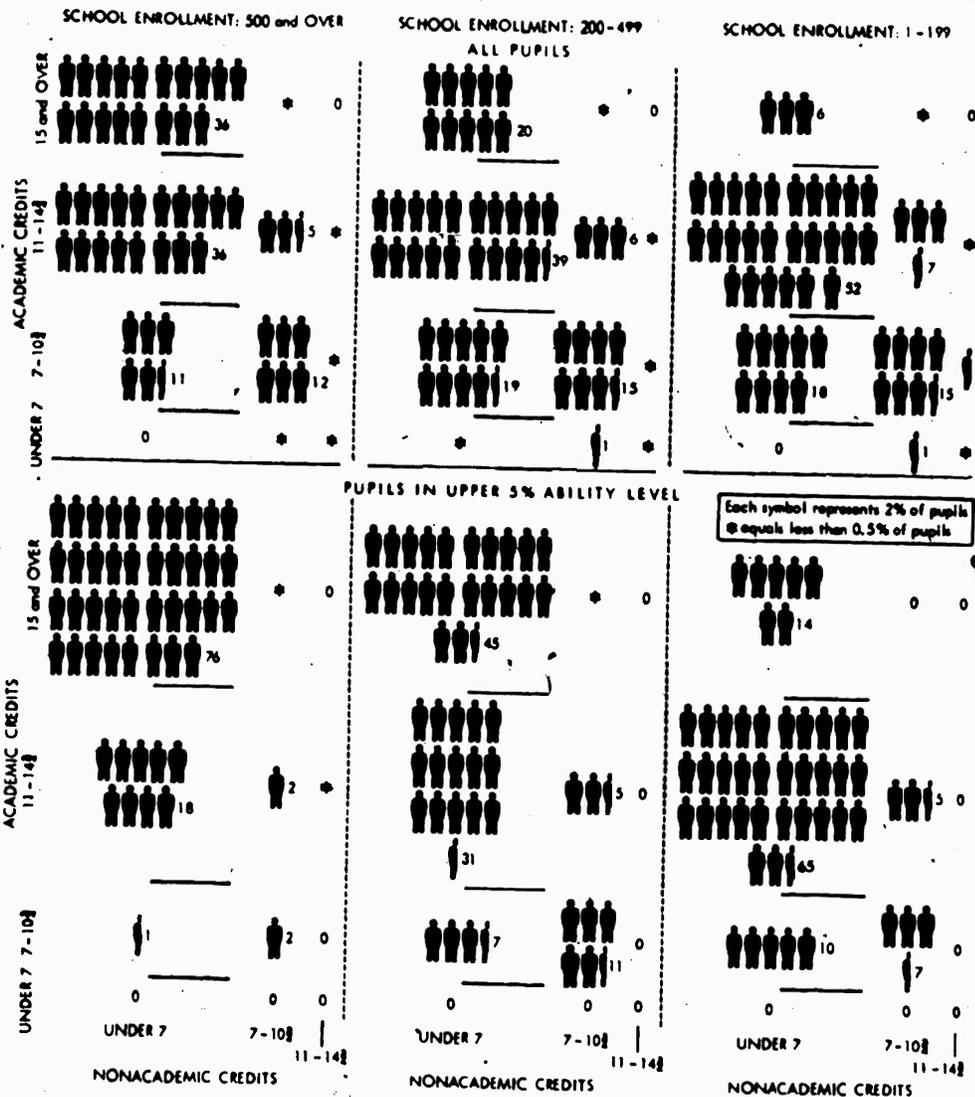
Participation in Academic and Nonacademic Programs

In the preliminary study the percentages of pupils taking certain patterns of academic work were reported. This section is not concerned with patterns of work but only with the relationship between the total academic and nonacademic credits earned.

It is quite evident that a high percentage of pupils in the upper ability levels enrolled in all schools completed programs including a large number of academic credits. Figure 8 shows the proportions of pupils in the upper 5 percent ability level who earned various combinations of academic and nonacademic credits. The highest proportion of pupils in this ability level enrolled in large schools earned 15 or more academic credits and fewer than 7 nonacademic credits. In the middle-enrollment schools, the highest proportion also completed this combination of credits, but the proportion of pupils was much smaller. The percentage who earned 11 to 14½ academic credits in the middle enrollment schools, however, increased over the proportion earning these credits in the largest schools. In the smallest schools the highest percentage of pupils earned the lower combination of 11 to 14½ academic credits and fewer than 7 nonacademic. In each enrollment group of schools considerably more than four-fifths of this ability group (upper 5 percent) earned at least 11 academic credits.

As pupil ability levels decreased even from the upper 5 percent to upper 25 percent in each enrollment group of schools, there was a decrease in the proportion of pupils who earned 15 academic credits and fewer than 7 nonacademic. (See also fig. 9.) There was also an increase in the proportion of pupils earning 11 to 14½ academic credits and fewer than 7 nonacademic credits and in those earning 7 to 10½ academic and fewer than 7 nonacademic credits. Even in the 25 percent ability group, however, more than three-fourths of the pupils in each group of schools earned a minimum of 11 academic credits. Virtually no pupils in the academically able groups (upper 5 percent, 15 percent, 25 percent) completed less than 7 academic credits.

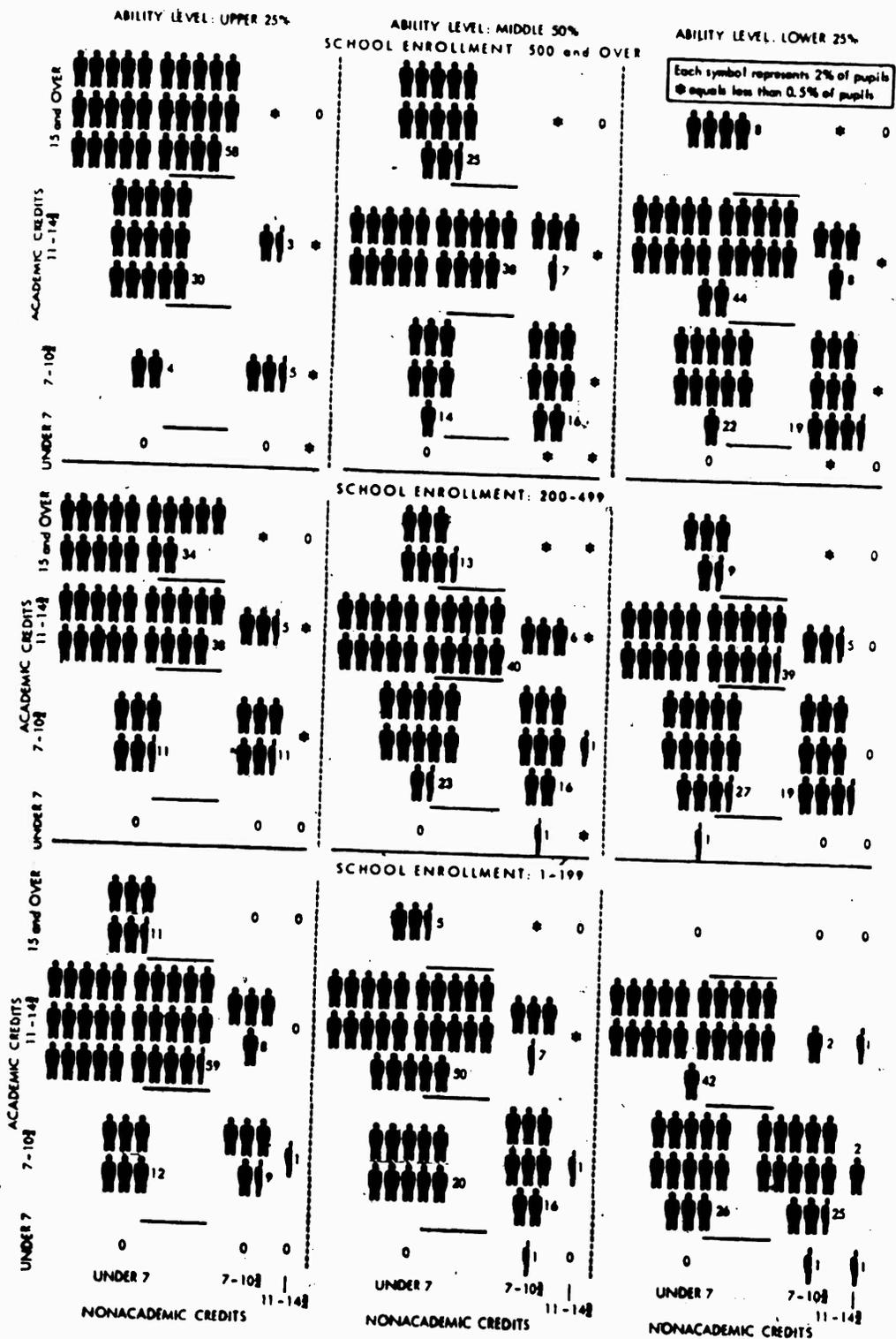
Figure 8.—Percent of participation of all pupils and those in the upper 5 percent of pupil ability, in academic and nonacademic programs, by school enrollment



As the number of academic credits carried by the upper ability pupils decreased, the number of nonacademic credits increased. Since such a high proportion of pupils in these groups completed 11 or more academic credits, few earned many nonacademic credits. In fact, in the various enrollment-size schools the proportion of the academically able pupils who earned fewer than seven nonacademic credits ranged from approximately four-fifths to almost the entire group.

An important fact observed is that in the large and middle-enrollment schools, especially, some of the pupils in the upper ability

Figure 9.—Percent of pupil participation in academic and nonacademic programs, by ability level



groups and even in the lower ability groups completed 7 to 10% non-academic credits as well as a minimum of 15 academic credits. This indicates that some pupils completed a difficult program, at least, quantitatively.

The programs of the lower 25 percent and upper 25 percent ability pupils differed in the number of academic and nonacademic credits. The less able were likely to complete fewer academic and more non-academic credits than the more able. In the large schools, for example, the proportion of pupils in the upper 25 percent ability group who completed a minimum of 15 academic credits was 7 times as great as in the lower 25 percent. In the middle-enrollment schools it was approximately 4 times as great while in the small schools no pupils in the lower 25 percent in ability completed 15 academic credits but over one-tenth of those in the upper 25 percent group did. Also, the proportion of pupils in the lower 25 percent ability group as compared with that in the upper 25 percent who completed 10% academic credits or less was more than 4 times as great in the largest schools and more than twice as great in the middle- and small-enrollment schools. (See fig. 9.)

The proportion of pupils in the upper 25 percent ability group who carried seven or more nonacademic credits ranged from approximately one-twelfth to one-sixth in the various enrollment-size schools while in the lower 25 percent group the range was approximately one-fourth to one-third.

There were comparatively few differences among the schools of different size enrollments in the proportion of pupils completing various amounts of academic and nonacademic hours of credit. As an example, even in the lower 25 percent ability groups, approximately half (45 percent to 60 percent) of the pupils completed at least 11 academic credits. This is partly due to the number of graduation requirements made in academic subjects in most schools. Even though, as a rule, the differences were not large, some were worth noting. For instance, the lowest enrollment schools had the smallest percentage of pupils in the lower 25 percent ability groups completing a minimum of 11 academic credits, but the largest percentage completing a minimum of 11 nonacademic credits. They had no pupils in the lower ability group who completed 15 hours of academic work although the other two groups of schools had about one-twelfth of their lower groups completing such programs. The largest schools had the highest proportion of pupils completing 15 credits of academic work in all ability groups except the lowest. This was especially pronounced in the upper ability groups. The wider offerings in the academic subjects in the larger schools may have been partly responsible for this situation.

A few generalizations may be made from the data regarding pupils of all abilities (figs. 8 and 9). Approximately two-thirds to three-fourths of all pupils completed 11 or more academic credits. Also, approximately two-thirds to three-fourths earned fewer than seven credits in nonacademic work. These facts tend to indicate that a high percentage of the programs completed by most high school pupils were made up of academic subjects. With the exception of a few pupils in the lower 25 percent in ability enrolled in the middle size schools, no pupil in any ability group or in any school completed programs which included fewer than 7 academic and 7 nonacademic credits. In fact, less than 1 percent in all ability groups completed fewer than 7 credits of academic work in combination with any number of credits of nonacademic work.

* * *

The following results may be noted in summary:

1. A high percentage of the academically able pupils, enrolled in all schools, completed programs with a large number of credits earned in academic subjects.
2. As the number of academic credits earned by pupils decreased, the number of nonacademic credits increased.
3. As the academic ability of pupils decreased, the proportion of pupils who completed 15 or more academic credits decreased greatly and the proportion who earned 7 to 10 $\frac{3}{4}$ credits increased rapidly.
4. Some pupils completed programs with a large number of academic credits and a high total of academic and nonacademic credits.
5. A very small proportion of pupils completed programs with fewer than seven academic and fewer than seven nonacademic credits.
6. Of the upper and middle-ability level pupils a higher proportion completed 15 hours of academic work in the largest schools than in the other school enrollment groups.
7. The lowest enrollment schools had no pupils in the lower 25 percent ability group who completed 15 or more hours of academic work. These schools had the smallest percentage of their lowest ability group completing a minimum of 11 academic hours, and the largest percentage completing a minimum of 11 nonacademic hours.

Total Credits Earned

How many credits did the typical pupil earn for graduation? Did the able pupil tend to carry just enough work to allow him to graduate or did he tend to earn a number of credits more in keeping with his ability? Did he carry a heavier program, quantitatively, than did the less able pupil? How did the programs of the boys differ from those of the girls? These are some of the questions with which this section is concerned.

Table 18.—Percentage distribution of high school graduates, by number of credits earned, pupil ability, and school enrollment: Continental United States, 1958

[Figures in *italic* represent only a part of the upper 25 percent in pupil ability, and are included in the total for 25 percent. **Boldface** type indicates median intervals]

Pupil ability levels	Total ¹	Percent of graduates, by number of credits earned						
		Under 16½	15½-16½	16½-17½	17½-18½	18½-19½	19½-20½	Over 20½
All schools								
All pupils	100	11	19	23	19	14	8	7
Upper 5 percent.....	100	<i>2</i>	<i>9</i>	<i>19</i>	² 21	² 19	<i>16</i>	<i>15</i>
Upper 15 percent.....	100	<i>4</i>	<i>12</i>	<i>21</i>	21	<i>20</i>	<i>13</i>	<i>10</i>
Upper 25 percent.....	100	5	13	22	21	18	11	9
Middle 50 percent.....	100	13	21	23	18	12	6	5
Lower 25 percent.....	100	18	27	22	16	9	5	4
School enrollment: 500 and over								
All pupils	100	9	17	21	21	15	9	7
Upper 5 percent.....	100	<i>1</i>	<i>6</i>	<i>16</i>	<i>22</i>	21	<i>18</i>	<i>16</i>
Upper 15 percent.....	100	<i>3</i>	<i>9</i>	<i>19</i>	22	<i>21</i>	<i>14</i>	<i>11</i>
Upper 25 percent.....	100	<i>3</i>	11	21	22	20	13	10
Middle 50 percent.....	100	11	19	22	21	13	7	7
Lower 25 percent.....	100	16	27	19	18	11	6	4
School enrollment: 200-499								
All pupils	100	15	24	26	15	10	5	7
Upper 5 percent.....	100	<i>6</i>	<i>18</i>	<i>25</i>	<i>18</i>	<i>12</i>	<i>11</i>	<i>13</i>
Upper 15 percent.....	100	<i>8</i>	<i>19</i>	² 24	² 17	<i>15</i>	<i>8</i>	<i>10</i>
Upper 25 percent.....	100	8	19	25	18	14	8	9
Middle 50 percent.....	100	17	26	25	13	9	4	5
Lower 25 percent.....	100	24	² 26	² 30	12	4	3	2
School enrollment: 1-199								
All pupils	100	15	26	26	14	11	5	3
Upper 5 percent.....	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Upper 15 percent.....	100	9	20	27	16	14	8	5
Upper 25 percent.....	100	11	20	27	16	15	8	4
Middle 50 percent.....	100	18	28	26	14	8	4	4
Lower 25 percent.....	100	17	² 33	² 23	11	9	4	5

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were circulated, see table A, in appendix A.

² Median falls between 2 intervals.

³ Percents not computed where fewer than 50 cases were reported.

NOTE.—Percents do not necessarily add up to total because of rounding.

More than two-thirds (71 percent) of the 1958 graduates earned $16\frac{1}{2}$ or more credits for graduation. This reflects the average graduation requirement of the reporting schools of at least 16 credits.

It should be pointed out that those pupils appearing to have graduated with fewer than the usual number of credits required for graduation (i.e., under 16) did meet their school's requirements. Some schools did not assign credit for certain subjects, such as physical education and driver training. Many schools assigned more credit to nonpreparation subjects than could be given according to the Carnegie unit standard. A few schools provided work experience and similar programs which were not suitable for evaluation by means of Carnegie units.

There was a direct relationship between the number of credits earned for graduation and the ability of the pupils. (See table 18.) Although the median number of credits earned by pupils in the upper 25 percent ability group fell in the $17\frac{1}{2}$ to $18\frac{1}{4}$ credit range, the median for the lower 25 percent ability group fell in the $16\frac{1}{2}$ to $17\frac{1}{4}$ credit range. This relationship was further emphasized by the percentage distributions of the pupils among the various credit ranges. For example, of the pupils in the upper 25 percent in ability, 38 percent earned $18\frac{1}{2}$ or more credits and 18 percent earned fewer than $16\frac{1}{2}$ credits. Yet, only 18 percent of the pupils in the lower 25 percent in ability earned $18\frac{1}{2}$ or more credits while 45 percent earned fewer than $16\frac{1}{2}$ credits.

Pupils in high-enrollment schools tended to earn more credits for graduation than did those in low-enrollment schools. Figure 10 indicates that greater proportions of pupils in the smaller schools fell in the ranges below $17\frac{1}{2}$ credits while greater proportions of the pupils in the larger schools fell in the $17\frac{1}{2}$ and above credit ranges. While 31 percent of the pupils in the large schools earned $18\frac{1}{2}$ or more credits, only 19 percent of the pupils in the small schools earned a similar number. At the other end of the scale, 26 percent of the pupils enrolled in large schools earned less than $16\frac{1}{2}$ credits and 41 percent of those in the small schools completed this small number. Part of the explanation for this may be that the large schools were likely to offer a greater variety of courses in which pupils were interested and for which they felt a need.

This tendency was shown to be still greater if only pupils in the upper 25 percent in ability were considered. (See fig. 10 and table 18.) Although all schools graduated higher proportions of the upper 25 percent ability pupils with large amounts of credit than they did of all pupils, the large schools were more successful in doing this than were the smaller schools. In the large schools, 86 percent of the pupils in the upper one-fourth in ability carried $16\frac{1}{2}$ or more

Figure 10.—Percentage distribution of all pupils and pupils in upper 25 percent ability level, by graduation credit, and by school enrollment



credits, while in the middle-size schools it was 74 percent and in the small schools, 70 percent. Also, of the upper 25 percent ability group, 14 percent in the large schools and 31 percent in the small schools earned less than 16½ credits. There was a closer relationship between the number of credits completed and pupil ability in the large schools than in the smaller ones. For instance, in the largest schools 23 percent of the upper 25 percent ability level pupils earned at least 19½ credits but only 10 percent of the lower 25 percent ability group earned this number. In the small schools there were 12 percent of the upper 25 percent ability group and 9 percent of the lower 25 percent who earned a similar number.

Girls tended to graduate with a larger number of credits than did the boys. (See fig. 11 and tables 19-20.) A greater percentage of

boys than of girls earned fewer than 16½ credits while a greater percentage of girls than of boys earned 16½ or more. Although 77 percent of the girls graduated with at least 16½ credits, this was true

Figure 11.—A comparison of the percentage distributions of boys and of girls, by graduation credit, and by ability level

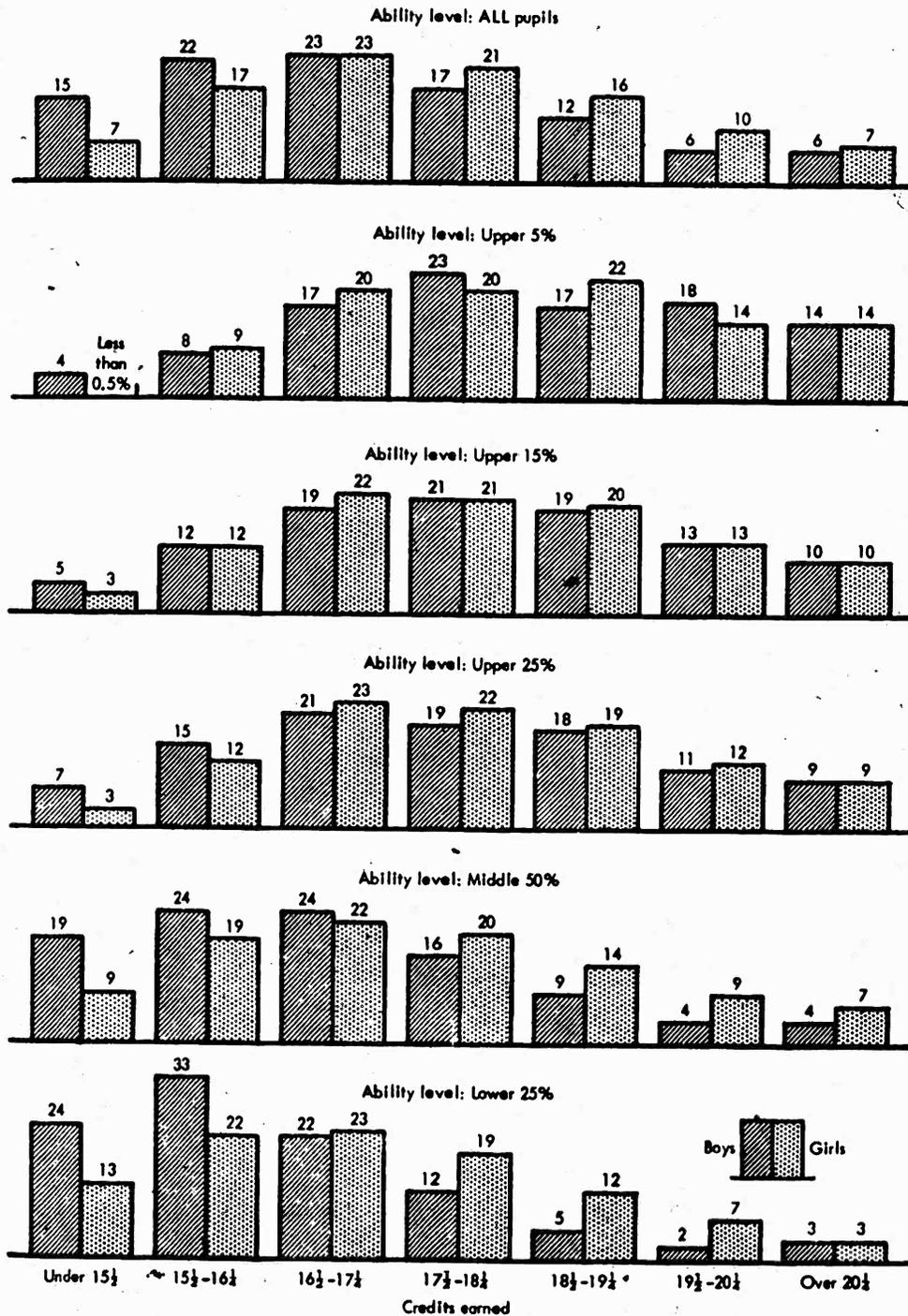


Table 19.—Percentage distribution of high school graduate boys, by number of credits earned, pupil ability, and school enrollment: Continental United States, 1958

[Figures in *italic* represent only a part of the upper 25 percent in pupil ability, and are included in the total for 25 percent. Boldface type indicates median intervals]

Pupil ability levels	Percent of boys, by number of credits earned							
	Total ¹	Under 15½	15½- 16¼	16¼- 17¼	17¼- 18¼	18¼- 19¼	19¼- 20¼	Over 20¼
All schools								
All boys	100	15	22	23	17	12	6	6
Upper 5 percent.....	100	4	8	17	23	17	18	14
Upper 15 percent.....	100	5	12	19	21	19	13	10
Upper 25 percent.....	100	7	15	21	19	18	11	9
Middle 50 percent.....	100	19	24	24	16	9	4	4
Lower 25 percent.....	100	24	33	22	12	5	2	3
School enrollment: 500 and over								
All boys	100	13	20	21	19	13	7	7
Upper 5 percent.....	100	2	6	15	23	18	21	16
Upper 15 percent.....	100	3	10	17	22	21	14	12
Upper 25 percent.....	100	5	13	20	20	19	12	10
Middle 50 percent.....	100	17	21	24	19	10	4	5
Lower 25 percent.....	100	24	36	15	13	6	2	4
School enrollment: 200-499								
All boys	100	18	25	27	12	10	4	5
Upper 5 percent.....	100	8	13	25	21	15	5	14
Upper 15 percent.....	100	11	17	25	18	15	6	8
Upper 25 percent.....	100	11	19	25	17	15	5	8
Middle 50 percent.....	100	22	30	24	9	7	4	4
Lower 25 percent.....	100	24	27	36	8	4	(²)	(²)
School enrollment: 1-199								
All boys	100	21	27	25	12	8	5	2
Upper 5 percent.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Upper 15 percent.....	100	14	22	28	15	11	8	2
Upper 25 percent.....	100	16	25	25	15	11	7	2
Middle 50 percent.....	100	25	27	26	11	7	3	2
Lower 25 percent.....	100	21	30	26	11	4	5	(²)

¹ Based on boys reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Percent not computed where fewer than 50 transcripts were available.

³ Median falls between intervals.

NOTE.—Percents do not necessarily add up to total because of rounding.

Table 20.—Percentage distribution of high school graduate girls, by number of credits earned, pupil ability, and school enrollment: Continental United States, 1958

[Figures in *italic* represent only a part of the upper 25 percent in pupil ability, and are included in the total for 25 percent. Boldface type indicates median intervals]

Pupil ability levels	Percent of girls, by number of credits earned							
	Total ¹	Under 15½	15½-16½	16½-17½	17½-18½	18½-19½	19½-20½	Over 20½
All schools								
All girls	100	7	17	23	21	16	10	7
Upper 5 percent.....	<i>100</i>	(²)	9	20	20	22	14	14
Upper 15 percent.....	100	3	12	22	21	20	13	10
Upper 25 percent.....	100	3	12	23	22	19	12	9
Middle 50 percent.....	100	9	19	22	20	14	9	7
Lower 25 percent.....	100	13	22	23	19	12	7	3
School enrollment: 500 and over								
All girls	100	5	14	22	23	17	11	7
Upper 5 percent.....	<i>100</i>	0	6	18	21	24	15	16
Upper 15 percent.....	100	2	8	21	22	22	14	10
Upper 25 percent.....	100	2	9	22	24	20	13	9
Middle 50 percent.....	100	7	17	21	22	15	10	7
Lower 25 percent.....	100	10	19	23	22	15	8	4
School enrollment: 200-499								
All girls	100	12	22	25	17	11	7	7
Upper 5 percent.....	<i>100</i>	4	21	24	15	10	16	11
Upper 15 percent.....	100	5	21	23	16	14	10	11
Upper 25 percent.....	100	5	20	24	18	13	10	9
Middle 50 percent.....	100	12	23	25	17	11	4	8
Lower 25 percent.....	100	24	25	24	15	4	6	2
School enrollment: 1-199								
All girls	100	8	25	26	16	13	6	6
Upper 5 percent.....	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Upper 15 percent.....	100	5	18	27	17	17	8	8
Upper 25 percent.....	100	7	16	29	17	18	8	6
Middle 50 percent.....	100	10	29	26	17	9	5	5
Lower 25 percent.....	100	12	36	21	11	13	2	4

¹ Based on girls reporting 4 years of credit and for whom ability measures were available. For number of pupils for which percents were calculated see table A in appendix A.

² Less than 0.5 percent.

³ Percent not computed where fewer than 50 transcripts were available.

⁴ Median falls between 2 intervals.

NOTE.—Percents do not necessarily add up to total because of rounding.

of only 64 percent of the boys. Also, 33 percent of the girls and 24 percent of the boys earned at least $18\frac{1}{2}$ credits. Only 7 percent of the girls, as compared to 15 percent of the boys, earned fewer than $15\frac{1}{2}$ credits. The difference between the proportions of girls and boys completing large numbers of its credits diminished markedly in the upper ability groups.

The opposite trend seemed to be evident toward the other end of the pupil-ability scale. As pupil abilities decreased the proportion of girls as compared with boys completing large amounts of credit increased rather rapidly, and the proportion of boys as compared with girls completing small amounts of credit increased even more rapidly. For instance, in the lower 25 percent ability group 64 percent of the girls earned $16\frac{1}{2}$ or more credits as compared to 44 percent of the boys.

Differences between proportions of girls and of boys completing various amounts of credit also varied with size of school enrollments. (See tables 19-20.) For instance, in the large schools the proportion of boys in the upper 5 and 15 percent ability groups who carried high amounts of credit was greater than the proportion of girls. However, in the smaller schools, for the same ability groups, the reverse was true. Of these ability groups, the proportion of boys as compared with girls earning small amounts of credit, was largest in the lowest enrollment schools. In the largest and middle-enrollment schools a larger proportion of girls than of boys in the lowest ability group earned high amounts of credit, but in the smallest schools the reverse was true.

Even though the data show that a high proportion of the pupils in the upper ability groups (85 percent of the girls and 78 percent of the boys in the upper 25 percent ability group) graduated with $16\frac{1}{2}$ or more credits, it would be interesting to know what caused the failure of the remaining pupils to earn at least as many credits. Even in the upper ability groups, a certain proportion of pupils earned fewer than $15\frac{1}{2}$ hours. In some instances, of course, the health of the pupils may have been a factor while in other cases outside work or extracurricular activities competed with schoolwork. These and other factors certainly influenced the load carried by pupils, but the fact remains that some able pupils carried a light school program.

If the distributions of pupils according to ability and according to class rank are compared, similar trends are apparent in the various amounts of credit completed. (See tables 18 and 21.) The class rank of a pupil, however, tended to be a slightly better indicator of the number of credits he earned than was his ability grouping. This might be expected since a greater proportion of the pupils in the lowest third of their class than in the lowest ability group probably

did not pass all of the subjects they carried and thus received no credit for them. Also, poor achievers, most frequently found in the lower class ranks, would not be expected to be guided into carrying heavier programs.

Table 21.—Percentage distribution of high school graduates, by number of credits earned, class rank, and school enrollment: Continental United States, 1958

[Boldface type indicates median interval]

Class rank	Percent of graduates, by number of credits earned							
	Total ¹	Under 15½	15½-16½	16½-17½	17½-18½	18½-19½	19½-20½	Over 20½
All schools								
All pupils	100	12	20	23	19	13	7	6
Not available.....	100	16	24	27	17	10	4	4
Upper ½.....	100	4	13	21	22	18	12	11
Middle ½.....	100	9	22	24	19	13	7	4
Lower ½.....	100	22	27	24	14	8	3	2
School enrollment: 500 and over								
All pupils	100	10	18	22	21	15	9	7
Not available.....	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Upper ½.....	100	2	11	19	23	20	13	12
Middle ½.....	100	10	19	23	22	14	8	4
Lower ½.....	100	21	25	24	16	8	3	3
School enrollment: 200-499								
All pupils	100	16	25	25	14	10	5	5
Not available.....	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Upper ½.....	100	8	18	25	19	15	7	10
Middle ½.....	100	16	28	27	13	8	5	4
Lower ½.....	100	27	31	23	11	6	2	2
School enrollment: 1-199								
All pupils	100	13	27	26	14	11	5	3
Not available.....	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Upper ½.....	100	8	21	26	19	14	9	4
Middle ½.....	100	15	29	27	12	11	3	3
Lower ½.....	100	22	37	25	8	5	2	1

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percentages were calculated see table A in appendix A.

² Median falls between 2 intervals.

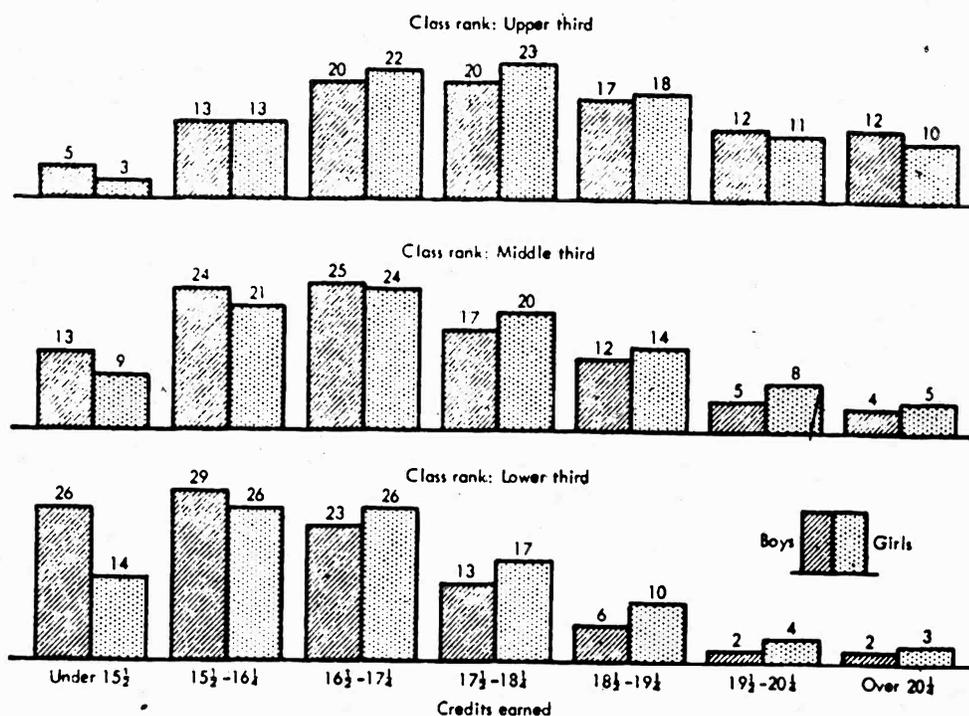
³ Percent not computed where fewer than 50 cases were reported.

NOTE.—Percents do not necessarily add up to total because of rounding.

As the size of the school enrollment decreased, the proportion of pupils in the upper class rank who carried large amounts of credit also decreased. For example, in the upper one-third of the class, 85 percent of the pupils in the largest schools and 72 percent in the smallest schools earned at least $16\frac{1}{2}$ credits while 12 percent in the largest schools and 4 percent in the smallest ones earned $20\frac{1}{2}$ or more credits.

Although the proportion of girls who earned a large number of credits was larger than the proportion of boys, it is interesting to note that in the upper one-third class rank a higher proportion of boys than of girls earned $19\frac{1}{2}$ or more credits. (See fig. 12.)

Figure 12.—A comparison of the percentage distributions of boys and of girls, by graduation credit, and by class rank



As the class rank decreased, the proportion of girls as compared to boys, who carried a large number of credits, increased. For instance, the proportion of girls in the lowest class rank who earned at least $19\frac{1}{2}$ credits was 7 percent while that of boys was 4 percent. (See tables 22-23.)

Where the numbers of pupils in the schools which reported only 3 years of credit were sufficiently large, the trends shown were similar to those reported here.

* * *

Table 22.—Percentage distribution of high school graduate boys, by number of credits earned, class rank, and school enrollment: Continental United States, 1958

[Boldface type indicates median intervals]

Class rank	Percent of graduates, by number of credits earned							
	Total ¹	Under 15½	15½-16¼	16¼-17¼	17¼-18¼	18¼-19¼	19¼-20¼	Over 20¼
All schools								
All boys	100	15	23	23	17	11	6	5
Not available.....	100	12	28	24	20	10	2	5
Upper ½.....	100	5	13	20	20	17	12	12
Middle ½.....	100	13	24	25	17	12	5	4
Lower ½.....	100	26	29	23	13	6	2	2
School enrollment: 500 and up								
All boys	100	13	21	22	19	12	7	7
Not available.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Upper ½.....	100	3	12	17	22	19	13	14
Middle ½.....	100	11	21	24	20	13	6	4
Lower ½.....	100	24	26	24	15	6	2	3
School enrollment: 200-499								
All boys	100	18	27	26	12	9	4	4
Not available.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Upper ½.....	100	9	15	28	18	15	7	9
Middle ½.....	100	15	30	26	12	10	4	3
Lower ½.....	100	30	32	23	8	5	2	2
School enrollment: 1-199								
All boys	100	20	28	25	13	8	4	2
Not available.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Upper ½.....	100	14	20	27	15	11	12	2
Middle ½.....	100	19	27	28	12	8	2	4
Lower ½.....	100	26	37	19	10	5	2	1

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Percent not computed where fewer than 50 transcripts were available.

³ Median falls between 2 intervals.

NOTE.—Percents do not necessarily add up to total because of rounding.

Table 23.—Percentage distribution of high school graduate girls, by number of credits earned, class rank, and school enrollment: Continental United States, 1958

[Boldface type indicates median intervals]

Class rank	Percent of girls, by number of credits earned							
	Total ¹	Under 15½	15½-16½	16½-17½	17½-18½	18½-19½	19½-20½	Over 20½
All schools								
All girls	100	8	18	23	20	15	9	7
Not available.....	100	16	22	28	14	11	6	3
Upper ½.....	100	3	13	22	23	18	11	10
Middle ½.....	100	9	21	24	20	14	8	5
Lower ½.....	100	14	26	26	17	10	4	3
School enrollment: 500 and over								
All girls	100	6	15	22	23	17	10	7
Not available.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Upper ½.....	100	2	10	20	24	20	13	10
Middle ½.....	100	7	17	23	24	16	9	5
Lower ½.....	100	12	23	26	19	12	5	3
School enrollment: 200-499								
All girls	100	13	24	25	16	10	6	7
Not available.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Upper ½.....	100	6	19	24	19	14	8	10
Middle ½.....	100	17	27	28	13	7	6	4
Lower ½.....	100	22	29	22	15	7	3	2
School enrollment: 1-199								
All girls	100	9	27	27	15	13	5	4
Not available.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Upper ½.....	100	5	21	26	21	15	7	6
Middle ½.....	100	10	32	25	12	14	4	3
Lower ½.....	100	15	37	35	4	6	1	3

¹ Based on girls reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Percents not computed where fewer than 50 transcripts were available.

³ Median falls between two intervals.

NOTE.—Percents do not necessarily add up to total because of rounding.

Some of the interesting facts which may be noted from this chapter are:

1. Approximately 70 percent of all pupils graduated with at least $16\frac{1}{2}$ credits (Carnegie units).
2. Some pupils graduated with fewer than $15\frac{1}{2}$ credits.
3. Academically able pupils graduated with more credits than did the less able.
4. Approximately 15 percent of the upper 5 percent ability group and 9 percent of the upper 25 percent ability group graduated with $20\frac{1}{2}$ or more credits.
5. A larger proportion of pupils in the high enrollment schools graduated with many credits than in the middle- and small-enrollment schools.
6. A higher proportion of girls than of boys tended to graduate with many credits.
7. The differences between the proportion of girls and of boys earning many credits tended to diminish in the higher ability groups and class ranks.
8. Pupils ranked in the upper one-third of their classes earned more credits than did those in the middle and lower thirds.
9. There was a closer relationship between credits earned and class rank than between credits earned and ability level.

Credits Eamed by Subject Matter Areas

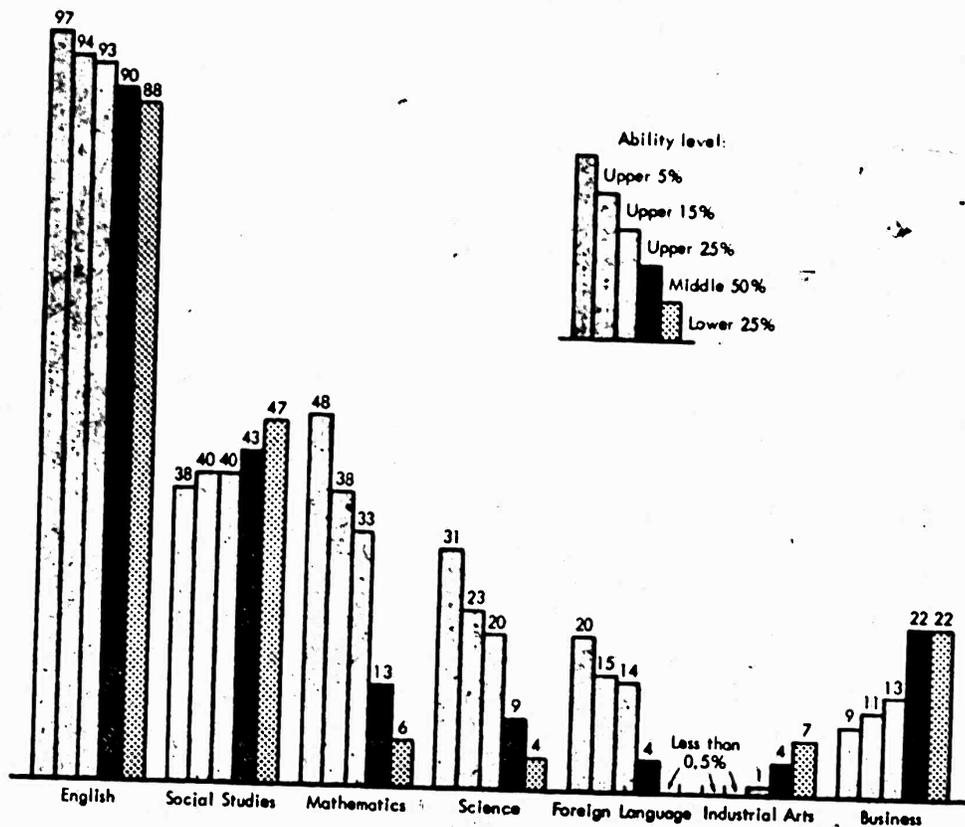
The bulletin, *High School Pupil Programs: A Preliminary Report*, published in 1961, gave the average credits earned by pupils in the five academic subject areas. This section does not concern itself with such averages. Rather it attempts to answer such questions as: What proportion of the average ability pupils earned four credits in mathematics? Two credits? Did a larger percentage of such pupils earn three credits in social studies in the large- or small-enrollment schools? Did a greater proportion of able pupils in the large schools earn a large number of credits than in the small schools? Did a higher percentage of able than of the less able pupils earn four science credits? Did a high proportion of the less able pupils earn more mathematics than business credits? In which subject matter areas did a higher proportion of boys than girls earn three credits? Tables 24-41 and figures 13-14 give information to answer these and similar questions.

In chapter II, *High School Requirements and Offerings*, the graduation requirements of the schools included in the sample were given. These requirements, naturally, had an influence on the subjects completed by the graduates. Since the largest number of credits were required in English and social studies, these areas were affected most. The previous section showed that from 60 percent to 63 percent of the schools required four credits in English for graduation. It is, therefore, not surprising that at least 91 percent of all pupils completed more than three credits and approximately 25 percent completed more than four credits. The proportion of pupils who

earned more than three credits decreased as the size of school enrollment decreased but even in the smallest schools 86 percent of the pupils earned this number of credits. Boys did almost as well as girls in earning more than three credits but a higher percentage of girls in the total group, as well as in each ability level, carried more than four credits. Pupil ability did not affect greatly the proportion of pupils earning different amounts of credit in English. For instance, in the upper 5 percent ability group 97 percent of the pupils earned over three credits and 27 percent completed over four credits while in the lower 25 percent ability group, 88 percent of the pupils earned three credits and 23 percent completed four credits.

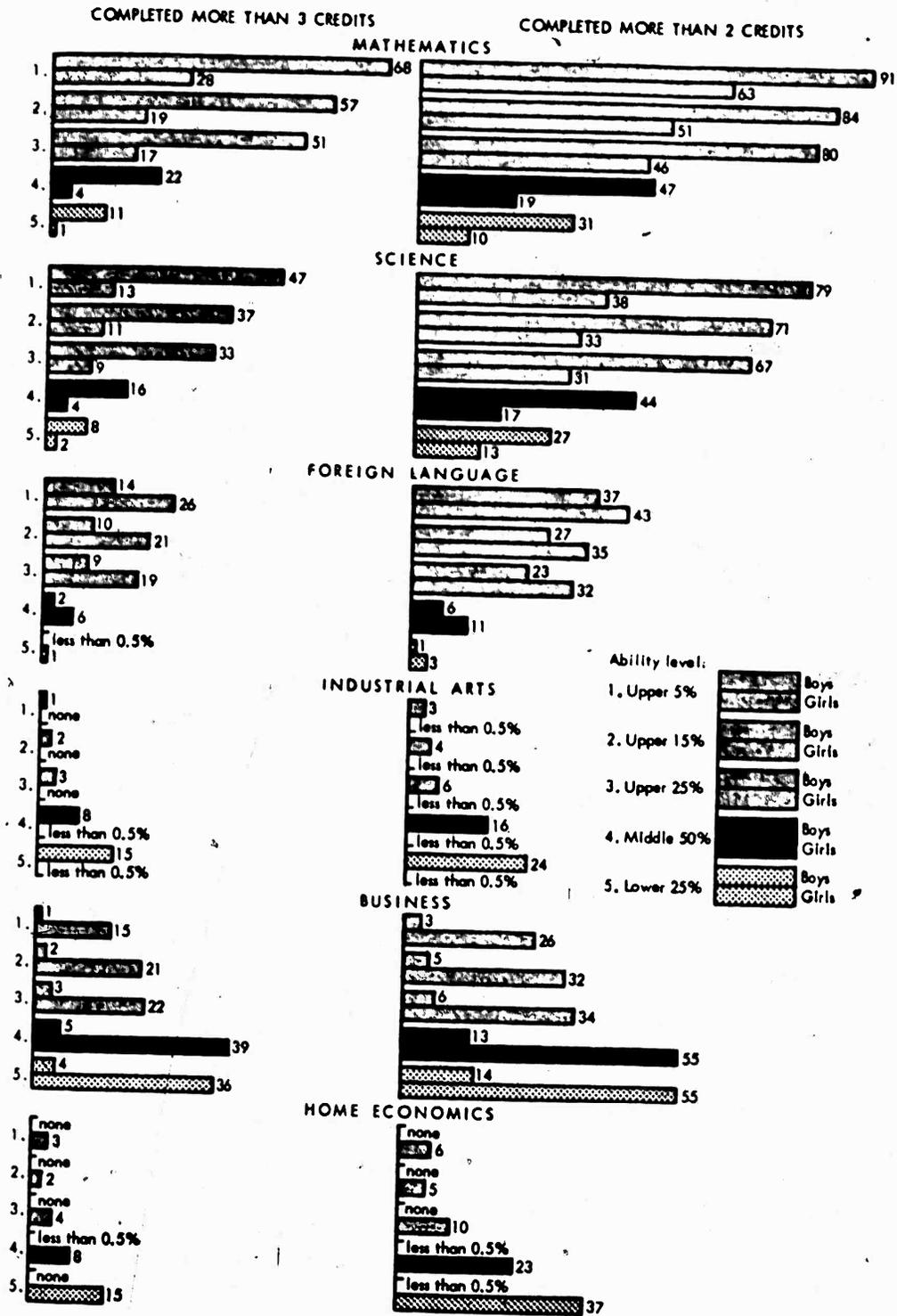
Approximately one-half of the schools required three or more credits in social studies for graduation. These requirements certainly helped increase the proportion of pupils completing more than two credits. Of the entire group of pupils, 83 percent earned more than two credits in the social studies area and 42 percent, more than three. Percentages of pupils completing larger numbers of credits decreased as

Figure 13.—Percent of pupils completing more than three credits in selected subject matter areas,¹ by ability level



¹ Subject matter areas in which more than 5 percent of the pupils in any level completed more than three credits.

Figure 14.—Percents of boys and of girls who completed more than three credits and more than two credits in selected subject matter areas,¹ by ability level



¹ Subjects selected were those in which significant differences in numbers of credits completed by boys and girls were noted.

enrollment-size of schools decreased. Although 86 percent earned more than two credits and 46 percent earned more than three credits in the large enrollment schools the comparative percentages in the smallest schools were 74 and 31. An increase in the proportion of pupils completing over three credits in social studies occurred as abilities decreased. There was no definite trend regarding proportions of boys and girls completing the larger amounts of credit. As may be noted, a higher proportion of girls than boys in the upper ability levels completed more than three credits, but this was reversed in the middle 50 percent ability group and the proportions were quite even in the lowest ability group.

The proportions of pupils who earned mathematics and science credit might have been influenced, to a certain degree, by graduation requirements. Fewer than one-half of the schools required more than one credit in mathematics, but 72 percent of the pupils earned more than one credit and 42 percent earned more than two. As pupil academic abilities decreased, the proportions of pupils completing various amounts of mathematics credit decreased quite rapidly. For example, in the upper 5 percent ability level, 48 percent of the pupils earned over three credits; in the upper 25 percent ability level, 33 percent; and in the lower 25 percent ability level, only 6 percent. (See fig. 13.) The proportions of pupils who earned mathematics credit decreased somewhat as the size of the school enrollment decreased. In the total group of pupils and in each ability level, the boys found mathematics more interesting than did the girls. For instance, in the entire group, four times as high a proportion of boys (32 percent) as of girls (9 percent) earned more than three credits while almost twice as high a proportion of boys as of girls earned more than two credits. (See fig. 14.) The proportion of pupils in the upper ability levels who completed credit in college preparatory mathematics was similar to that in the entire field of mathematics. This was not true in the middle and lowest ability levels.

The majority of the schools in the large- and middle-enrollment groups required 1 hour of science credit for graduation. Approximately the same number of the smallest schools, however, required two credits as required one credit. Seventy-two percent of the pupils earned more than one credit in science; 35 percent earned more than two; and 13 percent, more than three. The greatest proportion of pupils (78 percent) earned some credit in biological science, the next highest (66 percent) completed some credit in general science, and the lowest proportion (48 percent) in physical science. As academic abilities decreased, the percentages of pupils completing various amounts of credit decreased. (See fig. 13.) For example, the pro-

portion of pupils who completed over three credits in science decreased from 31 percent in the upper 5 percent ability level to 4 percent in the lower 25 percent ability level, whereas the proportion of boys decreased from 47 percent to 8 percent and the proportion of girls from 13 percent to 2 percent. As pupil abilities declined, the decrease in the proportion of pupils earning credit in general and biological sciences was small. This may be explained in part by the fact that when 2 years of science were required by schools, general science and biology were most often carried by pupils of different abilities to satisfy the requirement. In the area of science, as a whole, and also in each type of science, except the biological, a higher proportion of boys than of girls earned credit. This was most evident in the physical science in which 61 percent of the boys and 35 percent of the girls earned some credit. (See tables 25 and 26.)

There seemed to be little relationship between size of school enrollment and total number of science credits completed by pupils in the various sizes of schools. However, as enrollments decreased, the proportion of pupils who completed general science or biological science credit increased and the proportion who earned physical science credit decreased.

Although foreign language was seldom required for graduation by schools, 50 percent of the pupils completed some credit in foreign language. Approximately 23 percent earned $1\frac{1}{2}$ to 2 credits and 15 percent, more than 2 credits. As academic abilities decreased, the proportion of pupils who completed various amounts of credit also decreased. For instance, 40 percent of the pupils in the upper 5 percent ability level completed more than two credits of foreign language, while only 1 percent in the lower 25 percent ability level earned this amount. Girls were more likely to carry foreign language than were boys. Fifty-four percent of the girls and 46 percent of the boys earned some credit while 10 percent of the girls and only 4 percent of the boys completed more than three credits. In the upper 25 percent ability group, for instance, 19 percent of the girls and 9 percent of the boys earned more than three foreign language credits. (See fig. 14.) A great decline in the proportion of pupils completing credits occurred as school enrollments decreased. For example, 59 percent of the pupils in the largest schools and only 20 percent in the smallest schools earned credit in foreign language.

Spanish was the most popular language with 22 percent of the pupils earning some credit; 12 percent earning $1\frac{1}{2}$ to 2 credits; and 4 percent, more than 2. Latin was a close second and French, third. In the smallest and middle-enrollment schools, however, a higher proportion of pupils earned credits in Latin than in any other foreign language.

Of the nonacademic subjects business education was the most popular. Approximately 81 percent of all pupils (92 percent of the girls and 69 percent of the boys) completed some credit in this area, and more than 18 percent completed over three credits. It is quite evident from figure 14 that the proportion of girls in each ability level who completed more than three business credits was much greater than the proportion of boys, in the corresponding ability level. Also, in all ability levels this area was even more popular in the low-enrollment schools. The proportion of pupils earning business education credit in the largest schools was 76 percent, while in the smallest schools it was 93 percent, but a greater percentage in the large schools earned more than three credits. In all schools, a smaller proportion of upper ability pupils than of the lower ability earned business education credits.

Physical education was the next most common nonacademic area. Partly responsible for the large numbers of pupils earning physical education credit was the fact that a majority of the schools required some physical education credit for graduation. There were 62 percent of the boys and 58 percent of the girls who earned credit in physical education alone. Most of them earned one-fourth to one credit. Also, 7 percent of the pupils earned credit in combined physical education and health courses and 24 percent earned credit in health alone. In addition, some pupils completed courses in physical education without credit. These were not included here since credit courses only were tabulated.

An increase in the percentage of pupils completing physical education credits was shown as academic abilities decreased. In the upper 5 percent ability group 51 percent of the pupils earned credit, while in the lower 25 percent ability group it was 63 percent. The proportion of pupils who earned physical education credit increased with school enrollments.

Third in popularity were home economics for girls and industrial arts for boys. Although only 38 percent of all pupils earned credit in home economics, the proportion of boys was 4 percent and of girls, 69 percent. Whereas most of the boys who earned credit earned only one-fourth to one credit, 21 percent of all the girls completed more than two credits. A larger proportion of the pupils in the smaller schools earned home economics credit than in the large schools. In addition, a greater percentage of the lower ability level pupils than of the higher ability completed credits.

Industrial arts was more common among the boys than girls. Although 33 percent of all pupils earned some credit in this area, 61 percent of the boys and only 7 percent of the girls completed any credit. In the large schools the proportion of pupils earning industrial

arts credit was greater than in the smaller schools. A larger percentage of lower ability pupils earned credit in this area than in the upper ability levels.

Music was next in popularity with 44 percent of the pupils earning credit in the area. Fifty-two percent of the girls and only 34 percent of the boys earned music credit. In all cases the great majority completed only one-fourth to one credit. As academic abilities decreased from the upper 5 percent to the lower 25 percent the proportion of pupils decreased from 50 percent to 39 percent. Although the size of enrollment showed little relationship to the proportion of pupils earning some music credit, a greater percentage tended to take a larger number of credits in the low-enrollment schools. A higher proportion of upper ability pupils and a smaller proportion of lower ability pupils tended to earn credit in small schools than in the large schools.

While approximately 23 percent of the pupils earned some credit in art, most of them earned only one-fourth to one credit. A greater proportion of girls than of boys tended to earn art credit. Large schools seemed to have encouraged pupils to carry art courses. This was shown by the increase in the proportion of pupils earning art credit from 3 percent to 29 percent as school enrollments increased. It was also evident from the data that as pupil abilities increased the proportion of pupils earning art credit increased.

Small proportions of pupils earned credit in vocational education and vocational agriculture. As school enrollments increased the proportion of pupils who completed vocational education credit increased and of those who earned vocational agriculture credit decreased. This implies that the smaller schools, which were most often located in smaller communities, tended to guide a greater number of pupils into agriculture while those in the large schools encouraged pupils to take other phases of vocational education better suited to large communities. The proportion of girls who earned credit in either of these areas was much smaller than of the boys. There were virtually no girls and 5 percent of the boys who earned vocational agriculture credits, while 3 percent of the girls and 7 percent of the boys earned vocational education credit. If vocational home economics had been included in this area, the proportion of girls in vocational education would have been increased materially. In both areas, as pupil ability levels decreased there was some increase in the proportion of pupils who earned credit.

Driver education credit was earned by a small proportion of pupils. Only 7 percent of the boys and 8 percent of the girls earned any credit. Little difference in the proportion of pupils who earned driver education credit was found among school enrollment-size groups or ability levels.

Table 24.—Percentage distribution of high school areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of graduates, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	¼-1	1½-2	2¼-3	3¼-4	Over ⁴	Total ¹	0	¼-1	1½-2	
1	2	3	4	5	6	7	8	9	10	11	12	
ACADEMIC												
English.....	100	0	0	(²)	1	66	25	100	0	0	(²)	
Social studies.....	100	0	2	15	41	34	8	100	0	2	13	
Mathematics.....	100	3	25	30	22	18	2	100	3	23	29	
General mathematics.....	100	59	32	8	1	(²)	0	100	59	30	10	
College preparatory mathematics.....	100	21	23	24	18	13	1	100	23	19	22	
Science.....	100	2	25	37	22	12	1	100	2	27	34	
General science.....	100	34	64	2	(²)	0	0	100	36	63	2	
Biological science.....	100	23	73	3	0	0	0	100	24	73	3	
Physical science.....	100	53	29	18	1	(²)	0	100	51	29	19	
Miscellaneous.....	100	87	3	(²)	0	0	0	100	86	4	(²)	
Foreign language.....	100	56	13	23	8	5	2	100	41	12	28	
Latin.....	100	80	5	13	1	(²)	0	100	78	5	15	
French.....	100	86	4	8	3	1	0	100	83	4	9	
Spanish.....	100	79	6	12	3	1	0	100	73	7	15	
German.....	100	98	1	1	(²)	(²)	0	100	97	1	2	
All other foreign language.....	100	99	(²)	(²)	(²)	0	0	100	98	(²)	1	
NONACADEMIC												
Music.....	100	57	38	5	1	(²)	0	100	57	39	4	
Art.....	100	77	20	3	(²)	0	0	100	70	25	4	
Industrial arts.....	100	67	18	8	3	2	2	100	63	21	9	
Business.....	100	19	35	17	11	7	11	100	23	36	13	
Home economics.....	100	63	16	11	7	3	1	100	65	17	10	
Vocational education ⁴	100	96	2	1	1	(²)	(²)	100	94	3	2	
Vocational agriculture.....	100	98	(²)	(²)	1	1	1	100	99	(²)	(²)	
Physical education.....	100	41	58	1	(²)	(²)	0	100	39	60	2	
Physical education and health.....	100	88	5	2	(²)	(²)	0	100	84	4	2	
Health.....	100	76	22	2	0	0	0	100	75	23	2	
Athletics.....	100	100	1	0	0	0	0	100	100	1	0	
Driver education.....	100	93	7	1	0	0	0	100	94	5	1	
All others.....	100	71	22	3	1	2	1	100	74	22	2	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5.

³ Median falls between 2 intervals.

graduates, by number of credits earned in subject matter
Continental United States, 1958

median intervals]

Percent of graduates, by school enrollment—Continued																	
500 and over—Continued			200-499								1-199						
Credits earned—Continued			Credits earned								Credits earned						
2 1/4-3	3 1/4-4	Over 4	Total ¹	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	Total ¹	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
7	65	28	100	0	0	(?)	12	68	20	100	(?)	0	(?)	14	70	16	
40	37	9	100	0	3	20	43	28	7	100	0	2	24	43	26	5	
23	20	2	100	3	29	33	18	16	1	100	2	29	35	23	9	1	
1	(?)	0	100	60	37	3	(?)	(?)	0	100	57	39	3	1	1	0	
19	15	2	100	18	29	25	16	11	1	100	15	34	29	17	5	1	
23	12	1	100	3	24	39	20	14	1	100	2	20	45	25	8	1	
(?)	0	0	100	31	66	3	(?)	0	0	100	24	73	3	(?)	0	0	
0	0	0	100	20	78	2	(?)	0	0	100	21	78	1	0	0	0	
1	(?)	0	100	57	25	18	(?)	0	0	100	55	32	13	0	(?)	0	
0	0	0	100	88	2	0	0	0	0	100	97	3	0	0	0	0	
10	7	3	100	66	11	17	3	2	(?)	100	80	12	8	1	(?)	0	
2	(?)	0	100	81	6	13	1	0	0	100	91	6	3	(?)	0	0	
3	1	0	100	91	4	5	1	0	0	100	94	3	3	(?)	0	0	
4	1	0	100	90	5	5	(?)	0	0	100	95	3	2	0	0	0	
(?)	(?)	0	100	100	(?)	(?)	0	0	0	100	100	(?)	0	0	0	0	
1	0	0	100	100	(?)	0	0	0	0	100	99	1	0	0	0	0	
1	(?)	(?)	100	55	37	6	1	(?)	0	100	55	32	9	1	(?)	0	
(?)	(?)	0	100	60	10	1	0	0	0	100	97	3	0	0	0	0	
3	2	2	100	74	13	9	3	1	(?)	100	76	14	6	3	1	1	
8	6	13	100	12	34	23	14	9	8	100	7	25	33	20	10	5	
5	2	1	100	58	13	13	11	5	1	100	52	11	19	11	6	1	
1	1	(?)	100	98	1	1	1	(?)	(?)	100	99	(?)	(?)	(?)	0	0	
(?)	(?)	0	100	95	1	1	2	1	1	100	91	1	2	1	2	2	
(?)	(?)	0	100	45	55	(?)	0	0	0	100	40	52	3	(?)	0	0	
(?)	0	0	100	91	8	1	0	0	0	100	94	5	0	0	1	0	
0	0	0	100	77	23	(?)	0	0	0	100	87	13	1	0	0	0	
0	0	0	100	100	1	0	0	0	0	100	100	(?)	0	0	0	0	
(?)	0	0	100	89	10	(?)	0	0	0	100	94	6	0	0	(?)	0	
(?)	1	1	100	68	21	3	2	4	2	100	59	24	6	4	5	2	

¹ Excludes home economics and vocational agriculture.

NOTE.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 25.—Percentage distribution of high school graduate areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of boys, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	Total ¹	0	1/4-1	1 1/4-2	
1	2	3	4	5	6	7	8	9	10	11	12	
ACADEMIC												
English.....	100	0	0	(?)	9	69	21	100	0	0	(?)	
Social studies.....	100	0	2	15	40	35	8	100	0	2	13	
Mathematics.....	100	1	16	26	26	29	3	100	1	13	24	
General mathematics.....	100	57	33	9	1	(?)	0	100	58	30	11	
College preparatory mathematics.....	100	17	18	20	21	22	2	100	18	15	18	
Science.....	100	2	18	31	29	19	2	100	1	18	29	
General science.....	100	28	69	3	(?)	0	0	100	30	68	2	
Biological science.....	100	23	73	2	(?)	0	0	100	25	73	2	
Physical science.....	100	39	30	30	1	(?)	0	100	37	29	33	
Miscellaneous.....	100	96	4	(?)	0	0	0	100	95	5	(?)	
Foreign language.....	100	54	10	24	8	3	1	100	45	11	29	
Latin.....	100	83	4	12	1	(?)	0	100	81	4	13	
French.....	100	89	3	6	2	(?)	0	100	87	3	7	
Spanish.....	100	81	5	11	3	(?)	0	100	78	6	14	
German.....	100	97	1	2	(?)	(?)	0	100	96	1	2	
All other foreign languages.....	100	99	(?)	1	(?)	0	0	100	98	(?)	1	
NONACADEMIC												
Music.....	100	66	30	4	(?)	(?)	0	100	65	32	4	
Art.....	100	79	19	3	(?)	0	0	100	73	24	4	
Industrial arts.....	100	38	32	17	6	3	3	100	32	35	18	
Business.....	100	31	44	15	6	2	2	100	37	45	10	
Home economics.....	100	96	3	1	0	0	0	100	96	4	(?)	
Vocational education ²	100	94	3	2	1	1	(?)	100	93	3	2	
Vocational agriculture.....	100	95	1	1	1	1	1	100	99	(?)	(?)	
Physical education.....	100	38	59	2	(?)	(?)	0	100	37	61	2	
Physical education and health.....	100	93	6	1	(?)	0	0	100	93	5	2	
Health.....	100	77	22	1	0	0	0	100	76	23	2	
Athletics.....	100	99	1	0	0	0	0	100	99	1	0	
Driver education.....	100	93	7	0	0	0	0	100	94	6	0	
All others.....	100	67	21	4	2	4	3	100	72	22	3	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5 percent.

³ Median falls between 2 intervals.

boys, by number of credits earned in subject matter
Continental United States, 1958

median intervals]

Percent of boys, by school enrollment—Continued																
500 and over— Continued			200-499							1-199						
Credits earned— Continued			Credits earned							Credits earned						
3¼-3	3¼-4	Over 4	Total	0	¼-1	1¼-2	2¼-3	3¼-4	Over 4	Total	0	¼-1	1¼-2	2¼-3	3¼-4	Over 4
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
7	88	24	100	(?)	0	(?)	12	71	17	100	0	0	(?)	15	72	13
38	39	9	100	(?)	3	18	45	27	8	100	0	2	24	44	25	6
26	32	4	100	2	21	28	21	26	2	100	(?)	23	32	29	14	2
1	(?)	0	100	57	39	4	(?)	(?)	0	100	55	41	3	1	1	0
21	25	3	100	17	22	22	20	18	2	100	13	29	27	23	7	1
30	20	2	100	2	17	33	26	21	1	100	1	17	40	29	12	1
(?)	0	0	100	26	70	5	0	0	0	100	23	74	2	(?)	0	0
(?)	0	0	100	19	79	2	(?)	0	0	100	24	74	2	0	0	0
2	(?)	0	100	44	27	28	(?)	0	0	100	43	39	19	0	0	0
0	0	0	100	96	2	0	0	0	0	100	97	3	0	0	0	0
10	5	1	100	71	9	16	2	2	(?)	100	84	11	5	1	0	0
1	(?)	0	100	84	4	12	1	0	0	100	93	6	2	(?)	0	0
3	(?)	0	100	92	4	4	(?)	0	0	100	96	2	2	(?)	0	0
4	1	0	100	92	4	4	0	0	0	100	98	3	2	0	0	0
1	(?)	0	100	100	(?)	0	0	0	0	100	100	0	0	0	0	0
1	0	0	100	99	(?)	(?)	0	0	0	100	99	1	0	0	0	0
(?)	(?)	(?)	100	67	28	4	1	(?)	0	100	69	25	5	(?)	0	0
(?)	(?)	0	100	90	9	1	0	0	0	100	97	3	0	0	0	0
7	4	5	100	48	25	18	6	3	1	100	57	24	12	5	2	1
5	2	2	100	20	47	23	7	2	1	100	10	36	37	14	3	1
0	0	0	100	97	2	1	(?)	0	0	100	94	4	2	0	(?)	0
1	1	1	100	96	2	1	1	(?)	(?)	100	99	(?)	1	0	0	0
(?)	(?)	0	100	90	1	1	3	2	2	100	83	2	8	3	5	4
(?)	(?)	0	100	41	59	1	0	0	0	100	45	53	3	(?)	0	0
(?)	0	0	100	91	8	1	0	0	0	100	95	5	0	0	(?)	0
0	0	0	100	78	21	(?)	(?)	0	0	100	84	16	0	0	0	0
0	0	0	100	99	1	0	0	0	0	100	99	1	0	0	0	0
0	0	0	100	91	9	0	0	0	0	100	83	7	0	0	0	0
1	1	1	100	60	19	5	4	8	5	100	48	22	9	7	10	5

* Excludes home economics and vocational agriculture.

NOTE.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 26.—Percentage distribution of high school graduate areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of girls, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	Total ¹	0	1/4-1	1 1/4-2	2 1/4-3
2	3	4	5	6	7	8	9	10	11	12	13	
ACADEMIC												
English.....	100	(?)	0	(?)	8	63	29	100	(?)	(?)	(?)	
Social studies.....	100	0	2	16	41	34	7	100	0	2	13	
Mathematics.....	100	4	33	33	20	8	1	100	4	32	33	
General mathematics.....	100	61	32	7	(?)	0	0	100	61	31	8	
College preparatory mathematics.....	100	25	27	27	16	5	(?)	100	28	23	26	
Science.....	100	3	33	43	16	5	(?)	100	3	34	42	
General science.....	100	39	59	2	(?)	0	0	100	42	56	2	
Biological science.....	100	22	75	3	0	0	0	100	23	74	4	
Physical science.....	100	63	27	7	(?)	0	0	100	64	29	7	
Miscellaneous.....	100	98	2	0	0	0	0	100	93	3	0	
Foreign language.....	100	46	13	23	8	7	3	100	37	13	27	
Latin.....	100	78	6	14	1	(?)	0	100	76	6	16	
French.....	100	83	4	9	3	1	0	100	79	4	11	
Spanish.....	100	77	7	13	3	1	0	100	70	8	16	
German.....	100	98	(?)	1	(?)	(?)	0	100	98	(?)	1	
All other foreign language.....	100	99	(?)	(?)	(?)	0	0	100	96	1	(?)	
NONACADEMIC												
Music.....	100	48	43	6	1	(?)	(?)	100	49	46	4	
Art.....	100	75	21	4	(?)	0	0	100	68	27	5	
Industrial arts.....	100	93	7	(?)	(?)	(?)	0	100	92	8	(?)	
Business.....	100	9	26	19	15	12	20	100	11	29	16	
Home economics.....	100	32	27	21	13	6	2	100	37	30	18	
Vocational education.....	100	97	2	1	(?)	(?)	(?)	100	95	2	1	
Vocational agriculture.....	100	100	0	0	0	0	0	100	100	0	0	
Physical education.....	100	42	57	1	(?)	0	0	100	40	59	1	
Physical education and health.....	100	83	5	2	(?)	(?)	0	100	94	4	2	
Health.....	100	76	22	2	0	0	0	100	74	24	2	
Athletics.....	100	100	0	0	0	0	0	100	100	(?)	0	
Driver education.....	100	92	8	0	0	0	0	100	94	6	0	
All others.....	100	76	23	2	(?)	(?)	0	100	76	22	1	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5.

³ Median falls between 2 intervals.

girls, by number of credits earned in subject matter
Continental United States, 1958

median intervals]

Percent of girls, by school enrollment—Continued																	
500 and over—Continued			200-499							1-199							
Credits earned—Continued			Credits earned							Credits earned							
2½-3	3½-4	Over 4	Total	0	½-1	1½-2	2½-3	3½-4	Over 4	Total	0	½-1	1½-2	2½-3	3½-4	Over 4	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
6	61	32	100	0	0	(?)	12	66	22	100	(?)	0	0	13	67	19	
42	36	8	100	0	3	22	20	29	6	100			24	42	28	4	
21	9	1	100	4	35	37	16	7	(?)	100			39	18	4	1	
(?)	0	0	100	62	35	3	(?)	0	0	100	5	67	3	1	(?)	0	
17	6	(?)	100	19	36	28	13	4	(?)	100	18	38	31	11	2	(?)	
16	5	(?)	100	4	31	44	14	7	(?)	100	2	23	49	21	5	(?)	
0	0	0	100	36	62	2	(?)	(?)	0	100	25	72	8	0	0	0	
0	0	0	100	21	77	2	0	0	0	100	17	67	1	0	0	0	
(?)	0	0	100	68	23	9	0	0	0	100	67	26	7	0	(?)	0	
0	0	0	100	99	1	0	0	0	0	100	97	3	0	0	0	0	
10	10	4	100	62	14	18	4	3	1	100	76	12	11	1	(?)	0	
2	1	0	100	78	9	13	1	(?)	0	100	89	7	5	(?)	0	0	
4	2	0	100	89	4	6	1	0	0	100	92	4	4	0	0	0	
4	1	0	100	89	5	6	1	0	0	100	94	3	3	0	0	0	
(?)	(?)	0	100	100	0	(?)	0	0	0	100	99	1	0	0	0	0	
1	(?)	0	100	100	(?)	0	0	0	0	100	100	(?)	0	0	0	0	
1	(?)	(?)	100	45	46	8	1	(?)	(?)	100	48	28	13	1	1	0	
(?)	(?)	(?)	100	88	11	1	0	0	0	100	97	4	0	0	0	0	
(?)	(?)	(?)	100	97	2	(?)	0	(?)	0	100	95	4	(?)	(?)	0	0	
12	10	23	100	5	22	22	21	16	15	100	4	15	30	28	17	10	
9	4	2	100	22	23	25	20	9	2	100	12	17	25	22	12	2	
1	(?)	(?)	100	99	(?)	(?)	(?)	0	0	100	99	(?)	(?)	(?)	0	0	
0	0	0	100	100	0	0	0	(?)	0	100	100	(?)	0	0	0	(?)	
(?)	0	0	100	48	52	(?)	0	0	0	100	47	52	2	0	0	0	
(?)	0	0	100	99	9	1	0	0	0	100	94	5	0	0	1	0	
0	0	0	100	76	24	(?)	0	0	0	100	99	9	1	0	0	0	
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
0	0	0	100	98	14	0	0	0	0	100	92	8	0	0	0	0	
(?)	(?)	0	100	75	22	2	(?)	(?)	0	100	79	27	2	1	(?)	0	

* Excludes home economics and vocational agriculture.
NOTE.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 27.—Percentage distribution of high school graduates in the upper areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of graduates, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	¼-1	1½-2	2¼-3	3¼-4	Over 4	Total ¹	0	¼-1	1½-2	
2	3	4	5	6	7	8	9	10	11	12		
ACADEMIC												
English.....	100	(²)	0	(²)	3	70	27	100	(²)	0	0	
Social studies.....	100	0	2	16	44	35	3	100	0	1	15	
Mathematics.....	100	1	7	17	29	43	5	100	0	5	13	
General mathematics.....	100	83	14	3	(²)	(²)	0	100	85	11	3	
College preparatory mathematics.....	100	4	7	19	29	37	4	100	3	6	15	
Science.....	100	(²)	12	30	29	27	4	100	(²)	11	28	
General science.....	100	34	64	2	(²)	0	0	100	35	64	2	
Biological science.....	100	19	79	2	(²)	0	0	100	21	77	3	
Physical science.....	100	24	32	42	2	(²)	0	100	21	32	43	
Miscellaneous.....	100	95	5	0	0	0	0	100	94	6	0	
Foreign language.....	100	18	8	34	20	13	7	100	9	7	35	
Latin.....	100	61	6	28	5	1	0	100	59	6	29	
French.....	100	74	4	12	8	3	0	100	70	4	14	
Spanish.....	100	70	3	16	9	3	0	100	64	3	18	
German.....	100	95	(²)	4	1	0	0	100	94	1	5	
All other foreign language.....	100	98	1	1	1	0	0	100	98	1	1	
NONACADEMIC												
Music.....	100	49	42	7	1	(²)	(²)	100	53	43	3	
Art.....	100	74	21	4	(²)	0	(²)	100	68	26	6	
Industrial arts.....	100	71	22	5	1	(²)	(²)	100	69	24	5	
Business.....	100	31	44	10	6	4	5	100	36	45	7	
Home economics.....	100	78	15	6	1	1	(²)	100	80	14	5	
Vocational education ⁴	100	100	(²)	0	0	0	0	100	100	(²)	0	
Vocational agriculture.....	100	99	(²)	(²)	1	0	(²)	100	100	0	0	
Physical education.....	100	49	49	2	0	0	0	100	51	47	2	
Physical education and health.....	100	95	4	1	(²)	0	0	100	96	2	2	
Health.....	100	75	24	1	0	0	0	100	73	26	1	
Athletics.....	100	99	1	0	0	0	0	100	99	1	0	
Driver education.....	100	94	6	0	0	0	0	100	95	5	0	
All others.....	100	75	21	2	1	(²)	1	100	77	22	1	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5.

³ Median falls between 2 intervals.

5 percent ability level, by number of credits earned in subject matter
Continental United States, 1958.

median intervals]

Percent of graduates, by school enrollment--Continued																	
500 and over-- Continued			200-499							1-199							
Credits earned-- Continued			Credits earned							Credits earned							
2 1/4	3	3 1/4-4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
2	68	29	100	0	0	0	8	72	20	100	0	0	2	6	75	17	
43	38	4	100	0	7	17	51	23	3	100	0	5	22	44	29	2	
30	47	6	100	3	11	28	19	37	3	100	0	12	31	42	12	4	
(?)	(?)	0	100	84	16	0	0	0	0	100	64	34	2	0	0	0	
31	41	5	100	6	10	23	29	32	3	100	3	16	36	36	7	2	
30	26	5	100	1	13	32	23	30	1	100	0	11	39	30	21	0	
0	0	0	100	34	65	1	(?)	0	0	100	25	70	5	0	0	0	
(?)	0	0	100	11	87	2	0	0	0	100	18	82	0	0	0	0	
3	(?)	0	100	32	28	40	1	0	0	100	35	32	32	0	0	0	
0	0	0	100	97	4	0	0	0	0	100	98	2	0	0	0	0	
24	16	9	100	41	19	36	7	5	3	100	63	15	20	2	0	0	
5	1	0	100	60	6	32	3	0	0	100	82	9	7	2	0	0	
10	3	0	100	88	4	7	3	0	0	100	90	4	6	0	0	0	
11	3	0	100	85	4	11	(?)	0	0	100	92	7	7	0	0	0	
1	0	0	100	100	0	(?)	0	0	0	100	100	0	0	0	0	0	
1	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
1	0	(?)	100	41	39	16	4	(?)	0	100	38	42	21	0	0	0	
(?)	0	(?)	100	91	9	0	0	0	0	100	100	0	0	0	0	0	
2	0	(?)	100	75	18	4	1	1	0	100	82	17	1	0	0	0	
4	2	5	100	20	39	17	14	6	5	100	10	41	27	11	10	1	
1	(?)	0	100	64	18	12	3	4	0	100	57	17	15	2	6	3	
0	0	0	100	99	1	0	0	0	0	100	100	0	0	0	0	0	
(?)	0	0	100	98	1	0	1	0	1	100	93	2	4	2	0	0	
0	0	0	100	48	52	0	0	0	0	100	38	58	4	0	0	0	
(?)	0	0	100	85	15	(?)	0	0	0	100	96	4	0	0	0	0	
0	0	0	100	83	17	(?)	0	0	0	100	88	10	2	0	0	0	
0	0	0	100	99	1	0	0	0	0	100	100	0	0	0	0	0	
0	0	0	100	87	13	0	0	0	0	100	92	8	0	0	0	0	
0	0	(?)	100	73	21	4	2	0	1	100	62	19	10	3	4	2	

* Excludes home economics and vocational agriculture.

NOTE.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 28.—Percentage distribution of high school graduate boys in the areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of boys, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	$\frac{1}{2}$ -1	1 $\frac{1}{2}$ -2	2 $\frac{1}{2}$ -3	3 $\frac{1}{2}$ -4	Over 4	Total ¹	0	$\frac{1}{2}$ -1	1 $\frac{1}{2}$ -2	
2	3	4	5	6	7	8	9	10	11	12		
ACADEMIC												
English.....	100	0	0	(?)	3	74	23	100	0	0	0	
Social studies.....	100	0	3	16	47	34	1	100	0	1	15	
Mathematics.....	100	(?)	2	7	23	60	8	100	0	2	4	
General mathematics.....	100	85	12	3	1	(?)	0	100	84	12	3	
College preparatory mathematics.....	100	2	3	11	25	52	7	100	2	3	8	
Science.....	100	0	4	17	32	41	6	100	0	4	16	
General science.....	100	28	69	3	0	0	0	100	27	70	3	
Biological science.....	100	20	78	2	(?)	0	0	100	22	76	2	
Physical science.....	100	8	23	65	4	(?)	0	100	8	21	67	
Miscellaneous.....	100	93	7	0	0	0	0	100	92	8	0	
Foreign language.....	100	18	12	34	23	10	4	100	10	10	35	
Latin.....	100	63	7	25	4	1	0	100	62	7	26	
French.....	100	77	5	10	7	1	0	100	73	6	11	
Spanish.....	100	67	5	16	10	1	0	100	62	6	18	
German.....	100	93	1	6	(?)	0	0	100	91	1	8	
All other foreign language.....	100	99	(?)	0	(?)	0	0	100	99	1	0	
NONACADEMIC												
Music.....	100	58	35	6	1	0	0	100	58	37	4	
Art.....	100	78	20	3	0	0	0	100	72	25	3	
Industrial arts.....	100	48	40	10	2	1	(?)	100	46	41	10	
Business.....	100	41	50	6	2	1	(?)	100	47	49	3	
Home economics.....	100	99	1	0	0	0	0	100	99	1	0	
Vocational education ²	100	99	1	0	0	0	0	100	99	1	0	
Vocational agriculture.....	100	98	1	1	1	0	(?)	100	99	0	0	
Physical education.....	100	49	49	2	0	0	0	100	51	46	3	
Physical education and health.....	100	95	3	1	(?)	0	0	100	97	1	1	
Health.....	100	73	26	1	0	0	0	100	70	29	2	
Athletics.....	100	99	1	0	0	0	0	100	99	1	0	
Driver education.....	100	95	5	0	0	0	0	100	96	4	0	
All others.....	100	73	22	3	1	(?)	1	100	75	24	1	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5 percent.

upper 5 percent ability level, by number of credits earned in subject matter
Continental United States, 1958

median intervals]

Percent of boys, by school enrollment - Continued																	
500 and over- Continued			200-499							1-199							
Credits earned- Continued			Credits earned							Credits earned							
2 1/4-3	3 1/4-4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
3	71	26	100	0	0	0	6	63	11	100	0	0	4	7	62	8	
45	38	1	100	0	0	18	57	17	0	100	0	6	19	48	28	0	
22	63	9	100	1	0	22	10	62	5	100	0	0	9	60	15	8	
1	1	0	100	93	7	0	0	0	0	100	72	24	4	0	0	0	
24	53	8	100	1	0	23	14	57	5	100	5	4	21	56	11	4	
33	41	7	100	0	4	19	29	47	1	100	0	7	29	35	30	0	
0	0	0	100	35	63	2	0	0	0	100	25	73	2	0	0	0	
1	0	0	100	9	96	1	0	0	0	100	16	84	0	0	0	0	
4	1	0	100	7	29	64	1	0	0	100	21	33	46	0	0	0	
0	0	0	100	96	4	0	0	0	0	100	100	0	0	0	0	0	
28	12	5	100	40	12	38	6	3	1	100	64	24	12	0	0	0	
5	1	0	100	61	7	29	3	0	0	100	89	17	3	0	0	0	
9	1	0	100	87	4	7	1	0	0	100	93	5	3	0	0	0	
13	2	0	100	63	6	12	0	0	0	100	92	2	6	0	0	0	
1	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
1	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
1	0	0	100	55	30	13	3	0	0	100	62	29	9	0	0	0	
0	0	0	100	97	3	0	0	0	0	100	100	0	0	0	0	0	
3	0	1	100	48	37	10	2	3	0	100	67	31	2	0	0	0	
0	1	(?)	100	28	53	8	11	0	0	100	8	51	29	6	4	0	
0	0	0	100	99	1	0	0	0	0	100	100	0	0	0	0	0	
0	0	0	100	94	2	0	0	0	0	100	100	0	0	0	0	0	
1	0	0	100	94	2	0	3	0	1	100	84	4	8	4	0	0	
0	0	0	100	37	63	0	0	0	0	100	48	49	4	0	0	0	
1	0	0	100	83	15	0	0	0	0	100	96	5	0	0	0	0	
0	0	0	100	61	19	0	0	0	0	100	92	8	0	0	0	0	
0	0	0	100	95	3	0	0	0	0	100	100	0	0	0	0	0	
0	0	0	100	90	10	0	0	0	0	100	91	9	0	0	0	0	
0	0	1	100	72	16	6	4	0	2	100	46	17	22	6	5	5	

* Excludes home economics and vocational agriculture.
NOTE.--All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 29.—Percentage distribution of high school graduate girls in the areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of girls, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over ⁴	Total ¹	0	1/4-1	1 1/4-2	
2	3	4	5	6	7	8	9	10	11	12		
ACADEMIC												
English.....	100	(?)	0	0	4	65	31	100	1	0	0	
Social studies.....	100	0	(?)	16	42	35	5	100	0	0	15	
Mathematics.....	100	1	11	26	35	26	2	100	0	9	22	
General mathematics.....	100	82	16	2	0	0	0	100	86	11	3	
College preparatory mathematics.....	100	5	12	26	34	22	1	100	4	8	22	
Science.....	100	1	19	42	25	12	1	100	1	19	41	
General science.....	100	40	50	1	(?)	0	0	100	43	57	1	
Biological science.....	100	18	79	3	0	0	0	100	19	78	3	
Physical science.....	100	39	41	19	1	0	0	100	35	45	19	
Miscellaneous.....	100	96	4	0	0	0	0	100	96	4	0	
Foreign language.....	100	19	4	34	17	16	10	100	9	3	35	
Latin.....	100	50	5	31	5	1	0	100	56	5	32	
French.....	100	71	2	14	9	4	0	100	65	2	17	
Spanish.....	100	72	1	16	7	4	0	100	66	1	18	
German.....	100	97	0	2	1	0	0	100	96	0	3	
All other foreign language.....	100	97	1	1	1	0	0	100	96	1	2	
NONACADEMIC												
Music.....	100	42	49	8	1	(?)	(?)	100	47	49	3	
Art.....	100	79	23	6	(?)	0	(?)	100	63	28	8	
Industrial arts.....	100	95	5	0	(?)	0	0	100	94	6	0	
Business.....	100	22	38	15	11	6	9	100	25	41	11	
Home economics.....	100	52	29	13	3	3	(?)	100	60	28	9	
Vocational education ²	100	100	0	0	0	0	0	100	100	0	0	
Vocational agriculture.....	100	100	0	0	0	0	0	100	100	0	0	
Physical education.....	100	50	49	1	0	0	0	100	50	49	1	
Physical education and health.....	100	94	5	1	0	0	0	100	96	3	2	
Health.....	100	78	21	1	0	0	0	100	75	24	1	
Athletics.....	100	100	0	0	0	0	0	100	100	0	0	
Driver education.....	100	93	8	0	0	0	0	100	95	6	0	
All others.....	100	78	21	2	0	(?)	0	100	79	20	2	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5 percent.

³ Excludes home economics and vocational agriculture.

upper 5 percent ability level, by number of credits earned in subject matter
Continental United States, 1958

median intervals]

Percent of girls, by school enrollment—Continued																
500 and over—Continued			200-499							1-199						
Credits earned—Continued			Credits earned							Credits earned						
2 1/4-3	3 1/4-4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2	66	32	100	0	0	0	10	63	27	100	0	0	0	6	69	25
42	38	6	100	0	5	16	46	29	5	100	0	4	24	40	30	3
38	29	2	100	5	19	33	25	17	2	100	0	15	50	25	10	0
0	0	0	100	77	23	0	0	0	0	100	57	43	0	0	0	0
38	27	1	100	11	49	32	25	12	2	100	2	27	49	18	3	0
27	11	2	100	2	21	43	19	16	1	100	0	14	48	25	13	0
0	0	0	100	33	67	0	1	0	0	100	26	68	7	0	0	0
0	0	0	100	13	85	2	0	0	0	100	20	81	0	0	0	0
2	0	0	100	52	28	20	0	0	0	100	48	32	20	0	0	0
0	0	0	100	97	3	0	0	0	0	100	97	3	0	0	0	0
21	20	13	100	41	8	34	7	6	4	100	63	6	28	3	0	0
6	1	0	100	59	5	34	3	0	0	100	84	2	10	3	0	0
11	6	0	100	85	3	7	5	0	0	100	87	4	9	0	0	0
10	5	0	100	86	2	11	1	0	0	100	92	0	9	0	0	0
1	0	0	100	99	0	1	0	0	0	100	100	0	0	0	0	0
2	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0
1	0	1	100	29	46	20	5	1	0	100	17	53	30	0	0	0
1	0	1	100	86	14	0	0	0	0	100	100	0	0	0	0	0
1	0	0	100	98	2	0	0	0	0	100	96	4	0	0	0	0
9	4	10	100	13	27	24	17	11	8	100	11	32	25	15	15	2
2	1	0	100	35	31	22	5	7	0	100	20	33	27	2	12	5
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0
0	0	0	100	56	44	0	0	0	0	100	30	66	5	0	0	0
0	0	0	100	85	15	1	0	0	0	100	96	4	0	0	0	0
0	0	0	100	85	15	1	0	0	0	100	85	12	3	0	0	0
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0
0	0	0	100	84	16	0	0	0	0	100	93	7	0	0	0	0
0	0	0	100	74	25	2	0	0	0	100	76	20	0	0	4	0

* Median falls between 2 intervals.

NOTE.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 30.—Percentage distribution of high school graduates in the upper areas, and by school enrollment:

[Boldface type indicates

Subject matter areas ¹	Percent of graduates, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ²	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	Total ²	0	1/4-1	1 1/4-2	2 1/4-3
1	2	3	4	5	6	7	8	9	10	11	12	
ACADEMIC												
English.....	100	(?)	(?)	(?)	5	67	27	100	(?)	(?)	0	
Social studies.....	100	0	2	14	44	35	5	100	0	1	13	
Mathematics.....	100	1	10	22	30	34	4	100	1	8	20	
General mathematics.....	100	78	19	4	(?)	(?)	0	100	80	15	4	
College preparatory mathematics.....	100	6	12	23	28	29	3	100	5	10	21	
Science.....	100	1	15	32	28	21	2	100	1	16	31	
General science.....	100	35	63	1	0	0	0	100	38	61	1	
Biological science.....	100	20	78	2	(?)	0	0	100	21	77	3	
Physical science.....	100	31	33	35	2	(?)	0	100	29	34	35	
Miscellaneous.....	100	96	4	(?)	0	0	0	100	95	5	(?)	
Foreign language.....	100	26	10	33	16	11	4	100	16	9	34	
Latin.....	100	67	6	23	3	1	0	100	64	6	26	
French.....	100	77	4	12	6	2	0	100	73	4	13	
Spanish.....	100	72	4	16	6	2	0	100	66	4	19	
German.....	100	95	1	3	1	(?)	0	100	94	1	4	
All other foreign language.....	100	98	(?)	1	1	0	0	100	98	(?)	1	
NONACADEMIC												
Music.....	100	53	10	6	1	(?)	(?)	100	54	41	4	
Art.....	100	74	22	4	(?)	0	(?)	100	66	27	5	
Industrial arts.....	100	70	22	6	1	(?)	(?)	100	68	24	6	
Business.....	100	27	43	13	7	4	7	100	31	44	9	
Home economics.....	100	71	17	9	2	1	(?)	100	75	17	6	
Vocational education ³	100	98	1	(?)	(?)	(?)	(?)	100	98	1	(?)	
Vocational agriculture.....	100	98	(?)	(?)	1	(?)	(?)	100	96	0	(?)	
Physical education.....	100	45	53	1	(?)	0	0	100	45	54	2	
Physical education and health.....	100	94	5	1	(?)	0	0	100	96	3	2	
Health.....	100	75	24	1	0	0	0	100	73	26	2	
Athletics.....	100	100	(?)	0	0	0	0	100	100	(?)	0	
Driver education.....	100	93	7	0	0	0	0	100	95	5	0	
All others.....	100	75	21	2	1	1	1	100	77	22	1	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5 percent.

15 percent ability level, by number of credits earned in subject matter
Continental United States, 1958

median intervals]

Percent of graduates, by school enrollment—Continued																
500 and over—Continued			200-499								1-199					
Credits earned—Continued			Credits earned								Credits earned					
2 1/4-3	3 3/4-4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
4	66	31	100	(¹)	0	0	10	71	19	100	(¹)	0	1	10	72	18
43	38	6	100	0	3	17	48	27	5	100	0	4	18	49	25	3
30	37	4	100	2	15	26	21	33	2	100	0	14	32	39	12	3
(²)	(²)	0	100	77	22	1	0	0	0	100	58	39	2	0	(²)	0
29	31	3	100	8	14	27	23	27	2	100	6	20	37	30	8	1
39	21	3	100	3	12	34	24	27	1	100	1	14	38	29	17	2
0	0	0	100	30	68	1	(¹)	0	0	100	23	73	4	0	0	0
(²)	0	0	100	17	81	2	0	0	0	100	18	81	1	0	0	0
2	(¹)	0	100	34	28	33	(¹)	0	0	100	41	31	28	0	1	0
0	0	0	100	98	2	0	0	0	0	100	98	2	0	0	0	0
20	14	6	100	49	10	31	5	4	1	100	67	17	15	2	0	0
4	1	0	100	89	7	23	2	0	0	100	83	10	6	1	0	0
8	2	0	100	85	5	9	2	0	0	100	92	5	4	0	0	0
9	2	0	100	89	4	7	1	0	0	100	92	4	5	0	0	0
1	(¹)	0	100	99	1	1	0	0	0	100	99	1	0	0	0	0
1	0	0	100	99	(¹)	1	0	0	0	100	99	1	0	0	0	0
1	(¹)	(¹)	100	49	38	11	2	(¹)	0	100	47	35	17	1	1	0
(¹)	0	(¹)	100	99	9	1	0	0	0	100	99	1	0	0	0	0
1	(¹)	1	100	72	18	8	2	1	0	100	86	15	3	1	0	(¹)
5	4	7	100	20	36	19	13	6	7	100	7	33	34	15	8	2
1	(¹)	(¹)	100	64	16	13	4	3	0	100	51	16	20	8	4	1
(¹)	(¹)	(¹)	100	96	1	(¹)	1	0	0	100	99	1	0	0	0	0
(¹)	(¹)	0	100	97	1	(¹)	1	(¹)	1	100	92	2	2	2	2	1
(¹)	0	0	100	48	51	(¹)	0	0	0	100	44	54	3	0	0	0
(¹)	0	0	100	57	13	1	0	0	0	100	96	4	0	0	0	0
0	0	0	100	79	21	(¹)	0	0	0	100	84	14	2	0	0	0
0	0	0	100	99	1	0	0	0	0	100	100	(¹)	0	0	0	0
0	0	0	100	85	15	0	0	0	0	100	92	8	0	0	0	0
0	(¹)	(¹)	100	75	18	2	2	2	1	100	61	24	7	4	3	1

¹ Excludes home economics and vocational agriculture.

NOTE.—All usable transcripts furnished information shown in each subject matter area. Percent do not necessarily add up to total because of rounding.

Table 31.—Percentage distribution of high school graduate boys in the areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of boys, by school enrollment										
	All schools							500 and over			
	Credits earned							Credits earned			
	Total	0	½-1	1½-2	2½-3	3½-4	Over 4	Total	0	½-1	1½-2
1	2	3	4	5	6	7	8	9	10	11	12
ACADEMIC											
English.....	100	(?)	0	(?)	5	72	23	100	0	0	0
Social studies.....	100	0	2	14	45	35	5	100	0	1	13
Mathematics.....	100	(?)	5	12	27	51	6	100	0	3	10
General mathematics.....	100	79	17	4	(?)	(?)	0	100	80	15	4
College preparatory mathematics.....	100	3	7	14	27	44	5	100	3	7	11
Science.....	100	1	6	22	34	33	4	100	(?)	6	20
General science.....	100	30	64	2	0	0	0	100	31	67	2
Biological science.....	100	21	76	2	(?)	0	0	100	23	75	3
Physical science.....	100	14	27	56	3	(?)	0	100	12	27	57
Miscellaneous.....	100	94	5	(?)	0	0	0	100	93	7	(?)
Foreign language.....	100	27	11	35	17	8	2	100	17	10	39
Latin.....	100	69	6	22	3	(?)	0	100	68	5	23
French.....	100	81	4	9	5	1	0	100	78	5	11
Spanish.....	100	71	5	16	6	1	0	100	65	5	20
German.....	100	94	1	4	1	(?)	0	100	92	1	5
All other foreign language.....	100	96	(?)	1	1	0	0	100	96	(?)	1
NONACADEMIC											
Music.....	100	69	35	5	1	0	0	100	59	36	4
Art.....	100	76	21	3	0	0	0	100	70	26	4
Industrial arts.....	100	44	49	13	2	1	1	100	41	43	13
Business.....	100	38	48	9	3	1	1	100	44	49	5
Home economics.....	100	96	1	(?)	0	0	0	100	96	2	0
Vocational education ¹	100	96	1	1	(?)	0	0	100	96	1	1
Vocational agriculture.....	100	97	1	1	1	1	(?)	100	99	0	(?)
Physical education.....	100	45	53	2	(?)	0	0	100	46	52	2
Physical education and health.....	100	94	4	1	(?)	0	0	100	96	2	2
Health.....	100	73	26	1	0	0	0	100	72	27	1
Athletics.....	100	99	1	0	0	0	0	100	99	1	0
Driver education.....	100	93	7	0	0	0	0	100	95	5	0
All others.....	100	73	22	3	1	1	1	100	76	23	1

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5 percent.

³ Median falls between 2 intervals.

upper 15 percent ability level, by number of credits earned in subject matter
Continental United States, 1958

median intervals]

Percent of boys, by school enrollment—Continued

500 and over— Continued				200-499								1-199							
Credits earned— Continued				Credits earned								Credits earned							
2½-3	3½-4	Over 4	Total	0	¼-1	1½-2	2½-3	3½-4	Over 4	Total	0	¼-1	1½-2	2½-3	3½-4	Over 4			
13	16	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29			
4	70	27	100	(?)	0	0	8	78	13	100	0	0	1	9	81	9			
42	39	5	100	0	4	16	53	22	6	100	0	4	18	54	22	2			
26	54	7	100	1	8	17	21	50	4	100	0	12	19	48	15	5			
1	(?)	0	100	81	19	1	0	0	0	100	67	29	3	0	1	0			
27	45	6	100	5	6	21	23	43	3	100	6	11	28	41	12	1			
36	33	5	100	1	5	25	28	40	1	100	1	10	31	32	21	4			
0	0	0	100	27	71	2	0	0	0	100	27	71	2	0	0	0			
(?)	0	0	100	16	83	1	0	0	0	100	22	77	1	0	0	0			
4	(?)	0	100	18	24	57	1	0	0	100	25	34	42	0	0	0			
0	0	0	100	98	2	0	0	0	0	100	99	1	0	0	0	0			
21	11	3	100	53	8	32	4	2	1	100	68	23	9	1	0	0			
3	1	0	100	71	6	21	2	0	0	100	84	13	3	0	0	0			
6	1	0	100	85	4	7	1	0	0	100	91	6	3	0	0	0			
9	2	0	100	89	5	6	0	0	0	100	95	2	3	0	0	0			
1	(?)	0	100	99	1	0	0	0	0	100	100	0	0	0	0	0			
1	0	0	100	99	0	1	0	0	0	100	97	3	0	0	0	0			
(?)	0	0	100	62	29	8	1	0	0	100	59	32	9	0	0	0			
0	0	0	100	83	7	0	0	0	0	100	99	1	0	0	0	0			
2	1	1	100	46	33	16	3	2	0	100	63	23	6	3	0	0			
1	1	1	100	30	47	15	8	0	1	100	8	43	39	9	2	0			
0	0	0	100	99	(?)	1	0	0	0	100	97	0	3	0	0	0			
0	0	0	100	98	2	0	1	0	0	100	100	0	0	0	0	0			
(?)	(?)	0	100	93	2	1	2	1	1	100	81	4	4	4	5	3			
(?)	0	0	100	43	57	(?)	0	0	0	100	39	59	3	0	0	0			
(?)	0	0	100	87	12	1	0	0	0	100	96	4	0	0	0	0			
0	0	0	100	77	23	0	0	0	0	100	81	19	0	0	0	0			
0	0	0	100	99	1	0	0	0	0	100	99	1	0	0	0	0			
0	0	0	100	86	14	0	0	0	0	100	99	1	0	0	0	0			
0	(?)	(?)	100	71	17	3	3	3	3	100	88	12	0	0	0	0			
0			100	71	17	3	3	3	3	100	48	23	15	6	6	3			

* Excludes home economics and vocational agriculture.

NOTE.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 32.—Percentage distribution of high school graduate girls in the areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of girls, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	$\frac{1}{2}$ -1	1 $\frac{1}{2}$ -2	2 $\frac{1}{2}$ -3	3 $\frac{1}{2}$ -4	Over ⁴	Total ¹	0	$\frac{1}{2}$ -1	1 $\frac{1}{2}$ -2	
2	3	4	5	6	7	8	9	10	11	12		
ACADEMIC												
English.....	100	(?)	(?)	0	6	63	32	100	(?)	(?)	0	
Social studies.....	100	0	2	14	44	35	6	100	0	1	13	
Mathematics.....	100	2	15	32	33	18	1	100	2	13	31	
General mathematics.....	100	77	20	3	(?)	0	0	100	81	15	4	
College preparatory mathematics.....	100	8	17	32	29	14	1	100	8	14	30	
Science.....	100	2	25	42	22	10	1	100	1	27	41	
General science.....	100	40	53	1	(?)	0	0	100	45	53	(?)	
Biological science.....	100	18	79	2	0	0	0	100	19	79	3	
Physical science.....	100	47	38	14	1	(?)	0	100	46	41	13	
Miscellaneous.....	100	97	3	0	0	0	0	100	97	3	0	
Foreign language.....	100	25	9	33	14	14	7	100	15	7	34	
Latin.....	100	64	6	25	4	1	0	100	61	6	28	
French.....	100	72	4	14	7	3	0	100	68	3	16	
Spanish.....	100	73	3	16	6	2	0	100	67	3	19	
German.....	100	97	1	2	1	(?)	0	100	96	1	3	
All other foreign language.....	100	98	1	1	1	0	0	100	98	1	1	
NONACADEMIC												
Music.....	100	46	46	7	1	(?)	(?)	100	49	46	3	
Art.....	100	72	23	5	(?)	0	(?)	100	66	28	6	
Industrial arts.....	100	95	5	0	(?)	0	0	100	94	6	0	
Business.....	100	16	38	17	11	8	13	100	18	40	14	
Home economics.....	100	45	31	17	5	2	(?)	100	53	31	13	
Vocational education ³	100	98	1	(?)	(?)	(?)	(?)	100	96	1	(?)	
Vocational agriculture.....	100	100	0	0	0	0	0	100	100	0	0	
Physical education.....	100	46	53	1	0	0	0	100	44	55	1	
Physical education and health.....	100	94	5	1	0	0	0	100	95	3	2	
Health.....	100	76	23	2	0	0	0	100	73	25	2	
Athletics.....	100	100	0	0	0	0	0	100	100	0	0	
Driver education.....	100	94	7	0	0	0	0	100	95	5	0	
All others.....	100	78	21	1	(?)	(?)	0	100	79	20	1	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

³ Less than 0.5 percent.

upper 15 percent ability level, by number of credits earned in subject matter
Continental United States, 1958

median intervals]

Percent of girls, by school enrollment—Continued

500 and over— Continued		200-499										1-199						
		Credits earned										Credits earned						
2½	3	3½-4	Over 4	Total	0	¼-1	1½-2	2½-3	3½-4	Over 4	Total	0	¼-1	1½-2	2½-3	3½-4	Over 4	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
4	62	34	100	0	0	0	12	63	25	100	1	0	0	11	65	24		
43	37	7	100	0	3	18	45	30	4	100	0	4	19	45	27	3		
34	19	1	100	4	21	26	22	16	1	100	0	16	41	32	10	1		
(?)	0	0	100	74	25	1	0	0	0	100	52	47	2	0	0	0		
32	15	1	100	11	22	33	22	11	1	100	5	27	43	21	4	0		
22	8	1	100	4	19	43	20	14	(?)	100	0	17	43	26	14	1		
0	0	0	100	34	65	(?)	(?)	0	0	100	20	75	5	0	0	0		
0	0	0	100	18	79	3	0	0	0	100	15	84	1	0	0	0		
1	0	0	100	49	32	19	0	0	0	100	63	30	17	0	1	0		
0	0	0	100	99	1	0	0	0	0	100	97	3	0	0	0	0		
18	18	9	100	45	13	29	6	6	2	100	66	13	19	2	0	0		
5	1	0	100	67	8	24	2	0	0	100	83	8	9	1	0	0		
9	4	0	100	81	6	11	3	0	0	100	87	3	5	0	0	0		
9	3	0	100	88	3	8	1	0	0	100	90	5	6	0	0	0		
1	(?)	0	100	88	0	2	0	0	0	100	80	1	0	0	0	0		
1	0	0	100	99	1	0	0	0	0	100	100	0	0	0	0	0		
1	(?)	(?)	100	37	48	13	2	(?)	0	100	38	37	23	1	1	0		
(?)	0	(?)	100	87	11	2	0	0	0	100	89	1	0	0	0	0		
(?)	0	0	100	97	3	0	0	0	0	100	99	5	0	0	0	0		
8	6	14	100	11	25	23	18	11	13	100	6	25	23	19	13	3		
3	1	(?)	100	30	22	24	8	6	0	100	15	29	23	14	7	2		
(?)	(?)	(?)	100	99	0	(?)	-1	0	0	100	99	1	0	0	0	0		
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0		
0	0	0	100	84	46	(?)	0	0	0	100	48	50	2	0	0	0		
0	0	0	100	86	13	1	0	0	0	100	97	4	0	0	0	0		
0	0	0	100	81	18	(?)	0	0	0	100	86	11	3	0	0	0		
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0		
0	0	0	100	84	17	0	0	0	0	100	85	5	0	0	0	0		
0	0	0	100	78	20	2	1	(?)	0	100	71	24	0	3	2	0		

* Excludes home economics and vocational agriculture.
 Note.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 33.—Percentage distribution of high school graduates in the upper areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of graduates, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	1/2-1	1 1/2-2	2 1/2-3	3 1/2-4	Over ²	Total ¹	0	1/2-1	1 1/2-2	2 1/2-3
1	2	3	4	5	6	7	8	9	10	11	12	13
ACADEMIC												
English.....	100	(³)	(³)	(³)	6	66	27	100	(³)	(³)	(³)	(³)
Social studies.....	100	0	2	15	44	34	6	100	0	1	13	8
Mathematics.....	100	2	13	24	29	30	3	100	1	11	22	16
General mathematics.....	100	73	21	4	(³)	(³)	0	100	77	18	5	0
College preparatory mathematics.....	100	7	15	25	26	24	9	100	7	12	24	11
Science.....	100	1	18	33	28	18	2	100	1	19	37	31
General science.....	100	30	62	2	0	0	0	100	39	59	2	0
Biological science.....	100	20	77	3	(³)	0	0	100	22	75	3	0
Physical science.....	100	35	34	30	1	(³)	0	100	33	34	31	1
Miscellaneous.....	100	96	4	(³)	0	0	0	100	96	4	(³)	0
Foreign language.....	100	30	11	32	13	10	4	100	19	10	36	24
Latin.....	100	69	7	22	3	1	0	100	67	6	24	3
French.....	100	78	4	12	5	1	0	100	74	4	13	7
Spanish.....	100	73	5	16	5	1	0	100	67	6	19	7
German.....	100	96	1	2	1	(³)	0	100	95	1	3	1
All other foreign languages.....	100	96	(³)	1	1	0	0	100	96	(³)	1	0
NONACADEMIC												
Music.....	100	53	40	6	1	(³)	(³)	100	54	41	4	1
Art.....	100	76	20	4	(³)	0	(³)	100	69	26	5	0
Industrial arts.....	100	70	21	6	2	1	(³)	100	68	22	7	2
Business.....	100	25	41	14	8	5	8	100	29	43	10	1
Home economics.....	100	79	17	0	3	2	(³)	100	74	17	7	1
Vocational education ³	100	97	1	1	(³)	(³)	(³)	100	97	2	1	0
Vocational agriculture.....	100	96	(³)	(³)	1	(³)	(³)	100	100	(³)	(³)	0
Physical education.....	100	45	54	1	(³)	(³)	0	100	45	54	2	0
Physical education and health.....	100	93	5	2	(³)	0	0	100	94	4	2	0
Health.....	100	75	23	2	0	0	0	100	74	25	2	0
Athletics.....	100	100	(³)	0	0	0	0	100	100	(³)	0	0
Driver education.....	100	93	7	0	0	0	0	100	95	5	0	0
All others.....	100	75	21	2	1	1	1	100	77	21	1	0

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5 percent.

95 percent ability level, by number of credits earned in subject matter
Continental United States, 1958

median intervals]

Percent of graduates, by school enrollment—Continued																	
500 and over— Continued			200-499								1-199						
Credits earned— Continued			Credits earned								Credits earned						
2½-3	3½-4	Over 4	Total	0	½-1	1½-2	2½-3	3½-4	Over 4	Total	0	½-1	1½-2	2½-3	3½-4	Over 4	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
4	65	31	100	(?)	0	0	11	69	20	100	(?)	0	(?)	12	74	17	
44	36	6	100	0	3	19	46	28	4	100	0	3	20	47	26	5	
38	32	3	100	3	18	28	22	27	3	100	1	17	35	32	13	2	
(?)	(?)	0	100	73	25	1	(?)	(?)	0	100	66	38	2	0	1	0	
27	27	3	100	9	19	26	22	21	2	100	5	26	34	28	6	1	
29	18	2	100	2	16	35	23	24	(?)	100	(?)	14	41	30	14	2	
0	0	0	100	31	67	2	(?)	0	0	100	22	76	3	0	0	0	
(?)	0	0	100	17	62	2	0	0	0	100	17	62	2	0	0	0	
2	(?)	0	100	39	29	32	(?)	0	0	100	43	35	22	0	(?)	0	
0	0	0	100	68	2	0	0	0	0	100	68	2	0	0	0	0	
17	13	5	100	51	11	28	5	4	1	100	76	16	13	2	(?)	0	
3	1	0	100	76	8	21	1	(?)	0	100	85	9	6	1	0	0	
7	2	0	100	86	5	8	2	0	0	100	92	3	5	0	0	0	
7	2	0	100	88	4	8	(?)	0	0	100	93	4	3	0	0	0	
1	(?)	0	100	99	(?)	1	0	0	0	100	100	1	0	0	0	0	
1	0	0	100	98	(?)	1	0	0	0	100	99	1	0	0	0	0	
1	(?)	(?)	100	49	39	10	2	(?)	0	100	52	31	16	1	(?)	0	
(?)	0	(?)	100	66	9	1	0	0	0	100	66	2	0	0	0	0	
2	1	.1	100	73	16	7	3	2	0	100	86	15	3	1	(?)	(?)	
5	4	9	100	17	58	19	13	7	8	100	8	32	34	17	8	2	
2	1	(?)	100	62	16	14	5	4	0	100	53	14	18	10	5	1	
(?)	(?)	(?)	100	96	1	1	(?)	(?)	0	100	100	(?)	(?)	0	0	0	
(?)	(?)	0	100	87	1	(?)	1	1	1	100	91	1	2	2	3	2	
(?)	(?)	0	100	45	34	1	0	0	0	100	45	32	3	0	0	0	
(?)	0	0	100	87	12	1	0	0	0	100	96	3	0	0	0	0	
0	0	0	100	78	22	(?)	0	0	0	100	86	13	1	0	0	0	
0	0	0	100	100	(?)	0	0	0	0	100	100	(?)	0	0	0	0	
0	0	0	100	84	16	0	0	0	0	100	93	8	0	0	0	0	
(?)	(?)	(?)	100	73	18	3	2	2	2	100	62	24	6	3	3	2	

¹ Excludes home economics and vocational agriculture.

NOTE.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 34.—Percentage distribution of high school graduate boys in the areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of boys, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	½-1	1½-2	2½-3	3½-4	Over ⁴	Total ¹	0	½-1	1½-2	
1	2	3	4	5	6	7	8	9	10	11	12	
ACADEMIC												
English.....	100	(?)	0	(?)	6	71	23	100	0	0	0	
Social studies.....	100	0	2	15	45	34	5	100	0	1	13	
Mathematics.....	100	1	6	14	29	45	6	100	(?)	4	12	
General mathematics.....	100	74	21	4	(?)	(?)	0	100	76	18	5	
College preparatory mathematics.....	100	5	10	17	27	38	5	100	4	9	15	
Science.....	100	1	9	24	34	29	4	100	1	9	22	
General science.....	100	31	67	2	0	0	0	100	32	66	2	
Biological science.....	100	21	76	3	(?)	0	0	100	23	74	3	
Physical science.....	100	20	28	49	3	(?)	0	100	17	28	51	
Miscellaneous.....	100	95	5	(?)	0	0	0	100	94	6	(?)	
Foreign language.....	100	33	11	34	14	7	2	100	23	11	38	
Latin.....	100	72	6	20	2	(?)	0	100	76	5	21	
French.....	100	82	4	9	4	(?)	0	100	86	4	11	
Spanish.....	100	74	5	15	5	1	0	100	68	6	19	
German.....	100	95	1	3	1	(?)	0	100	94	1	4	
All other foreign languages.....	100	96	(?)	1	1	0	0	100	96	(?)	1	
NONACADEMIC												
Music.....	100	69	34	5	1	0	(?)	100	69	36	4	
Art.....	100	78	19	3	0	0	0	100	72	24	4	
Industrial arts.....	100	43	37	13	3	2	1	100	40	40	14	
Business.....	100	36	48	11	3	1	1	100	42	49	6	
Home economics.....	100	96	2	(?)	0	0	0	100	97	3	0	
Vocational education ⁴	100	97	2	1	(?)	(?)	0	100	96	2	1	
Vocational agriculture.....	100	96	1	1	1	1	1	100	99	(?)	(?)	
Physical education.....	100	42	55	2	(?)	(?)	0	100	43	54	2	
Physical education and health.....	100	93	5	2	(?)	0	0	100	94	4	2	
Health.....	100	76	23	1	0	0	0	100	74	24	1	
Athletics.....	100	99	1	0	0	0	0	100	99	1	0	
Driver education.....	100	93	7	0	0	0	0	100	95	6	0	
All others.....	100	72	21	3	1	1	1	100	76	21	2	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5 percent.

³ Median falls between 2 intervals.

upper 25 percent ability level, by number of credits earned in subject matter
Continental United States, 1958

median intervals]

Percent of boys, by school enrollment—Continued																	
500 and over—Continued			200-499								1-199						
Credits earned—Continued			Credits earned								Credits earned						
2 1/4-3	3 1/4-4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
4	69	26	100	(?)	0	0	10	75	15	100	0	0	1	10	78	11	
43	37	5	100	0	4	18	48	26	5	100	0	3	21	50	22	5	
29	48	6	100	2	11	20	20	43	5	100	0	14	22	42	19	3	
(?)	(?)	0	100	75	24	2	0	(?)	0	100	61	36	2	0	1	0	
26	42	5	100	8	10	20	23	35	4	100	6	17	26	41	10	1	
36	29	4	100	1	9	27	27	36	1	100	1	11	35	33	17	3	
0	0	0	100	26	71	2	0	0	0	100	24	75	1	0	0	0	
(?)	0	0	100	15	83	2	0	0	0	100	22	77	2	0	0	0	
3	(?)	0	100	26	24	50	1	0	0	100	29	30	33	0	0	0	
0	0	0	100	96	2	0	0	0	0	100	99	1	0	0	0	0	
18	9	2	100	54	10	29	4	2	1	100	72	18	9	1	0	0	
3	(?)	0	100	72	6	20	1	0	0	100	87	9	3	1	0	0	
5	1	0	100	87	6	6	1	0	0	100	92	4	4	0	0	0	
7	1	0	100	89	4	7	0	0	0	100	94	4	3	0	0	0	
1	(?)	0	100	99	1	0	0	0	0	100	100	0	0	0	0	0	
1	0	0	100	99	0	1	0	0	0	100	96	3	0	0	0	0	
(?)	0	(?)	100	81	29	8	2	0	0	100	83	27	10	0	0	0	
0	0	0	100	83	8	0	0	0	0	100	97	3	0	0	0	0	
3	2	(?)	100	45	32	14	5	3	0	100	62	27	8	3	1	1	
1	1	1	100	26	48	17	8	1	1	100	9	43	36	10	2	0	
0	0	0	100	99	1	1	0	0	0	100	97	2	2	0	0	0	
(?)	(?)	0	100	97	1	(?)	(?)	1	0	100	99	0	1	0	0	0	
1	(?)	0	100	93	1	1	2	2	2	100	80	2	3	4	6	5	
(?)	(?)	0	100	40	69	1	0	0	0	100	41	57	2	0	0	0	
(?)	0	0	100	86	12	1	0	0	0	100	97	4	0	0	0	0	
0	0	0	100	77	23	1	0	0	0	100	83	17	0	0	0	0	
0	0	0	100	99	1	0	0	0	0	100	99	1	0	0	0	0	
0	0	0	100	87	13	0	0	0	0	100	91	9	0	0	0	0	
(?)	1	1	100	68	19	4	4	3	3	100	51	23	13	4	5	4	

* Excludes home economics and vocational agriculture.

NOTE.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 35.—Percentage distribution of high school graduate girls in the areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of girls, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	$\frac{1}{4}$ -1	$1\frac{1}{4}$ -2	$2\frac{1}{4}$ -3	$3\frac{1}{4}$ -4	Over 4	Total ¹	0	$\frac{1}{4}$ -1	$1\frac{1}{4}$ -2	
2	3	4	5	6	7	8	9	10	11	12		
ACADEMIC												
English.....	100	(?)	(?)	(?)	6	62	31	100	(?)	(?)	(?)	
Social studies.....	100	0	2	15	44	34	6	100	0	1	13	
Mathematics.....	100	2	19	34	29	16	1	100	2	17	32	
General mathematics.....	100	73	22	3	(?)	0	0	100	77	18	4	
College preparatory mathematics.....	100	10	19	33	26	11	1	100	11	15	32	
Science.....	100	2	26	41	22	9	(?)	100	2	29	40	
General science.....	100	41	58	1	(?)	0	0	100	45	54	1	
Biological science.....	100	19	78	3	0	0	0	100	21	77	3	
Physical science.....	100	49	38	13	(?)	(?)	0	100	47	41	12	
Miscellaneous.....	100	97	3	0	0	0	0	100	97	3	0	
Foreign language.....	100	27	11	31	13	13	6	100	16	10	34	
Latin.....	100	66	7	23	3	1	0	100	63	7	26	
French.....	100	74	4	14	7	2	0	100	68	4	16	
Spanish.....	100	72	5	16	6	1	0	100	66	5	20	
German.....	100	97	1	2	1	(?)	0	100	96	1	2	
All other foreign language.....	100	99	1	1	(?)	0	0	100	98	1	1	
NONACADEMIC												
Music.....	100	46	45	7	1	(?)	(?)	100	49	46	4	
Art.....	100	74	21	4	(?)	0	(?)	100	67	27	6	
Industrial arts.....	100	95	5	(?)	(?)	0	0	100	94	6	0	
Business.....	100	15	34	16	12	8	14	100	18	38	13	
Home economics.....	100	44	30	17	6	3	1	100	51	31	13	
Vocational education ²	100	96	1	(?)	(?)	(?)	(?)	100	96	1	(?)	
Vocational agriculture.....	100	100	0	0	0	0	0	100	100	0	0	
Physical education.....	100	47	52	1	(?)	0	0	100	46	53	1	
Physical education and health.....	100	93	5	2	(?)	(?)	0	100	95	4	2	
Health.....	100	75	23	2	0	0	0	100	73	25	2	
Athletics.....	100	100	0	0	0	0	0	100	100	0	0	
Driver education.....	100	93	7	0	0	0	0	100	96	4	0	
All others.....	100	77	21	1	1	(?)	0	100	78	21	1	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5 percent.

upper 25 percent ability level, by number of credits earned in subject matter
Continental United States, 1958

median intervals]

Percent of girls, by school enrollment²—Continued

500 and over— Continued			200-499								1-199							
Credits earned— Continued			Credits earned								Credits earned							
2¼-3	3¼-4	Over 4	Total	0	¼-1	1¼-2	2¼-3	3¼-4	Over 4	Total	0	¼-1	1¼-2	2¼-3	3¼-4	Over 4		
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		
4	.81	35	100	0	0	0	13	64	24	100	1	0	0	13	66	21		
44	35	7	100	0	3	19	45	30	4	100	0	4	19	44	30	5		
31	17	1	100	3	25	35	23	13	1	100	1	19	47	24	8	2		
(²)	0	0	100	73	27	1	(²)	0	0	100	58	40	2	0	0	0		
29	13	1	100	11	27	31	22	8	1	100	5	33	41	17	3	1		
22	7	(²)	100	3	22	43	20	12	(²)	100	0	16	46	27	11	1		
0	0	0	100	35	63	1	(²)	0	0	100	20	76	4	0	0	0		
0	0	0	100	19	86	2	0	0	0	100	12	86	2	0	0	0		
(²)	0	0	100	51	33	16	0	0	0	100	55	31	13	0	1	0		
0	0	0	100	98	2	0	0	0	0	100	98	2	0	0	0	0		
17	17	7	100	49	12	27	5	5	2	100	68	14	16	2	(²)	0		
4	1	0	100	67	9	22	1	(²)	0	100	82	9	8	1	0	0		
9	3	0	100	85	4	10	2	0	0	100	92	3	5	0	0	0		
8	2	0	100	87	4	8	1	0	0	100	92	4	4	0	0	0		
1	(²)	0	100	99	0	1	0	0	0	100	99	1	0	0	0	0		
1	0	0	100	100	(²)	0	0	0	0	100	100	0	0	0	0	0		
1	(²)	(²)	100	39	48	12	2	1	0	100	42	35	22	2	1	0		
1	0	(²)	100	98	11	1	0	0	0	100	99	1	0	0	0	0		
(²)	0	0	100	97	3	(²)	0	0	0	100	95	5	0	0	0	0		
9	6	16	100	9	26	22	17	13	14	100	6	23	32	22	13	4		
3	1	1	100	30	29	25	10	7	0	100	15	24	32	19	9	2		
1	(²)	(²)	100	99	0	1	(²)	0	0	100	99	1	0	0	0	0		
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0		
(²)	0	0	100	51	49	(²)	0	0	0	100	48	48	4	0	0	0		
(²)	0	0	100	86	13	2	0	0	0	100	96	3	0	0	1	0		
0	0	0	100	79	21	(²)	0	0	0	100	89	9	2	0	0	0		
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0		
0	0	0	100	81	19	0	0	0	0	100	94	6	0	0	0	0		
(²)	0	0	100	78	18	3	1	(²)	0	100	71	24	1	3	1	0		

² Excludes home economics and vocational agriculture.

Note.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 36.—Percentage distribution of high school graduates in the middle and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of graduates, by school enrollment										
	All schools							500 and over			
	Credits earned							Credits earned			
	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	Total	0	1/4-1	1 1/4-2
1	2	3	4	5	6	7	8	9	10	11	12
ACADEMIC											
English.....	100	0	0	(?)	10	66	24	100	0	0	(?)
Social studies.....	100	0	2	15	49	34	9	100	0	2	12
Mathematics.....	100	3	31	24	20	12	1	100	3	30	23
General mathematics.....	100	54	37	8	1	(?)	0	100	53	36	10
College preparatory mathematics.....	100	25	27	24	15	8	1	100	28	24	23
Science.....	100	3	28	29	20	9	(?)	100	3	30	28
General science.....	100	32	65	2	(?)	0	0	100	35	63	2
Biological science.....	100	23	74	3	0	0	0	100	24	73	3
Physical science.....	100	61	27	12	(?)	0	0	100	60	27	13
Miscellaneous.....	100	97	3	(?)	0	0	0	100	96	4	(?)
Foreign language.....	100	58	13	20	5	3	1	100	56	14	25
Latin.....	100	85	5	9	(?)	(?)	0	100	84	5	11
French.....	100	89	4	6	1	(?)	0	100	87	4	7
Spanish.....	100	80	7	11	2	(?)	0	100	75	8	15
German.....	100	99	1	1	(?)	(?)	0	100	96	1	1
All other foreign language.....	100	99	(?)	(?)	(?)	0	0	100	99	(?)	1
NONACADEMIC											
Music.....	100	55	37	4	1	(?)	0	100	58	37	4
Art.....	100	77	20	3	(?)	0	0	100	71	25	4
Industrial arts.....	100	66	17	9	4	2	2	100	62	19	9
Business.....	100	16	32	19	12	9	13	100	19	34	15
Home economics.....	100	59	16	13	8	3	1	100	61	18	12
Vocational education ¹	100	95	2	2	(?)	1	(?)	100	93	3	2
Vocational agriculture.....	100	96	1	(?)	1	1	(?)	100	99	(?)	(?)
Physical education.....	100	38	60	1	(?)	0	0	100	35	63	2
Physical education and health.....	100	93	6	2	(?)	0	0	100	93	5	2
Health.....	100	77	22	1	0	0	0	100	75	23	2
Athletics.....	100	99	1	0	0	0	0	100	99	1	0
Driver education.....	100	93	7	0	0	0	0	100	94	7	0
All others.....	100	79	23	3	1	2	1	100	73	22	3

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5 percent.

³ Median falls between 2 intervals.

50 percent ability level, by number of credits earned in subject matter areas,
Continental United States, 1958

median intervals]

Percent of graduates, by school enrollment—Continued																	
500 and over—Continued			200-499								1-199						
Credits earned—Continued			Credits earned								Credits earned						
2¼-3	3¼-4	Over 4	Total	0	¼-1	1½-2	2¼-3	3¼-4	Over 4	Total	0	¼-1	1½-2	2¼-3	3¼-4	Over 4	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
8	65	27	100	0	0	(?)	13	67	20	100	0	0	0	14	71	15	
28	38	10	100	0	2	21	43	27	8	100	0	2	23	43	26	6	
21	13	2	100	3	32	37	17	11	1	100	2	35	34	20	8	1	
1	(?)	0	100	66	40	4	(?)	0	0	100	56	38	3	2	1	0	
16	9	1	100	19	33	27	14	6	(?)	100	21	37	25	13	4	1	
20	9	(?)	100	3	28	40	20	9	1	100	2	21	47	24	6	0	
(?)	0	0	100	29	66	4	(?)	(?)	0	100	24	74	3	(?)	0	0	
0	0	0	100	22	77	1	(?)	0	0	100	22	77	1	0	0	0	
(?)	0	0	100	62	25	13	(?)	0	0	100	60	31	9	0	0	0	
0	0	0	100	60	1	0	0	0	0	100	67	3	0	0	0	0	
6	4	1	100	73	13	12	2	1	0	100	66	9	4	1	0	0	
(?)	(?)	0	100	66	7	7	(?)	0	0	100	64	4	2	0	0	0	
1	(?)	0	100	63	3	4	(?)	0	0	100	64	3	2	(?)	0	0	
2	(?)	0	100	61	5	4	(?)	0	0	100	66	3	1	0	0	0	
(?)	(?)	0	100	60	0	0	0	0	0	100	60	(?)	0	0	0	0	
(?)	(?)	0	100	60	(?)	0	0	0	0	100	60	(?)	0	0	0	0	
1	(?)	0	100	55	39	5	1	(?)	(?)	100	62	32	5	1	(?)	0	
(?)	(?)	0	100	66	11	1	0	0	0	100	66	4	0	0	0	0	
4	2	3	100	74	11	10	4	1	(?)	100	73	14	7	4	1	1	
10	8	15	100	10	30	24	16	11	10	100	7	22	23	22	10	7	
6	2	1	100	55	12	15	13	4	1	100	53	9	20	12	7	1	
1	1	1	100	66	1	1	(?)	0	0	100	60	0	1	0	0	0	
(?)	(?)	0	100	65	1	1	2	1	1	100	61	2	2	1	3	2	
(?)	0	0	100	43	57	(?)	0	0	0	100	47	51	3	(?)	0	0	
(?)	0	0	100	63	7	1	0	0	0	100	64	6	0	0	0	0	
0	0	0	100	76	23	(?)	(?)	0	0	100	67	12	(?)	0	0	0	
0	0	0	100	60	1	0	0	0	0	100	60	(?)	0	0	0	0	
0	0	0	100	60	11	0	0	0	0	100	65	6	0	0	0	0	
1	1	1	100	65	23	4	2	5	2	100	66	26	6	4	5	2	

* Excludes home economics and vocational agriculture.

NOTE.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 37.—Percentage distribution of high school graduate boys in the matter areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of boys, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	$\frac{1}{2}$ -1	1 $\frac{1}{2}$ -2	2 $\frac{1}{2}$ -3	3 $\frac{1}{2}$ -4	Over ⁴	Total ¹	0	$\frac{1}{2}$ -1	1 $\frac{1}{2}$ -2	
2	3	4	5	6	7	8	9	10	11	12		
ACADEMIC												
English.....	100	0	0	(?)	11	69	20	100	0	0	(?)	
Social studies.....	100	0	2	14	38	36	10	100	0	2	12	
Mathematics.....	100	2	21	31	25	20	2	100	2	19	38	
General mathematics.....	100	53	37	9	1	(?)	0	100	51	35	12	
College preparatory mathematics.....	100	20	22	23	20	14	1	100	22	18	23	
Science.....	100	2	21	34	28	15	1	100	2	23	32	
General science.....	100	28	79	3	1	0	0	100	28	69	2	
Biological science.....	100	24	75	2	(?)	0	0	100	24	74	2	
Physical science.....	100	47	32	21	(?)	0	0	100	46	31	23	
Miscellaneous.....	100	96	4	(?)	0	0	0	100	95	5	(?)	
Foreign language.....	100	64	10	20	4	2	(?)	100	55	11	25	
Latin.....	100	68	4	8	(?)	(?)	0	100	66	4	9	
French.....	100	92	2	4	1	(?)	0	100	90	3	6	
Spanish.....	100	84	5	10	2	(?)	0	100	79	6	13	
German.....	100	96	1	1	(?)	(?)	0	100	96	1	1	
All other foreign language.....	100	99	(?)	1	(?)	0	0	100	98	(?)	1	
NONACADEMIC												
Music.....	100	68	28	4	(?)	(?)	0	100	67	28	4	
Art.....	100	79	18	2	(?)	0	0	100	74	23	3	
Industrial arts.....	100	36	29	19	8	4	4	100	30	33	19	
Business.....	100	27	43	18	8	3	2	100	32	43	12	
Home economics.....	100	96	4	1	0	(?)	0	100	96	3	1	
Vocational education ²	100	94	2	2	1	1	1	100	92	3	2	
Vocational agriculture.....	100	95	1	1	1	1	1	100	99	(?)	(?)	
Physical education.....	100	36	63	2	(?)	0	0	100	33	95	2	
Physical education and health.....	100	93	6	1	(?)	0	0	100	92	6	1	
Health.....	100	77	22	1	0	0	0	100	75	23	2	
Athletics.....	100	99	1	0	0	0	0	100	99	1	0	
Driver education.....	100	94	6	0	0	0	0	100	95	5	0	
All others.....	100	65	22	4	2	4	3	100	79	23	3	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5.

³ Median falls between 2 intervals.

**middle 50 percent ability level, by number of credits earned in subject
Continental United States, 1958**

median intervals]

Percent of boys, by school enrollment—Continued																	
500 and over— Continued			200-499								1-199						
Credits earned— Continued			Credits earned								Credits earned						
2½-3	3¼-4	Over 4	Total ¹	0	¼-1	1½-2	2¼-3	3¼-4	Over 4	Total ¹	0	¼-1	1½-2	2¼-3	3¼-4	Over 4	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
9	69	22	100	0	0	(2)	13	69	17	100	0	0	0	16	73	12	
35	41	11	100	0	1	16	46	27	9	100	0	2	22	44	25	8	
25	22	3	100	2	24	33	22	19	1	100	1	26	34	25	13	2	
1	(2)	0	100	53	43	4	1	0	0	100	53	41	3	1	2	0	
21	16	1	100	17	27	25	20	10	1	100	16	33	23	17	7	2	
27	16	(2)	100	2	19	36	29	14	1	100	2	16	44	29	10	0	
1	0	0	100	23	71	6	0	0	0	100	21	75	3	1	0	0	
0	0	0	100	21	77	2	(2)	0	0	100	23	75	2	0	0	0	
(2)	0	0	100	49	32	19	(2)	0	0	100	48	38	15	0	0	0	
0	0	0	100	99	1	0	0	0	0	100	97	3	0	0	0	0	
6	2	1	100	79	9	10	1	1	0	100	99	8	2	(2)	0	0	
(2)	(2)	0	100	89	3	7	(2)	0	0	100	95	4	1	0	0	0	
2	(2)	0	100	95	3	3	0	0	0	100	97	1	1	(2)	0	0	
2	(2)	0	100	92	4	4	0	0	0	100	96	2	0	0	0	0	
(2)	(2)	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
(2)	0	0	100	100	(2)	0	0	0	0	100	99	1	0	0	0	0	
(2)	(2)	0	100	67	29	3	1	(2)	0	100	73	24	3	(2)	0	0	
(2)	0	0	100	87	12	1	0	0	0	100	96	2	0	0	0	0	
9	5	6	100	49	21	21	7	2	(2)	100	59	24	14	7	2	2	
6	3	2	100	17	45	27	8	3	1	100	11	33	37	15	3	1	
0	0	0	100	95	4	2	0	0	0	100	93	5	2	0	1	0	
1	1	1	100	96	2	2	1	0	0	100	100	0	(2)	0	0	0	
(2)	(2)	0	100	89	2	1	4	2	2	100	83	3	4	2	5	3	
(2)	0	0	100	42	58	(2)	0	0	0	100	47	49	4	1	0	0	
(2)	0	0	100	93	7	1	0	0	0	100	95	5	0	0	0	0	
0	0	0	100	78	22	(2)	(2)	0	0	100	84	16	0	0	0	0	
0	0	0	100	99	2	0	0	0	0	100	100	1	0	0	0	0	
0	0	0	100	92	8	0	0	0	0	100	97	4	0	0	0	0	
1	2	2	100	55	21	5	4	9	5	100	59	29	8	8	10	4	

¹ Excludes home economics and vocational agriculture.

NOTE.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 38.—Percentage distribution of high school graduate girls in the matter areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of girls, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3
1	2	3	4	5	6	7	8	9	10	11	12	
ACADEMIC												
English.....	100	0	0	1	9	63	29	100	0	0	1	
Social studies.....	100	0	2	17	41	33	8	100	0	2	13	
Mathematics.....	100	5	40	33	15	4	(?)	100	5	40	35	
General mathematics.....	100	56	36	7	1	(?)	0	100	53	36	9	
College preparatory mathematics.....	100	30	32	26	10	2	(?)	100	33	29	25	
Science.....	100	4	35	44	13	4	(?)	100	5	36	43	
General science.....	100	38	60	2	(?)	0	0	100	40	59	2	
Biological science.....	100	23	74	3	0	0	0	100	23	72	5	
Physical science.....	100	74	22	4	0	0	0	100	73	23	4	
Miscellaneous.....	100	98	2	0	0	0	0	100	98	2	0	
Foreign language.....	100	53	15	21	5	5	1	100	45	16	25	
Latin.....	100	83	6	10	(?)	(?)	0	100	81	6	12	
French.....	100	67	5	7	1	(?)	0	100	84	5	9	
Spanish.....	100	77	9	12	2	(?)	0	100	71	10	16	
German.....	100	99	(?)	1	(?)	(?)	0	100	99	(?)	1	
All other foreign language.....	100	99	(?)	(?)	(?)	(?)	0	100	99	1	(?)	
NONACADEMIC												
Music.....	100	49	45	5	1	(?)	0	100	59	46	3	
Art.....	100	76	21	3	(?)	(?)	0	100	69	26	5	
Industrial arts.....	100	93	6	(?)	(?)	(?)	0	100	91	8	(?)	
Business.....	100	5	22	19	16	15	24	100	6	25	17	
Home economics.....	100	26	37	25	15	0	2	100	30	31	22	
Vocational education ¹	100	95	2	2	(?)	(?)	(?)	100	94	3	2	
Vocational agriculture.....	100	100	(?)	0	0	0	0	100	100	0	0	
Physical education.....	100	40	59	1	(?)	0	0	100	37	61	1	
Physical education and health.....	100	93	5	2	(?)	0	0	100	93	4	3	
Health.....	100	77	22	1	0	0	0	100	75	23	2	
Athletics.....	100	100	(?)	0	0	0	0	100	100	(?)	0	
Driver education.....	100	91	9	0	0	0	0	100	93	8	0	
All others.....	100	74	23	2	(?)	(?)	0	100	76	22	2	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5.

³ Median falls between 2 intervals.

middle 50 percent ability level, by number of credits earned in subject
Continental United States, 1958

median intervals]

Percent of girls, by school enrollment—Continued																
500 and over— Continued			200-499								1-199					
Credits earned— Continued			Credits earned								Credits earned					
2½-3	3½-4	Over 4	Total	0	¼-1	1½-2	2½-3	3½-4	Over 4	Total	0	¼-1	1½-2	2½-3	3½-4	Over 4
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
7	61	31	100	0	0	(?)	13	65	22	100	0	0	0	12	60	19
42	35	8	100	0	2	26	39	28	6	100	0	2	25	43	27	4
16	4	(?)	100	4	38	49	13	4	(?)	100	4	45	34	15	3	0
11	0	0	100	59	37	3	(?)	0	0	100	60	35	3	2	1	0
11	2	(?)	100	21	39	29	9	2	0	100	25	41	25	8	1	0
13	3	(?)	100	4	36	44	12	5	1	100	3	27	49	19	2	0
0	0	0	100	35	61	3	(?)	(?)	0	100	26	72	3	0	0	0
0	0	0	100	22	76	1	0	0	0	100	20	69	0	0	0	0
0	0	0	100	75	19	6	0	0	0	100	72	25	4	0	0	0
0	0	0	100	99	1	0	0	0	0	100	97	3	0	0	0	0
6	6	2	100	67	16	13	3	1	0	100	52	11	7	1	0	0
1	(?)	0	100	83	10	7	(?)	0	0	100	82	5	3	0	0	0
1	1	0	100	91	4	5	(?)	0	0	100	83	4	2	0	0	0
2	(?)	0	100	89	6	5	1	0	0	100	95	4	2	0	0	0
(?)	(?)	0	100	100	0	0	0	0	0	100	99	1	0	0	0	0
1	(?)	0	100	100	(?)	0	0	0	0	100	100	(?)	0	0	0	0
1	(?)	0	100	44	47	7	1	0	(?)	100	51	40	8	2	(?)	0
1	(?)	0	100	89	11	1	0	0	0	100	94	6	0	0	0	0
0	(?)	0	100	97	2	1	0	(?)	0	100	96	3	1	1	0	0
12	13	27	100	4	16	21	23	18	18	100	2	11	28	28	18	14
11	4	2	100	18	20	27	25	8	3	100	11	13	33	24	12	2
(?)	1	1	100	99	1	(?)	0	0	0	110	100	0	1	0	0	0
0	0	0	100	100	0	0	0	(?)	0	100	100	1	0	0	0	0
(?)	0	0	100	44	58	(?)	0	0	0	100	47	26	1	0	0	0
(?)	0	0	100	93	6	1	0	0	0	100	94	6	0	0	0	0
0	0	0	100	78	25	(?)	0	0	0	100	91	9	1	0	0	0
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0
0	0	0	100	87	13	0	0	0	0	100	83	8	0	0	0	0
(?)	(?)	0	100	74	24	2	0	(?)	0	100	66	31	3	0	0	0

* Excludes home economics and vocational agriculture.

Note.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 39.—Percentage distribution of high school graduates in the lower areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of graduates, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total	0	½-1	1½-2	2½-3	3½-4	Over 4	Total	0	½-1	1½-2	
1	2	3	4	5	6	7	8	9	10	11	12	
ACADEMIC												
English.....	100	0	0	(?)	12	63	23	100	0	0	(?)	
Social studies.....	100	(?)	3	17	34	36	11	100	0	2	13	
Mathematics.....	100	5	39	38	14	6	(?)	100	5	39	37	
General mathematics.....	100	35	47	17	1	(?)	0	100	29	45	24	
College preparatory mathematics.....	100	44	30	17	5	3	0	100	53	26	15	
Science.....	100	3	36	41	15	4	(?)	100	2	38	49	
General science.....	100	33	63	4	(?)	0	0	100	32	64	4	
Biological science.....	100	27	70	3	0	0	0	100	29	64	4	
Physical science.....	100	73	20	5	(?)	0	0	100	73	19	6	
Miscellaneous.....	100	97	3	0	0	0	0	100	97	3	0	
Foreign language.....	100	77	11	11	1	(?)	(?)	100	75	12	12	
Latin.....	100	93	3	4	(?)	0	0	100	93	2	3	
French.....	100	95	3	2	(?)	0	0	100	95	2	3	
Spanish.....	100	89	7	4	1	0	0	100	86	8	5	
German.....	100	90	(?)	1	(?)	0	0	100	99	(?)	1	
All other foreign languages.....	100	99	(?)	(?)	(?)	0	0	100	99	(?)	1	
NONACADEMIC												
Music.....	100	61	36	3	(?)	0	0	100	58	39	3	
Art.....	100	77	20	2	(?)	(?)	0	100	69	27	4	
Industrial arts.....	100	61	17	11	5	3	4	100	63	20	12	
Business.....	100	16	28	21	15	9	13	100	20	26	17	
Home economics.....	100	54	14	12	12	7	2	100	54	17	12	
Vocational education ¹	100	93	4	1	1	1	1	100	90	6	1	
Vocational agriculture.....	100	97	(?)	1	1	1	1	100	99	0	(?)	
Physical education.....	100	37	61	2	0	(?)	0	100	32	66	2	
Physical education and health.....	100	94	4	2	(?)	(?)	0	100	93	3	3	
Health.....	100	78	21	2	0	0	0	100	77	21	2	
Athletics.....	100	100	(?)	0	0	0	0	100	100	1	0	
Driver education.....	100	93	7	0	0	0	0	100	93	7	0	
All others.....	100	64	22	3	2	4	2	100	71	23	3	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A

² Less than 0.5 percent.

25 percent ability level, by number of credits earned in subject matter
Continental United States, 1958

median intervals]

Percent of graduates, by school enrollment—Continued																	
500 and over—Continued			200-499								1-199						
Credits earned—Continued			Credits earned								Credits earned						
2½-3	3¼-4	Over 4	Total	0	¼-1	1½-2	2¼-3	3¼-4	Over 4	Total	0	¼-1	1½-2	2¼-3	3¼-4	Over 4	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
12	63	25	100	0	0	(?)	11	70	19	100	0	0	0	20	63	17	
34	39	12	100	(?)	6	18	36	31	9	100	0	1	37	31	28	3	
13	6	1	100	4	41	34	15	6	0	100	3	38	42	14	3	0	
2	0	0	100	43	31	6	0	(?)	0	100	53	44	4	0	0	0	
4	3	0	100	33	37	18	9	3	0	100	21	43	29	5	2	0	
15	4	1	100	6	32	42	14	5	1	100	3	34	47	14	2	0	
(?)	0	0	100	35	61	4	(?)	0	0	100	32	66	2	0	0	0	
0	0	0	100	22	78	3	0	0	0	100	26	74	0	0	0	0	
(?)	0	0	100	77	17	6	0	0	0	100	70	29	1	0	0	0	
0	0	0	100	97	3	0	0	0	0	100	95	5	0	0	0	0	
1	(?)	(?)	100	60	8	9	2	1	0	100	66	10	7	0	0	0	
(?)	0	0	100	88	3	9	0	0	0	100	93	6	1	0	0	0	
(?)	0	0	100	95	4	1	0	0	0	100	94	4	2	0	0	0	
1	0	0	100	94	5	2	0	0	0	100	95	1	4	0	0	0	
(?)	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
(?)	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
(?)	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
(?)	0	0	100	68	29	3	0	0	0	100	63	32	5	0	0	0	
1	(?)	0	100	90	9	1	0	0	0	100	95	5	0	0	0	0	
6	4	6	100	74	12	8	3	2	2	100	78	11	7	3	1	0	
14	7	17	100	9	37	25	15	10	5	100	6	18	35	23	13	6	
11	5	2	100	55	10	10	15	9	1	100	53	9	16	13	9	1	
1	1	1	100	96	1	1	1	1	1	100	99	1	0	1	0	0	
0	(?)	0	100	94	0	1	2	1	2	100	92	1	0	2	1	4	
0	(?)	0	100	47	52	1	0	0	0	100	44	54	2	0	0	0	
(?)	0	0	100	93	6	2	0	0	0	100	90	6	0	0	3	0	
0	0	0	100	78	23	0	0	0	0	100	84	14	0	0	0	0	
0	0	0	100	100	(?)	0	0	0	0	100	100	0	0	0	0	0	
0	0	0	100	93	7	0	0	0	0	100	94	14	0	0	0	0	
1	1	2	100	67	19	3	2	7	3	100	56	20	3	5	11	5	

¹ Excludes home economics and vocational agriculture.

NOTE.—All usable transcripts furnished in information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 40.—Percentage distribution of high school graduate boys in the matter areas, and by school enrollment:

[Boldface type indicates

Subject matter areas	Percent of boys, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	$\frac{1}{2}$ -1	1 $\frac{1}{2}$ -2	2 $\frac{1}{2}$ -3	3 $\frac{1}{2}$ -4	Over 4	Total	0	$\frac{1}{2}$ -1	1 $\frac{1}{2}$ -2	
1	2	3	4	5	6	7	8	9	10	11	12	
ACADEMIC												
English.....	100	0	0	(?)	13	64	22	100	0	0	1	
Social studies.....	100	(?)	2	19	33	35	10	100	0	1	16	
Mathematics.....	100	2	27	49	20	11	(?)	100	2	23	42	
General mathematics.....	100	29	48	21	2	(?)	0	100	22	44	30	
College preparatory mathematics.....	100	39	27	20	8	7	0	100	45	24	18	
Science.....	100	3	30	49	19	7	1	100	3	31	39	
General science.....	100	28	64	4	1	0	0	100	26	69	4	
Biological science.....	100	27	79	3	0	0	0	100	30	67	3	
Physical science.....	100	67	25	9	(?)	0	0	100	67	23	9	
Miscellaneous.....	100	85	5	0	0	0	0	100	85	5	0	
Foreign language.....	100	82	8	9	1	(?)	(?)	100	86	9	10	
Latin.....	100	84	2	4	0	0	0	100	86	1	3	
French.....	100	86	2	1	(?)	0	0	100	86	2	2	
Spanish.....	100	87	5	2	(?)	0	0	100	87	5	3	
German.....	100	89	(?)	1	(?)	0	0	100	86	(?)	1	
All other foreign language.....	100	89	0	1	(?)	0	0	100	83	0	1	
NONACADEMIC												
Music.....	100	72	27	1	0	0	0	100	79	30	0	
Art.....	100	69	18	2	1	(?)	0	100	71	24	3	
Industrial arts.....	100	30	34	22	9	7	8	100	15	27	26	
Business.....	100	29	39	18	10	2	2	100	38	26	12	
Home economics.....	100	84	5	1	(?)	0	0	100	83	7	1	
Vocational education ²	100	89	6	2	1	1	1	100	86	9	2	
Vocational agriculture.....	100	84	(?)	1	2	1	2	100	89	0	1	
Physical education.....	100	35	61	3	0	1	0	100	30	64	4	
Physical education and health.....	100	85	4	1	0	(?)	0	100	86	4	1	
Health.....	100	82	17	1	0	0	0	100	81	17	2	
Athletics.....	100	99	1	0	0	0	0	100	99	1	0	
Driver education.....	100	82	8	0	0	0	0	100	83	7	0	
All others.....	100	66	20	5	3	8	5	100	65	23	6	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5 percent.

lower 25 percent ability level, by number of credits earned in subject Continental United States, 1958

median intervals]

Percent of boys, by school enrollment—Continued

500 and over—Continued			200-499								1-199						
Credits earned—Continued			Credits earned								Credits earned						
2 1/4	3 3/4	4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4	Total	0	1/4-1	1 1/4-2	2 1/4-3	3 1/4-4	Over 4
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
13	64	23	100	0	0	0	13	64	19	100	0	0	0	19	60	21	
32	39	12	100	(1)	0	20	35	20	10	100	0	2	34	29	27	4	
30	12	1	100	3	31	32	21	10	0	100	0	32	47	16	6	0	
3	0	0	100	37	54	7	0	(9)	0	100	0	47	49	5	0	0	
6	7	0	100	33	28	19	12	7	0	100	16	43	31	6	4	0	
20	7	1	100	6	26	39	17	10	2	100	2	34	46	20	4	0	
1	0	0	100	31	64	5	0	0	0	100	23	64	4	0	0	0	
0	0	0	100	19	77	5	0	0	0	100	34	67	0	0	0	0	
0	0	0	100	69	21	10	0	0	0	100	54	40	2	0	0	0	
0	0	0	100	96	4	0	0	0	0	100	94	6	0	0	0	0	
1	0	(2)	100	84	6	8	2	(3)	0	100	87	7	5	0	0	0	
0	0	0	100	81	1	8	0	0	0	100	87	4	0	0	0	0	
0	0	0	100	78	3	1	0	0	0	100	85	2	0	0	0	0	
1	0	0	100	94	5	1	0	0	0	100	93	2	5	0	0	0	
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
1	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
0	0	0	100	78	20	2	0	0	0	100	71	26	3	0	0	0	
1	1	0	100	84	6	1	0	0	0	100	92	8	0	0	0	0	
12	8	12	100	49	21	17	6	5	3	100	63	14	13	5	2	0	
11	1	2	100	18	49	24	5	3	1	100	7	29	39	17	6	2	
0	0	0	100	99	0	0	1	0	0	100	91	7	2	0	0	0	
1	1	1	100	92	2	1	2	1	1	100	99	1	0	0	0	0	
0	1	0	100	87	0	3	4	3	4	100	87	2	0	4	1	6	
0	1	0	100	40	58	1	0	0	0	100	40	52	2	0	0	0	
0	0	0	100	96	3	2	0	0	0	100	90	8	0	0	2	0	
0	0	0	100	82	19	0	0	0	0	100	84	16	0	0	0	0	
0	0	0	100	100	(2)	0	0	0	0	100	100	0	0	0	0	0	
0	0	0	100	83	7	0	0	0	0	100	85	16	0	0	0	0	
1	2	4	100	58	12	6	4	15	6	100	34	22	4	10	21	9	

¹ Excludes home economics and vocational agriculture.

NOTE.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Table 41.—Percentage distribution of high school graduate girls in the matter areas, and by school enrollment:

[**Boldface type indicates**

Subject matter areas	Percent of girls, by school enrollment											
	All schools							500 and over				
	Credits earned							Credits earned				
	Total ¹	0	¼-1	1¼-2	2¼-3	3¼-4	Over 4	Total ¹	0	¼-1	1¼-2	
1	2	3	4	5	6	7	8	9	10	11	12	
ACADEMIC												
English.....	100	0	0	(²)	11	65	23	100	0	0	0	
Social studies.....	100	0	4	14	35	37	11	100	0	3	10	
Mathematics.....	100	7	59	33	9	1	(²)	100	8	51	32	
General mathematics.....	100	40	46	14	1	0	0	100	34	46	19	
College preparatory mathematics.....	100	49	33	15	3	0	0	100	59	27	12	
Science.....	100	4	42	43	11	2	0	100	2	45	41	
General science.....	100	37	59	4	(²)	0	0	100	37	59	4	
Biological science.....	100	26	71	3	0	0	0	100	28	67	4	
Physical science.....	100	53	15	2	0	0	0	100	52	16	3	
Miscellaneous.....	100	99	2	0	0	0	0	100	99	1	0	
Foreign language.....	100	72	13	13	2	1	(²)	100	70	14	14	
Latin.....	100	92	3	5	(²)	0	0	100	95	2	3	
French.....	100	93	3	3	0	0	0	100	94	2	4	
Spanish.....	100	86	8	6	1	0	0	100	81	10	7	
German.....	100	100	0	(²)	0	0	0	100	100	0	(²)	
All other foreign language.....	190	99	1	0	0	0	0	100	99	1	0	
NONACADEMIC												
Music.....	100	52	43	5	(²)	0	0	100	49	46	5	
Art.....	100	75	22	3	0	0	0	100	68	28	4	
Industrial arts.....	100	88	11	1	(²)	0	(²)	100	85	14	1	
Business.....	100	4	18	23	19	14	22	100	5	17	22	
Home economics.....	100	18	23	22	22	12	3	100	21	25	21	
Vocational education ³	100	96	2	0	1	(²)	1	100	94	3	0	
Vocational agriculture.....	100	100	0	0	0	0	(²)	100	100	0	0	
Physical education.....	100	39	61	(²)	0	0	0	100	33	67	0	
Physical education and health.....	100	92	4	3	(²)	(²)	0	100	94	2	4	
Health.....	100	75	23	2	0	0	0	100	74	23	3	
Athletics.....	100	100	0	0	0	0	0	100	100	0	0	
Driver education.....	100	93	7	0	0	0	0	100	94	6	0	
All others.....	100	76	23	(²)	1	0	0	100	75	23	(²)	

¹ Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A.

² Less than 0.5 percent

³ Excludes home economics and vocational agriculture.

lower 25 percent ability level, by number of credits earned in subject
Continental United States, 1958

tes median intervals]

Percent of girls, by school enrollment—Continued																	
500 and over— Continued			200-499									1-199					
Credits earned— Continued			Credits earned									Credits earned					
2¼-3	3¼-4	Over 4	Total	0	¼-1	1¼-2	2¼-3	3¼-4	Over 4	Total	0	¼-1	1¼-2	2¼-3	3¼-4	Over 4	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
11	62	26	100	0	0	(?)	9	72	20	100	0	0	0	21	66	13	
35	39	13	100	0	7	16	37	32	8	100	0	0	36	54	28	2	
8	1	1	200	6	48	35	10	2	0	100	7	45	36	12	0	0	
1	0	0	100	49	46	5	0	0	0	100	60	30	2	0	0	0	
3	0	0	100	32	45	18	5	0	0	100	27	42	27	4	0	0	
11	2	0	100	7	37	44	11	2	0	100	4	34	53	7	0	0	
0	0	0	100	38	50	3	(?)	0	0	100	37	62	1	0	0	0	
0	0	0	100	24	74	2	0	0	0	100	18	82	0	0	0	0	
0	0	0	100	85	14	2	0	0	0	100	84	16	0	0	0	0	
0	0	0	100	98	2	0	0	0	0	100	96	4	0	0	0	0	
2	(?)	(?)	100	76	10	11	2	1	0	100	75	13	9	0	0	0	
(?)	0	0	100	86	4	10	0	0	0	100	89	9	2	0	0	0	
0	0	0	100	94	4	2	0	0	0	100	90	7	4	0	0	0	
1	0	0	100	93	5	2	0	0	0	100	96	0	2	0	0	0	
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
(?)	0	0	100	60	37	4	0	0	0	100	55	38	8	0	0	0	
0	0	0	100	87	13	1	0	0	0	100	89	2	0	0	0	0	
(?)	0	1	100	97	3	0	0	0	0	100	93	7	0	0	0	0	
16	12	28	100	0	26	33	24	17	8	100	4	6	30	30	21	10	
19	10	4	100	13	19	19	29	18	3	100	9	11	32	28	19	2	
2	1	1	100	100	0	0	0	0	0	100	99	0	0	2	0	0	
0	0	0	100	100	0	0	0	0	0	100	98	0	0	0	0	2	
0	0	0	100	53	47	0	0	0	0	100	43	56	2	0	0	0	
(?)	0	0	100	80	9	2	0	0	0	100	91	4	0	0	5	0	
0	0	0	100	74	26	0	0	0	0	100	88	12	0	0	0	0	
0	0	0	100	100	0	0	0	0	0	100	100	0	0	0	0	0	
0	0	0	100	94	6	0	0	0	0	100	87	13	0	0	0	0	
1	0	0	100	74	26	0	0	0	0	100	82	17	1	0	0	0	

* Median falls between 2 intervals.

NOTE.—All usable transcripts furnished information shown in each subject matter area. Percents do not necessarily add up to total because of rounding.

Although the proportion of girls and the proportion of boys who earned credit in the nonacademic areas were not the same, the relative popularity of the subject areas agreed remarkably well. The most common areas in the order of their popularity were as follows:

<i>Girls</i>	<i>Boys</i>
business	business
physical education	physical education
home economics	industrial arts
music	music
art	health
health	art

* * *

Some of the important findings were:

1. School graduation requirements made a strong impact upon the number of credits earned in English and social studies; some impact on those earned in mathematics, science, and physical education; and very little upon other subject matter areas.
2. In the academic subjects at least 91 percent of all pupils completed more than three credits in English; 83 percent completed more than two credits in social studies and 42 percent earned more than three credits in social studies; 72 percent earned more than one credit in mathematics, 42 percent completed more than two credits, and 20 percent, more than three; 72 percent earned more than one credit in science, 35 percent earned more than two credits, and 13 percent, more than three; 50 percent earned some credit in foreign language and 15 percent, earned more than two credits and 7 percent more than three.
3. The median pupil completed $3\frac{1}{4}$ to 4 credits in English, $2\frac{1}{4}$ to 3 credits in social studies, $1\frac{1}{4}$ to 2 credits in mathematics, $1\frac{1}{4}$ to 2 credits in science, 0 to 1 credit in foreign language, one-fourth to 1 credit in business, and one-fourth to 1 credit in physical education. The median pupil in the upper 25 percent ability group completed only one more credit in mathematics, and 1 to $1\frac{1}{4}$ more credits in foreign language than did the median pupil of the entire group of boys and girls.
4. As school enrollment decreased, the percentage of pupils completing three or more credits in English decreased to some extent; the proportion of pupils completing three or more credits in social studies, mathematics, and in foreign language decreased decidedly, but the proportion completing 3 or more hours in science showed little relationship to school enrollment.
5. As pupil abilities decreased, the percentage of pupils completing three or more credits in English decreased slightly; the proportion earning three or more credits in social studies increased slightly while the proportion earning three or more credits in mathematics decreased greatly as it did also in science and foreign language.
6. All girls and boys completed some credit in social studies and English. A greater percentage of girls completed more than four credits in English; the proportion of girls and boys earning various amounts of credit in social studies was virtually the same; a higher proportion of boys completed a large number of credits in mathematics and in science; and a higher proportion of girls earned some as well as a large number of credits in foreign language.
7. In mathematics, college preparatory rather than general mathematics attracted the highest proportion of pupils; in science, biological science attracted the highest percentage, general science next highest, and physical science third highest; and in foreign language, Spanish attracted the largest proportion with Latin and French next in order.

8. Business, physical education, home economics, art, and health education were the five most popular nonacademic subject areas with the girls, as measured by the percentage who completed credits in each. Business education, physical education, industrial arts, health education and art were most popular with the boys.
9. Of all pupils 81 percent earned some credit in business education, 18 percent earning more than three credits; 60 percent earned physical education credit whereas, 7 percent earned credit in a combination of physical education and health and some completed physical education courses without credit; 38 percent earned home economics credit; 53 percent, industrial arts credit; 43 percent, music credit; 25 percent, art credit; 24 percent, health credit; 7 percent, driver education credit; and smaller proportions earned credit in vocational agriculture and vocational education.
10. As school enrollments decreased, the proportion of pupils earning business education, home economics, and vocational agriculture credits increased; the proportion earning physical education, industrial arts, art, vocational education, and health education credits decreased; and the proportion of pupils earning music and driver education were affected only slightly.
11. As abilities decreased, the proportions of pupils completing business education, physical education, home economics, industrial arts, vocational education, and vocational agriculture credits increased and the proportions completing music and art credits decreased while the proportions of pupils earning credit in driver education and in health were virtually unchanged.
12. In the nonacademic areas higher proportions of girls than of boys earned business education, music, and art credits; a slightly higher percentage of boys than of girls earned physical education credit (62 percent, 58 percent); a much higher percentage of girls (68 percent) than of boys (4 percent) earned home economics credit; a much higher proportion of boys (62 percent) than of girls (7 percent) earned industrial arts credit. Much higher percentages of boys than girls earned vocational agriculture and vocational education credits; while approximately the same proportions of boys and girls earned credits in health and driver education.

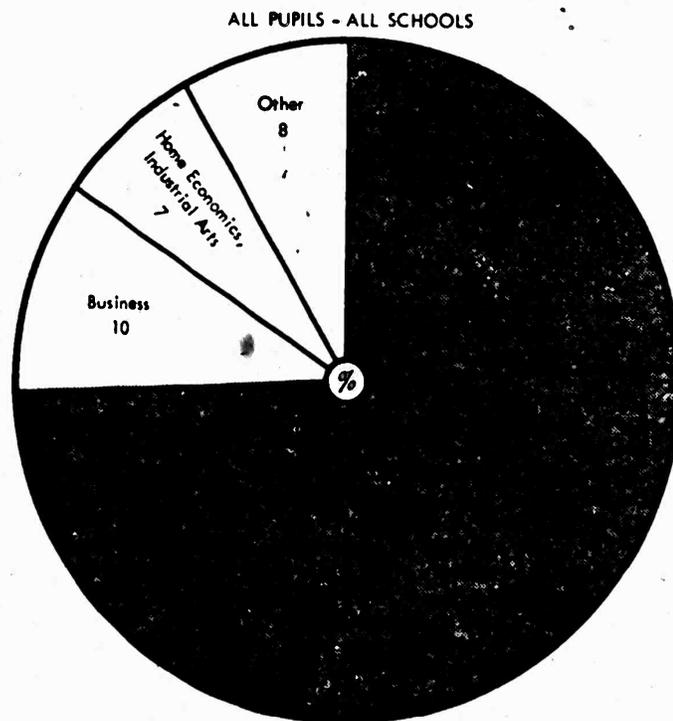
Percent of Pupil Programs Devoted to Various Subject Matter Areas

What proportion of a pupil's high school program was given over to science, physical education, social studies? How many of his credits were earned in academic subjects as compared with nonacademic subjects? Did the proportion of credits earned by the academically able pupils in various subject matter areas differ from that earned by the less able pupils? Did the program completed by a pupil who ranked in the upper one-third of his class differ significantly in the proportion of credits earned in various subject matter areas from that completed by a pupil ranked in the lower one-third of his class? How does the program of a pupil enrolled in one of the largest schools differ from that of a pupil enrolled in one of the small schools in the proportion of credits devoted to various subject matter area?

These are some of the questions which this chapter attempts to answer. The difference in the proportions of the program devoted to

specific subject matter areas by all pupils and those of various ability levels is clearly illustrated in figures 15 and 16. Those pertaining to pupils of different class ranks are shown in figure 17. Programs of pupils of different academic abilities and in different class ranks who enrolled in various size schools are shown in tables 42 and 43.

Figure 15.—Proportion of high school pupil programs devoted to certain subject matter areas

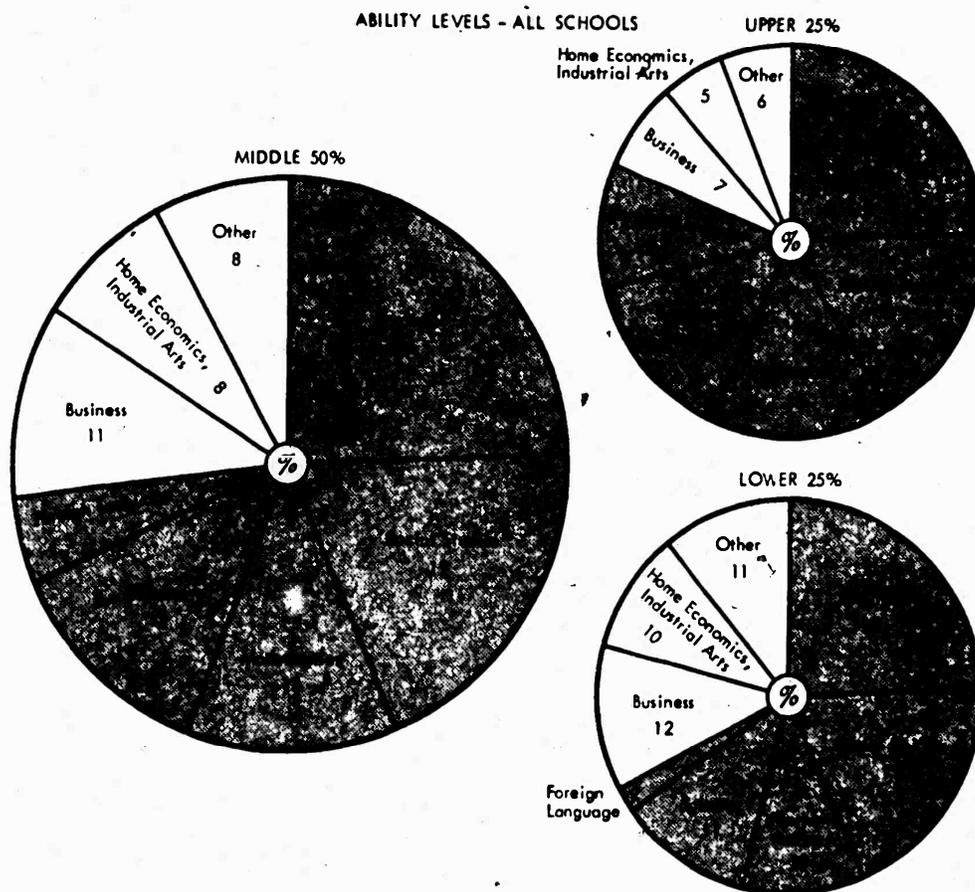


The data show that almost one-fourth (24 percent) of the typical 1958 graduate's program was made up of English. This was true of the program completed by any pupil enrolled in schools of any size. A slightly higher proportion of the program of the lower ability pupil than of the academically able was devoted to English.

A little less than one-fifth (18 percent) of the program completed by a pupil enrolled in schools of any size was made up of social studies. Except in the smallest schools, the academically able pupils devoted a slightly smaller proportion of their time to this area than did the less able.

Approximately 13 percent of the program of the typical pupil was devoted to mathematics. Although the median pupil in the upper 25 percent ability group earned 15 percent of his credits in mathematics, one in the lower 25 percent ability group devoted only 10 percent of his program to this area. In the low-enrollment schools

Figure 16.—Proportion of high school pupil programs devoted to certain subject matter areas, by pupil ability level

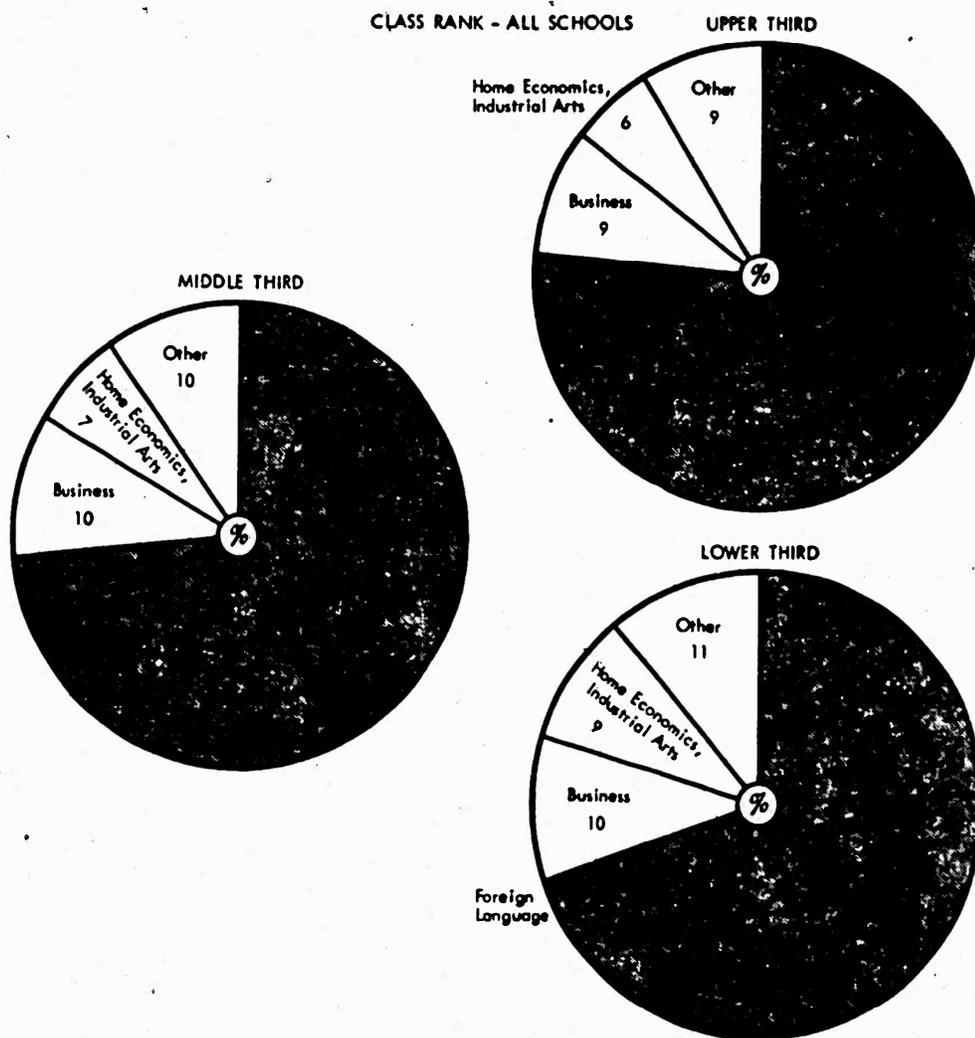


mathematics made up a smaller percentage of the pupil's program than it did in the other schools. Also, in each group of schools the able pupils devoted a higher proportion of their programs to mathematics than did the less able. For instance, in the high-enrollment schools, 16 percent of the program completed by a typical pupil in the upper 25 percent ability group and 10 percent, by a pupil in the lower 25 percent ability group were given over to mathematics.

The slightly greater percentage of the program devoted by the less able pupil to English, social studies, and general mathematics might have been because this pupil, as a rule, earned fewer credits than did the more able. In this event, the credits earned in these subjects would account for a higher proportion of the total credits than would the same number of credits earned in these subjects by the more able pupil.

College preparatory mathematics made up at least 10 percent of the typical pupil's program in all schools. In the highest enrollment

Figure 17.—Proportion of high school pupil programs devoted to certain subject matter areas, by class rank



schools the ablest pupils devoted more than three times as high a percentage of their programs to this area as did the least able academically; in the middle-size schools it was approximately twice as much; and in the smallest schools, about one and a half times. In the highest enrollment schools the able pupil devoted a greater proportion of credit to this aspect of mathematics than in the other two groups of schools. However, in the two groups of smaller enrollment schools, a greater percentage of the program of the less able pupil was devoted to college preparatory mathematics than in the largest schools. In fact, in the largest schools a pupil in the lower 25 percent in ability devoted a greater proportion of his program to general mathematics than to college preparatory mathematics but in either of the two

groups of smaller schools he devoted a greater proportion of his program to college preparatory mathematics. One explanation for this may be that there are still many small schools in the country which offer only college preparatory mathematics.

Science comprised 12 percent of the typical program of the 1958 graduate. Again a greater proportion of the able pupil's program than of the less able was given over to science. For instance, a pupil in the upper 25 percent ability group devoted 14 percent of his program to science while one in the lower 25 percent group devoted 11 percent to this area.

Pupils in the smaller enrollment schools devoted a slightly higher proportion of their programs to this area than did those in the largest schools. In all enrollment-size schools science made up approximately the same proportion of the program of the lower ability pupil as did mathematics. This was also true of the able pupil except in the largest schools where science constituted a smaller proportion of his program.

General science, biological science, and physical science, each made up from 4 to 5 percent of the pupil's program in all schools. The difference between the proportion of the program devoted to general or biological science by the able pupil and by the less able was never large. This uniformity was due partly to the fact that many schools required 1 year of general science and 1 year of biological science for graduation. However, there was a great difference in the proportion of credit given over to physical science by the able pupil and the less able. Since virtually none of the schools required 3 years of science, the physical science taken by the pupil was, in most instances, elected by him. Although certain curriculums, such as the college preparatory, might have required physical science, the pupil had already indicated a choice since he had elected the curriculum in which he was enrolled. In the large schools the pupil in the upper 25 percent ability group devoted three times as much of his program to physical science as did the pupil in the lower 25 percent ability group; in the middle- and smallest-size schools it was two and a half times as much.

The typical pupil earned approximately 6 percent of his credits in the area of foreign language. The able pupil devoted a greater percentage of his total credits to foreign language than did the less able. For example, only 2 percent of the credits earned by a pupil in the lower 25 percent ability group were foreign language credits, but 10 percent of those earned by a pupil in the upper 25 percent ability group were foreign language credits. In the highest enrollment schools 8 percent of the credits earned by all pupils were devoted to foreign language while in the lowest enrollment schools it was only 2 percent.

Table 42.—Percent of credits earned by high school graduates in certain subject matter areas, by pupil ability, and school enrollment: Continental United States, 1958

(Figures in italic represent only a part of the upper 25 percent in pupil ability and are included in the total for 25 percent)

Pupil ability level	Percent of credits earned in academic subjects													Percent of credits earned in nonacademic subjects														
	Total	Total academic	English	Social studies	All mathematics	General mathematics	College preparatory mathematics	All science	General science	Biological science	Physical science	All language	Latin	French	Spanish	German	Total nonacademic	Music	Art	Industrial arts	Business	Home economics	Vocational education	Vocational agriculture	Physical education	Physical education and health	Health	All others
1	3	3	4	6	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
All pupils	100	78	24	18	13	3	10	12	4	5	4	6	2	2	2	2	25	2	1	3	10	4	1	1	3	1	1	2
Upper 5 percent	100	84	25	17	17	1	16	16	4	6	7	12	4	3	4	1	14	2	1	1	6	2	0	0	2	1	1	1
Upper 15 percent	100	81	25	17	16	1	15	14	4	6	6	11	4	3	3	1	16	2	1	2	6	3	0	0	2	1	1	1
Upper 25 percent	100	80	24	17	15	2	14	14	4	5	5	10	3	3	3	0	18	2	1	2	7	3	0	0	2	1	1	1
Middle 50 percent	100	72	24	19	12	3	9	12	4	5	3	9	2	2	2	0	25	2	1	3	11	6	1	1	3	1	1	2
Lower 25 percent	100	66	24	19	10	5	5	11	4	5	2	2	1	1	1	0	29	1	1	4	12	6	1	1	3	1	1	3
School enrollment: 500 and over	100	75	24	18	13	3	11	12	4	4	4	6	2	2	2	2	23	2	1	3	9	3	1	1	3	1	1	1
Upper 5 percent	100	87	25	17	18	1	16	15	3	4	7	14	4	4	6	1	14	3	1	3	6	1	0	0	2	1	1	1
Upper 15 percent	100	85	24	17	18	1	15	14	3	4	6	12	4	3	4	1	16	2	1	2	6	2	0	0	2	1	1	1
Upper 25 percent	100	84	24	18	16	2	14	14	3	4	6	12	4	3	4	1	17	2	1	2	7	2	0	0	2	1	1	1
Middle 50 percent	100	72	24	19	12	3	9	11	4	5	3	6	2	2	3	0	28	2	1	4	11	4	1	1	3	1	1	2
Lower 25 percent	100	65	24	20	10	6	5	10	4	4	2	2	1	1	1	0	31	2	1	5	12	1	1	1	3	1	1	2
School enrollment: 200-499	100	72	24	18	13	3	10	13	4	4	4	4	2	1	1	0	24	2	0	2	10	5	0	1	2	1	1	1
Upper 5 percent	100	78	25	16	16	1	15	15	4	6	6	8	4	2	2	0	21	4	0	2	7	4	0	0	2	1	1	1
Upper 15 percent	100	76	25	17	15	1	14	15	4	6	6	8	3	2	1	0	22	5	0	2	8	4	0	0	2	1	1	1
Upper 25 percent	100	75	23	17	15	2	13	14	4	5	5	6	3	1	1	0	23	3	0	2	9	4	0	1	2	1	1	2
Middle 50 percent	100	69	24	18	12	3	9	12	4	5	3	3	1	1	1	0	28	2	1	3	12	6	1	1	3	1	1	1
Lower 25 percent	100	68	25	19	11	4	7	11	4	5	2	2	1	1	0	28	1	1	3	11	7	1	1	1	3	1	1	4
School enrollment: 1-199	100	69	24	18	13	3	10	13	5	5	4	2	1	1	0	28	2	0	2	11	7	0	2	2	3	1	1	1
Upper 5 percent	100	74	25	17	16	2	15	15	6	6	6	5	2	1	1	0	25	4	0	1	7	5	0	1	3	1	1	1
Upper 15 percent	100	72	25	17	15	3	12	14	6	6	5	7	1	1	0	26	3	0	1	9	6	0	0	2	3	1	1	1
Upper 25 percent	100	71	23	17	14	2	12	14	5	5	5	3	1	1	0	25	3	0	1	9	6	0	0	2	3	1	1	1
Middle 50 percent	100	67	23	18	12	3	9	12	5	5	3	1	1	1	0	30	2	0	2	12	7	0	1	3	1	1	1	1
Lower 25 percent	100	63	24	17	10	3	7	11	4	4	2	1	1	1	0	31	2	0	2	13	7	1	1	3	1	1	1	1

NOTE. Percents do not necessarily add up to total because of rounding. Percents for each percentile group as well as for each total group of pupils in driver education, all other science, and all other foreign language were less than 0.5.

Based on pupils reporting 4 years of credit and for whom mental ability measures were available. For number of pupils from which percents were calculated see table A in appendix A. * Less than 0.5 percent.

Table 43.—Percent of credits earned by high school graduates in certain subject matter areas, by class rank, and school enrollment: Continental United States, 1958

Class rank	Percent of credits earned in academic subjects													Percent of credits earned in nonacademic subjects														
	Total academic	English	Social studies	All mathematics	General mathematics	College preparatory mathematics	All science	General science	Biological science	Physical science	All foreign language	Latin	French	Spanish	German	Total nonacademic	Music	Art	Industrial arts	Business	Home economics	Vocational education	Vocational agriculture	Physical education	Physical education and health	Health	All others	
1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
All schools	78	24	19	13	3	10	12	4	5	4	6	2	2	2	(1)	26	3	1	3	10	4	1	(1)	3	1	1	1	3
All pupils	100	24	18	14	4	10	12	4	4	3	5	2	2	2	(1)	22	1	1	3	9	5	(1)	3	(1)	1	1	1	4
Not available	73	24	17	13	2	13	13	3	5	5	9	3	2	3	(1)	22	2	1	2	9	4	(1)	3	(1)	1	1	1	4
Upper 1/4	100	24	19	13	3	10	12	4	5	3	6	2	1	1	(1)	27	2	1	3	10	4	1	3	1	1	1	1	1
Middle 1/4	100	24	19	13	3	10	12	4	5	3	6	2	1	1	(1)	23	1	1	5	10	4	1	3	1	1	1	1	1
Lower 1/4	100	24	20	11	4	7	12	4	5	2	3	1	1	1	(1)	23	1	1	5	10	4	1	3	1	1	1	1	3
School enrollment: 100 and over	100	24	18	13	3	11	12	4	4	2	6	2	2	3	(1)	24	2	1	3	9	3	1	(1)	3	1	1	1	1
All pupils	100	24	18	13	3	11	12	4	4	2	6	2	2	3	(1)	24	2	1	3	9	3	1	(1)	3	1	1	1	1
Not available	75	24	18	14	3	11	11	4	4	3	8	3	1	3	1	22	2	1	3	8	4	(1)	3	(1)	1	1	1	2
Upper 1/4	100	23	17	15	2	13	13	3	5	5	11	4	3	4	1	21	2	1	2	8	3	(1)	3	1	1	1	1	1
Middle 1/4	100	24	19	13	3	10	12	4	4	3	7	2	2	3	(1)	25	2	1	3	10	3	1	(1)	3	1	1	1	1
Lower 1/4	100	24	20	11	5	7	11	4	5	2	4	1	1	2	(1)	27	1	1	5	10	4	1	(1)	3	1	1	1	2
School enrollment: 200-499	100	24	18	13	3	10	12	4	5	4	4	2	1	1	0	25	2	(1)	2	10	6	(1)	1	3	1	1	1	3
All pupils	100	24	18	13	3	10	12	4	5	4	4	2	1	1	0	25	2	(1)	2	10	6	(1)	1	3	1	1	1	3
Not available	72	25	17	14	2	11	13	4	5	4	3	2	1	1	(1)	23	1	(1)	2	10	5	0	3	1	1	1	1	0
Upper 1/4	100	25	17	14	2	13	14	4	5	5	6	3	1	1	0	24	3	(1)	1	10	5	0	3	1	1	1	1	0
Middle 1/4	100	24	19	13	3	10	12	4	5	3	3	2	1	1	0	26	2	(1)	2	11	6	(1)	2	2	1	1	1	3
Lower 1/4	100	25	20	11	4	7	12	5	5	2	1	1	(1)	(1)	0	29	1	1	4	10	5	1	2	3	1	1	1	5
School enrollment: 1-199	100	24	18	13	3	10	12	5	5	3	2	1	1	1	1	27	2	(1)	2	11	7	(1)	2	2	(1)	1	1	4
All pupils	100	24	18	13	3	10	12	5	5	3	2	1	1	1	1	27	2	(1)	2	11	7	(1)	2	2	(1)	1	1	4
Not available	72	24	19	14	7	7	13	7	4	2	2	(1)	2	(1)	0	23	1	0	1	10	5	0	1	2	1	2	5	
Upper 1/4	100	24	17	13	3	11	13	4	5	4	3	2	1	1	(1)	24	3	(1)	1	11	8	0	1	3	(1)	1	3	
Middle 1/4	100	24	18	13	3	10	12	5	5	3	3	2	1	1	0	26	2	(1)	2	11	6	(1)	2	2	(1)	1	3	
Lower 1/4	100	24	19	11	3	8	12	5	5	2	1	(1)	(1)	(1)	0	27	2	(1)	3	11	6	(1)	2	3	(1)	1	6	

1 Based on pupils reporting 4 years of credit. For number of pupils from which percents were calculated see table A in appendix A.
 2 Percents do not necessarily add up to total because of rounding. Percents for each class rank as well as for each total group of pupils in driver education, all other sciences, and all other foreign languages were less than 0.5.
 3 Less than 0.5 percent.



Also, in the largest schools the able pupil completed six times as high a proportion of all his credits in foreign language as did the less able while in the small schools it was approximately three times as high. Spanish, Latin, and French were the three languages to which pupils devoted the greatest part of their programs. Spanish was first in the proportion of the program given to it by pupils enrolled in the large schools. Latin was first in the medium and small size schools. In many of the small schools Latin is still the only foreign language taught which would be one factor in its greater popularity in programs of pupils enrolled in these schools.

The figures show that as a pupil's ability rose, a higher proportion of his program was devoted to the academic subjects. For example, almost 67 percent of the credits earned by the typical pupil were in English, social studies, science, and mathematics and 73 percent in these four academic subjects and foreign language. Approximately 80 percent of the program of a pupil in the upper 25 percent ability group was devoted to academic subjects while only 66 percent of that of the pupil in the lowest ability group was given over to this area. The difference in the proportion of all credits earned in academic work by a pupil in the lowest class rank and one in the highest was not as great as it was between the proportion earned by a pupil in the highest ability level and one in the lowest. This would tend to indicate that ability was a stronger determiner in a pupil choosing academic subjects than was the earning of good marks.

Certainly the large proportion of the programs which able pupils devoted to academic subjects would tend to imply that these pupils were not seeking "easy" credits. Since the median pupil in the upper 25 percent ability group earned approximately 18 credits, approximately 14 $\frac{1}{2}$ of the credits earned by the typical pupil in the upper 25 percent ability group were academic. Although the schools may have required 9 to 11 hours of academic work, pupils of this ability group carried more academic work than was required of them. Whether the pupils in the lower 25 percent ability group, who earned 66 percent of their credits in the academic area, carried programs which best suited their needs requires careful study.

Of all nonacademic areas, business education was most popular as determined by the amount of the pupil's program devoted to it. Approximately 10 percent of the program of the typical pupil was spent in this area. Home economics was next in popularity with approximately 4 percent of the typical pupil's program given to it; industrial arts and physical education were third and fourth with 3 percent each; music followed with 2 percent, and the remaining areas with a total of more than 3 percent.

All of the nonacademic subjects, except music, art, and health, tended to comprise a greater proportion of the less able pupil's program than of the academically able.

There was little relationship between the proportions of the pupil's credits earned in some of the nonacademic subjects. In the middle-size or low-enrollment school music made up a greater percentage of the pupil's program, especially of the able pupil, while art made up a smaller percentage. A much greater proportion of the program was given to industrial arts and to home economics by the less able pupils than the able in the largest schools as compared to the smaller schools.

The same trends seemed to be evident among pupils of various class ranks as were noted among those of different academic abilities.

* * *

Some important findings obtained from this section were:

1. Of a typical pupil's program, 24 percent was English; 18 percent, social studies; 13 percent, mathematics; 12 percent, science; 6 percent, foreign language; 10 percent, business; 4 percent, home economics; 3 percent, industrial arts; 3 percent, physical education; 2 percent, music; and approximately 5 percent, other subjects such as art, vocational education, health, and driver education.
2. The median pupil earned 73 percent of his credits in English, social studies, science, mathematics, and foreign language.
3. A typical pupil in the upper 25 percent in ability earned 80 percent of his credits in the five academic subjects while one in the lower 25 percent in ability earned 66 percent.
4. A typical pupil ranked in the upper one-third of his class earned 79 percent of his credits in the five academic subjects while one in the lower one-third of his class earned 70 percent.
5. A slightly higher proportion of the academic program of the less able pupil than of the able pupil was devoted to English and social studies.
6. A much higher percentage of the program of the able pupil than of the less able was devoted to mathematics, science, and foreign language.
7. There was little difference in the proportion of the program devoted to general science and to biological science by the able pupil and that given to these areas by the less able.
8. A much higher proportion of the able pupil's program was devoted to physical science than of the less able.
9. When compared with the less able pupil, the able pupil devoted a smaller proportion of his program to general mathematics and a much larger proportion to college preparatory mathematics.
10. In the large schools, the proportion of a pupil's program given to mathematics and foreign language was greater than in the low-enrollment schools. In the smaller schools, a higher proportion of the pupil's program was devoted to science.

11. Of all foreign languages the largest proportion of a pupil's program in the high-enrollment schools was devoted to Spanish. For the pupil enrolled in one of the lower enrollment schools, Latin was first among the foreign languages in proportion of credits.
12. A greater proportion of the pupil's credits were earned in business education than in any other nonacademic area. Home economics or industrial arts, and physical education were next in importance in regard to the proportion of a pupil's credits earned.
13. Each of the nonacademic subjects, except music, art, and health, comprised a greater proportion of the less able pupil's program than of the academically able.

CHAPTER IV

Summary

THIS SURVEY has had as its main purpose obtaining information regarding programs carried by pupils of different academic ability levels. The findings, some of which are reviewed here, pertain to four areas of concern: (1) The appropriateness to pupil abilities of programs carried by the able; (2) the comparison between the programs of the able pupils and the less able; (3) the comparison between the programs carried by girls and boys, and (4) the comparison of programs carried by pupils in large with those carried in small schools. These areas, each introduced by a question, follow.

Do high school pupils judged to be academically able take courses which are appropriate in terms of their abilities?

Findings revealed by the study indicate that many of the academically able pupils could have carried heavier programs. Only 63 percent of the upper 5 percent ability group and 50 percent of the upper 25 percent in ability were enrolled in college preparatory curriculum. However, since an additional 18 percent of the pupils in each of these ability groups were enrolled in single curriculums, higher percentages of pupils were probably enrolled in programs similar to those of the college preparatory curriculums.

Of the upper 25 percent ability group almost 60 percent were ranked in the upper one-third of the class and of the upper 5 percent ability group 75 percent were so ranked. Although these figures show that a large majority of the very able pupils earned school marks in keeping with their high academic ability, at least one-fourth of them did not.

The median pupil in the upper 5 percent ability group fell within the group earning 17½ to 19½ credits for graduation and the median pupil in the upper 15 percent or 25 percent ability group fell within the 17½ to 18½ credit range. This means that the typical able pupil earned approximately 4½ or 4¾ credits per year. This may not constitute a very heavy program load.

Furthermore, a rather large percentage of the upper ability pupils completed programs composed of a small number of credits. For instance, of the upper 5 percent ability group, 19 percent earned $16\frac{1}{2}$ to $17\frac{1}{4}$ credits and 11 percent earned fewer credits, while 22 percent of the upper 25 percent group earned $16\frac{1}{2}$ to $17\frac{1}{4}$ credits and 18 percent earned fewer. In the upper 25 percent ability group, also, there were 5 percent who earned fewer than $15\frac{1}{2}$ credits. Even though there may have been several valid reasons for the light loads carried by these boys and girls, some of which are given in the text, there must have been many pupils who could and should have earned additional credits.

The survey does not indicate that the able pupil shunned academic subjects since a very large proportion of his program was devoted to these areas. In the upper 5 percent ability group, 84 percent of a pupil's program consisted of academic subjects while 80 percent of that of a pupil in the upper 25 percent ability group was made up of such work.

A typical pupil in the upper 5 percent ability group earned $11\frac{1}{4}$ to 15 academic credits of which $3\frac{3}{4}$ to 4 were in English; $2\frac{1}{4}$ to 3, in each of social studies, mathematics, and science; and $1\frac{1}{4}$ to 2, in foreign language. In addition, he earned one quarter to 1 nonacademic credit in each of the areas of music, business, and physical education. A pupil in the upper 25 percent ability group earned the same number of credits in the various subjects except that he completed only $1\frac{1}{4}$ to 2 credits in science and no credit in music.

The data show that the area of foreign language was slighted by the able pupils. Also, while these pupils did not neglect academic subjects, many did not carry advanced courses in social studies, mathematics, science, or foreign language. For instance, of the pupils in the upper 5 percent academic ability group only 38 percent completed more than three credits in social studies; 48 percent, more than three credits and 77 percent, more than 2 credits in mathematics; 31 percent, more than three credits and 60 percent, more than two credits in science; and 20 percent, more than three credits and 40 percent, more than two credits in foreign language. In the various arts virtually none carried advanced courses. A lack of advance course offerings in some schools was a factor, but it probably was not solely responsible for the situation.

Although approximately 60 percent of the pupils in the upper 25 percent ability group were bound for some type of formal education beyond high school, too many had no such commitment.

How does the program of the academically able pupils compare with that of the less able?

Several differences were found in the types of programs carried by able and less able pupils. The highest proportion of able pupils was

enrolled in the college preparatory curriculum and, as pupil academic abilities decreased, enrollments in this curriculum also decreased. Therefore, in the middle 50 percent ability group approximately the same proportions were enrolled in the general curriculum as in the college preparatory curriculum, and of the lower 25 percent ability group almost four times as many were enrolled in the general curriculum as in the college preparatory curriculum. The typical able pupil earned approximately one more credit for graduation than did the typical pupil in the average ability group. He devoted 80 percent of his program to academic subjects while the pupil in the lowest 25 percent ability level devoted 66 percent. While a pupil in the average or lower academic ability group completed $3\frac{1}{4}$ to 4 credits in English; $2\frac{1}{4}$ to 3 in social studies; $1\frac{1}{4}$ to 2 credits in each of mathematics, science, and business; and one quarter to 1 credit in physical education, the pupil in the upper 25 percent ability group completed only 1 more credit in mathematics, $1\frac{1}{4}$ to 2 more credits in foreign language but 1 less credit in business. It follows that a greater proportion of the credits earned by the middle and lower ability groups than by the able groups were nonacademic credits.

The difference, at least in quantitative difficulty, between the program of the able and that of the less able child was greater in the high-enrollment schools than in the low. It would seem, however, that the differences in pupil programs between ability groups were not as great as the needs of the boys and girls would have required.

How do the programs of boys differ from those of girls?

On the whole, girls seemed to carry programs more nearly commensurate with their abilities than did boys. For instance, girls were more likely to earn a larger number of credits than were boys. While 77 percent of the girls earned at least $16\frac{1}{2}$ credits, only 64 percent of the boys earned that amount. A smaller proportion of girls as compared to boys earned fewer than $15\frac{1}{2}$ credits. However, as academic abilities increased, the difference between the proportion of girls and the proportion of boys earning large numbers of credit decreased until in the upper 5 percent ability group, a slightly higher proportion of boys earned at least $17\frac{1}{2}$ credits.

The typical girl completed fewer credits in mathematics and industrial arts, but more credits in foreign language, music, business, and home economics than did the typical boy. Also, the typical able boy earned more science credits than did the able girl.

Girls, when compared to boys of similar academic abilities, were more likely to earn better marks in their schoolwork. All ability and class rank distributions showed a greater percentage of upper ability boys than of girls ranking lower in their classes than abilities

would indicate. Also, ability distributions by class rank showed that a higher percentage of girls than of boys of all academic abilities attained ranking in the upper one-third of their classes.

How do programs carried by pupils in the low- and high-enrollment schools compare?

The data show that programs carried by pupils in large enrollment schools differed from those in small schools. For instance, in the high-enrollment schools, a larger percentage of all pupils, as well as pupils of high ability, were enrolled in college preparatory curriculums than in the low-enrollment schools.

Pupils in the larger schools tended to carry more credits than did those in the small schools. While the pupil in the highest enrollment schools completed $17\frac{1}{2}$ to $18\frac{1}{2}$ credits, one in the smaller schools completed 1 credit less.

In the large enrollment schools there seemed to have been a greater attempt to adjust the program load to the ability of the pupil, at least in number of credits earned, and in the amount of academic subjects carried, than was true in the smaller schools. For instance, in the largest schools 23 percent of the upper 25 percent ability group earned at least $19\frac{1}{2}$ credits while 10 percent of the lower 25 percent ability group did so. In the small schools 12 percent of the upper 25 percent ability group and 9 percent of the lower 25 percent ability level earned a similar amount. In addition, in the high-enrollment schools the typical pupil in the upper 25 percent ability group devoted 84 percent of his program to academic subjects and the one in the lower 25 percent ability group devoted 66 percent, while in the low-enrollment schools the proportions of the programs devoted by the able and less able child were 71 percent and 63 percent.

The programs carried by pupils in the high- and low-enrollment schools varied to some extent in subject matter. The pupil in the lowest ability group in the large school earned almost the same number of credits in the different subject matter areas as did the one in the small school except that he carried 1 credit more in the social studies area. The typical pupil in the upper 25 percent ability group, however, carried 1 more mathematics credit, $1\frac{1}{2}$ to 2 more foreign language credits, and 1 less business education credit in the large school than did a pupil of like ability in the small school.

In the large school the able girl earned more credits in physical science and foreign language but fewer in home economics and business than one in the smallest school, while the able boy earned more credits in mathematics, physical science, and foreign language and fewer credits in industrial arts than did one in the smallest school. In the large school the boy in the lowest 25 percent ability group earned more

credits in social studies and industrial arts but fewer credits in business than one in the smallest school. The girl in this ability group who was enrolled in the largest school earned fewer college preparatory and more music credits than the one in the smallest schools.

Little difference between the large and small enrollment-size schools was noted in the percentage distributions of boys and girls in class ranks according to abilities except that in the small schools a higher proportion of the lowest academic ability pupils who ranked in the lower one-third of the class were boys and a smaller proportion of those who ranked in the upper one-third were boys.

* * *

Surveys of this type, as well as program evaluations, need to be conducted by State and local school districts in order that the status of programs being carried by pupils of various abilities, including the academic, may be determined. These surveys can then form the basis for further study to improve the identification and motivation of pupils of all abilities.

Appendixes

Appendix A.—Appendix Tables

Table A.—Distribution of usable transcripts of 1958 high school graduates, by sex, class rank, and ability level
 [Figures in italic represent only a part of the upper 25 percent in pupil ability, and are included in the total for 25 percent]

Pupil ability levels	Class rank														
	Total			Not available			Upper ¼			Middle ¼			Lower ¼		
	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls
1	3	3	4	5	6	7	8	9	10	11	12	13	13	15	16
School enrollment: 500 and over															
All pupils tested	3,305	1,572	1,733	46	17	29	1,273	458	815	1,114	506	548	872	531	341
Upper 5 percent	389	198	191	1	1	0	294	129	165	75	53	22	19	15	4
Upper 15 percent	948	468	478	9	1	8	608	253	355	241	146	95	88	68	20
Upper 25 percent	1,329	646	683	16	5	11	789	314	475	366	213	153	158	114	44
Middle 50 percent	1,533	726	807	20	10	10	441	127	314	607	295	312	465	294	171
Lower 25 percent	1,443	200	243	10	2	8	43	17	26	141	58	83	249	123	126
School enrollment: 200-499															
All pupils tested	1,526	728	798	25	10	15	562	197	365	505	232	273	434	289	145
Upper 5 percent	135	61	74	4	2	2	99	43	56	24	13	11	8	3	5
Upper 15 percent	343	168	175	5	1	4	232	98	134	72	44	28	54	25	9
Upper 25 percent	547	256	291	12	5	7	315	122	193	143	74	69	77	55	22
Middle 50 percent	703	339	364	9	4	5	217	64	153	258	115	143	219	156	63
Lower 25 percent	276	133	143	4	1	3	30	11	19	104	43	61	138	78	60
School enrollment: 1-199															
All pupils tested	816	402	414	12	6	6	321	103	218	287	163	124	196	130	66
Upper 5 percent	65	29	34	0	0	0	48	17	31	14	12	2	1	0	1
Upper 15 percent	191	84	106	2	2	0	136	44	92	43	30	13	10	8	2
Upper 25 percent	286	133	153	4	4	0	181	62	119	75	49	26	26	18	8
Middle 50 percent	413	207	206	6	2	4	131	40	91	168	90	78	108	75	33
Lower 25 percent	117	62	55	2	0	2	9	1	8	44	24	20	62	37	25

APPENDIX A.—Continued

Table B.—Distribution of usable transcripts of 1958 high school graduates enrolled in each curriculum, by size of school: Continental United States, 1958

Curriculums	Number of transcripts, by school enrollment		
	500 and over	200-499	1-199
Total	3,305	1,526	816
Not available.....	229	122	144
Single.....	557	273	193
General.....	687	456	263
College preparatory.....	1,211	425	120
Vocational.....	163	107	40
Commercial.....	360	122	40
Home economics and industrial arts.....	65	15	8
Miscellaneous.....	33	6	8

Appendix B**List of Mental Ability Tests With Name and Address of Publisher**

California Test of Mental Maturity
California Test Bureau
Del Monte Research Park
Monterey, Calif.

Detroit Advanced Intelligence Test
Public School Publishing Co.
Test Division of Bobbs-Merrill Co.,
Inc.
1720 East 38 Street
Indianapolis 6, Ind.

General Aptitude Test Battery
U.S. Employment Service
U.S. Department of Labor
Washington 25, D.C.

The Henmon-Nelson Tests of Mental
Ability
Houghton Mifflin Co.
2 Park Street
Boston 7, Mass.

Kuhlmann-Anderson Intelligence Tests
Personnel Press, Inc.
188 Nassau Street
Princeton, N.J.

Kuhlmann-Finch Intelligence Tests
American Guidance Service, Inc.
720 Washington Avenue SE.
Minneapolis 14, Minn.

The Lorge-Thorndike Intelligence Tests
Houghton Mifflin Co.
2 Park Street
Boston 7, Mass.

Ohio State University Psychological
Test
Ohio College Association
Ohio State University
Columbus, Ohio

Otis Quick Scoring Mental Ability
Tests
Harcourt, Brace and World, Inc.
Tarrytown, N.Y.

Otis Self-Administering Tests of Men-
tal Ability
Harcourt, Brace and World, Inc.
Tarrytown, N.Y.

Philadelphia Test of Mental Ability
Bureau of Research
Board of Education
Philadelphia Public Schools
Philadelphia, Pa.

Pintner General Ability Tests
Harcourt, Brace and World, Inc.
Tarrytown, N.Y.

SRA Non-Verbal Form
Science Research Associates, Inc.
259 East Erie Street
Chicago 11, Ill.

SRA Test of Primary Mental Abilities
Science Research Associates
259 East Erie Street
Chicago 11, Ill.

Terman-McNemar Test of Mental
Ability
Harcourt, Brace and World, Inc.
Tarrytown, N.Y.

Appendix C.—Subject Titles

The following list includes all titles of courses appearing on the transcripts of high school credits and classified under English, mathematics, science, foreign languages and social studies.

ENGLISH

American Essay	English, Remedial
Assembly Production	English, Secretarial
Basic Skills of Reading	English, Vocational
Bible (only when listed under English on transcript)	Etymology
Communications	Exposition
Communications Arts	Expression
Communications, Oral	Grammar
Composition	Grammar, Senior
Composition, Advanced	Grammar and Composition
Composition, Senior	Great Books
Composition and Rhetoric	Journalism
Composition and Speech	Journalism 1
Correspondence, Business	Journalism 2
Debate	Language
Declamatory	Language Arts (Communications Arts)
Drama	Language Culture
Drama Assistant	Language, General
Drama, Modern	Language and Literature
Drama, Senior	Librarian
Dramatic Arts	Library
Dramatics, Reading	Library Assistant
Effective Speaking	Library Club
English	Library Experience (Practice)
English (General)	Library Methods
English 1 or 9th grade	Library Office Practice
English 2 or 10th grade	Library Science
English 3 or 11th grade	Library Training
English 4 or 12th grade	Library Work (Service)
English, Advanced	Literature 1
English, Advanced Freshman	Literature 2
English, Basic	Literature 3
English, Business	Literature, 19th and 20th Century
English, College	Literature, American
English, Contemporary	Literature, American and English
English, Functional	Literature and Composition
English Fundamentals	Literature, English
English Mechanics I or 1	Literature, Modern (Contemporary)
English Mechanics II or 2	Literature and Rhetoric
English Mechanics III or 3	Literature, Rhetoric and Modern
English, Modern	Literature Survey
English, Oral	Literature, World
English, Practical	Newswriting
English, Preparatory	Oral Expression
	Oratory and Debate

Penmanship	Speech
Play Production	Speech 1
Public Speaking	Speech 2
Public Speaking 1	Speech, Advanced
Public Speaking 2	Speech Arts
Publications	Speech, Basic
Publications, School	Speech, Cooperative
Radio	Speech Correction
Radio English	Speech and Drama
Radio Production	Speech, Elementary
Radio Speech	Speech Major
Radio Workshop	Speech Minor
Reading, Accelerated	Speech and Spelling
Reading, Basic Skills of	Speech and Survey
Reading, College and Modern	Spelling
Reading, College Preparatory	Spelling and Literature
Reading, Developmental	Stage
Reading, Effective	Stagecraft
Reading Improvement	Stagework
Reading Literature	Theater Arts
Reading, Remedial	Word Study
Reading, Rhetoric and Background	Writing, Business
Rhetoric	Writing, Creative
Seminar	Writing, Expositive

MATHEMATICS

Algebra	Arithmetic, Practical
Algebra I (1st year)	Arithmetic Problems
Algebra II (2d year)	Arithmetic Review
Algebra, Advanced (2d and 3d year)	Arithmetic, Senior
Algebra, Basic	Calculus
Algebra, Beginning	Geometry
Algebra, College	Geometry I
Algebra, Elementary	Geometry II
Algebra, Higher	Geometry, 11th Year
Algebra, Intermediate (2d Year)	Geometry, Analytical
Algebra, Intermediate and Advanced	Geometry, Applied
Algebra Review	Geometry, Globe
Algebra-Geometry	Geometry, Plane
Algebra, Advanced and Solid	Geometry, Solid
Geometry	Honors Survey
Algebra, Advanced and Trigonometry	Mathematics
Algebra and Trigonometry Review	Mathematics 9 or 1
Analysis and Calculus	Mathematics 10 or 2
Analytics and Calculus	Mathematics 11 or 3
Arithmetic	Mathematics 12 or 4
Arithmetic, Advanced	Mathematics, Advanced
Arithmetic, Advanced Commercial	Mathematics, Advanced Senior
(only when credited under mathematics on transcript)	Mathematics Analysis
Arithmetic, Applied	Mathematics, Applied
Arithmetic, Higher	Mathematics I, Applied
	Mathematics II, Applied

Mathematics, Basic	Mathematics, Related Shop (only when credited under mathematics on transcript)
Mathematics, Beta	Mathematics Review
Mathematics, Business (only when credited under mathematics on transcript)	Mathematics Review-College
Mathematics, College	Mathematics, Senior
Mathematics, Comprehensive	Mathematics, Senior Refresher
Mathematics, Consumer (or Arithmetic)	Mathematics Shop (only when credited under mathematics on transcript)
Mathematics, Economic	Mathematics, Trade (only when credited under mathematics on transcript)
Mathematics Essentials	Mathematics, Universal
Mathematics, Functional	Mathematics, Vocational (only when credited under mathematics on transcript)
Mathematics, Fundamental	Mathematics, Vocational Applied (only when credited under mathematics on transcript)
Mathematics, General	Mathematics and Trigonometry Review
Mathematics I, General	Navigation
Mathematics II, General	Slide Rule
Mathematics, General Advanced	Trigonometry
Mathematics, High School	Trigonometry, Industrial (only when credited under mathematics on transcript)
Mathematics, Industrial (only when credited under mathematics on transcript)	Trigonometry, Plane
Mathematics, Introduction to College	Trigonometry, Vocational (only when credited under mathematics on transcript)
Mathematics, Laboratory (only when credited under mathematics on transcript)	Trigonometry and Solid Geometry
Mathematics, Occupational	
Mathematics, Personal	
Mathematics, Practical	
Mathematics, Preparatory	
Mathematics, Refresher	

FOREIGN LANGUAGES

Danish	Hebrew II
French	Hebrew III
French I or 1	Italian
French II or 2	Italian I
French III or 3	Italian II
French IV or 4	Italian III
French, College	Latin
French I, Conversational	Latin I
French II, Conversational	Latin II
French, General	Latin III
German	Latin IV
German 1	Latin, Caesar
German 2	Latin, Virgil
German 3	Polish
Greek	Portuguese
Hebrew	Russian
Hebrew I	Spanish

Spanish I or 1
 Spanish II or 2
 Spanish III or 3
 Spanish IV or 4

Spanish I, Conversational
 Spanish II, Conversational
 Spanish, College Preparatory
 Spanish, General
 Spanish, Nonpreparatory

SCIENCE

Aeronautics
 Anatomy and Physiology
 Astronomy
 Aviation
 Aviation Education
 Biology
 Biology I
 Biology II
 Biology, Advanced
 Biology, Applied
 Biology, Beginning
 Biology, College
 Biology, Elementary
 Biology, General
 Biology-Health
 Biology Laboratory
 Botany
 Botany Agriculture
 Chemistry
 Chemistry, Advanced (Chemistry II)
 Chemistry, Applied
 Chemistry, College
 Chemistry, Consumer
 Chemistry, Elementary
 Chemistry, Everyday
 Chemistry, General
 Chemistry, Industrial
 Chemistry Laboratory
 Chemistry, Practical
 Chemistry, Vocational
 Chemistry and Laboratory
 Climatology
 Conservation
 Geology
 Geography, Physical
 Health (only when listed as science on transcript)
 Hygiene and Sanitation (only when listed as science on transcript)
 Laboratory Assistant
 Physics, Aeronautical
 Physics, Applied
 Physics, College
 Physics, Everyday

Physics, General
 Physics, Industrial
 Physics, Vocational
 Physics Laboratory
 Physics and Laboratory
 Physiography
 Physiology
 Science
 Science, 9th grade
 Science, 11th grade
 Science, 12th grade
 Science, Advanced
 Science, Advanced Physical
 Science, Air
 Science, Applied
 Science, Aviation
 Science, Basic
 Science, College
 Science, Consumer
 Science, Earth
 Science, Elementary
 Science, General
 Science, General and Biology
 Science, Industrial (only when listed as science on transcript)
 Science Laboratory
 Science, Life
 Science, Modern
 Science, Modern Physical
 Science, Natural
 Science, Physical
 Science, Practical
 Science Problems
 Science, Related Physical
 Science Review
 Science, Senior
 Science Shop (only when listed as science on transcript)
 Science Survey
 Science, Vocational (only when listed as science on transcript)
 Science and Health
 Zoology

SOCIAL STUDIES

Adjustment, School	Economics, Social
Adjustment, Vocational	Economics and Government
Affairs, Current	Economics and Industrial Geography
Affairs, Far East	Economics and Law
Affairs, World	Economics and Social Problems
Business Relations and Occupations (only when listed under Social Studies on transcript)	Education, Consumer
Citizenship	Education, Consumer Problems
Citizenship, Basic	Education, Vocational (only when listed under Social Studies on transcript)
Citizenship, Community	Ethics
Citizenship, Economic	Etiquette
Citizenship, World	Events, Current
Civics	Geography
Civics 9	Geography, Advanced
Civics, Community	Geography, Commercial
Civics, Occupational	Geography, Economic
Civics Problems	Geography, Global
Civics, Social	Geography, Industrial
Civics, United States	Geography, United States
Civics, Vocational	Geography, World
Civics and Geography	Goals
Civics and History	Goals, Senior
Civics and State History	Government
Civilization, Contemporary	Government, Advanced
Civilization, World	Government, American
Commerce (only when listed under Social Studies on transcript)	Government, Applied
Commerce, World (only when listed under Social Studies on transcript)	Government, Civil
Commerce and Industry (only when listed under Social Studies on transcript)	Government, Senior
Community	Government, United States
Constitution, United States	Guidance
Counseling, Senior	Guidance, Group
Culture	Guidance, Vocational
Culture, World	Heritage, Cultural
Customs, Social	History
Democracy	History 10
Democracy, American	History 11
Democracy, Economic	History 12
Democracy, Problems of American	History I
Development, Social	History II
Discussion, Group	History III
Economics	History, Academic World
Economics, Consumer	History, American
Economics, Elementary	History, American and Civics
Economics, Personal	History, American and Government
Economics, Principles of	History, Ancient
	History, Ancient and Medieval
	History, Contemporary
	History, Contemporary World
	History, Early European
	History, English

- History, European
 History, Far Eastern
 History, French
 History, General
 History, General World
 History, Hebrew
 History, Industrial
 History, Latin-American
 History, Medieval
 History, Medieval and Modern
 History, Modern
 History, Modern European
 History, Modern World
 History, Negro
 History, Northwest
 History, Oriental
 History, Our Air Age
 History, Pan-American
 History, State
 History, United States
 History, United States and Govern-
 ment
 History, Vocational
 History, Western
 History, World
 History and Social Science
 History and Social Studies
 Horizons, American
 Humanities
 Ideas, Contemporary
 Ideas, Growth of
 Industry, Local
 Information, Vocational
 Job and Trades (only when listed
 under Social Studies on transcript)
 Leadership
 Living, Art of
 Living, Community
 Living, Effective
 Living, Efficient
 Living, Everyday
 Living, Family
 Living, Home
 Living, Home and Family
 Living, Modern
 Living, Personal
 Living, Problems of
 Living, Problems of Modern
 Living, Science of Daily
 Living, Social
 Living and Planning
 Living in Society
 Management, Family
 Nations
 Nations at Work
 Organizations, Democratic
 Orientation
 Orientation, Freshman
 Orientation, Sophomore
 Peoples, World
 Planning, Educational
 Problems
 Problems, American
 Problems, Consumer
 Problems, Contemporary
 Problems, Current World
 Problems, Economic
 Problems, Family
 Problems, Freshman
 Problems, Modern
 Problems, National
 Problems, Personal and Community
 Problems, Personal and Social
 Problems, Psychology
 Problems, Senior
 Problems, Social
 Problems, Social Economic
 Problems, United States
 Problems, World
 Psychology
 Psychology, Applied
 Psychology, Personal
 Psychology, Senior
 Psychology, Social
 Psychology and Sociology
 Psychology of Living
 Relations
 Relations, Family
 Relations, Home
 Relations, Human
 Relations, International
 Relations, International and History
 Relations, Life
 Relations, Occupational
 Relations, Pacific
 Relations, Personal
 Relations, Social
 Religion
 Religion I
 Religion II
 Religion Education
 Religion Instruction
 Seminary
 Science, Political
 Social Studies
 Social Studies I

Social Studies II	Sociology, Elementary
Social Studies III	Sociology, General
Social Studies IV	Sociology, Problems in
Social Studies, Advanced Skills in	Sociology and Economics
Social Studies, Current	Survey, Community
Social Studies, Introduction to	Training, Job
Social Studies, Senior	Training, Missionary
Society, American	Travel, World
Sociology	Trends, American
Sociology I	Vocations
Sociology II	World Background
	World Economics

MUSIC

Accompanist	Glee Club
Band	Glee Club, Boys
Band I	Glee Club, Girls
Band II	Harmony
Band, Advanced	Instrumental Instruction
Band, Brass	Instruments
Band, Cadet	Instruments, Beginning
Band, Concert	Instruments, Wind
Band, Dance	Majorette
Band, Intermediate	Music
Band, Junior	Music, Allstate
Band, Marching	Music, Applied
Band, ROTC	Music, Appreciation
Band, Senior	Music, Band and Vocal
Band and Chorus	Music, Camp
Band and Glee Club	Music, Fundamentals of
Band and Orchestra	Music, General
Band and Theory	Music, History of
Band, Orchestra, and Choir	Music Instruction
Choral Production	Music, Instrumental
Choir	Music Literature
Choir, A cappella	Music Major
Choir, Junior	Music, Rudiments of
Choir, Madrigal	Music Theory
Choir, Preparatory	Music, Vocal
Choir, Senior	Music and Theory
Choir, Treble	Musical Art
Choir, Preparatory and Senior	Musicianship
Choirsters	Orchestra
Chorus (or Choral)	Organ
Chorus, Boys	Piano
Chorus, Girls	Piano Lessons
Chorus, Mixed	Strings
Clef, Treble	Strings, Advanced
Drum Corps	Strings, Beginning
Drum Training	Strings, Intermediate
Ensemble	

Theory, Fundamentals of
Theory and Harmony
Theory, Piano
Treble Clef
Troubadors

Twirling
Vocal
Vocal, Girls
Vocal Lessons
Voice

HOME ECONOMICS

Child Care
Child Care and Home Nursing
Child Development
Clothing I
Clothing II
Clothing III
Clothing, Advanced
Clothing, Commercial
Clothing Major
Clothing Minor
Clothing, Senior
Cooking
Cooking, Boys
Cooking Club
Cooking and Sewing
Domestic Science
Domestic Science I
Domestic Science II
Dressmaking
Family Economics
Family Living
Family Relations
Foods I
Foods II
Foods III
Foods IV
Foods Advanced
Foods Boys
Food Science
Foods Shop
Food and Clothing
Home Economics, Advanced
Home Economics, Basic
Home Economics, Boys
Home Economics I
Home Economics II
Home Economics III
Home Economics IV
Home Economics, Vocational I
Home Economics, Vocational II
Home Economics, Vocational III
Home Economics, Vocational IV
Home Economics Laboratory

Home Economics Project
Home Economics Project (Summer Project)
Home Economics, Vocational, Sewing Project
Home Crafts (Arts)
Home Decoration
Home and Gardens
Home and Living
Home Making
Home Making I
Home Making II
Home Making III
Home Making IV
Home Making V
Home Making, Senior Problems
Home Management
Home Mechanics
Home Nursing
Home Planning
Home Relations
Home and Society
Household Arts
Household Chemistry (Only when listed under Home Economics in transcript)
Laundry
Marriage and Family
Meal Planning
Needlecraft
Nursing Arithmetic
Nursing, Practical
Nutrition
Personal Grooming
Personal Living
Personal Relations
Prenursing
Sewing
Sewing and Design
Tailoring
Tearoom Management
Textiles
Wardrobe Planning

BUSINESS

Accounting	Business Science
Accounting I	Business Skills
Accounting II	Business Speech
Accounting, Elementary	Business Spelling
Accounting, Personal	Business Survey
Advertising	Business Training
Auditing	Business Training, Junior
Banking	Business Training, Senior
Bookkeeping	Business Training, Elementary
Bookkeeping I	Clerical, General
Bookkeeping II	Clerical, General Practice
Bookkeeping III	Clerical Practice
Bookkeeping, Personal	Clerical Records
Business Arithmetic	Clerical Training
Business, Applied	Commerce
Business, Basic (Elementary)	Commerce, Advanced
Business, Beginning	Commerce Training
Business Behavior	Commercial Arithmetic
Business, Commercial	Commercial Arithmetic (Advanced)
Business Communications	Commercial Arts
Business Correspondence	Commercial Arts, Advanced
Business Economics (Commercial)	Commercial English
Business Education	Commercial Law
Business, Elements of	Commercial Science
Business English	Comptometer
Business Essentials	Consumers Goods
Business Exploration	Consumers Living (only when listed under Business in transcript)
Business Forms	Duplicating
Business, General	Filing
Business, General Elements of	Filing and Mimeographing
Business, Introduction to	Machine Calculation
Business, Junior	Marketing
Business Law	Merchandising
Business Law and Economics	Office, Commercial
Business Law and Mathematics	Office Experience
Business Law and Principles	Office, Junior
Business Law, Common	Office Machines
Business Law, Economics of	Office Occupation
Business Law, Practical	Office Organization
Business Machines	Office Practice
Business Management	Office Production
Business Mathematics and English	Office Training
Business Organization	Penmanship
Business Organization and Law	Penmanship and Spelling (only when listed under Business in transcript)
Business Organization and Manage- ment	Prebusiness
Business Orientation	Recording
Business Practice	Recordkeeping
Business Principles	Records
Business Procedures	Records, Clerical
Business Relations	
Business Relations and Occupations	

Retailing	Shorthand II
Retail Selling (not distributive education)	Shorthand and Stenography
Sales and Advertising (not distributive education)	Shorthand and Training
Sales and Business Organization	Shorthand and Transcription
Sales, General	Shorthand II and Transcription
Sales and Merchandising (not distributive education)	Stenography
Sales, Personal (not distributive education)	Stenography I
Sales, Selling (not distributive education)	Stenography II
Sales and Retailing	Stenography III
Salesmanship (not distributive education)	Stenography, Senior
Salesmanship and Psychology	Stenography and Transcription
Secretarial Experience	Stenography and Typing
Secretarial Practice	Transcription
Secretarial Studies	Typewriting, General
Secretarial Service	Typing I
Secretarial Training	Typing II
Selling, Retail	Typing III
Shorthand	Typing IV
Shorthand I	Typing, Advanced
	Typing, Business
	Typing Club
	Typing, Elementary
	Typing, Intermediate
	Typing, Personal
	Typing Review

PHYSICAL EDUCATION AND HEALTH

Athletic Association, Girls	Driver Training Wheel (only when listed under Physical Education in transcript)
Athletics	Driving (only when listed under Physical Education in transcript)
Athletics and Physical Education	Driver, Road (only when listed under Physical Education in transcript)
Baseball	Field Sports
Basket Ball, Boys	First Aid
Basket Ball, Girls	First Aid and Health
Bowling	Football
Cheerleader	Football and Swimming
Dance	Golf
Dance Camp	Gym
Dance Composition	Health
Dance, Modern	Health Appraisal
Drill Team	Health, Basic
Driver Education and Health	Health, Basic and Physical Education
Driver Education, Safe Driving	Health and Gym
Driver Education, Safe Driving Theory	Health and Hygiene
Driver Training (only when listed under Physical Education in transcript)	Health and Development
Driver Training Class (only when listed under Physical Education in transcript)	Health, Corrective
	Health Education

Health Training
 Health and Nutrition
 Health, Personal Regimen
 Health and Safety
 Healthful Living
 Indoor Sports
 Intramurals
 Life Saving
 Military
 Military, Army Reserve
 Military Cadets
 Military Drill
 Military, Drill Theory
 Military Science—Basic Training
 Military Science I
 Military Science II
 Military Training
 Pep Squad
 Physical Education
 Physical Education 1
 Physical Education 2
 Physical Education 3
 Physical Education 4

Physical Education and Health
 Physical Education or Health
 Physical Education, Health, and
 Safety
 Physical Education, Health or Driver
 Education
 Physical Education and Basic Health
 Physical Education and Driver Edu-
 cation
 Physical Training
 Pool
 Red Cross
 Reserve Officers Training Corps
 Soccer
 Softball
 Sports
 Sports, Senior
 Swimming
 Swimming and Gym
 Tennis
 Track
 Tumbling
 Wrestling

VOCATIONAL EDUCATION

(Not including vocational home economics)

Air Conditioning
 Automobile I, Vocational
 Automobile II, Vocational
 Automobile Mechanics
 Automobile, Related
 Automobile Science
 Automobile Shop
 Automobile Theory
 Automobile Trade
 Blueprint
 Blueprint Reading
 Cabinetmaking
 Carpentry
 Carpentry Trade
 Chef
 Coal Mining
 Cosmetology
 Cooperative Business
 Cooperative Industry
 Cooperative, Merchandise
 Cooperative, Office
 Cooperative, Related Sales
 Cooperative, Retail
 Cooperative, Sales
 Cooperative Training

Distribution, Economics of
 Distributive Education
 Distributive Education Laboratory
 Distributive Education Major
 Distributive Education Minor
 Diversified Education
 Diversified Education Major
 Diversified Education Minor
 Diversified Education, On the Job
 Training
 Diversified Education, Related
 Information
 Diversified Education, Related
 Occupations
 Diversified Occupations
 Diversified Occupations, Work
 Experience
 Diversified Training, Cooperative
 Diversified Training, General
 Diversified Training, Special
 Electrical Work
 Employment Practices
 Floristry
 Food Preparation

General Industry Shop	Patternmaking
Machine Shop	Photography
Machine Shop, Metal Fitting	Plumbing
Machine Shop, Related Machine	Printing
Masonry	Printing Shop
Metal Trades	Projection
Mechanics	Radio
Mechanical Drafting	Restaurant Training
Merchandising	Retail Selling
Occupations	Store Problems

UNCLASSIFIED COURSES

Annual Photo	Library and Chorus
Art—English	Mathematics or Science
Art or Industrial Arts	Music or Art
Art, Music, or Industrial Arts	Music and Art
Art, Office	Noninterpretable Credits
Art and Speech	Nurses Aid
Attendance Officer	Office Service
Audio-Visual	Pep Club
Auditorium	Personal Training
Band and Physical Education	Physical Education and Art
Band, Physical Education and Chorus	Physiology-Psychology
Band, Physical Education, Library and Chorus	Printing—Foods
Band, Physical Education, and Voca- tional Music	Projection
Basic Skill	Recreation Council
Boys Club	Related Subjects
Cadet Teaching	Relative Training
Cafeteria	Reviews
Civil Air Patrol	Safety
Clinic Assistance	Safety Education
Composite	Safety Education and Driver Training
Correspondence Club	Safety, Personal
Distributive Education Club	Science Club
Elective	Seamanship
Exploratory Teaching	Seminar (also coded as Clinic)
Extracurricular	Senior Forum
Future Farmers Association	Senior Review
Future Homemakers Association	Senior Survey
General Education	Speech Clinic
Guidance	Student Body Officer
Hobbies	Student Conservation Society
Home Economics or Industrial Arts	Student Exchange
Homeroom Program	Student Government
Introduction to Education	Student Store
Latin Club	Study Hall
Leadership	Switchboard
Letter Club	Transportation
	Visual Aids
	World Affairs Club

Appendix D.—The Questionnaire

Form SEC-14

Budget Bureau No. 51-5810
Approval Expires 6-15-59

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Office of Education
Washington 25, D.C.

DEAR PRINCIPAL:

Events of the "cold war" have emphasized a number of questions about the status of American education. One of these questions concerning which information is greatly needed is the number of pupils of high scholastic aptitude who are, in fact, studying secondary school subjects which challenge their abilities and interests. In order to answer this question, and also in order to be able to compare the programs of study of pupils of different levels of aptitude, the Office of Education is making a survey of the subjects which 1957-58 high school graduates of different levels of ability studied in high school. For this purpose we need two types of information:

- (1) General information concerning the school, from a short questionnaire.
- (2) Information concerning the individual pupil, from the pupil's transcript of credits and other sources.

We feel certain that you will want to help us obtain a true picture of high school students' programs in the United States. You will find the procedures for doing so on the accompanying pages.

Your school is one of a small number selected by scientific sampling methods. Because the number of schools selected is small, it is particularly important that each one make a report. Your cooperation in giving us the information requested will be greatly appreciated.

A postage-free label is enclosed for your use in returning the pupil transcripts and the questionnaire.

Sincerely yours,

L. G. DERTHICK,
U.S. Commissioner of Education.

Enclosures

Form SEC-14

Budget Bureau No. 51-5810
Approval Expires 6-15-59DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Office of Education, Washington 25, D.C.A STUDY OF HIGH SCHOOL PUPIL PROGRAMS
Questionnaire

--

Report prepared by _____

Title _____

1. Check the type of organization applicable to your high school:
 - (1) Senior high school (3-year) _____.
 - (2) Regular high school (4-year) _____.
 - (3) Junior-senior high school or undivided high school (5-6-year) _____.
 - (4) Other (specify) _____.

Note: a. If your school did not graduate students from the 12th grade in 1957-58, please check here _____, and return the questionnaire without proceeding further.

b. If your school was not operating in 1957-58, check here _____, and return the form.
2. Type of community served (check one): Urban (2,500 or more population) _____.
Rural (less than 2,500 population) _____. Area in suburb of city of 25,000 or more population _____.
3. Give the 1957-58 membership, i.e., the number of pupils on the active rolls in your high school organization _____.
4. a. Give the number of graduates from the 12th grade in 1957-58 _____.
b. Give the number of these graduates who are attending 2-year or 4-year colleges _____.
5. a. According to the most recent scholastic aptitude test, give the number of pupils in the 1957-58 graduating class whose intelligence quotients fell into the following groupings:

1	Less than 90	_____
2	90-109	_____
3	110-119	_____
4	120-129	_____
5	130 and over	_____

b. Give the name and form of the test _____
6. Check the grades in which credits or units required for graduation from your high school are earned:
 - a. Grades 9-12 _____
 - b. Grades 10-12 (only) _____
7. Give the minimum number of Carnegie units* required of any pupil in the 1957-58 class for graduation regardless of the curriculum elected _____.
8. Give the number of units necessary for graduation in each of the following:
 - a. Required subject matter _____
 - b. Elective subject matter _____

*A Carnegie unit represents a minimum class attendance of 120 clock hours during a school year in any major subject in the secondary school.

WHAT HIGH SCHOOL PUPILS STUDY

9. Of the units required (see 8a above), indicate by checking in the table below the number of units required in each subject field or group of fields.

Field	Number of Carnegie units required						Other (specify)
	¼	½	1	2	3	4	
English							
Social studies							
Mathematics							
Science							
Foreign language							
Music							
Art							
Industrial arts							
Home economics							
Physical education							
Health							
Driver education							
Physical education and health (combined course)							
Physical education or health							
Physical education, health, or driver education							
Music or art							
Art or industrial arts							
Art, music, or industrial arts							
Home economics or industrial arts							
Mathematics or science							
Other (specify)							

10. Indicate recent and anticipated changes in programs of your school. (Check in the table below as many spaces as apply.)

Type of change	Made during 1957-58	Made during 1958-59	Definitely scheduled to begin in 1959-60
Increase in number of units of required subjects			
Decrease in number of units of required subjects			
Increase in courses in mathematics, science and foreign language			
Increase in subjects other than mathematics, science, and foreign language			

INSTRUCTIONS FOR PREPARATION OF PUPIL TRANSCRIPTS OF CREDIT FOR TRANSMITTAL TO THE OFFICE OF EDUCATION

Note: Follow instructions 1a and 2, regardless of the size of your enrollment. Follow instructions 1b and 1c that apply to your enrollment-size group

All Schools

1. Procedure for determining which transcripts to send and identifying them
 - a. In the alphabetical list of names, select the transcript of pupil No. 3.

Schools With Enrollments Below 500

- b. Count down five names until you come to No. 8. Select the transcript of that pupil. Then count down five more to No. 13. Select that transcript. Continue selecting transcripts of each fifth pupil until you reach the end of the list.
- c. Number the selected transcripts (3, 8, 13, etc.). Pupils' names may be blocked out.

Schools With Enrollments of 500 and Over

- b. Count down 10 names until you come to No. 13. Select the transcript of that pupil. Then count down 10 more to No. 23. Select that transcript. Continue selecting transcripts of each 10th pupil until you reach the end of the list.
- c. Number the selected transcripts (3, 13, 23, etc.). Pupils' names may be blocked out.

All Schools

2. The following information is essential to the success of this study. On the transcript, please make the necessary additions:
 - a. Sex of pupil.
 - b. Date of birth of pupil.

- c. Scholastic aptitude of pupil.
- (1) "Intelligence quotient (IQ)." When the scholastic aptitude of the pupil is expressed as an intelligence quotient, include it. (If you have more than one intelligence quotient for the pupil, choose the one obtained from the test given most recently.)
 - (2) "Percentile." If, instead of being expressed as an intelligence quotient, the scholastic aptitude of the pupil is expressed as a percentile based on established national norms, include it. (When you have more than one percentile rank for the pupil, choose the one obtained from the test given most recently.)
 - (3) If you have no measure of scholastic aptitude for the pupil, write, "No scholastic aptitude measure."
- d. Pupil's scholastic rank in class when he graduated.
If the pupil's rank in class is not available and it is not convenient to calculate it, indicate in which third of the class he graduated:
upper one-third
middle one-third
lower one-third
- e. Type of curriculum from which pupil graduated. (College preparatory, general, vocational, etc.)
- f. College attendance. Indicate whether or not pupil is attending college. If information is not available, write "College attendance not available."
- g. Work done in former high school. If student transferred from a high school in another system, please identify work done in the former school, by circling courses studied in other school systems.

Please send the completed questionnaire with the pupil transcripts of credit, as described on pages 3 and 4, to the U.S. Office of Education, Washington 25, D.C. Retain the second copy for your files.