

DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

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REQUIREMENTS FOR
HIGH-SCHOOL GRADUATION

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LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,

Washington, October 24, 1928.

SIR: The Bureau of Education has repeatedly published bulletins dealing with subject offerings of schools, but it has not published a study of requirements for high-school graduation. Nevertheless, graduation requirements constitute a better index to a school's objectives than curriculum offerings; for if a subject is required for graduation it must be studied, without regard to the pupil's desires. Merely to offer a subject gives an opportunity which may or may not be accepted. Graduation requirements of public high schools are a matter of prime importance, therefore, to all school officers who are concerned with high-school administration. I have asked Mr. Carl A. Jessen, specialist in secondary education in this bureau, to undertake this study, and the result of his efforts is submitted herewith.

I recommend that it be printed as a bulletin of the Bureau of Education.

L. A. KALBACH, *Acting Commissioner*

The SECRETARY OF THE INTERIOR.

Requirements for High-School Graduation

I. Introduction: The Elective System and Graduation Requirements

One of the important developments in American secondary education during the past 30 years has been the widespread adoption of the elective system. Our earlier schools did not embarrass the pupil with curricular choices. The educational bill of fare was definitely table d'hôte. With the advent of new courses, it became evident that not even adolescent appetite could be relied upon to have taste and time for all pedagogical dishes. Elimination of some of the former offerings was frowned upon by the older patrons and was frequently not favored by the newcomers. To care for new courses and still retain the old ones an a la carte service was needed. Thus came about the entry of the elective system.

The new menu offered a tempting and bewildering variety. A few obsolete entrées had been eliminated, but in their places had come a mystifying list of new items and of familiar courses under strange names. The consequence was that some shut their eyes and chose blindly, while others ingeniously avoided the pièce de résistance and took a dainty taste of this and a delicate nibble of that.

Various devices have been developed to make election of courses a matter for more deliberate consideration and less aimless choice. Advance registration, the counseling system, educational guidance, and similar plans are all designed to cause the pupil to examine values of subjects which he selects. In addition, certain restrictions are imposed which plainly limit his free election of subjects. Regulations of this latter type are usually incorporated into graduation requirements. These graduation requirements as they exist in the various States and in individual high schools throughout the Nation form the basis for the investigation here reported.

II. Principles Governing Graduation Requirements

Preliminary to detailed discussion of graduation requirements, it appears desirable to examine briefly the fundamentals upon which they are based.

While there is a great deal of variety in the requirements themselves, there is a remarkable uniformity in the underlying principles. These may be classified under the three following heads:

1. Total amount of credit required as minimum
2. Constants required of all pupils.
3. Systems for securing continuity in the courses of individual pupils.

Amount of credit required.—Amount of credit is most commonly referred to in terms of the "unit." The unit, is variously defined in different sections, but in general it represents approximately one-fourth of a year's work as performed by a pupil of average ability. The following interpretation of unit accords closely with the definition given it in most localities:

A unit course of study in a secondary school is defined as a course covering an academic year that shall include in the aggregate not less than the equivalent of one hundred twenty 60-minute hours of classroom work—two hours of shop or laboratory work being equivalent to one hour of prepared classroom work.¹

"Credit" and "point" are other terms used in designating amount of credit. For the sake of convenience, reference to amount of credit in this bulletin is reduced to semester credit, two semester credits being equivalent to a unit course of study as defined above.

Constants.—By constants are here meant subjects which no one may escape taking. They are common to all curriculums and to all conditions. Constants may be required with credit, with limited credit, or without credit.

Sequence requirements.—While the purpose of secondary education is not preeminently one of specialization, it has been felt that a certain degree of unity is desirable in the character of the courses pursued. Two principal means employed for bringing such continuity into courses are curriculum groupings and major-minor sequences.

Analysis of groupings by curriculums is difficult on account of the great variety of subjects included in curriculums of the same or similar name. The college preparatory curriculum, for instance, means widely varying subject assignments in different sections of the United States. Sometimes some central authority, such as the city or the State, brings a measure of uniformity into curriculum organization of schools under its jurisdiction; but even under these conditions numerous opportunities are usually offered for differentiation. A classification of curriculums as offered in high schools of the Nation is likely to become either unreliable or prolix.

The system of requiring major and minor sequences has always been inherent in differentiated curriculum organization. More recently it has repeatedly issued forth as an independent principle, sometimes added to curriculums, frequently free of affiliation with them. In schools which use the major-minor plan, practice is almost universal that a major represents six and a minor four semester credits in one department. The departments usually recognized as valid for major or minor sequences are English, mathematics, laboratory science, history and social studies, any one foreign language, fine arts, and the subjects of any individual vocational field.

¹ Quoted from the standards of the North Central Association of Colleges and Secondary Schools.

Relationships.—There is a close interrelation between these various types of requirements. There are, for instance, schools in which few electives can be offered and nearly all subjects are constants, whether or not so classified. There are other schools in which curriculum organization is so strongly developed as to make unnecessary any separate statement of constants, of majors and minors, or even of a stated minimum number of credits for graduation. Combinations are frequent; they involve constants and curriculums, constants and major-minor sequences, or all three of these devices. Later tables will hint at this situation, but the relationships are in many cases closer than is apparent in the statistical tables.

III. State Requirements

In our American system of education the State is supreme. Consequently, in investigating high-school graduation requirements it seems logical to begin with State demands as fundamental. No high school may disregard the requirements of the State in which it is located.

Occasionally a graduation requirement is written specifically into the State law. Much more frequently, however, responsibility for formulation of such minimums is by statute assigned to some administrative agency, such as the State board of education or the State department of education.

In the large majority of cases the graduation requirements are incorporated into regulations or standards governing approval of high schools. In some States one set of standards is applied to all high schools; in other States classification of high schools is made dependent upon the particular group of standards which are met. The requirements discussed in this bulletin are those which apply to schools classed as of the first or highest grade.

The graduation requirements for 1927-28 as reported by the 48 States were as follows:

7104°—28—2

REQUIREMENTS FOR HIGH-SCHOOL GRADUATION

TABLE 1.—State graduation requirements¹

States	Semester-credits of constants													Other subjects	Sequence requirements ²			
	Total semester credits	English	Ninth-grade social	Foreign history	Civics	American history	Problems of American democracy	Economics	Other social sci.	Elementary science	Physics or chemistry	Any sciences	Algebra			Plane geometry	Any mathematics	Physical education
1	2	6	6	6	6	7	8	8	10	11	12	13	14	15	16	17	18	19
Alabama.....	32	6	2	2	1	1	(1)	(1)	(1)	(1)	(1)	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Arizona.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Arkansas.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
California.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Colorado.....	30	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Connecticut.....	29	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Delaware.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Florida.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Georgia.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Idaho.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Illinois.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Indiana.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Iowa.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Kansas.....	30	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Kentucky.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Louisiana.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Maine.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Maryland.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Massachusetts.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Michigan.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Minnesota.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Mississippi.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Missouri.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Montana.....	30	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Nebraska.....	30	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
Nevada.....	30	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.
New Hampshire.....	32	6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	2	2	2	2	1 year	Health work (girls), 2. Soul and crops (boys), 2.	1 major and 3 minors. 1 major.

REQUIREMENTS FOR HIGH-SCHOOL GRADUATION

State	Total Credits	English	Mathematics	Science	History	Physical Education	Foreign Language	Art	Music	Vocational	Social Studies	Electives	Remarks
New Mexico	30	6	6	6	6	6							Selection curriculum: one of the following: Language, scientific, vocational. 1 major in mathematics except in vocational curriculums. 1 major and 2 minors; social studies must be included as major or minor. 1 major and 2 minors. 1 major or 2 minors.
New York	30	7	3	3	3	3							1 major and 2 minors. 1 major and 2 minors.
North Carolina	30	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
North Dakota	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Ohio	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Oklahoma	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Oregon	30	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Pennsylvania	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Rhode Island	30	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
South Carolina	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
South Dakota	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Tennessee	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Texas	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Utah	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Vermont	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Virginia	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Washington	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
West Virginia	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Wisconsin	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.
Wyoming	32	6	6	6	6	6							1 major and 2 minors. 1 major and 2 minors.

The requirements operative in the District of Columbia are given under the city of Washington in Table 2.
 Major and minor requirements as here stated are always in addition to English.
 A check (x) indicates the existence of a requirement.
 Biology may be substituted.
 A total of 4 credits of history.
 For American history.
 Physiology may be substituted.
 Physics required.
 Two semester credits required among special subjects—Manual training, home economics, music, physical training, fine arts.
 No subject requirements made by the State.
 United States constitutional history.
 Physiology and hygiene, 1.
 Four credits of foreign language required of all pupils not specializing in vocational subjects.
 Biology required except in vocational curriculums.
 Two credits in Problems of American democracy or in sociology and economics.
 Two credits of natural science.

Selection curriculum: one of the following: Language, scientific, vocational.
 1 major in mathematics except in vocational curriculums.
 1 major and 2 minors; social studies must be included as major or minor.
 1 major and 2 minors.
 1 major or 2 minors.
 1 major and 2 minors.
 Total, 10 semester credits required in mathematics and sciences.
 2 majors and 2 minors.
 1 major and 2 minors.
 1 major and 2 minors.



It will be observed that in all States the requirements are made applicable to 4-year high schools.² This situation becomes reasonable when one reflects that, of all pupils enrolled in the last four years of the public-school course (1925-26), 72 per cent attended regular 4-year high schools.³ In some of the States, alternative plans apply to various types of reorganized high schools; but quite often, even in these situations, the graduation requirements are stated in terms of four years of work. College entrance requirements are, more frequently than State graduation requirements, based upon courses normally completed in fewer than four years.

Total amount of credit.—The total amount of credit required for graduation ranges from 29 to 36 semester credits. Thirty-two semester credits (16 units) is the median requirement, being uniform in 35 States; 30 semester credits is the standard in 10 States.

English.—English is the most universal constant, being specified in 41 States; 22 of these require three years, 19 four years, of the subject.

Social science.—Social studies follow English closely, with a total of 40 States requiring some credit in history or other social science before a pupil may be graduated. Thirty-four demand that some training in American history be included, while 22 specify that study of civics must be pursued either separately or as a part of the American history course. In the total amount of compulsory social studies credit, the frequency curve is bi-modal, 17 States requiring four semester credits and 13 placing the minimum at two credits.

Laboratory science.—A year's work in elementary science is required in 5 States; 3 others give the pupil an option between general science and biology or physiology; in 1 State two semester credits of natural science are stipulated. A choice between chemistry and physics is given in 2 States, while 13 accept a year's work in any science as satisfactory to the requirements. Twenty-six States place a science requirement as a condition of graduation.

Mathematics.—Fourteen States require a year's study of algebra and nine of these add a year of geometry. Nine are content with any type of high-school mathematics course pursued for one year; one stipulates two years of some type of mathematics. Exactly one-half of the States include mathematics as a constant in the high-school course.

Miscellaneous subjects.—Physical education, varying in amount and in credit assignment, is required in 17 of the States. A year's work in home economics is a constant for girls in 2 States. Two years of foreign language is a universal requirement in 2 States, and

¹ Seven of the States reported that the predominating high-school organization included grades 8 to 12; in all other States the prevailing high-school organization included grades 9 to 12.

² Statistics of Public High Schools, 1925-26. Department of the Interior, Bu. of Educ., Bul., 1927, No. 53. See Tables 14 and 16.

in 1 other it applies to all pupils except those who have elected a vocational course.

Subject groupings.—There is a very evident tendency on the part of State authorities to make it impossible for a pupil to be graduated from high school unless he can show evidence of fairly intensive work in two or more departments of study. In a number of States this policy is made effective through incorporating into the requirements of constants a major in English and various additional major or minor sequences. Nineteen States make mention of majors and minors, and 15 of the 19 make it compulsory that pupils present a certain number of major and minor groupings for graduation. One State requires that schools adopt curriculums with specific groupings of subjects; seven States recommend the organization of such curriculums.

Recommendations.—In conclusion it may be said that many of the States recommend the introduction of additional local requirements. Such recommendations involve minimum total amount of credit acceptable for graduation, constants which appear desirable, curriculums, majors and minors, minimum credit which may be presented in foreign languages, and the like. Some of the more important of these recommendations are listed in Table 2. The effect of such suggestions can, however, be observed only by studying the requirements operative in high schools within the State.

TABLE 2.—State recommendations for graduation requirements

- Delaware.*—Type curriculums suggested for high schools of various sizes.
- Illinois.*—Eight credits of English, except in large high schools.
- Kansas.*—Total of 32 credits for graduation.
- Kentucky.*—Type curriculums suggested for high schools of various sizes.
- Maine.*—General, commercial, college preparatory, and practical arts curriculums with subjects specified.
- Maryland.*—Type curriculums suggested for high schools of various sizes.
- Massachusetts.*—Total of 32 credits for graduation, English (4 years), general science ($\frac{1}{2}$ or 1 year), community civics ($\frac{1}{2}$ to 1 year), physical education (4 years) as constants. In addition to English, at least (a) one major and one minor, or (b) two minors.
- Minnesota.*—The following constants, aside from English, American history, and physical education: Modern world history (1 year), twelfth-grade social science (1 year), general science (1 year), biological science (1 year).
- Mississippi.*—Inclusion of American history as a required subject.
- Missouri.*—Two minors aside from majors in English and social science.
- Montana.*—Total of 32 credits for graduation. Eight credits of English; type curriculums suggested for high schools of various sizes.
- Nevada.*—The meeting of college entrance requirements: English (3 years), algebra (1 year), plane geometry (1 year); in addition one major and one minor, or three minors.
- New Hampshire.*—One year of science; special curriculum choices suggested.
- New Jersey.*—Eight credits in English.
- New Mexico.*—Physical education and vocational guidance.

Pennsylvania.—English and social studies each year of the course.

South Dakota.—Total of 32 credits for graduation.

Vermont.—General mathematics, physical education, and music instruction; in addition to English, two majors and two minors.

Washington.—English, classical, scientific, commercial, household economics, manual training, agriculture, and music curriculums, with subjects specified.

West Virginia.—Biology recommended for meeting natural science requirement.

IV. City Requirements

Large cities frequently have more or less uniform organization plans for the several high schools within the city system. Such an arrangement may include the establishment of minimum requirements for graduation.

In Table 3 are given the graduation requirements with regard to total amount of credit, constants, and sequences as established by 12 cities with a population of more than 250,000 each. For purposes of this study this population level was selected rather than a lower one because a city having a quarter of a million inhabitants will usually have five or more high schools and will as a consequence feel more urgently the need of fixing city-wide graduation requirements.

TABLE 3.—High-school graduation requirements in 12 large cities

Cities	Total semester credits	Semester credits of constants										Sequence requirements ¹		
		English	American history	Civics	Mathematics	Science	Physical education	Art and drawing	Music	Other subjects	Minors	Major	Minors	Curriculums and subjects
1	3	3	4	5	6	7	8	9	10	11	13	13	14	
Chicago, Ill.	32	17	12	11	12	12	4 years ¹	2 years ¹	2 years ¹		11	13	14	Selection of a curriculum; 10 offered.
Cincinnati, Ohio	30	8	1.3	1.3			4 years	4 years	4 years			12	14	Selection of a curriculum; 7 offered.
Denver, Colo.	26	4	2				3 years				(1)	12	14	7 recommended curriculums; ³
Detroit, Mich.	33	8	2				4 years				(1)	12	14	4 curriculums offered.
Kansas City, Mo.	24	4	History, 2								(1)	12	14	12 curriculums offered.
Milwaukee, Wis.	33	4	2								(1)	12	14	Four different types of groupings suggested. ⁴
Minneapolis, Minn.	34	8	Social studies, 5				4 years	2 years	2 years		(1)	12	14	Selection of a curriculum; 7 offered.
Newark, N. J.	36	7	2	1			4 years	2 years	2 years		(1)	12	14	7 curriculums offered.
New York, N. Y.	36	8	2				do	2 years	2 years		(1)	12	14	4 curriculums, in addition to technical courses, offered. ⁵
Philadelphia, Pa.	32	7	Social studies, 4				do	1 year	2 years		(1)	12	14	
Seattle, Wash.	33	6	2	1			2	2 years	2 years		(1)	12	14	
Washington, D. C.	24	8	2				4 years	2 years	4 years		(1)	12	14	

¹ Majors and minors are stated in addition to constants.

² Recommended.

³ Requirements for 2-year senior high schools.

⁴ World history, 2; mathematics, science, or foreign history, 2.

⁵ Social studies may not be counted in the two minors required.

⁶ No credit toward graduation allowed for one semester's work in a subject which continues for a full year.

⁷ Social science, 4; social arts, 1.6.

⁸ Except in the case of pupils not expecting to go to college.

⁹ At least 13 credits, including the required major and two of the minors, must be in academic or commercial work.

¹⁰ Time equivalent of 36 semester credits required.

¹¹ Problems of American democracy, 1; physiology and hygiene, 1.

¹² European history, 2; economics, 1; civics, 1. In addition New York requires passing of certain State board examinations and of a special examination in oral English, a school record showing good moral character, and signing of a pledge of loyalty to the United States and to the State of New York.

¹³ World history, 2.

¹⁴ Foreign language, 4.



Among the more important facts which may be summarized from the data gathered are the following:

1. In total semester credits required the range for 4-year high schools is from 30 to 36; the median and the mode both fall at 32.

2. Constants in English and social studies are listed by all 12 cities. Seven or eight semester credits in English are usual. Eight cities specify American history and seven list civics among the constants. Ten require physical education; six demand some science training; and five include mathematics. Music is universally required of all pupils in five cities; art or drawing in four cities.

3. The plan of grouping subjects into curriculums is followed more or less closely in 9 of the cities; in 3, selection by the pupil of a specific curriculum is one of the conditions of later graduation. Kansas City, Mo., groups subjects and administers sequence requirements through majors and minors; at least 18 of the 24 credits required for graduation from senior high school must be earned in academic or commercial work. New York likewise stipulates major-minor requirements for securing continuity in pupil programs. Chicago, Denver, and Philadelphia supplement curriculum requirements with additional demands for continued work in two or three fields. A number of cities state that no credit toward graduation will be allowed for less than two years of study of a foreign language or for one semester's work in a subject which continues throughout the full year.

V. Graduation Requirements of Individual Schools

State graduation requirements are of necessity confined rather largely to minimums regarding which there is general agreement. The same is to considerable extent true of uniform regulations established by central authority for the various high schools of a city. These larger units usually favor differentiation between the several high schools within their limits and consequently approve extension of graduation requirements to meet local conditions. The actual requirements met by graduates operate through the individual schools and are frequently somewhat in advance of city-wide or state-wide minimums.

Scope of the investigation and grouping of schools.—During the school year 1927-28 a questionnaire inquiring regarding graduation requirements was sent to a sampling of high schools in the United States by the Bureau of Education. Returns of 464 of these questionnaires as tabulated included schools from every State. The distribution by States and by sizes of schools is given in Table 4.

TABLE 4.—Number of schools reporting graduation requirements¹

State	Total	Schools with pupil enrollment of—			State	Total	Schools with pupil enrollment of—		
		50-199	200-999	1,000 or more			50-199	200-999	1,000 or more
United States.....	404	196	114	154	Nebraska.....	10	7	1	2
Alabama.....	6	1	2	3	Nevada.....	2	2		
Arizona.....	3	1	1	1	New Hampshire.....	2	1	1	
Arkansas.....	8	4	2	2	New Jersey.....	12		8	7
California.....	24	4	6	14	New Mexico.....	3	2	1	
Colorado.....	4	2	2		New York.....	42	10	6	26
Connecticut.....	6	1	3	2	North Carolina.....	12	8	4	2
Delaware.....	2	1		1	North Dakota.....	4	3	1	
Dist. Columbia.....	3			8	Ohio.....	27	10	4	13
Florida.....	3	1	2		Oklahoma.....	10	8	2	
Georgia.....	3	2	1		Oregon.....	8	4	1	3
Idaho.....	4	2	2		Pennsylvania.....	26	8	10	8
Illinois.....	27	8	5	14	Rhode Island.....	4	1	1	2
Indiana.....	20	15	2	3	South Carolina.....	6	5	1	
Iowa.....	18	12	4	2	South Dakota.....	3	3		
Kansas.....	9	6	2	1	Tennessee.....	6	4	1	1
Kentucky.....	6	2	2	2	Texas.....	11	6	4	1
Louisiana.....	4	2	1	1	Utah.....	6	1	2	3
Maine.....	5	1	2	2	Vermont.....	3	2	1	
Maryland.....	5	2	1	2	Virginia.....	9	5	3	1
Massachusetts.....	11	4	1	6	Washington.....	12	3	2	7
Michigan.....	18	8	3	7	West Virginia.....	7	4	2	1
Minnesota.....	12	7	3	2	Wisconsin.....	13	6	2	5
Mississippi.....	5	1	4		Wyoming.....	4	2	2	
Missouri.....	9	3	3	3					
Montana.....	7	3	2	2					

¹ Data were also gathered from a considerable number of high schools enrolling fewer than 50 pupils, but tabulation of replies disclosed that these schools offered almost no electives. In effect graduation requirements and programs of studies were identical. The incomplete information gathered concerning the programs of studies of these schools and the limited number of schools of this size reporting (about 100) influenced decision in favor of eliminating these returns from the present study.

Similarly there have been omitted from this study the graduation requirements reported by 32 schools of the 3-year senior high school type; it is felt that this number of schools is too small to constitute a reliable sampling.

In several of the tables which follow, schools are grouped by sections instead of by States. The grouping by individual States would have lengthened the tables unduly and would not be especially useful for comparison with State requirements, since the minimums described in Table 1 deal with high schools of the highest grade only, and the data included in the tables which follow concern high schools of all classifications.

The grouping has been made on the basis of territory served by the various regional standardizing agencies operating in the secondary school field. In New England, the Middle States, the Southern and the North Central sections it has been possible to follow this classification in all cases; in the region indicated as Western there are included the schools of two States which are affiliated with no regional accrediting agency.

The five sections and the States assigned to each are as follows:

1. New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.

2. Middle States: Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania.

3. Southern: Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia.

4. North Central: Arizona, Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Ohio, Oklahoma, South Dakota, West Virginia, Wisconsin, Wyoming.

5. Western: California, Idaho, Nevada, Oregon, Utah, Washington.

Total semester credits required for graduation.—The most striking fact presented by Table 5 is the ascendancy of the 32-credit requirement; this number of credits is mentioned as the minimum accepted in almost three-fourths of the schools reporting. It is noticeable, too, that the schools of the Middle States and Maryland are bi-modal, if not tri-modal, with regard to total credits required as minimum. This situation is partly explained when one realizes that 19 of the 24 schools which report 36 semester credits are located in New York City where a universal requirement of 36 semester hours obtains.

TABLE 5.—*Distribution of schools according to total number of credits required for graduation*

Section	Total	Semester credits required								
		30	31	32	33	34	36	37	38	40
United States.....	1 462	39	6	343	8	20	36	1	3	6
New England.....	31	3	1	21	.....	1	1	.....	1	3
Middle States.....	88	14	4	33	3	6	24	.....	2	2
Southern.....	71	3	.....	59	1	2	6	.....	.....	.....
North Central.....	216	15	1	183	3	7	8	1	.....	1
Western.....	56	6	.....	47	1	4	.....	.....	.....	.....

¹ One school states the requirement as indefinite, and one follows purely curriculum selection. These two schools added bring the total to 464.

English as constant.—Only three schools omit English from the subjects required as a constant; in over three-fifths of the schools studied four years of English are prescribed; three years, placed in one-third of the schools, is the requirement of next greatest frequency. The four-year requirement is general throughout eastern and southern schools; the three-year requirement runs a close second in north central and western sections. Small schools usually include four years of English among the constants.

TABLE 6.—Number of schools requiring English as a constant

[Read the table as follows: 461 schools reported that English was required as a constant. Of those enrolling 50 to 199 pupils, 6 required four semester credits of English, 55 required six semester credits, etc.]

Sections	Total	Enrollment 50-199.				Enrollment 200-999.				Enrollment 1,000 or more			
		Credits				Credits				Credits			
		4	6	7	8	4	6	7	8	4	6	7	8
United States....	461	6	55	1	133	.....	38	2	74	7	56	10	79
New England.....	31	.....	.....	.....	10	.....	.....	.....	9	1	3	1	7
Middle States.....	90	.....	7	1	13	.....	5	1	16	.....	7	1	39
Southern.....	71	1	1	.....	33	.....	2	.....	23	.....	1	1	9
North Central.....	214	5	35	.....	73	.....	23	1	20	6	26	6	19
Western.....	56	.....	12	.....	4	.....	8	.....	6	.....	20	1	5

Social studies as constants.—As was forecast in State and city requirements, the placing of American history as a constant is more general than any other individual social science requirement. It is of interest to note that in point of frequency the full-year course far outstrips the one-semester course in schools of all sizes and in all sections of the Nation. A greatly lowered number of schools require an eleventh or twelfth grade course in civics; this situation may, however, be accounted for by the requirements in closely allied social studies, especially in community civics and in problems of American democracy. Some study of foreign history is required in almost 30 per cent of the schools studied; the ratio between schools requiring one year and those requiring two years is approximately 12 to 1; undoubtedly some of the schools requiring one year of foreign history give pupils an option between early European and later European courses, but the high ratio quoted above argues that a large number of one-year foreign history courses are in existence. The item "Any social science," as used in the table, includes, aside from those schools which state their total social science requirements in those terms, also those which, after making a specific requirement of one or more particular social studies, demand that pupils shall in addition select certain stated amounts of work in the social science field.

TABLE 7.—Number of schools requiring history and social studies as constants¹

[Read the table as follows: 131 schools require foreign history among graduation credits. Of schools with an enrollment of 50 to 199 pupils, 1 requires one semester credit, 50 require two semester credits, etc.]

Sections and subjects	Total	Enrollment 50-199			Enrollment 200-999			Enrollment 1,000 or more		
		Credits			Credits			Credits		
		1	2	4	1	2	4	1	2	4
United States:										
Foreign history.....	131	1	50	6	2	22	4			46
American history.....	296	19	108	3	12	67		12		75
Community civics.....	47	8	7		3	8		7		17
Advanced civics.....	152	37	19	2	27	10		52		5
Economics.....	44	13	4		3			24		
Problems of American democracy.....	38	1	19		4	5		5		4
Any social science.....	159	13	48	30	6	24	13	6		10
Miscellaneous ²	12	3	4		2			3		
New England:										
Foreign history.....	3		1			2				
American history.....	18		9			4				5
Community civics.....	4		1			3				
Advanced civics.....	5	1	1			1		1		1
Economics.....										
Problems of American democracy.....	1		1							
Any social science.....	9		3	1		1	1	2		1
Miscellaneous ²	1		1							
Middle States:										
Foreign history.....	41		9		2	9				21
American history.....	60		8		1	18		1		32
Community civics.....	5							5		
Advanced civics.....	40	3	5		6	5		21		
Economics.....	21							21		
Problems of American democracy.....	15		6		2	1		4		3
Any social science.....	27	2	2	11	2	3	1			5
Miscellaneous ²	0									1
Southern:										
Foreign history.....	21		9	3		5	3			1
American history.....	39	3	13	2	2	13				6
Community civics.....	4	2			1					1
Advanced civics.....	16	4	2	2	4	1		1		2
Economics.....										
Problems of American democracy.....	5		2		1	1		1		
Any social science.....	26	2	6	11	1	2	4			
Miscellaneous ²	3	1	1		1					
North Central:										
Foreign history.....	44	1	20	3		6	1			3
American history.....	158	13	72	1	8	24		10		30
Community civics.....	17	6	6		2	2				1
Advanced civics.....	65	25	8		10	3		17		2
Economics.....	21	13	4		2			2		
Problems of American democracy.....	17	1	11		1	3				1
Any social science.....	77	8	31	6	3	16	4	3		1
Miscellaneous ²	7	2	1		1			3		
Western:										
Foreign history.....	22		1							21
American history.....	21	3	6		1	8		1		2
Community civics.....	17							2		18
Advanced civics.....	26	4	3		7			12		
Economics.....	2				1			1		
Problems of American democracy.....										
Any social science.....	20	1	6	1		2	3	1	4	3
Miscellaneous ²	1		1							

¹ In this and a number of tables which follow, the totals of columns would be misleading; in such tables the totals of items listed horizontally are the only ones given.

² Includes principally sociology and vocations.

Science as constant.—Specific sciences required for graduation are, in the order of frequency: General science, biology, physics, chemistry. An option between chemistry and physics is allowed in a considerable number of schools. There are more schools requiring general science than there are schools placing any kind of requirement in either chemistry or physics. The item "Other science require-

ment" in the following table includes a few schools in which specific mention is made of some specialized science, but principally it includes cases where the requirement is stated as "Any science." It will be observed that this type of requirement occurs most frequently in New England and in the extreme West. Careful check of the questionnaires discloses that 306 of the schools studied (nearly 66 per cent) place a requirement of science credit as a condition of high-school graduation.

TABLE 8.—Number of schools requiring science as a constant

[Read the table as follows: Elementary or general science is required by 92 of the schools studied. Among schools of fewer than 200 pupils, 3 require one credit, 56 require two credits, etc.]

Sections and subjects	Total	Enrollment 50-199			Enrollment 200-999			Enrollment 1,000 or more		
		Credits			Credits			Credits		
		1	2	4	1	2	4	1	2	4
United States:										
Elementary or general.....	92	3	56	2	2	17		1	11	
Biology.....	63	2	33	1	4	11			10	
Chemistry.....	9		7			2				
Physics.....	36		31	1		2			2	
Chemistry or physics.....	21		15	1		3			7	
Other science requirement.....	118		47	7		28	6		26	4
New England:										
Elementary or general.....										
Biology.....	2		2							
Chemistry.....										
Physics.....										
Chemistry or physics.....										
Other science requirement.....	11		3			1			3	4
Middle States:										
Elementary or general.....	11		2			5			4	
Biology.....	21	7	6	1		6		1	6	
Chemistry.....	3		2			1				
Physics.....	7		5						2	
Chemistry or physics.....	5		2			1			2	
Other science requirement.....	12		2	1		3			6	
Southern:										
Elementary or general.....	23		15	2		3			3	
Biology.....	9		5			3				
Chemistry.....	3		3			1				
Physics.....	5		4	1						
Chemistry or physics.....	4			1		2			1	
Other science requirement.....	22		7	4		3	2		1	
North Central:										
Elementary or general.....	53	3	37		2	8		1	2	
Biology.....	27	1	19		4	1			2	
Chemistry.....	1					1				
Physics.....	23		21			2				
Chemistry or physics.....	15		11			2			2	
Other science requirement.....	40		28	1		9	3		1	
Western:										
Elementary or general.....	5		2			1				
Biology.....	4		1			1			2	
Chemistry.....	2		2							
Physics.....	1		1							
Chemistry or physics.....	7		2			3			2	
Other science requirement.....	33		9	1		7	1		15	

Mathematics as constant.—Of the 464 schools, 319 require that pupils earn some credit in mathematics during the last four years of high school. Of these, 242 specify one or more years of algebra, while 77 accept any high-school mathematics; 161 schools require

one year or more of study of geometry. Size of school apparently does not influence the mathematics requirements significantly, except that the largest schools rarely require more than one year of work in algebra. Regionally it is interesting to note that extensive mathematics requirements are of greatest frequency in the South, and that general mathematics as a required subject is probably more prevalent in the North Central and Middle States than in the other groups.

The detailed facts reported for mathematics are summarized in Table 9.

TABLE 9:—Number of schools requiring mathematics as a constant

[Read the table as follows: Algebra is required in a total of 242 of the schools studied. Of schools having an enrollment of 50 to 199 pupils, 109 require two credits, 9 require three credits, 9 require three credits, etc.]

Sections and subjects	Total	Enrollment 50-199			Enrollment 200-999			Enrollment 1,000 or more		
		Credits			Credits			Credits		
		2	3	4	2	3	4	2	3	4
United States:										
Algebra.....	242	109	9	22	54	4	7	34	2	1
Geometry.....	161	92	2	7	31			29		
Any mathematics.....	77	22		4	11		3	30	2	3
New England:										
Algebra.....	16	7			5			4		
Geometry.....	5	3			1			1		
Any mathematics.....	4				1			1	2	
Middle States:										
Algebra.....	36	13		2	10			10		1
Geometry.....	15	5		1	4			5		
Any mathematics.....	13	3			3		1	5		1
Southern:										
Algebra.....	56	14	3	12	10	3	7	1	1	
Geometry.....	39	22		5	10			2		
Any mathematics.....	9	6			1			1		1
North Central:										
Algebra.....	113	65	6	3	23	1		14	1	
Geometry.....	57	53	2	1	13			18		
Any mathematics.....	41	12		4	6			18		1
Western:										
Algebra.....	21	10			6			5		
Geometry.....	15	9			3			3		
Any mathematics.....	10	1					2	5		3

Physical education as a constant.—The attention given to physical education varies through a continuous range from physical exercises imposed one or two periods a week during one school year to an extensive program for health education including such activities as medical inspection, corrective exercises, hygiene instruction, supervision of school lunch, physical training, athletic play, and mental hygiene. More than one-half of the schools studied, one-third of the small ones and four-fifths of the large ones, require physical education, usually with credit but sometimes without credit allowance.

TABLE 10.—Number of schools requiring physical education as a constant

Subjects	Total	Enroll- ment 50-199	Enroll- ment 200-500	Enroll- ment 1,000 or more
United States:				
Required with credit.....	183	43	20	90
Required without credit.....	63	30	18	25
Required ¹	8	3	4	1
New England:				
Required with credit.....	17	3	4	10
Required without credit.....	6	2	1	3
Required ¹				
Middle States:				
Required with credit.....	39	6	6	25
Required without credit.....	6	2	3	1
Required ¹				
Southern:				
Required with credit.....	14	2	7	5
Required without credit.....	6	1	3	2
Required ¹				
North Central:				
Required with credit.....	78	27	26	25
Required without credit.....	39	15	11	13
Required ¹	8	4	4	1
Western:				
Required with credit.....	35	5	5	25
Required without credit.....	6			6
Required ¹				
Total.....	254	60	72	116

¹ Not stated whether with or without credit.

Foreign language as a constant.—Latin is required as a constant more frequently than all the modern languages combined. In most of the schools, especially of the East, in which foreign language is compulsory, pupils are often allowed choice between the various foreign languages offered. The 2-year requirement is the most common; 3-year and 4-year sequences are rarely applied. The foreign-language requirement prevails noticeably among smaller schools and among institutions of the South. Of the schools returning the questionnaire, two required more than one foreign language; there are thus included a total of 70 different schools which place a foreign-language requirement. If the schools studied are typical of practice throughout the Nation, pupils may emerge as graduates from high school untouched by foreign language in all except 15 per cent of the institutions.

TABLE 11.—Number of schools requiring foreign language as a constant

Sections and subjects	Total	Enrollment 50-199				Enrollment 200-999				Enrollment 1,000 or more			
		Credits				Credits				Credit			
		2	4	6	8	2	4	6	8	2	4	6	8
United States:													
Latin.....	23	3	19	1									
Modern language.....	15	2	10			3							
Any foreign language.....	34	2	10		3	1	8			10			
New England:													
Latin.....	0												
Modern language.....	1	1											
Any foreign language.....	3	1											
Middle States:													
Latin.....	2		1	1									
Modern language.....	2	1				1							
Any foreign language.....	13		4			1	2			6			
Southern:													
Latin.....	5	3	5										
Modern language.....	6		5			1							
Any foreign language.....	11		5			5				1			
North Central:													
Latin.....	12		12										
Modern language.....	4		4										
Any foreign language.....	7	1	1		3		1			1			
Western:													
Latin.....	1		1										
Modern language.....	2		1			1							
Any foreign language.....	0												

Vocational subjects as constants.—In schools requiring vocational subjects as constants it is customary to differentiate between constants for girls and constants for boys. Home economics for girls and shop or agriculture for boys are the subjects most frequently required for graduation. The requirements of agriculture and shop are generally found in small schools and in vocational or technical high schools organized for giving special training in a certain group of vocational subjects. The home economics requirement occurs in large high schools with as great frequency as in smaller ones; this may indicate acceptance of the belief that no girl should be graduated from high school without some training in home making. In the large majority of high schools the vocational work is elective and is administered through specialized curriculums or special schools. Check of the 464 questionnaires reveals that agriculture is a constant in 14 schools, shop work in 26, and home economics in 58.

TABLE 12.—Number of schools requiring vocational subjects as constants

Sections and subjects	Total	Enrollment 50-199				Enrollment 200-999				Enrollment 1,000 or more			
		Credits				Credits				Credits			
		1	2	4	6	1	2	4	6	1	2	4	6
United States:													
Home economics	55	3	6	15	12	2	9			3	7	3	
Shop	26	2	2	10	1	2	5			1	1	2	
Agriculture	14	3		5	3	1	1			1	1	2	
New England:													
Home economics	1		1										
Shop	0												
Agriculture	1					1							
Middle States:													
Home economics	9	1		1						1	4	3	
Shop	3					1				1	1		
Agriculture	1			1									
Southern:													
Home economics	17		4		6	1	3						
Shop	5		1				3				1		
Agriculture	2			1			1						
North Central:													
Home economics	27	1	1	14	6	1	3					1	
Shop	16	2	1	9	1	1	1					1	
Agriculture	9	3		3	3								
Western:													
Home economics	4									1	2		
Shop	3						1					1	
Agriculture	1						1						

Summary of requirements of constants.—A measure of the total requirements in constants may be secured by bringing together facts presented in Tables 6 to 12 and by deriving certain computations inherent in the figures of these tables. This has been done in Table 13. The figures opposite "English," for instance, present the total of semester hours set forth as requirements in Table 6. The figures are reached by multiplying the number of semester hours required (4, 6, 7, or 8) by the number of schools making each requirement; these several products are then added to form the totals. The same has been done for the various other subjects, except for physical education; omission here has been dictated by the varied practices with regard to the granting of credit in the subject.

TABLE 13.—Total semester credits required as constants

[Read the table as follows: The aggregate number of semester credits required in English by all the schools studied is 3,325. The smallest schools report 1,425 credits of this total; the schools of medium size, 834, etc.]

Subjects	Total	Enrollment 50-199	Enrollment 200-999	Enrollment 1,000 or more
	1	2	4	6
English	3,325	1,425	834	1,066
Social studies	1,629	777	393	459
Mathematics	1,077	611	344	222
Science	731	431	170	130
Foreign language	299	200	46	40
Vocational	315	239	35	41
Total	7,363	3,683	1,722	1,958
Average for each school	15.9	18.8	15.1	12.6

The table brings out some interesting facts concerning the amount of credit required in the different subjects. It is seen that the amount of work required in English is more than twice as great as that in social studies; no such difference was observed in the number of schools requiring graduation credit in these two departments. Mathematics holds a perceptible lead over science in the total amount of work required, and vocational subjects outdo foreign languages. The averages indicate that approximately 16 credits, one-half of a pupil's high-school work, is prescribed for him in the form of constants; the range extends from 19 semester credits in smaller schools to 12½ in schools enrolling 1,000 or more pupils.

Methods of administering graduation requirements.—Only two of the schools studied list no constants in their graduation requirements. Both of these have, however, elaborate curriculum organizations; one offers 34 different curriculums. Slightly fewer than one-half of the schools demand that pupils select among the curriculums offered; more than one-third incorporate majors and minors in graduation requirements. The methods of administering requirements arranged in descending order of frequency are as follows: 1. Constants and curriculums. 2. Constants only. 3. Constants and majors and minors. 4. Constants, curriculums, and majors and minors. 5. Curriculums only. The first two mentioned are of approximately equal frequency, the "constants only" type being typical of small schools and the "constants-curriculum" requirement being prescribed principally in large schools.

TABLE 14.—*Distribution of schools according to methods of administering graduation requirements*

[Read the table as follows: Of the 464 schools reporting, 149 state their graduation requirements in terms of constants only. Of the 149 schools, 96 are smaller schools as here classified, 38 are of medium size, etc.]

1	2	Constants only				Curriculums only			
		3	4	5	6	7	8	9	10
	Total	Total	50-199	200-999	1,000 or more	Total	50-199	200-999	1,000 or more
United States.....	464	149	96	38	15	2		1	1
New England.....	31	9	4	2	3				
Middle States.....	90	23	13	7	3				
Southern.....	71	36	23	13					
North Central.....	216	74	51	14	9	2		1	1
Western.....	56	7	5	2					

TABLE 14.—Distribution of schools according to methods of administering graduation requirements—Continued

	Constants and curriculums				Constants and majors and minors				Constants, curriculums, and majors and minors			
	Total	50-199	200-999	1,000 or more	Total	50-199	200-999	1,000 or more	Total	50-199	200-999	1,000 or more
1	11	12	13	14	15	16	17	18	19	20	21	22
United States.....	151	39	49	63	96	51	16	29	66	10	10*	46
New England.....	20	6	6	8	1			1	1		1	
Middle States.....	37	5	12	20	11	2	1	8	19	1	2	16
Southern.....	23	5	11	7	8	6		2	4	1	1	2
North Central.....	59	20	17	22	53	36	7	10	28	7	5	16
Western.....	12	3	3	6	23	7	8	8	14	1	1	12

The types of requirements, with percentages, for schools of various sizes are more easily studied in Table 15.

TABLE 15.—Types of graduation requirements classified according to size of schools

	Number	Per cent
<i>All schools</i>		
Requiring constants only.....	149	32.0
Requiring curriculums only.....	2	0.5
Requiring constants and curriculums.....	151	32.5
Requiring constants and major-minors.....	96	21.0
Requiring constants, curriculums, and major-minors.....	66	14.0
Total.....	464	100.0
<i>Schools enrolling 50-199</i>		
Requiring constants only.....	96	49.0
Requiring curriculums only.....	0	0
Requiring constants and curriculums.....	39	20.0
Requiring constants and majors-minors.....	51	26.0
Requiring constants, curriculums, and major-minors.....	10	5.0
Total.....	196	100.0
<i>Schools enrolling 200-999</i>		
Requiring constants only.....	38	33.0
Requiring curriculums only.....	1	1.0
Requiring constants and curriculums.....	49	44.0
Requiring constants and major-minors.....	16	14.0
Requiring constants, curriculums, and major-minors.....	10	8.0
Total.....	114	100.0
<i>Schools enrolling 1,000 or more</i>		
Requiring constants only.....	15	9.0
Requiring curriculums only.....	1	1.0
Requiring constants and curriculums.....	63	41.0
Requiring constants and major-minors.....	29	19.0
Requiring constants, curriculums, and major-minors.....	46	30.0
Total.....	154	100.0

Number of curriculums offered.—A total of 117 schools reported the number of curriculums offered. Seventy-seven per cent of these schools offer from two to five curriculums. Within this range are included all schools enrolling fewer than 200 pupils and nearly all with an enrollment under 1,000. More than seven curriculums are rarely offered even in the largest schools.

TABLE 16.—*Distribution of schools according to number of curriculums offered*

	Total	Enrollment 50-199	Enrollment 200-999	Enrollment 1,000 or more
1	2	3	4	5
Offering 2 curriculums.....	33	18	4	11
Offering 3 curriculums.....	23	10	7	6
Offering 4 curriculums.....	19	4	10	5
Offering 5 curriculums.....	16	2	8	6
Offering 6 curriculums.....	9			9
Offering 7 curriculums.....	7		1	6
Offering 8 curriculums.....	2		2	
Offering 9 curriculums.....	2			2
Offering 10 curriculums.....	3			3
Offering 11 curriculums.....	1			1
Offering 12 curriculums.....	1			1
Offering 24 curriculums.....	1			1
Total.....	117	34	32	51

Types of major-minor sequences.—Of the 116 schools reporting in detail regarding the number of majors and minors needed for graduation, 80 place the requirement at one major and two minors, exclusive of English. The one major requirement is next in frequency. It will be noted that some of the major-minor demands leave very slight election to the pupil except in the selection of departments.

TABLE 17.—*Distribution of schools requiring various combinations of majors and minors*¹

	Total	Enrollment 50-199	Enrollment 200-999	Enrollment 1,000 or more
1	2	3	4	5
Requiring 2 minors.....	1			1
Requiring 3 minors.....	1		1	
Requiring 4 minors.....	1			1
Requiring 1 major.....	18	3	5	10
Requiring 2 majors.....	2	2		
Requiring 1 major and 1 minor.....	4	1	1	2
Requiring 1 major and 2 minors.....	80	27	18	35
Requiring 1 major and 3 minors.....	5	3		2
Requiring 1 major and 4 minors.....	1		1	
Requiring 2 majors and 2 minors.....	2			2
Requiring 2 majors and 3 minors.....	1			1
Total.....	116	36	16	64

¹ Majors and minors here stated do not include requirements in English.

² Three schools report two majors as an alternative to this requirement.

³ One school reports two majors as an alternative to this requirement.

Sequences incorporated into requirements for constants.—Treatment has been given to sequence requirements as administered through curriculums and through majors and minors. One other method for securing continuity in the programs of individual pupils remains to be considered; this consists in incorporating sequence requirements into constants. It is clear that the school which requires four semester credits in laboratory science has in effect placed requirement for a minor in science regardless of the fact that the regulations governing graduation may make no mention of majors and minors.

Study of these major-minor requirements latently contained in constants yields the results tabulated in Table 18. Since English is almost universally required for three or four years (see Table 6), this subject has been excluded from consideration in Table 18. It should also be borne in mind that probably two-thirds of the schools included in the table supplement the demand for constants with requirements for curriculum election, or stated major-minor sequences, or both.

TABLE 18.—*Distribution of schools incorporating into constants sequences of four or more semester credits*

[Read the table as follows: Seventy-four schools include one minor, exclusive of English, in the requirement of constants; 21 of these schools are classified as smaller, 29 as of medium size, etc.]

	Total	Enrollment 50-199	Enrollment 200-999	Enrollment 1,000 or more
1	2	3	4	5
Requiring 1 minor.....	74	21	29	24
Requiring 2 minors.....	44	20	15	9
Requiring 3 minors.....	14	9	2	3
Requiring 4 minors.....	4	4		
Requiring 5 minors.....	1	1		
Requiring 1 major.....	24	11	7	6
Requiring 2 majors.....	5	2	2	1
Requiring 3 majors.....	1		1	
Requiring 1 major and 1 minor.....	14	9	5	
Requiring 1 major and 2 minors.....	22	16	4	2
Requiring 1 major and 3 minors.....	7	6	1	
Requiring 2 majors and 1 minor.....	2	2		
Requiring 2 majors and 2 minors.....	4	4		
Requiring 2 majors and 3 minors.....	1	1		
Total.....	217	106	67	44

VI. Conclusion: The Typical Requirement for High-school Graduation

High schools are often criticized as offering too much and requiring too little. There is an unfortunate notion abroad in the United States that the pupil after an easeful sojourn of four years in high school finds himself catapulted out of an environment of soft pedagogy into a world of hard facts and that he is fortified for this encounter only by a beribboned diploma certifying completion of a course consisting chiefly of fads, frills, and fine feathers.

In so far as the criticism pertains to subjects offered in secondary schools, the data gathered for this bulletin offer no significant information. No attempt has been made here to investigate programs of study.

The charge that the average pupil may skirt along the fringes of the curriculum, always taking "snap" courses, is not warranted by present facts. By reference to Table 13 it is found that one-half of the pupil's work is mapped out for him in the form of constants. In the case of the smaller school three-fifths of his work is thus prescribed; the larger school lists two-fifths of the total as constants. In one-third of the States he must in addition take one or more years of physical education. According to Table 15 his free election is further limited in one-half of the smaller schools by demand that he elect a curriculum, or present a certain number of major-minor sequences, or meet both of these qualifications. In the larger schools, where fewer constants are required, 90 per cent of the schools safeguard the schedules of pupils by requiring curriculum selection, or major-minor sequences, or both. If the central tendencies are accepted as typical, the high-school pupil presents for graduation 16 semester credits of constants and in addition completion of a definite curriculum, or one major and two minors aside from English, or both. Free election is thus limited to one-fourth or less of the pupil's work; if the elective system is worth retaining at all, it would seem that it should be allowed to operate to this extent.

The criticism that the graduate has secured only superficial training fails to take account of the large number of subjects offered and the shortness of the high-school course. Art is long and life is short. The modern comprehensive high school offers courses in English, social studies, mathematics, science, several foreign languages, physical education, art, music, and a variety of vocational subjects. The pupils in three-fourths of the high schools have, however, only four years to give to secondary education. It is manifestly unreasonable to expect expertness in all these fields of knowledge within so short a time.

The graduate who goes on to college has opportunity there to extend his training. The graduate who issues directly from high school into a vocation is not deserving of censure because of limitation in the number of subjects taken or lack of specialized knowledge of any considerable number of them. As he steps out of high school into the world he should not find himself confronted with a sign announcing, "No admittance." Rather, he should see immediately across the way the jovial round-faced world holding wide open the front door of opportunity and saying, "Welcome, young man; come in just as you are."