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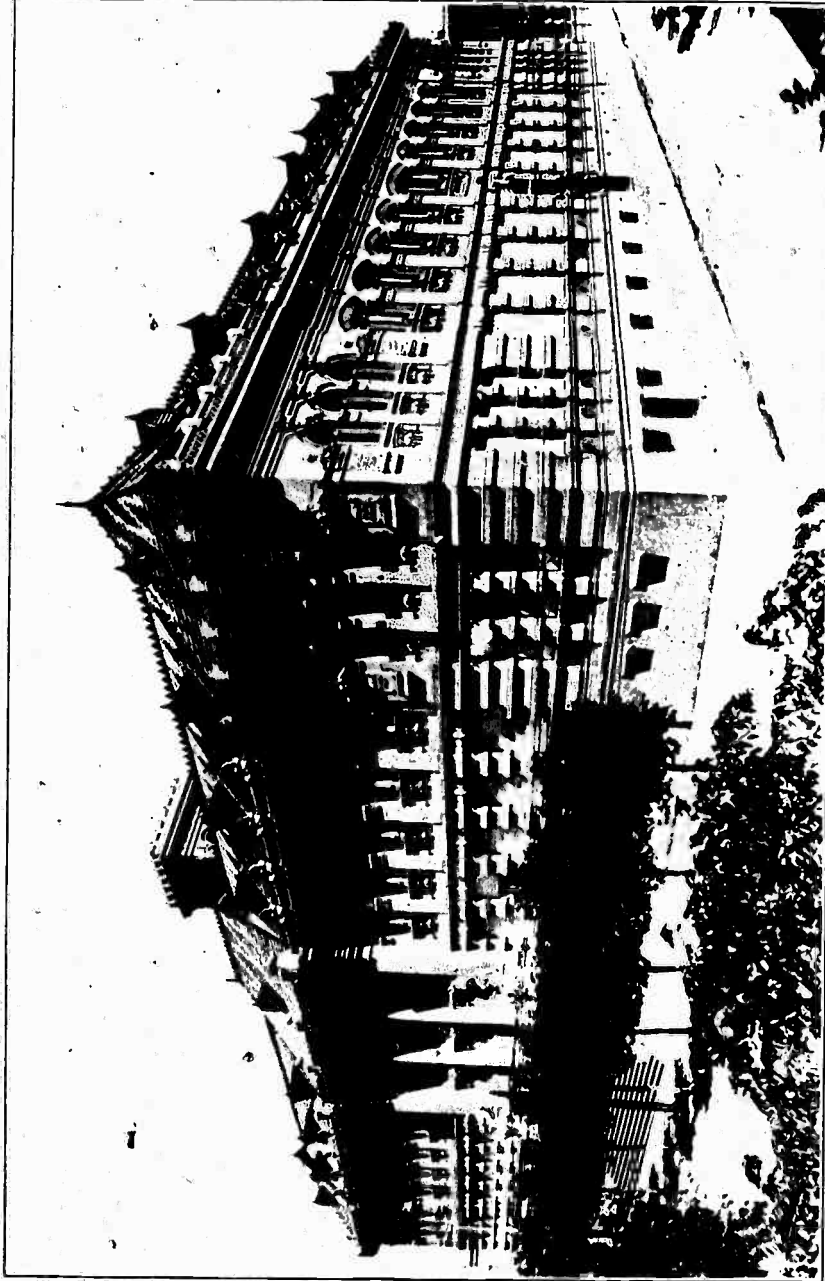
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SECONDARY SCHOOLS IN THE STATES OF
CENTRAL AMERICA, SOUTH AMERICA,
AND THE WEST INDIES:
SCHOLASTIC SCOPE AND STANDARDS

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CONTENTS.

	Page.
Letter of transmittal.....	5
Introductory survey.....	7
Costa Rica:	
Administration of school system.....	9
Standard program—secondary schools.....	10
Panama:	
National Institute.....	13
San Salvador:	
National Institute.....	13
Argentina:	
Recent measures pertaining to secondary education.....	14
Organization of secondary institutions.....	15
Plan of studies.....	16
A new departure.....	18
Uruguay:	
Proposed reforms.....	19
The departmental liceos (secondary schools).....	20
Course of study.....	20
Purpose.....	20
Relations to higher education.....	21
Studies preparatory to the university faculties.....	21
Chile:	
Classification of secondary schools.....	22
Program of humanities.....	23
Peru:	
Attempted reforms.....	24
The present status of secondary schools.....	24
Venezuela:	
Recent developments.....	25
The new programs.....	26
Brazil:	
Distinctive characteristics.....	27
Gymnasio Nacional at Rio de Janeiro.....	28
Remaining States:	
Trend of activities.....	29
Common elements in the different programs.....	30
The West Indies:	
Opposite tendencies.....	34
Cuba—	
Official plan of studies for secondary schools.....	34
Jamaica—	
Typical programs.....	35
The Cambridge local examinations.....	36
Sources of information.....	37
Bibliography.....	38

LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,

Washington, June 1, 1915.

SIR: The new interest which the people of the United States are taking in the countries of Central and South America calls for information not only in regard to their industrial and commercial development, but in regard to their social, civic, and political life, and also information in regard to their schools and their agencies of education, on which all else depends. A knowledge of the means by which these countries are trying to meet the need for education in modern democratic society can not fail to be helpful to us in our efforts to readjust our schools to constantly changing conditions; all problems in education have become in a very real sense international. I therefore recommend that the accompanying manuscript on the *Scholastic scope and standards of secondary schools in the States of Central America, South America, and the West Indies* be published as a bulletin of the Bureau of Education. This manuscript has been prepared by Miss Anna Tolman Smith, the bureau's specialist in foreign educational systems.

Respectfully submitted,

P. P. CLAXTON,
Commissioner.

The SECRETARY OF THE INTERIOR.

SECONDARY SCHOOLS IN THE STATES OF CENTRAL AMERICA,
SOUTH AMERICA, AND THE WEST INDIES—SCHOLASTIC SCOPE
AND STANDARDS.

INTRODUCTORY SURVEY.

The States of Central America and South America are in the midst of an industrial development which imparts new impulses to their educational activities. There is at once an awakened sense of the economic bearings of elementary or popular education and of the need of a readjustment of the work of the long-established secondary schools. Efforts in the latter direction are of special interest to other nations, as it is in the secondary schools that the directive classes are educated. Schools of this order determine in great measure the opinions and purposes of the men who control public affairs and promote international sympathies and interests.

Educational reports and periodicals published in the States referred to abound in discussions of the changes that are required to meet the new demands. Many of these discussions reveal merely conscious needs for which as yet no adequate provision can be made. But in a few States the problems are clearly defined and, in particular, definite plans have been adopted for the reform or development of the courses of study in secondary schools.

The official programs afford a clearer idea of the subject, both in the States that have lately revised their courses of secondary instruction and in those which have made no changes, than any general discussions. These programs, it should be said, are not announcements of ambitious institutions, but the expression of matured plans adopted by the educational authorities in full view of public resources and social demands either at the present time or at an earlier period. By reference to the several programs presented below it will be seen that the idea of education as a culture process has not been sacrificed in those of recent date.

For a better understanding of the scholastic work of the schools considered, it is desirable to have in mind certain features of their organization which may properly be called common to the different States.

In all the States secondary education is the preparatory stage to higher institutions and in several instances forms a department

in the university organization. This is notably the case in Uruguay, the University of Montevideo including a faculty of secondary instruction which is charged with administrative functions;¹ the public college of this city is practically an adjunct of the university. This same relation is illustrated by the National Institute of Panama and the college of the University of La Plata.

The public secondary schools are supported by Government funds alone or in combination with provincial and departmental appropriations or by municipalities. The schools may be either for day students solely or include boarding departments. The private colleges which abound in all the States are boarding schools. They are often subsidized and follow in the main the official programs of secondary education.

The course of secondary instruction is generally arranged for six years, covering the ages 12 to 18; in a few States the course may be completed in five years. Pupils may pass from the primary schools to the public secondary schools; as a rule, private secondary schools include a preparatory class for children from 10 to 12 years of age. In several States the successful completion of the secondary studies entitles the student to the bachelor's degree; in other States additional study in a university faculty of letters and philosophy is required before a diploma is obtained.

The institutional life which forms such an important factor in the secondary schools of other countries plays a very small part in the public secondary school of the Spanish-American States. The administrative staff of the schools is usually large, comprising a chief executive (rector or director), a treasurer, secretary, etc. The professors, who are appointed by the government, central or local, are assigned to particular subjects for a definite number of hours, and have no further relation with their classes. As a rule they are men holding university diplomas and engaged in professional practice. This peculiar system, which prevails also in the universities, prevents the close unity of a corporate body, although it brings students into contact with men of affairs. One of the most significant signs of progress in the leading States is the effort to replace this system by that of permanent professors having special preparation for the service.

The features of organization to which attention has been called affect in various ways the general spirit of the schools and the conduct of studies; but the purpose here is to consider mainly the scholastic scope and standards of secondary education as illustrated by official programs. These programs incidentally reveal differences in

¹ See plate of the administration building (frontispiece); original was received from the Uruguayan Government by the courtesy of Dr. Harry Erwin Bard, secretary of the Pan American Society of the United States.

the schools of the different States, but notwithstanding the fact that each State is an independent unity, the differences are not greater than appear in the secondary schools of the different sections of the United States.

The intimate view of the content of secondary education in the States of Central and South America afforded by the particulars which follow is of interest to all persons engaged in promoting international relations, and particularly so to those who must determine the equivalence of the scholastic standards maintained in different countries.

CENTRAL AMERICA.

COSTA RICA.

In Central America, Costa Rica has taken the lead in practical measures for extending the scope of public education and adapting the course of instruction to local conditions. The purpose is promoted by the centralized control of education, which is exercised by an undersecretary in a department including other executive duties. The chief officer of the division of public instruction, however, is generally chosen with regard to his special-fitness for that service.

The governors of the five Provinces into which the State is divided are responsible for the execution of the school laws in their respective areas. The immediate direction of public primary schools is committed to Government inspectors, who are responsible to the central authority. Public secondary and higher institutions are directly under the secretary for public instruction.

In the projects of reform submitted to the Congress of Costa Rica in 1913, the importance of unifying the entire scheme of education so that the course of the secondary schools (*liceos*) should be continuous with that of primary schools and both better adapted to present needs was urged by the undersecretary for public instruction, Señor Brenes-Mesén.¹ Propositions embodying these views were authorized by decrees issued by the President of Costa Rica the same year. Among these was a decree of March 5 reorganizing the plans of study for the Liceo de Costa Rica, the Normal School, and the School of Commerce. There are five public secondary schools in the State, namely, the Liceo de Costa Rica and the Colegio Superior de Señoritas, both at San Jose; the Liceo de Heredia; Instituto de Alajuela; and Colegio de Cartago. The first three institutions are supported entirely by national funds, while the expenses of the last two are met equally by municipal and national funds.

¹ At present Señor Brenes-Mesén is envoy extraordinary and minister plenipotentiary to the United States from Costa Rica.

The new program for the Liceo de Costa Rica, which fixes the standard for the secondary schools, is as follows:¹

STANDARD PROGRAM.

PREPARATORY COURSE.

Subjects assigned for the year.	Weekly periods.
The mother tongue.....	5
Writing (includes forms of correspondence).....	2
Elementary arithmetic and geometry.....	4
Geography and history of Costa Rica.....	4
Hygiene and physical culture.....	2
Elementary science.....	2
Manual training.....	2
Music.....	2
Drawing.....	2

HUMANIDADES.

Secondary course of study.

FIRST YEAR.

[Minimum: 20 (11 periods obligatory, 9 elective). Maximum: 26.]

Obligatory subjects.	Weekly periods.	Electives.	Weekly periods.
Spanish (Castilian) (I).....	5	English or French (I).....	5
Mathematics: Algebra and arithmetic.....	5	History (I): Ancient.....	4
Hygiene and gymnastics.....	1	Biology (I), botany, and zoology.....	4
		Manual arts (I).....	2
		Drawing (I).....	2
		Music.....	2

SECOND YEAR.

[Minimum: 24 (10 periods obligatory, 14 elective).]

Obligatory subjects.	Weekly periods.	Electives.	Weekly periods.
Spanish (Castilian) (I).....	5	History (II): Medieval and modern.....	3
Geography.....	4	Mathematics (II): Algebra (II) and plane geometry.....	4
Hygiene and gymnastics.....	1	English or French (II).....	5
		Biology (II), botany, and zoology.....	4
		Physics (I).....	3
		Manual arts (II).....	2
		Drawing (II).....	2
		Writing.....	2
		Music (II).....	2
		Typewriting (I).....	2

¹ Memoria de Instrucción pública, 1914, pp. 4-9.

STANDARD PROGRAM—Continued.

HUMANIDADES—continued.

THIRD YEAR.

[Minimum: 25 (13 periods obligatory, 12 elective). Maximum: 34.]

Obligatory subjects.	Weekly periods.	Electives.	Weekly periods.
Spanish (Castilian) (III).....	5	English or French.....	5
Physiology (I).....	3	Mathematics (III): Algebra, solid geometry, goniometry.....	4
Hygiene and gymnastics.....	1	Physics (II).....	4
History (III): Contemporary.....	4	Chemistry (I).....	3
		Drawing (III).....	2
		Manual arts (III).....	2
		Music (III).....	2
		Typewriting and shorthand.....	2
		Civics.....	2

FOURTH YEAR.

[Minimum: 28 (7 periods obligatory, 21 elective). Maximum: 37.]

Obligatory subjects.	Weekly periods.	Electives.	Weekly periods.
Spanish (Castilian) (IV).....	5	English or French (IV).....	5
Civil government.....	2	Mathematics: Advanced algebra and trigonometry.....	4
		Chemistry (II).....	4
		Physiology (II).....	2
		Geology and meteorology.....	3
		Drawing (IV).....	2
		Political economy.....	2
		Typewriting (III).....	2
		Manual arts (IV).....	2
		Music (IV).....	2

FIFTH YEAR.

[Minimum: 18 (6 periods obligatory, 12 elective). Maximum: 29.]

Obligatory subjects.	Weekly periods.	Electives.	Weekly periods.
Science of health.....	2	Calculus and analytical geometry.....	2
Manual arts.....	2	General literature.....	4
Typewriting.....	2	Logic and debate.....	3
		General biology.....	3
		Elements of sociology.....	3
		History: Historical investigation.....	5
		Anthropogeography.....	3

In order to enter the liceo, pupils from the primary schools must pass through the preparatory year, which forms the link between primary and secondary instruction.

The important change effected by the program of 1913 consists in systemizing the studies. By means of the obligatory subjects all students secure a common basis of general knowledge of which a culture language (Castilian) with its literature is the chief element. The elective studies are grouped by means of the final examination so that a student is directed in his choice by considerations of his

ultimate purpose. The relations are indicated by the numbers in parantheses.

In the first, second, and third years of the secondary course an elective subject is not given unless at least 10 students request it, and in the fourth and fifth years unless at least 5 students take it.

The degree of bachelor of humanities (Bachiller en Humanidades) is conferred upon students who finish the full course of five years and pass an examination. The subjects of the examination and their relative values are as follows:

OBLIGATORY SUBJECTS (VALUE 14 UNITS).

	Units.
Castilian.....	5
Arithmetic and geometry.....	1
French or English.....	3
Contemporaneous history.....	1
Sanitary science and hygiene.....	1
Public administration.....	1
Typewriting.....	1
Manual training.....	1

The electives are grouped for the examination as follows:

ELECTIVES.

First group, 16 units.	Second group, 17 units.	Third group, 16 units.
Mathematics, I-V. Physics, I, II. Chemistry, I. General biology, I. Geology and meteorology, I. Geography, I. Manual training, I, II. Drawing, I, III.	Biology, I-III. Physiology, I, II. Hygiene, I-III. Chemistry, I, II. Physics, I, II. Geography, I. Gymnaastics, I, II. Drawing, I, II.	French or English, I-III. Logic and debate, I. History, I-IV. Geography, I. Elements of sociology, I. Political economy, I. General biology, I. Civics, I. Drawing, I. Music, I.

The 33 units required for the pass mark can be completed from the following subjects: Manual training, II and III; drawing, II-IV; music, I-IV.

PANAMA.

In various ways the closer relations that have been promoted between the United States and Central America are affecting educational practices and standards in the latter. An interesting example of these relations is afforded by the call of Dr. Edwin G. Dexter from the United States to take charge of the Instituto Nacional of Panama. It is the intention of the Government that this shall become a central university, drawing students from the neighboring States. Following the usual custom in Latin-American States, a secondary course

of instruction is provided under the general direction of the institute. This secondary school, the liceo, is arranged in two cycles, after the model of the French lycée, each cycle covering a three years' course. The program provides for the traditional studies in Latin-American schools with the introduction of Latin as an alternative to French and with greater stress than usual upon English. The scheme of study and the relative time given to each branch are shown in the following conspectus:

PANAMA.

NATIONAL INSTITUTE.

Program of studies for the liceo.¹

Subjects.	Number of lessons a week.					
	Cycle I.			Cycle II.		
	First year.	Second year.	Third year.	First year.	Second year.	Third year.
Philosophy.....					3	3
Castilian.....	5	5	5	5	5	5
English.....	3	3	3	3	3	3
Latin or French ²		2	2	4	4	4
Geography.....	2	2	2	3		
History.....	2	2	2	3	2	2
Mathematics.....	6	5	5	4	3	3
Physics and chemistry.....		3	3	3	3	
Natural sciences.....	2	2	2	2	2	2
Physiology and hygiene.....	1	1				
Civics.....		1		1	1	1
Bookkeeping.....			3			
Manual training.....	2	2	2	2	2	2
Singing.....	2	2	2			
Total.....	25	30	31	30	28	25

¹ Panama: Informe, Secretario de Estado en el Despacho de Instruccion Publica, 1914. pp. 29-31.

² Optional in the first cycle.

³ In addition to the subjects tabulated drawing and gymnastics occupy each 2 periods a week throughout the first and second cycles.

Significant features of the program are the prominence given to English and the introduction of Latin as an alternative to French. The decree authorizing the liceo was issued in 1913, hence time has not sufficed for students to reach the second cycle.

The Instituto Nacional is to be comprehensive in scope, and in addition to the liceo, or secondary school, comprises a normal school and a commercial school; all of these will be adjuncts of the university, for which plans are now in progress.

SAN SALVADOR.

In his official report for 1913 the minister of education for San Salvador dwells upon plans for improving the course of study and the standards of the national institute situated at the capital. This school has had more than local prestige, and it is the purpose of the authorities to bring it into accord with the new demands that are

arising. Complaint has been made, in particular, that students presenting themselves for examination to enter the lowest class of the institute were not sufficiently prepared; the new plan of studies includes a preparatory or complementary course which pupils from the ordinary primary schools must pass through in order to enter upon the true course of secondary studies. The program recently developed is similar as regards the subjects of instruction to that arranged for the Panama institution with the omission of Latin.

SOUTH AMERICA.

South America comprises 10 independent States, which, with the exception of Brazil, were originally Spanish colonies. The systems of secondary and higher education retain some characteristics derived from the early colonists, although they have been more largely influenced by French theories and models. In order to avoid needless repetitions, selection is here made of a few official programs of secondary education which adequately illustrate its scope and standards in all the States.

ARGENTINA.

RECENT MEASURES PERTAINING TO SECONDARY EDUCATION.

The subject of secondary education has occupied the serious attention of the Government of Argentina for several years, and in December, 1911, several decrees were issued by the President of the Republic providing for the better administration and closer organization of the national secondary schools (colegios).

A decree of December 15 provided for the creation of a new division in the ministry of public instruction for the service of secondary education. The division was organized under the charge of a director general, with whom was associated an assistant director. The force was completed by subordinate officials and clerks. Ten inspectors were also authorized for the official supervision of the schools themselves.

The qualifications for the chief officials in this division were carefully determined by the decree; in particular it was required that candidates for the positions of director and subdirector should be at least 30 years of age and should have had not less than six consecutive years' experience either as professors or education officials.

A second decree of the same date determined in detail the requirements for the administrative authorities of secondary schools (rectors, vice rectors, directors, and vice directors); and also those for professors of secondary education.

The requirements for professorships as set forth in the decree illustrate the new conception of that service which is gradually developing in the most progressive States.

In general, positions in secondary education have been held by men engaged in professional duties quite apart from education. The present tendency is to regard teaching even in the higher institutions, as a profession having its recognized standards of qualification and chief claim upon the mind and time of the incumbents. In accordance with this idea the recent decree in Argentina provides that candidates for professorships in the secondary schools shall present a "diploma of capacity" issued by one of the following institutions: The pedagogical section of the University of La Plata, the National Institute for Secondary Professors, the Normal School for Professors of Living Languages, the Normal School of Physical Education, the National Academy of Fine Arts, or other institutions which prepare candidates for positions in secondary education.

Candidates for the professorships in national history, civics, and morals must be citizens of Argentina, natural or adopted. In the latter case they must have had at least 10 years' experience in the service.

The decree also provides for professors who have not secured the diplomas above mentioned, but who have already served at least five consecutive years in the university faculties or as professors in secondary schools. Those who have served for 10 years may obtain a diploma from the minister of public instruction, which will give them the same rights and privileges as those conferred by the institutions mentioned.

ORGANIZATION OF SECONDARY INSTITUTIONS.

A decree was issued by the President on February 12, 1912, determining the classification of secondary schools (colegios) and the subjects of instruction and duration of courses for the different classes. This decree is as follows:¹

CLASSES OF COLLEGES AND DURATION OF COURSES OF INSTRUCTION.

ARTICLE 1. Secondary education shall be general or professional. The former is to be given in national colleges for one or the other sex, and the latter in establishments having specific purpose.

ARTICLE 2. The national colleges shall comprise two classes: Elementary colleges having a four-year course, and superior colleges having a course of six years. Elementary colleges may be established in places having more than 15,000 inhabitants; the superior colleges shall be established at the Federal capital, the capitals of Provinces, whatever their population may be, and in towns of more than 30,000 inhabitants.

¹ Ministerio de Justicia e Instrucción Pública. Dirección general de enseñanza secundaria y especial, 1913. pp. 17-18.

PURPOSES.

ARTICLE 3. The purposes of the national colleges are (a) to give to the pupils solid and well-balanced knowledge, general scientific and literary, and to develop in them the intellectual and moral, physical, and esthetic faculties which shall fit them for the active duties of society, or for the successful pursuit of higher studies; (b) to form their characters and inculcate in them the sentiment of patriotism and the desire to cooperate in the effort to realize the ideals of the nation and of humanity.

SCOPE OF THE INSTRUCTION.

ARTICLE 4. The minimum course of study in the national colleges shall be as follows:

PLAN OF STUDIES.¹

A.

FIRST YEAR.

I.

Subjects.	Hours a week.
Spanish (Castilian). Reading and composition. (a) Pronunciation and orthography; (b) purifying and enriching vocabulary and forms.....	3
History. Brief summary of the history of the ancient Orient and of Greece, Rome, and the Middle Ages.....	4
French.....	4

II.

Mathematics. Plane geometry, 2 hours; arithmetic, 3 hours.....	5
Geography of Europe, general, and detailed for selected countries.....	3

III.

Drawing. Lineal and ornamental.....	2
Penmanship.....	2
Gymnastics. Systematic games and exercises for developing the physique.....	2

25

SECOND YEAR.

I.

Subjects.	Hours a week.
Spanish (Castilian). (a) Analysis; (b) purifying and enriching vocabulary and forms.....	3
History. Modern and contemporary.....	3
French.....	3
English.....	4

II.

Mathematics. Plane geometry, 2 hours; arithmetic and accounts, 2 hours.....	4
Biological sciences. Zoology and botany.....	3
Geography of Argentina.....	3

¹ From decree of the minister of public instruction, February 16, 1912. (Official copy.)

III.

Subjects.	Hours a week.
Drawing. Lineal and ornamental.....	2
Penmanship.....	1
Gymnastics ¹	2
	28

THIRD YEAR.

I.

Subjects.	Hours a week.
Spanish (Castilian). (a) Syntax and elements of linguistics and etymology; (b) purification and enrichment of vocabularies and forms.....	3
History, Argentine.....	4
Civics and the national constitution.....	2
French.....	3
English.....	4

II.

Mathematics. Plane geometry, 2 hours; algebra, 2 hours.....	4
Biological sciences. Zoology and botany.....	3
Geography. North and South America.....	2

III.

Drawing. Drawing of natural forms and simple study of works of art.....	2
Gymnastics ¹	2
	29

FOURTH YEAR.

I.

Subjects.	Hours a week.
Philosophy. Concepts; general problems, division, methods, etc., of psychology, logic, ethics, sociology, and metaphysics.....	3
Literature. Literary theories; study of the literature of Argentina and of Spanish America.....	3
History. America and Argentina.....	3
French.....	3
English.....	4

II.

Mathematics. Geometry of space, 2 hours; algebra, 2 hours.....	4
Physics and chemistry. Elements of both sciences; their laws and general problems; their division, etc.....	2
Biological sciences. Anatomy, physiology, and hygiene.....	3
Geography. Asia, Africa, and Oceania.....	2

III.

Drawing. Drawing of natural forms and simple study of works of art.....	2
Military exercises.....	2
	31

¹ Same as first year with extensions.

SECONDARY SCHOOLS.

HIGHER COLLEGES (FINAL COURSE).

B.

FIFTH YEAR.

Subjects.	Hours a week.
I.	
Philosophy. Logic and critique of knowledge, psychology.....	3
Literature. History of Castilian literature.....	3
History. History of America and Argentina since 1810.....	2
Latin.....	6
Italian.....	2
II.	
Mathematics. Geometry of space, 2 hours; algebra, 3 hours.....	5
Physics. Mechanics, acoustics, and heat.....	3
Chemistry. Inorganic chemistry and mineralogy.....	4
General geography and geology.....	2
III.	
Military exercises.....	2
	32

SIXTH YEAR.

Subjects.	Hours a week.
I.	
Philosophy. Ethics, sociology, and metaphysics.....	2
Moral and civic instruction. Comparative study of the national constitution; duties and rights of the citizen.....	1
Literature. Epitomes of French, Italian, English, and German literatures.....	3
History. Argentine history from 1810 to 1910; summary of the history of civilization and human culture.....	4
Latin.....	6
Italian.....	2
II.	
Mathematics. Trigonometry, 3 hours; cosmography, 2 hours.....	5
Physics. Optics, magnetism, and electricity.....	3
Chemistry. Organic and analytic chemistry.....	4
III.	
Military exercises and gun practice.....	2
	32

A NEW DEPARTURE.

The University of La Plata, which is the youngest and most modern institution of higher education in South America, includes in its organization a secondary or preparatory school. The latter represents a new departure in respect both to its scholastic scheme and its general conduct. While the curriculum does not differ radically, in respect to the studies included, from that of other colleges in the State, the equipment for scientific studies is unusually

complete, and the professors have been chosen with special reference to their familiarity with scientific methods. Hence the spirit of the instruction is thoroughly modern. For the boarding department the home unit idea has been adopted, separate residences having been provided, each of which accommodates about 35 students. These homes contain dining hall, kitchen, clubroom, library, and individual bedrooms for each of the inmates. The buildings are in the midst of a fine campus, affording ample opportunity for sports and physical exercises, which are conducted much after the plan of those of the English public schools.

URUGUAY.

PROPOSED REFORMS.

In Uruguay, as in several other South American States secondary education is under the immediate direction of the university authorities, which include a council (*consejo de la sección de enseñanza secundaria y preparatoria*) charged with the development of courses of instruction for the secondary schools and their adjustment to the programs of the primary schools and the higher institutions. The reform of secondary education has been a subject of serious deliberation in the council for several years. The most important result thus far accomplished is the law bearing date January 5, 1912, as set forth in a presidential decree of February 16, 1912.¹ This decree provided for the establishment of a departmental liceo in the capital city of each department, as soon as the necessary arrangements could be made. For admission to these liceos it was required that the candidate should give proof of having completed the entire course of the rural primary schools, or the fifth year of the urban primary schools, or should pass an examination in the following subjects: Arithmetic, geography, grammar with composition, geometry, national history, and the constitution of the Republic.

COURSE OF STUDY.

The plan of studies for the departmental liceos previously recommended by the council was sanctioned by the decree. This plan, which is given below, is tentative and may be modified to suit local conditions. The studies assigned for each year of the course occupy one period daily or on alternate days, a day's session comprising five hours. The alternate subjects may form half-year courses if preferred.

¹ See *Anales de la Universidad*, 1912-13. Pp. 359-366.

THE DEPARTMENTAL LICEOS (SECONDARY SCHOOLS).

OFFICIAL PROGRAM.¹

First year.	Second year.
Castilian grammar and idioms. Mathematics (arithmetic and algebra). French. Natural history (zoology and zoography). History, American and national. Geography. Drawing.	Castilian. Mathematics (algebra and geometry). French. English or German. Natural history (botany and mineralogy). Universal history. Geography. Physics and chemistry. Drawing.
Third year.	Fourth year.
Castilian idioms and literature. French. English or German. Mathematics. Physics and chemistry. Natural history. Universal history. Typewriting. Drawing.	Literature. French. English or German. Universal history. Civics. Cosmography. Drawing. Typewriting. Bookkeeping. Drawing.

Gymnastics and physical training are maintained throughout the four years of the course.

PURPOSE.

The departmental liceos have been created for the purpose of increasing the public provision for secondary education and correlating its programs with those of the public primary schools forming thus a continuous plan of study as do the courses of instruction in the graded and high schools of the United States.

The liceos are open alike to boys and girls, but the need of special arrangements for girls is indicated by the creation of a section of the university council to consider the interests of young women as related to both secondary and preparatory studies. By order of the minister of public instruction Doctora Señorita Clotilde Luissi was appointed dean of this section December 16, 1912.

The admission of pupils to the liceos who have finished the three-year course of the rural primary schools or the fifth year of the urban primary schools makes it possible for the transfer to take place in the case of children too young or not sufficiently prepared to enter with profit upon the secondary studies. Such pupils are found to be at a disadvantage as compared with those who enter the liceos by exami-

¹ Anales de la Universidad, 1912-13, pp. 191-194.

nation, which is not open to candidates under 12 years of age. This experience agrees with the tendency in older countries to make 12 years the lower age limit of secondary studies.

The departmental liceos of Uruguay, it should be recalled, have only been in existence two years and have not yet passed the experimental stage. The first report of their operations was made in January, 1914, at which time they numbered 18, with a registration of 969 students. Of the total schools, 11 had completed the first and second years of the course and 7 the first year only. The report of their work has already led to proposed modifications, having special reference to raising the standard of admission and relieving the over-crowded programs.

RELATIONS TO HIGHER EDUCATION.

The significance of this recent departure in Uruguay, in a comparative view of secondary education in different countries, is found in the relation of the local liceos to higher institutions. In the law and decree creating the liceos it is distinctly set forth that they are not intended to prepare students for the university faculties. They give the basis, however, for such preparation which must be completed by the courses of study required for admission to each faculty.

The studies of the liceos lead to a certificate (*certificado de suficiencia liceal*) which is conferred upon the students who complete the course and pass the annual examinations. The law provides that this certificate shall admit a student to the schools of commerce, agriculture, and veterinary surgery, and it will have value for those who would enter upon the courses of study preparatory to the specialized faculties, although it does not exempt them from other tests. It appears, then, that the course of secondary instruction in Uruguay, using the term in its broad sense covering the entire work of general education from the elementary school to the university, comprises the work both of the liceos and the so-called preparatory studies. The latter are determined by the university council charged with the double interest, which includes representatives of the several faculties. The period of preparatory study and the branches comprised are determined for each faculty separately.

STUDIES PREPARATORY TO THE UNIVERSITY FACULTIES.

Provision for the courses of study required for entrance to the university faculties is made in three institutions at Montevideo, namely, Instituto Universal, Instituto de Enseñanza Secundaria, and the liceo. Government scholarships are offered in each department to assist pupils of the local liceos to continue their studies at the capital with a view of ultimately preparing for professional careers.

According to the latest regulations, the period of preparation following the four years of the secondary course ranges from one year required for the studies that lead to the university courses for notary public and odontology to three years required for preparation for the faculties of law, medicine, engineering, and architecture. The preparatory courses of three years' duration include as common subjects an extension and deepening of the literary and historical studies included in the secondary course. To these are added branches determined by the subsequent professional courses. The complete course of preparatory studies prescribed for admission to the faculty of law is as follows: (I) Literature; (II) universal history, in particular Roman and contemporaneous history and philosophy of history; (III) American history; (IV) theoretic and practical courses in physics, chemistry, natural history, and cosmography; (V) philosophy; (VI) practical courses in French and English or German; (VII) physical exercises.

In the courses preparatory to the medical faculty special stress is placed upon the sciences, i. e., natural history (zoology, zoography, botany, and anthropology); physics; chemistry; drawing in connection with the science studies.

Students who finish the entire course of secondary and preparatory studies may be admitted to the university examinations for the degree of bachelor. It will be observed that the entire course preparatory for this degree is quite as extensive as the customary college course in the United States, but differs essentially from that in the absence of the classical languages, Latin and Greek. The proposition to create in the university a faculty of letters and philosophy is under consideration, and it has been proposed to include the classics in its program.

CHILE.

CLASSIFICATION OF SECONDARY SCHOOLS.

The main features of the administration and organization of the public secondary schools of Chile were determined by law of January 9, 1879. In accordance with the provisions of this law the secondary schools (liceos and colejos) are of two classes, first and second. The former offer a complete course of instruction covering six years; the latter class, which includes the Instituto Nacional at Santiago de Chile and the liceos of the Province of Tacna, concentrate on the last three years of the course. A preparatory section provided for in the plan of the liceos comprises a three-year course of study including the following branches: Spanish (Castilian), mathematics, French, geography and history, object lessons, drawing and writing, and religion.

The course of secondary instruction (humanidades), authorized by a decree of January 2, 1912, is as follows:

PROGRAM OF HUMANITIES.¹

FIRST, SECOND, AND THIRD YEARS.

	Hours a week.
Spanish (Castilian).....	4
French.....	3
English or German.....	3
Mathematics.....	4
Natural sciences.....	2
History and geography.....	3
Drawing and penmanship.....	3
Religion.....	2
Manual work.....	2
Singing and gymnastics.....	3
	20

FOURTH YEAR.

	Hours a week.
Spanish (Castilian).....	4
French.....	3
English or German.....	3
History and geography.....	4
Mathematics.....	4
Natural sciences.....	2
Physics and chemistry.....	2
Civic instruction.....	2
Religion.....	1
Drawing ²	2
Manual work.....	2
Singing and gymnastics.....	3
	32

FIFTH AND SIXTH YEARS.

	Hours a week.
Spanish (Castilian).....	3
Philosophy.....	2
French.....	3
English or German.....	3
History and geography.....	3
Mathematics.....	3
Natural sciences (hygiene).....	2
Physics.....	2
Chemistry.....	2
Civic instruction.....	2
Religion.....	1
Drawing ²	2
Manual work.....	2
Singing and gymnastics.....	3
	33

¹ Anuario del Ministerio de Instruccion Publica. Recopilacion de leyes i reglamentos relativos a los servicios de instruccion superior, secundaria i especial, 1912. pp. 290-294.

² Optional.

Applicants for admission to the lowest class of a liceo must not be less than 10 years of age nor more than 13, and must give proof that they have mastered the studies of the primary schools; for admission to higher classes the candidate must pass an examination in the studies of the lower. The council of public instruction has the sole right of deciding on the admission of girls to a liceo intended for boys. On account of the increasing number of young women who desire to follow professional careers, a project for raising the standards of the public liceos for girls has been submitted to the Government.

Students who complete the course in humanities may matriculate in the faculties of philosophy and letters as candidates for the degree of bachelor.

PERU.

ATTEMPTED REFORMS.

Peru was one of the earliest States in South America to undertake a general reorganization of its system of education in view of modern requirements. With this purpose in view, a special commission was appointed in 1910, and an expert from the United States¹ was called in to aid the work of the commission by advice and suggestions. As a result of the deliberations of this body a comprehensive plan was submitted to the Government which provided, among other matters, for important modifications of the system of secondary education. Before final action could be taken political changes prevented the consummation of the project. It was evident, however, that all parties favored to some extent the changes recommended, and while the general plan of recasting the system of education failed, improvements have gradually been made in all departments of the system.

PRESENT STATUS OF THE SECONDARY SCHOOLS.

There are at present 27 secondary schools (colegios) maintained by the Government, 3 of which are for girls exclusively. The course of study for the colegios for boys is uniform throughout the country, and comprises the same subjects as those in the programs previously cited, with the addition of the elements of church doctrine. The duration of the entire course is four years, which, it is admitted, is too brief for the variety and range of studies attempted; improvements are taking place in the direction of reducing the amount of each study and making the instruction more intensive. This course of study is in direct continuation with that of the public primary schools, and therefore the period of secondary-school studies is comparable with that of the high schools in the United States as regards

¹ The choice fell upon Dr. H. E. Bard, who had had experience in educational administration in the Philippines.

duration; this likeness is increased by the fact that the universities of Peru include faculties of letters and science or philosophy; the curricula of these faculties is arranged for three years, and is in direct continuation of the course in the secondary schools. The bachelor's degree can be obtained at the end of two years of study in the faculties named. The third year is regarded as postgraduate and leads to the degree of doctor.

VENEZUELA.

The reorganization of the system of education has been undertaken recently by the Government of Venezuela on a broader scale than the similar effort in other South American States. The endeavor was preceded by investigations of school systems in foreign countries, and the conclusions finally reached by the committee were submitted to the National Congress, with an exhaustive report on the defects of the existing system and the grounds for the changes proposed. The recommendations of the committee were in the main approved by the National Congress in its session of 1912-13, and instructions were issued authorizing the minister of public instruction to adopt measures for carrying the reforms into effect. The present is, therefore, a time of change and experiment, preliminary to final adjustments which must work out gradually.

Secondary education is the province of colleges, classified by their sources of support as Federal, municipal, and private. The aim of all these institutions was originally that of preparing students for university matriculation or examinations, but the pressure of modern demands has caused other purposes to be considered, and hence the courses of study have been extended to include subjects special to commercial business, such as stenography, bookkeeping, commercial geography, etc., or in the direction of science courses required by students looking toward agricultural and mining pursuits.

For the scholastic session 1913-14 new programs were issued by the minister of public instruction for the Federal colleges. These programs were not intended to make a decided break in the established courses of study, but to systematize them. The entire scheme of study is organized in two sections—the preparatory, covering two years, and the course of philosophy, covering four years. The preparatory course is correlated with the six-year course for the graded primary schools and with the latter forms a fairly adequate preparation for commercial and business pursuits. The course of philosophy, or baccalaureate course, prepares candidates for the examination for the bachelor's degree, which is conducted by a university board on which the professors of secondary education are represented.

The new scheme for the secondary schools (colegios) will be seen by the following conspectus, which comprises two elements—the sub-

jects of study and the hours assigned for each subject. On account of the options allowed students, the time element indicates only the relative weight of each subject as compared with others in the course. It should be stated, further, that the time allowed for each branch provides for the advanced lesson and a review of the previous work in the proportion two-thirds for the former and one-third for the latter:

OFFICIAL PROGRAM.

STUDIES AND HOURS A WEEK.

Preparatory division.

Subjects.	First year.	Second year.
	Hours.	Hours.
Castilian grammar.....	6	3
Rhetoric and composition.....	2	3
Stenography.....	2	2
Latin.....	4	3
French.....	4	4
English.....	6	6
Arithmetic.....	3	3
Geography (Venezuela).....	3	6
History.....	3	3
Elements of natural science and chemistry.....	3	3
Hygiene.....	3	3
Total.....	30	30

COURSE OF PHILOSOPHY.

Subjects.	First year.	Second year.
	Hours.	Hours.
Castilian literature (authors and history).....	2	4
Latin.....	1	4
Greek (elements).....	4	4
German.....	6	6
Algebra.....	6	6
Geometry.....	5	5
Botany and zoology.....	5	6
Mineralogy and geology.....	6	6
Physics.....	6	6
Chemistry.....	6	6
History.....	6	6
Philosophy.....	6	6
Total.....	30	30

COURSE OF PHILOSOPHY.

Subjects.	Third year.	Fourth year.
	Hours.	Hours.
Castilian literature (authors and history).....	4	4
Cosmography and chronology.....	6	6
Physics.....	6	6
Biology and anthropology.....	6	6
Philosophy.....	6	6
Mineralogy and geology.....	6	6
Total.....	28	28

The program given above differs from those previously cited by the inclusion of short courses in Latin and Greek. The purpose of these courses as indicated by the elaboration of individual subjects in the official instructions is to acquaint the students with their relation to the Spanish language. The Latin language, in particular, is treated in its relation to the origin and early development of the Spanish language.

The endeavors of the Venezuelan Government to perfect the organization of the school system and to raise the scholastic standards have excited wide attention; in his report for 1914 the minister notes with satisfaction that, following the example of other foreign countries, the Spanish Government has announced that the baccalaureate conferred in Venezuela will be recognized as equivalent to the corresponding Spanish diploma for admission to the universities of Spain.¹

BRAZIL.

DISTINCTIVE CHARACTERISTICS.

Brazil comprises 20 States, 1 National Territory, and 1 Federal District, covering an area greater than that of the United States, exclusive of the outlying possessions. Each State of the Republic of Brazil has independent management of its primary and secondary schools. The direction of higher education throughout the country has been reserved to the Central Government, which also has entire control of education in the Federal District and the Territory. The extent and varied character of the country, a part of which has scarcely yet been explored, the sparse and mixed population, and the independence and the undeveloped resources of the constituent States all combine to prevent the general diffusion of education. There are, however, centers of progress, especially in the eastern section of the country, in which schools are flourishing and high standards are maintained. In these centers two tendencies are noticeable—one growing out of modern conditions, the other resulting from the early relations of the country with Portugal and the ideals fostered at the capital during the long reign of Dom Pedro II.

The first tendency referred to is illustrated by the excellent systems of graded schools in Rio de Janeiro, Sao Paulo, Bahia, and several other eastern cities. These systems include high schools of modern type leading to various classes of vocational schools—commercial, agricultural, etc. The older influences have affected particularly the provinces of secondary and higher education, which before the rise of public schools were regarded as a privilege of the upper classes. This traditional relation still prevails to a great extent, and hence the

¹Memoria. 1914. Vol. 1, p. LXX.

secondary schools maintain the earlier ideals of culture, leaving to the modern public schools the work of preparing students for practical careers. This distinction is promoted by the peculiar system of higher education. Brazil has no university, but in its place professional faculties which are situated in different cities, and therefore have no organic union.

Naturally the requirements for admission to the distinct faculties have chief effect in determining the courses in secondary education, which as a rule is the province of private colleges, either secular or clerical in character. Since the Central Government has control of higher education, it exercises a certain unifying influence over the secondary schools, but this influence is somewhat lessened by reason of the special character of the faculty groups. There is, however, a strong unifying influence coming from the long-established ideals of culture.

One of the oldest secondary schools in the country is the Colégio Pedro II at Rio Janeiro, now generally known as the *Gymnasio Nacional*. The official program of this institution may be taken as a type of secondary education in Brazil. The subjects which it comprises and the relative value given to each are shown in the following conspectus:

GYMNASIO NACIONAL AT RIO DE JANEIRO.¹

DAILY PERIODS ALLOTTED.

Subjects.	First year.	Second year.	Third year.	Fourth year.	Fifth year.	Sixth year.
Maternal language: (Portuguese).....	3	3	3	3		
Foreign languages:						
English or German.....		3	3	4		
French.....	3	3	3			
Latin.....					5	5
Greek.....					3	3
Mathematics.....	4	4	4	6		
History.....					4	4
Civics.....						3
Geography.....	3	3	3			
Natural science.....					3	3
Hygiene.....					3	3
Physics and chemistry.....					3	3
Drawing.....	3	3	2	4		
Physical training.....	3	3	3	3		
Total.....	19	22	21	20	21	21

¹ Ministerio da Justica e negocios interiores. Regulamento do Colégio Pedro II, 1911.

The purpose of the *Gymnasio Nacional* is to provide a well-balanced course of study cultivating and at the same time practical in character. The institution is organized for both day and boarding students, the latter, however, being limited to the first four years of the course. The distinctions between the studies and those of the Spanish-American States pertain chiefly to language.

Portuguese, the native tongue, and French occupy equal time during the first three years of the course. Choice between English and German is allowed in the second year and continues to the fifth year, when Latin and Greek are introduced.

The mathematical course for the last three years comprises algebra through the binomial theorem and the general principles of the formation and solution of equations; geometry, plane and solid; and rectilinear trigonometry.

In the final examination in mathematics new problems are offered embodying the principles that have been studied during the course.

The final tests in Latin and Greek consist of translations of passages taken from some one of the authors studied during the two years, and also passages selected for sight translation.

Students who pass the examination successfully receive a diploma (certificado do curso fundamental). This certificate or its equivalent admits a student to the university faculties.

THE REMAINING STATES.

This survey of the scope of secondary education in the Latin-American States has been based upon official programs taken as a rule from reports of the States in which the course of study has recently been reorganized. The survey would be incomplete without considering the extent to which these examples are typical of corresponding courses of instruction in the remaining States.

In respect to Central America it may be said that all systems of education are in a transition stage. It should be noted, however, that a formal agreement for the unification of primary and secondary instruction has been signed by the Governments of the five States of Central America, which may be taken as a guaranty that common standards will prevail. The secretaries of public instruction in all these States have recently emphasized the importance of maintaining secondary education at a high degree of efficiency, not only because of its relation to the general welfare, but also because of its effect upon the standards of university education.

The remaining States of South America are all actively engaged in improving education within their borders, although their efforts have been more particularly directed to increasing the provision for primary education and the establishment of special schools of agriculture, mining, etc.

The secretary of public instruction for Colombia, in his report for 1913, calls attention to recent developments in the Colegio Nacional de San Bartolomé, the only secondary school for boys in the State which depends upon the ministry. The secretary states that during

the year covered by his report the literary studies of the school were conducted in a very satisfactory manner. In response to the pressure of modern demands the subjects of natural history, physiology, and the experimental sciences have been introduced, and in order to provide for practical instruction in these matters a museum has been founded in the college and is in charge of Prof. Miguel Gutierrez, S. J., who is well known for his scientific attainments. This institution prepares students for the bachelor's diploma, as do also the departmental colleges in this State.

The report of the minister of public instruction of Ecuador for the year 1913 calls attention to resolutions submitted by a committee of the professors of secondary education to the superior council. These resolutions emphasize the need of professors specially qualified for the service of the secondary schools and also the importance of a more thorough systematization of the course of study. The report also presents a model time-table for secondary schools which corresponds, as regards the subjects included, with those already given, excepting that for philosophy in the fifth and sixth years psychology and ethics are substituted.

During the present year the Government of Bolivia commissioned Señor Georges Rouma, director general of primary, secondary, and normal schools in the State, to take measures for reorganizing the system of education. The preliminary measures include requests to foreign Governments for full information as to the administration and conduct of schools in their respective countries.

The professed purpose of this undertaking is to systematize the work of the schools of all orders and adjust it more closely to modern demands.

COMMON ELEMENTS IN THE DIFFERENT PROGRAMS.

From the survey of secondary schools here presented it is obvious that certificates from liceos or colegios in South America, whether merely proofs of graduation or carrying the bachelor's degree, represent different standards, but there is sufficient uniformity to form the basis for a general determination of values.

In all the States excepting Brazil the basis of the literary studies is Castilian, that form of the Spanish language which has preserved continuity and purity from age to age by reason of its rich and varied literature. The thorough manner and serious spirit in which this instruction is conducted may be illustrated by the elaborated program for Argentina. In the first year of the course stress is placed upon the formation and pronunciation of words and their accents; this is followed the second year by the study of simple sentences, parts of speech, and their inflections; and the third year

syntax is taken up, including the principles of composition and figures of rhetoric. From the first, the grammatical instruction is accompanied by readings from Spanish authors. As a rule the works selected at this early stage treat of Spanish history and the relations between Spain and her American colonies; in the third year the study is begun of the works of native authors as well as those of Spain.

From the fourth to the sixth year the study of Castilian is replaced by that of literature taken in a more extended sense. The literatures of Argentina and Spanish America in general occupy the time for the fourth year; and the history of Castilian literature the corresponding period in the fifth year.

The course for the fifth year is divided into six periods, following the development of Castilian literature from the earliest stage to its culmination and later, though less brilliant manifestations. A large part of the course is given by résumés and compendiums. Among the authors that are critically considered are Herrera, representing the national classical epoch; Lope de Rueda, Lope de Vega, and Calderon, the period of dramatic poetry; Cervantes, the novel; de Huerta and Martinez de la Rosa, the drama; and Zorrilla, the later romantic period.

The official instructions comprise lists of reference books and critical editions of the authors as well as cheaper school manuals. Among critical editions of well-known works are the following: *La gesta de Mio Cid*, ed. by Ramon Menendez Pidal; *El ingenioso hidalgo Don Quijote de la Mancha*, ed. by F. Rodriguez Marín.

In the list of critical résumés appear the history of the Spanish literature by George Tichnor, Castilian and Portuguese literature, by Wolff; and the anthologies of Castilian poetic literature, critical history of esthetic ideas in Spain, and other similar works by Menendez y Pelayo.

The official instructions accompanying the program urge that reading of the authors be made the basis of the entire study of literature. This reading should precede as far as possible all commentary and exposition of rhetorical principles. Discussions of style should be based upon the texts which illustrate the principles elucidated. In this way an eminently practical character is imparted to the instruction in literature. It is interesting to note in this connection, also, that the study of universal history is conducted by periods marked by great movements, and that in connection with each the literature of the period is specially emphasized.

The course in literature as outlined in the official programs is very extended, but it should be considered that the instruction in this subject is given largely by lectures and critical readings on the part of the professors, the students taking notes during the class, on

which they are subsequently questioned. The intensive study of authors and literary periods is continued as a rule in special institutions and the university faculties.

In Brazil the study of the Portuguese language is carried out in the same thorough manner as the study of Spanish in the neighboring States. Composition and exercises in paraphrasing are required as a means of giving the pupils facility of expression and familiarity with the distinctions between prose and verse. The literature of Portugal is studied by selected authors illustrating its chief epochs.

In all discussions of the instruction in living foreign languages emphasis is placed upon the use of the natural or practical method, which is very readily employed, since the professor in charge of each language is proficient in the same. Hence conversation upon familiar subjects, dictation, and translation, at first of simple sentences and gradually of more extended matter, are common features of the class exercises. As a result a large proportion of the students from the secondary schools of South America have a ready use of the French language and very generally of the English or German also.

In the complete or six-year course of secondary instruction the mathematical studies, including algebra, geometry, and trigonometry, are carried about as far as in the high schools of the United States.

The similarity of the courses in science outlined for the schools of the different States indicates their development under common influences. The introduction of these subjects is undoubtedly due to the enthusiasm awakened in France by the work of Buffon and his immediate successors in the Museum of Natural History, Paris, and the interest which these scientific efforts awakened in the minds of learned men throughout Europe. The sequence of subjects follows the development of science itself. Attention is first directed to the branches of natural science which lend themselves readily to observation and description. Illustrative plates and cabinet collections afford material for what is termed the intuitive method, which, however, appears to be limited in the main to a mere description of the object. The tendencies in this respect are criticised by Dr. Lapeyre, dean of the department of secondary and preparatory studies, Uruguay, in his latest report. He complains that in the study of anatomy a professor will content himself with naming the bones and describing their relation to the skeleton, or with pointing out the general position of the main organs of the body without reference to their functions or the part which they play in the life of the individual. This defect he attributes to the want of professors familiar with the scientific method and to the absence of material equipment in the liceos. On the latter point he says:

The liceos have not been furnished always with the material for science instruction, museums, cabinets, and laboratories; but it is no less certain that in some places where

this material exists the result has been the same, which leads me to observe that the material appliances in every case serve merely as a decorative element, an adornment.

In the advanced classes physics and chemistry are introduced. With respect to these sciences the detailed programs and official instruction accompanying are very similar, as regards scope and the emphasis placed upon practical demonstrations, to the corresponding courses in the high schools of the United States. The course in physics is extended to include aeronautics and electricity, the latter in its applications as a motor power.

It is a general complaint that the schools are not provided with the equipment for practical or experimental instruction, and that where this need is supplied the appliances are used mainly by the professors for demonstration. In this respect, indeed, the practice is similar to that very commonly followed in the lycées of France. In the latter country the opinion is supported by many scientists that laboratory practice and independent experiment should not be undertaken by students until after their admission to special schools and the faculties of science.

The greatest distinction between the course of secondary instruction in South American schools and those of the United States is in the importance given to philosophy. As elaborated for Argentina, in which State the subject has unusual extension, philosophy comprises the following: Psychology, especially in its modern extensions; logic; evolution of philosophical ideas and systems.

The proper place of philosophy in a complete scheme of liberal education—that is, whether it should be taken up in secondary schools or deferred to the university stage—is a matter of very earnest discussion on the part of educational leaders. Its present position appears to be due to the influence of French precedents, and the division of opinion brought out in the discussion of the place of philosophy in an ideal scheme of higher education is similar to that which has taken place in the French council of public instruction.

The purpose of this summary has been to emphasize the salient elements in the courses of study to which it relates without entering at all upon comparison with like courses in other countries. As bearing upon this purpose it is of interest to cite here the opinion of Dr. Brandon, who has given great attention to the subject from the university standpoint. He says:

The age of the liceo graduate is about the same as that of the American boy when he finishes the high school. The Latin American is perhaps superior in breadth of vision, cosmopolitan sympathy, power of expression, and argumentative ability, but, on the other hand, perhaps inferior in the powers of analysis and initiative and in the spirit of self-reliance.¹

¹ Latin-American Universities and Special Schools. By Edgar Ewing Brandon, vice president of Miami University. U. S. Bureau of Education Bulletin, 1912, No. 30.

WEST INDIES.

OPPOSITE TENDENCIES.

The West Indies afford examples of two different systems of government and of social life, one of which, represented by Cuba, is the result of the same influences that have shaped the destinies of Latin America generally, and has reached a similar stage in progress and conscious needs. The other system is represented by Jamaica, which has been a British possession for two and one-half centuries, and has an educational system modeled upon that of England. It would be out of place to consider the latter island in this connection, but for the fact that the standards applicable to its schools apply equally to the British colony of Honduras, in Central America, and British Guiana, on the northern shore of South America.

In the case of the British possessions as in that of the Latin American States a special reason for considering the character and scope of secondary education is found in the increased number of their students who seek admission to higher institutions in the United States and whose attainments, therefore, have to be measured by the entrance requirements of those institutions.

CUBA.

All schools and higher institutions supported by the Government in Cuba are under the direction of the secretary of public instruction and fine arts. Within his province are included the public institutions for secondary education, situated, respectively, in the capitals of the six Provinces into which the island is divided.

The candidates for admission to the secondary schools must have completed the thirteenth year of age and give proof either by certificates or examinations that they have finished an elementary course of study in the following branches: Castilian, English, or French, arithmetic as far as ratio and proportion, lineal drawing and elements of geometry, detailed geography of Cuba, and elements of general geography, history of Cuba and the American Continent, and elements of physical geography, hygiene, physiology, zoology, and botany.

The official plan of studies for the secondary schools comprises seven groups of studies, forming a course of four years of eight months each (usually October to May, both inclusive). The groups of studies are arranged in courses, each course occupying a year unless otherwise indicated. An hour a day is given to each study during the period assigned. The groups of studies are as follows:¹

A. Castilian grammar and literature (3 courses). B and C. English and French (2 courses). D. Geography and history (2 courses, respectively). E. Mathematics:

¹ Official letter bearing date June 3, 1914, and Memoria Anual, Instituto de segunda enseñanza de Matanzas.

Arithmetic, algebra, geometry, and trigonometry (3 courses). F. Physics (2 courses) chemistry (1 course). G. Cosmology (1 term); biology (1 term); and natural history (1 year). H. Logic, sociology, and civics (2 courses).

Students have choice between English and French. The studies of group G are optional. The degree of bachelor of letters is conferred upon students who complete the course and pass the required examinations.

Secondary education may be given also in private colleges incorporated in the several Provinces, but degrees conferred by such institutions have no validity. Their students must appear before the official examining board to secure the degree of bachelor of letters and science.

JAMAICA.

TYPICAL PROGRAMS.

Secondary education in Jamaica is the province of two Government schools, which are largely supported by public funds, and of endowed or private schools. The course of study in the different schools varies somewhat, but they all prepare students for certain external examinations, which has a tendency to unify their curricula. The following tabulation pertaining to St. George's Colleges comprises subjects which, with one or two exceptions to be noted, enter into the course of study for all secondary schools of the island. The table indicates by the distribution of hours in a week the relative weight given to each study.

ST. GEORGE'S COLLEGE.

COURSE OF ACADEMIC STUDIES.¹

Subjects.	Distribution of weekly hours.			
	Fourth-year terms.		Third-year terms.	
	First.	Second.	First.	Second.
	Hours.	Hours.	Hours.	Hours.
Latin.....	8	8	5	5
English.....	5	5	4	4
Mathematics (arithmetic, algebra).....	5	5	5	5
Christian doctrine.....	2	2	2	2
History.....	2	2	2	2
Physical geography.....	2	2		
Greek or shorthand and bookkeeping.....	1½	1½	1½	1½
Education.....	1	1	1	1
Modern languages.....	2	2	2	2

¹ From report in manuscript.

It will be seen by reference to the table that the main subjects as regards the amount of time given to them are Latin, English, and mathematics. Slight reduction takes place with respect to the first two after the fourth year. The program for the third year is identical with that for the second and first years.

The particulars in which the course for St. George's College differs materially from that of several other secondary schools are as follows: Geography, less extended; Greek, made an alternative with commercial subjects; elocution, maintained throughout the course; modern languages, limited to French. The school includes a preparatory department, to which boys are not admitted till they have passed the tenth year of age. The general age for admission to the academic department is 12 years. This school does not make a specialty of preparing students for external examinations, though it has had fair success in this work.

The Potsdam school has a course of study arranged for six forms or years and having special reference to the requirements of the Cambridge local examinations. The standard of the school may be illustrated by the following synopsis of the principal branches covered by the fifth and sixth, or two highest forms:

English composition. (a) Essays and the planning thereof; (b) the art of summarizing—*précis*-writing; (c) punctuation (prose and verse); (d) correction of faulty constructions; (e) paraphrasing; (f) letter writing; (g) 1. Memorizing and recitation of selected prose passages and examination thereof; 2. Memorizing and recitation of selected passages and examination thereof.

English literature. (a) Shakespeare—*Macbeth*, *Tempest*, and four additional dramas; (b) Ruskin—*Sesame and Lillies*; (c) Spencer—*Fairy Queen*; (d) Plutarch's *Lives*; (e) Chaucer—*Prologue*; (f) Addison—*Coverley Papers*; (g) *Andromeda*.

Latin. Fifth form—translation. Virgil, *Aeneid*, Book II, and Livy, Book V. Passages are regularly set for translation at sight, and passages of continuous prose are rendered into Latin. Sixth form—Same authors; more advanced prose attempted and harder passages set for translation at sight.

Mathematics. Form five—1. Arithmetic continued; 2. Algebra, including logarithms, the binomial and allied theorems; 3. Plane trigonometry up to the solution of triangles, de Moivre's theorem and simple applications; 4. Algebraic geometry; 5. Elementary differential and integral calculus; 6. The elements of statics and dynamics; 7. Geometry, including solid geometry. Form six—Continues the subjects of form five with extensions, including, in mathematics, solid geometry and the elementary parts of modern pure geometry.

The study of geography is continued through five forms. French is the modern language selected.

THE CAMBRIDGE UNIVERSITY LOCAL EXAMINATIONS.

The Cambridge local examinations have promoted unity in the curricula of secondary schools in all the British outlying possessions. In an official letter of recent date the director of education for Jamaica says:

It has, since 1881, been possible for Jamaica students to sit for the Cambridge senior local certificate, which are admitted *pro tanta* by all the English universities and by several American and Canadian universities.

The Jamaica College, Potsdam and Hampton and Wolmer's (boys and girls) schools have every year, or nearly every year, had several students holding good positions

¹ From manuscript report.

in the Cambridge senior, and any one of them would probably obtain the recognition of any American body of regents, as the Jamaica College has actually done at one university. Other schools have from time to time sent in students who have obtained good places, but hardly in sufficient numbers to enable any external authority to judge of the standing of the upper forms in the school, except, possibly, in the case of the Montego Bay Secondary School. . . .

(1) All our schools are open to white and colored children equally, and are used by both. (2) The schools named do, in their upper classes, reach the standard required for matriculation in English and American and Canadian universities. (3) Boys and girls from them do each year enter some of these universities. (4) All the best pupils in them—and in some of the other schools—enter for the Cambridge senior and higher local exams or the London matriculation or intermediate B. A. examination.

Similar examinations are held at Belize, British Honduras.

SOURCES OF INFORMATION.

On the administrative side the systems of education in Latin America are characterized by a closer coordination of the different departments than is found in European systems. This relation is emphasized by the official reports, which, as a rule, deal with the systems as a whole. The scope of these reports is shown by the annotations in the appended bibliography, which comprises the publications consulted in the preparation of this circular.

BIBLIOGRAPHY.¹

Argentine Republic. Ministerio de justicia e instrucción pública. Dirección general de enseñanza secundaria y especial. La enseñanza secundaria; decretos orgánicos; resoluciones de la dirección general; plan de estudios; programas analíticos. Buenos Aires, Talleres gráficos de la penitenciaría nacional, 1913. 419 p. 4°.

As indicated in the title, this work gives full official status, laws, rules, and regulations for secondary education, including plans of studies carefully analyzed.

Provincia de Buenos Aires. Dirección general de escuelas. Memoria . . . 1910-11. . . La Plata, Peuser, 1912. vols. 1-3. 4°.

The first volume of this extensive work (817 pages) treats of the central administration of the schools, including economic factors, school classification, statistics; teachers and pupils; nationalization of education; school finances and architecture, with numerous diagrams. The volume includes a number of theses and discussions of various educational topics.

Volume 2 (526 pages) presents in a comprehensive way the results of the general inspection of schools. Among topics treated are: Instructions to inspectors, special schools for abnormal children, vacation schools, programs, and promotion of patriotism.

Volume 3 (568 pages) discusses the medical and hygienic side of the schools, treating the different topics at length. Among these subjects are the prevention of contagious diseases, rules as to medical inspection, schools for abnormal children, schools for debilitated children, finger prints of abnormal children. This volume contains also a number of lectures and original investigations of school children from the medical point of view.

Dirección general de estadística. Resúmenes estadísticos retrospectivos. Buenos Aires, Imprenta de G. Kraft, 1914. 234 p. 8°.

Under head of "Estadística escolar" (pp. 210-231) is a short introduction followed by statistical tables, including number of schools, teachers, and pupils for each year in the different provinces from 1903 to 1912.

Brazil. Ministerio da justiça e negocios interiores. Regulamento do collegio Pedro II, aprovado pelo decreto n. 8.680, de 5 de Abril de 1911. Rio de Janeiro, Imprensa nacional, 1911. 18 p. 8°.

Contains text of the decree determining the organization of the institution and statement of its purposes.

Chile. Ministerio de instrucción pública. Anuario. Recopilación de leyes i reglamentos relativos a los servicios de instrucción superior, secundaria i especial . . . Santiago de Chile, Imprenta universitaria, 1912. ci, 607 p. 4°.

A chronological, alphabetical, and analytical index of the laws and regulations is given as a preface to the volume.

Oficina central de estadística. Anuario estadístico de la República de Chile. Instrucción. Año 1911. Santiago de Chile, Soc. imp. y lit. universo, 1913. x, 228 p. 8°.

The educational section of a general statistical report. Statistical tables only; these are in detail and quite complete. No comments are given with the tables.

Colombia. Ministro de instrucción pública. Informe . . . al congreso de 1913. Bogota, Imprenta nacional, 1913. 256 p. 4°.

A report of the minister of education, giving detailed statistics of educational matters of the Republic, illustrated with photographs of pupils and buildings in different localities. The report is made to the Colombian Legislature.

Costa Rica. Secretaria de instrucción pública. Memoria de instrucción pública, presentada al congreso constitucional por Roberto Brenes Meeén. . . 1914. San Jose, Tipografía nacional, 1914. xiii, 339 p. 8°.

The secretary in his introduction considers recent educational reforms in his country. Extensive statistics in tabular form give details as to present status of education in its various departments.

¹ Prepared by Arthur MacDonald.

Cuba. Instituto de segunda enseñanza de Matanzas. Memoria anual. Correspondiente al curso academico de 1908 á 1909. Matanzas, Imprenta de Quiros y Estrada, 1908.

Comprises report of the institution and the course of study prescribed for all the national secondary schools.

Ecuador. Ministerio de instrucción pública, correos, telégrafos, etc. Informe anual que Luis N. Dillon . . . presenta a la nación en 1913. Quito, Imprenta y encuadernación de la escuela de artes y oficios, 1913. 2 vols. 4°.

Volume 1 contains an extensive exposition (75 pages) of the different classes of education—primary, secondary, etc.—to which is annexed a series of reports from educational officials of the different Provinces discussing questions of school attendance, material conditions, school organization, physical and moral education, native idioms, civic, and esthetical education, and previous condition of education; also methods of instruction, textbooks, school administration and finances, direction of studies, inspectors' visits, libraries, suggestions of school councils, and school discipline.

Under secondary and higher education attention is given to courses of study in detail, degrees, reports from professors and rectors. These, with other topics, cover 450 pages.

Volume 2 presents in detail (483 pages) plans, articles, and rules for primary education, including executive decrees as to public instruction, ministerial circulars, official letters, etc.; articles or rules for school authorities and school inspectors of different classes; also rules and instructions as to school discipline, supervision, classification; classes of teachers, their qualifications and examinations.

Guatemala. Ministerio de instrucción pública. Memoria de la Secretaría de instrucción pública de Guatemala, presentada a la Asamblea nacional legislativa en 1914. Guatemala, Tipografía nacional, 1914. 402 p. 8°.

This memoria gives a somewhat full report of educational statistics.

Jamaica. Announcements of individual schools and official correspondence. In manuscript.

Nicaragua. Ministerio de instrucción pública. Memoria de relaciones exteriores e instrucción pública presentada al Congreso nacional. . . Octubre de 1911 á diciembre de 1913. Managua, Tipografía nacional, 1914. 2 vols. 8°.

In volume 2 are given resúmenes of some educational statistics in tabular form.

Panama (Republic). Secretaría de instrucción pública. Memoria que el secretario de estado en el despacho de instrucción pública presenta a la asamblea nacional de 1914. Panama, Imprenta nacional, 1914. 477 p. 8°.

This report has a general introduction of 50 pages treating of the different phases of education in the Republic and also of special institutions. Among the latter are the National Institute, normal school for teachers, schools of arts and trades, conservatories of music and oratory, and schools of painting. The report contains much detailed information, including names of officials, programs of studies, and reports of local officers.

[Peru.] Lockey, Joseph B. Estudios sobre la instrucción primaria en el departamento de Lima y la provincia constitucional del Callao. Lima, Perú, Gil, 1911. xiii; 290 p. tables, plans, etc. 8°.

This work is divided into three parts, the first containing general considerations pertaining to various subjects: among these scientific management applied to school administration, physical education, agricultural education, vocational education, and some anthropometrical studies of pupils.

The second part consists mainly of official letters and circulars having reference to subjects of current interest; such as school hygiene, school exhibitions, etc. The third part consists of 21 statistical tables of a comprehensive or retrospective character for the Department of Lima and the Province of Callao.

Ministerio de instrucción. Informaciones sobre la segunda enseñanza en la república. Edición oficial. Lima, Tipografía de "El Lucero," 1906. 2 vols.

The two volumes comprise an exhaustive survey of secondary education in Peru in the form of communications from directors and professors of national and private colleges and educational authorities. The matter was submitted in response to a call from the Legislature in view of proposed modifications and reforms in the department of secondary education.

Salvador. Ministerio de instrucción pública. Memoria de los actos del poder ejecutivo en el ramo de instrucción pública presentada a la honorable asamblea nacional el día 10 de Marzo de 1913, por el sr. subsecretario de estado Dr. Gustayo S. Baron. San Salvador, Imprenta, Melen dez, 1913. 4°.

After a general introduction, this report gives detailed information chiefly in the form of statistical tables for the different educational institutions of the country, i. e., technical, commercial, and special schools, as well as primary, secondary, and higher educational schools.

Uruguay. Dirección general de estadística. Anuario estadístico . . . con varios datos de 1911. (Años 1909-10.) Libro 22 del "Anuario" y 36 de las. Tomo 1. Montevideo, Dornaleche, 1912. xxxix, 471 p. (Apéndice, i-cxx p.) 4°. (Libro 22 del "Anuario" y 36 de las publicaciones de la dirección general de estadística.)

In the appendix is a census (p. 13-15) of education for 1908, giving number of pupils, students, teachers, and professors for primary, secondary, higher, and special education; also registration in different faculties, and results of examinations for all orders of education, including entrance examinations.

Dirección general de instrucción primaria. Anales de instrucción primaria. Año 11-12. Tomo 13, nos. 1-12. Montevideo, Imp. "El sigl. ilustrado," de G. V. Mariño, 1914. 979 p. 8°.

This work comprises articles on and the results of the original investigations of many modern phases of primary education, by specialists of the country.

Montevideo. Universidad. Proyecto de plan de estudios para la sección de enseñanza secundaria y preparatoria. Anales . . . 1912. Tomo 21, no. 88. Montevideo, Tip de la Escuela nacional de artes y oficios, 1912. p. 1-194. 8°.

This volume comprises the plan of secondary studies and of studies preparatory to the university faculties, submitted by the section of the university council charged with that interest, according to article 18, law of December 31, 1908; also the discussions and final action of the university council respecting the proposed plan and the decree of the President of the Republic authorizing the adoption of the plan of studies. p. 1-194. The remainder of the volume is occupied by articles and official papers pertaining to university matters.

Venezuela. Ministerio de fomento. Dirección general de estadística de Venezuela. Anuario estadístico . . . 1910. Caracas, Imprenta nacional, 1913. xxi, 504 p. 8°.

Contains documents pertaining to 1911 and 1912.

On pages 57-72 of this yearbook are given statistical tables of primary education, including number of schools, teachers, and pupils of public and private schools; classes of schools and divisions by ages; also statistics and colored graphs (p. 400-403) illustrating them from 1908 to 1910.

Ministerio de instrucción pública. Memoria. Exposición. Dirección primaria y secundaria. Documentos. Tomo 1. Caracas, Imprenta nacional, 1914. cxiv, 495 p. 4°.

Dirección de instrucción superior y de bellas artes. Documentos. Tomo 2. Caracas, Imprenta nacional, 1914. 538 p. 4°.

Dirección de estadística y contabilidad. Documentos. Tomo 3. Caracas, Imprenta nacional, 1914. 335 p. 4°.

In the first volume (495 pages), after an extensive introduction (100 pages), Minister F. Guevara Rojas calls especial attention to certain points, including the following:

Primary education. Creation of new graded schools; work of first school census; foundation of anti-Catholic education in the country; organization of manual labor in the schools.

Normal school instruction. Establishment of the internat in both normal schools.

Secondary instruction. Rules for written examination in colleges; official edition of previous programs of study; installation of chemical laboratory in the college for boys at Caracas; scholarships for young men delegated to study branches of technical education in foreign countries.

Institutions for university extension. Designation of a delegate to represent Venezuela in the Sixth Pan-American Congress of Lima; organization of a circulating library; establishment of four meteorological stations.

Special education. Reorganization of the academy of plastic arts, conservatory of music and declamation; creation of a professorship of composition in the academy; scholarships for young men to study the fine arts in foreign countries.

School of arts and trades for men. Formation of classes in tailoring and photography, in physics and mechanics of automobiles; competition for scholarship in school of arts and trades of Santiago de Chile.

School of arts and trades for women. Creation of new professorships of materials and costumes, making of hats, artistic flowers, etc.; organization of a school for nurses.

The remainder of volume 1 contains official papers comprising letters from the minister to the President of the Republic, and from State superintendents to the minister; also lists of the students graduating, and numerous tables of details.

The second volume (538 pages) bound with the third, consists of official papers on the direction of superior instruction and fine arts.

The third volume (335 pages) deals especially with statistics and accounts.

BULLETIN OF THE BUREAU OF EDUCATION.

[NOTE.—With the exceptions indicated, the documents named below will be sent free of charge upon application to the Commissioner of Education, Washington, D. C. Those marked with an asterisk (*) are no longer available for free distribution, but may be had of the Superintendent of Documents, Government Printing Office, Washington, D. C., upon payment of the price stated. Remittances should be made in coin, currency, or money order. Stamps are not accepted. Numbers omitted are out of print.]

1906.

- *No. 3. State school systems: Legislation and judicial decisions relating to public education, Oct. 1, 1904, to Oct. 1, 1906. Edward C. Elliott. 15 cts.

1908.

- *No. 5. Education in Formosa. Julian H. Arnold. 10 cts.
- *No. 6. The apprenticeship system in its relation to industrial education. Carroll D. Wright. 15 cts.

1909.

- *No. 1. Facilities for study and research in the offices of the United States Government in Washington. Arthur T. Hadley. 10 cts.
- *No. 2. Admission of Chinese students to American colleges. John Fryer. 25 cts.
- *No. 3. Daily meals of school children. Caroline L. Hunt. 10 cts.
- No. 5. Statistics of public, society, and school libraries in 1908.
- *No. 6. Instruction in the fine and manual arts in the United States. A statistical monograph. Henry T. Bailey. 15 cts.
- No. 7. Index to the Reports of the Commissioner of Education, 1867-1907.
- *No. 8. A teacher's professional library. Classified list of 100 titles. 5 cts.
- *No. 9. Bibliography of education for 1908-9. 10 cts.
- No. 10. Education for efficiency in railroad service. J. Shirley Eaton.
- *No. 11. Statistics of State universities and other institutions of higher education partially supported by the State, 1908-9. 5 cts.

1910.

- *No. 1. The movement for reform in the teaching of religion in the public schools of Saxony. Arley B. Shaw. 5 cts.
- No. 2. State school systems: III. Legislation and judicial decisions relating to public education, Oct. 1, 1908, to Oct. 1, 1909. Edward C. Elliott.
- *No. 5. American schoolhouses. Fletcher B. Dresslar. 75 cts.

1911.

- *No. 1. Bibliography of science teaching. 5 cts.
- *No. 2. Opportunities for graduate study in agriculture in the United States. A. C. Monahan. 5 cts.
- *No. 3. Agencies for the improvement of teachers in service. William C. Ruediger. 15 cts.
- *No. 4. Report of the commission appointed to study the system of education in the public schools of Baltimore. 10 cts.
- *No. 5. Age and grade census of schools and colleges. George D. Strayer. 10 cts.
- *No. 6. Graduate work in mathematics in universities and in other institutions of like grade in the United States. 5 cts.
- No. 9. Mathematics in the technological schools of collegiate grade in the United States.
- *No. 13. Mathematics in the elementary schools of the United States. 15 cts.
- *No. 14. Provision for exceptional children in the public schools. J. H. Van Sickle, Lightner Witmer, and Leonard P. Ayres. 10 cts.
- *No. 15. Educational system of China as recently reconstructed. Harry E. King. 10 cts.
- No. 19. Statistics of State universities and other institutions of higher education partially supported by the State, 1910-11.

1912.

- *No. 1. A course of study for the preparation of rural-school teachers. F. Mutchler and W. J. Craig. 5 cts.
- *No. 3. Report of committee on uniform records and reports. 5 cts.
- *No. 4. Mathematics in technical secondary schools in the United States. 5 cts.
- *No. 5. A study of expenses of city school systems. Harlan Updegraff. 10 cts.
- *No. 6. Agricultural education in secondary schools. 10 cts.
- *No. 7. Educational status of nursing. M. Adelaide Nutting. 10 cts.

- *No. 8. Peace day. Fannie Fern Andrews. 5 cts. [Later publication, 1913, No. 12. 10 cts.]
- *No. 9. Country schools for city boys. William S. Myers. 17 cts.
- *No. 13. Influences tending to improve the work of the teacher of mathematics. 5 cts.
- *No. 14. Report of the American commissioners of the international commission on the teaching of mathematics. 10 cts.
- *No. 17. The Montessori system of education. Anna T. Smith. 5 cts.
- *No. 18. Teaching language through agriculture and domestic science. M. A. Lelper. 5 cts.
- *No. 19. Professional distribution of college and university graduates. Bailey B. Burritt. 10 cts.
- No. 22. Public and private high schools.
- *No. 23. Special collections in libraries in the United States. W. D. Johnston and I. G. Mudge. 10 cts.
- No. 27. History of public-school education in Arkansas. Stephen B. Weeks.
- *No. 28. Cultivating school grounds in Wake County, N. C. Zebulon Judd. 5 cts.
- No. 29. Bibliography of the teaching of mathematics, 1900-1912. D. E. Smith and Chas. Goldziber.
- No. 30. Latin-American universities and special schools. Edgar E. Brandon.

1913.

- No. 1. Monthly record of current educational publications, January, 1913.
- *No. 2. Training courses for rural teachers. A. C. Monahan and R. H. Wright. 5 cts.
- *No. 3. The teaching of modern languages in the United States. Charles H. Wandschin. 15 cts.
- *No. 4. Present standards of higher education in the United States. George E. MacLean. 20 cts.
- *No. 5. Agricultural instruction in high schools. C. H. Robison and F. B. Jenks. 10 cts.
- *No. 7. College entrance requirements. Clarence D. Kingsley. 15 cts.
- *No. 8. The status of rural education in the United States. A. C. Monahan. 15 cts.
- *No. 12. The promotion of peace. Fannie Fern Andrews. 10 cts.
- *No. 13. Standards and tests for measuring the efficiency of schools or systems of schools. 5 cts.
- *No. 16. Bibliography of medical inspection and health supervision. 15 cts.
- *No. 18. The fifteenth international congress on hygiene and demography. Fletcher B. Dresslar. 10 cts.
- *No. 19. German industrial education and its lessons for the United States. Holmes Beckwith. 15 cts.
- *No. 20. Illiteracy in the United States. 10 cts.
- *No. 22. Bibliography of industrial, vocational, and trade education. 10 cts.
- *No. 23. The Georgia club at the State Normal School, Athens, Ga., for the study of rural sociology. E. C. Branson. 10 cts.
- *No. 24. A comparison of public education in Germany and in the United States. Georg Kerschesteiner. 5 cts.
- *No. 25. Industrial education in Columbus, Ga. Roland B. Daniel. 5 cts.
- *No. 28. Expressions on education by American statesmen and publicists. 5 cts.
- *No. 29. Accredited secondary schools in the United States. Kendrick C. Babcock. 10 cts.
- *No. 30. Education in the South. 10 cts.
- *No. 31. Special features in city school systems. 10 cts.
- No. 32. Educational survey of Montgomery County, Md.
- *No. 34. Pension systems in Great Britain. Raymond W. Sles. 10 cts.
- *No. 35. A list of books suited to a high-school library. 15 cts.
- *No. 36. Report on the work of the Bureau of Education for the natives of Alaska, 1911-12. 10 cts.
- No. 37. Monthly record of current educational publications, October, 1913.
- *No. 38. Economy of time in education. 10 cts.
- No. 39. Elementary industrial school of Cleveland, Ohio. W. N. Hallmann.
- *No. 40. The reorganized school playground. Henry S. Curtis. 10 cts.
- *No. 41. The reorganization of secondary education. 10 cts.
- No. 42. An experimental rural school at Winthrop College. H. S. Browne.
- *No. 43. Agriculture and rural-life day; material for its observance. Eugene C. Brooks. 10 cts.
- *No. 44. Organized health work in schools. E. B. Hoeg. 10 cts.
- No. 45. Monthly record of current educational publications, November, 1913.
- *No. 46. Educational directory, 1913. 15 cts.
- *No. 47. Teaching material in Government publications. F. K. Noyes. 10 cts.
- *No. 48. School hygiene. W. Carson Ryan, Jr. 15 cts.
- No. 49. The Farragut School, a Tennessee country-life high school. A. C. Monahan and Adams Phillips.
- *No. 50. The Fitchburg plan of cooperative industrial education. M. R. McCann. 10 cts.
- *No. 51. Education of the immigrant. 10 cts.
- *No. 52. Sanitary schoolhouses. Legal requirements in Indiana and Ohio. 5 cts.
- No. 53. Monthly record of current educational publications, December, 1913.
- No. 54. Consular reports on industrial education in Germany.
- No. 55. Legislation and judicial decisions relating to education, Oct. 1, 1906, to Oct. 1, 1912. James C. Boykin and William R. Hood.
- No. 58. Educational system of rural Denmark. Harold W. Focht.
- No. 59. Bibliography of education for 1910-11.
- No. 60. Statistics of State universities and other institutions of higher education partially supported by the State, 1912-13.

1914.

- *No. 1. Monthly record of current educational publications, January, 1914. 5 cts.
- No. 2. Compulsory school attendance.
- *No. 3. Monthly record of current educational publications, February, 1914. 5 cts.
- No. 4. The school and the start in life. Meyer Bloomfield.
- No. 5. The folk high schools of Denmark. L. L. Friend.
- No. 6. Kindergartens in the United States.
- No. 7. Monthly record of current educational publications, March, 1914.
- *No. 8. The Massachusetts home-project plan of vocational agricultural education. R. W. Stimson. 15 cts.
- No. 9. Monthly record of current educational publications, April, 1914.
- *No. 10. Physical growth and school progress. B. T. Baldwin. 25 cts.
- *No. 11. Monthly record of current educational publications, May, 1914. 5 cts.
- *No. 12. Rural schoolhouses and grounds. F. B. Dresslar. 50 cts.
- No. 13. Present status of drawing and art in the elementary and secondary schools of the United States.
Royal B. Farnum.
- No. 14. Vocational guidance.
- No. 15. Monthly record of current educational publications. Index.
- No. 16. The tangible rewards of teaching. James C. Boykin and Roberta King.
- No. 17. Sanitary survey of the schools of Orange County, Va. Roy K. Flannagan.
- No. 18. The public-school system of Gary, Ind. William P. Burris.
- No. 19. University extension in the United States. Louis E. Beber.
- No. 20. The rural school and hookworm disease. J. A. Ferrell.
- No. 21. Monthly record of current educational publications, September, 1914.
- No. 22. The Danish folk high schools. H. W. Foght.
- No. 23. Some trade schools in Europe. Frank L. Glynn.
- No. 24. Danish elementary rural schools. H. W. Foght.
- No. 25. Important features in rural school improvement. W. T. Hodges.
- No. 26. Monthly record of current educational publications, October, 1914.
- No. 27. Agricultural teaching.
- No. 28. The Montessori method and the kindergarten. Elizabeth Harrison.
- No. 29. The kindergarten in benevolent institutions.
- No. 30. Consolidation of rural schools and transportation of pupils at public expense. A. C. Monahan.
- No. 31. Report on the work of the Bureau of Education for the natives of Alaska.
- No. 32. Bibliography of the relation of secondary schools to higher education. R. L. Walkley.
- No. 33. Music in the public schools. Will Earhart.
- No. 34. Library instruction in universities, colleges, and normal schools. Henry R. Evans.
- No. 35. The training of teachers in England, Scotland, and Germany. Charles H. Judd.
- *No. 36. Education for the home—Part I. General statement. B. R. Andrews. 10 cts.
- *No. 37. Education for the home—Part II. State legislation, schools, agencies. B. R. Andrews. 30 cts.
- No. 38. Education for the home—Part III. Colleges and universities. B. R. Andrews.
- No. 39. Education for the home—Part IV. Bibliography, list of schools. B. R. Andrews.
- No. 40. Care of the health of boys in Girard College, Philadelphia, Pa.
- No. 41. Monthly record of current educational publications, November, 1914.
- No. 42. Monthly record of current educational publications, December, 1914.
- No. 43. Educational directory, 1914-15.
- No. 44. County-unit organization for the administration of rural schools. A. C. Monahan.
- No. 45. Curricula in mathematics. J. C. Brown.
- No. 46. School savings banks. Mrs. Sara L. Oberholtzer.
- No. 47. City training schools for teachers. Frank A. Manny.
- No. 48. The educational museum of the St. Louis public schools. C. G. Rathman.
- No. 49. Efficiency and preparation of rural school-teachers. H. W. Foght.
- No. 50. Statistics of State universities and State colleges.

1915.

- No. 1. Cooking in the vocational school. Iris P. O'Leary.
- No. 2. Monthly record of current educational publications, January, 1915.
- No. 3. Monthly record of current educational publications, February, 1915.
- No. 4. The health of school children. W. H. Heck.
- No. 5. Organization of State departments of education. A. C. Monahan.
- No. 6. A study of colleges and high schools.
- No. 7. Accredited secondary schools in the United States. Samuel P. Capen.
- No. 8. Present status of the honor system in colleges and universities. Bird T. Baldwin.
- No. 13. The schoolhouse as the polling place. E. J. Ward.
- No. 14. Monthly record of current educational publications, May, 1915.
- No. 15. Monthly record of current educational publications. Index, Feb., 1914-Jan., 1915.
- No. 16. Monthly record of current educational publications, June, 1915.
- No. 17. Civic education in elementary schools as illustrated in Indianapolis. A. W. Dunn.

- No. 18. Legal education in Great Britain. H. S. Richards.
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