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Education in ECUADOR

By CAMERON D. EBAUGH

Senior Specialist on Education in Latin American Countries

American Republics Section, Division of International

Educational Relations

FEDERAL SECURITY AGENCY, Watson B. Miller, Administrator

Office of Education • John W. Studebaker, Commissioner

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FOREWORD

THE U. S. Office of Education has undertaken the preparation of a series of basic studies on education in a number of Central and South American countries under the sponsorship of the Interdepartmental Committee on Scientific and Cultural Cooperation. This series of studies is part of a program to promote understanding of educational conditions in the American countries and to encourage cooperation in the field of Inter-American education. The project, a part of a Government-wide program of cultural cooperation under the auspices of the Department of State, was begun in the fall of 1943. It involves travel by Office of Education specialists in the various countries for the purpose of gathering data first hand on their educational systems, and the preparation of reports from these data for publication.

Education in Ecuador is based on data gathered by the author in Ecuador in 1944 and supplemented since then through documentation.

To the many persons and organizations, in Ecuador and the United States who have aided in bringing this study to completion, the U. S. Office of Education expresses gratitude.

HAROLD BENJAMIN,

Director, Division of International Educational Relations.

CHAPTER I

Evolution of Education in Ecuador

INTRODUCTION

GEOGRAPHY

The Republic of Ecuador is situated on the northwest coast of South America, between Colombia and Peru. Included in its area of approximately 275,936 square miles are the Galapagos Islands, 600 miles to the west in the Pacific, with 3,028 square miles. About 100 miles south of the Colombian border the country is crossed by the Equator, from which it derives its name.

Ecuador is traversed from north to south by two lofty cordilleras of the Andes, joined by numerous transverse ranges, many of which extend eastward into the Amazon Basin. A dozen peaks rise to heights of more than 16,000 feet—Chimborazo, with 21,424 feet and Cotopaxi, with 19,550, being the highest. Several others, notably Cayambe and Altisana, are above 19,000 feet.

As in Peru, the cordilleras in Ecuador divide the country into three natural zones. A tropical coastal region, drained and irrigated by numerous rivers and smaller streams, borders the Pacific Ocean. East of the Andes lies the fertile but little-known expanse referred to as the Orient (el Oriente), drained by a veritable network of rivers and streams tributary to the mighty Amazon. Between these two areas the central plateau formed by the Andes rises to altitudes ranging from 5,000 to 9,000 feet.

PRODUCTS

With the exception of the Inter-Andean plateau and a few arid spots along the Pacific coast, Ecuador is a vast forest. Of a total of 176,599,040 acres, only about 12,000,000 are under cultivation. In the hot coastal regions cacao, coffee, bananas, and rice are raised. Tagua nuts, toquilla palm leaves for Panama hats, balsa wood, and wild rubber-grow on the western slopes of the Andes under the 4,000-foot line. Subsistence farming, principally of wheat, corn, barley, beans, and potatoes, supplemented with the production of pork and poultry, marks the central highlands, where three-fourths of the population dwell. The Amazon region, or the Orient, is potentially rich in oil, fine woods, and agricultural products, but its isolated position has impeded its rightful development. Copper, lead, gold, silver, and petroleum are the chief mineral resources. The country imports

manufactured goods, such as machinery, structural iron and steel, chemicals, paper, motor vehicles, tires, and drygoods.

PEOPLE

According to a census in 1942, Ecuador has a population of 3,085,871, distributed racially as follows: Whites, 8 percent; Indians, 27 percent; mestizos (mixture of white and Indian), 54 percent; others, 11 percent. As in other countries with vast expanses of unexplored territory peopled by primitive tribes, accurate census-taking is practically impossible. The official language of the Republic is Spanish; but the Indians speak Quechua or, in the Amazon region, a tribal tongue of their own—the Jibaro.

True to the history of all Spanish colonies, Roman Catholicism was introduced at the time of the conquest and remains the religion of the people of Ecuador today. The national government, however, recognizes no specific religion and freedom of worship is granted to all. State appropriations for the Church were discontinued in 1895: All births, marriages, and deaths must be registered with the civil authorities.

GOVERNMENT

The Republic of Ecuador comprises 17 provinces, each administered by a Governor appointed by the President, and the Galapagos Archipelago, which is administered by a Territorial Chief under the Ministry of National Defense. The provinces are divided into 70 cantons, governed by political chiefs or mayors and elected cantonal councilors. The cantons are further divided into 533 urban and rural parishes, each under a political lieutenant or subordinate officer appointed by the mayor for minor administrative duties.

Under the new Political Constitution of the Republic of Ecuador, passed by the National Constitutional Assembly of 1944-45 and promulgated March 6, 1945, legislative power is vested in a unicameral National Congress comprising:

(1) Deputies elected by direct and secret popular vote on the basis of population: 3 for each province with 150,000 inhabitants or less; 1 for each 75,000 in provinces with more than 150,000 inhabitants; 2 for each province of the Orient with less than 150,000 inhabitants; and 1 for the Galapagos Archipelago;

(2) Functional Deputies representative of and elected by special groups: University professors, 2; university students, 2; public secondary, normal schools, and special education, 1; private secondary education, 1; public elementary education, 1; private elementary education, 1; the press, cultural institutions, and scientific societies, 1; industrialists, 2; agriculturists, 3; merchants, 2; workers, 4; rural laborers, 2; organizations of Indians, 1; and the armed forces, 1.

Executive authority is exercised by the President of the Republic, who is elected by direct and secret vote for a 4-year term. He is ineligible for reelection within 4 years of vacating or terminating office. The president is assisted by a cabinet of Ministers of State appointed by him. Judicial power is vested in the Supreme Court of Justice, the Superior Courts, and other tribunals and lower courts established by law. Ministers of the Supreme and the Superior Courts are eligible to immediate reappointment.

EDUCATION

COLONIAL PERIOD

Early colonial education in Ecuador, following the pattern of Spanish policy throughout the New World, aimed at the conversion and domination of the conquered race as an aid in the quest for gold and the exploitation of the land. Schools of a sort functioned sporadically in the more populated regions and in private homes where a servant or the father himself was the teacher. On large land grants it was obligatory to erect a chapel or church and to provide a cleric or other person to give instruction in numbers, language, and elementary arts and trades; but it is hardly proper to refer to these activities as institutional schools, for they lacked educational organization and orientation.¹

In 1575 Augustinian monks arrived and 2 years later some Sisters of the Immaculate Conception. These were soon followed by Franciscans, Dominicans, Mercedarians, and members of other orders. Activities of these organizations included the establishment of schools of elementary instruction in Spanish, music, manual activities, the native tongue, and, above all, Christian doctrine.

In the latter years of the eighteenth century, public schools conducted by laymen appeared, but Church instruction had become so well entrenched that the idea of general public education was extremely slow in making itself felt among the masses. However, the early Ecuadorian patriots, especially those who had had the advantages of educational study in Europe, desired to increase educational opportunities for the people. Through their influence schools began to hold the attention of the governing and cultured classes during the final years of the Spanish period, and considerable thought was given to the preparation of teachers.

The colonial teacher in Ecuador, generally a member of a religious order, enjoyed all the privileges and prerogatives of the Church. The kings of Spain were his friends and it was considered necessary

¹ Juan S. Jaramillo G. *La Educación Primaria en el Ecuador*. Ambato, Imprenta de Educación Primaria, 1940. p. 23.

that he be regarded as a great politician and savant. When other duties occupied his attention, his schoolwork was taken over by a subordinate, the prototype of the lay school teacher.

REPUBLIC

When Bolívar completed his work of liberation in 1822, he began the establishment of schools, libraries, and other educational institutions. In Ecuador about 20 schools were opened.² The early years of the Republic, however, were too chaotic to permit much attention to education. In 1835, Don Vicente Rocafuerte, one of Ecuador's governors, spoke of education in these words:

Public education is one of the essential duties of government, for when a people knows its rights there is no other way to govern it than by cultivating its intelligence and instructing it in the fulfillment of its obligations. The education of the masses strengthens their liberty and destroys their enslavement. Every representative government that owes its existence to elections should establish a broad national system of academic and industrial education which will throw its light over the darkness, stamp out arbitrary limitations, and allot to each class its rank and to each man his place.³

In spite of the interest and efforts of a few great men, educational progress was practically impossible because of the general disorder in the country, the emptiness of the national treasury, the absence of a universal desire to establish and maintain schools, and the scarcity of trained teachers. Schools of the various religious organizations, a few maintained by municipalities, and a few others under private direction, continued to provide education for that part of the masses which was interested in self-betterment. Education as a means of national enlightenment and progress was not yet recognized. The teachers, other than those of the Church schools, were with few exceptions recruited from the lower social, economic, and cultural spheres and almost entirely lacking in professional preparation. School subjects were inadvisably distributed: the same ones, with highly similar content, were given in elementary and secondary schools, and even in the universities; so that it was not possible to distinguish definitely one type of institution from the others.⁴ In regard to equipment, even blackboards were unknown. Instead, agave or maguey leaves, or sand-sprinkled boards, were employed, the pupils using sticks or their index fingers for the formation of letters and numbers—a practice still to be seen in the remote schools of the Amazon region.

Developments between 1861 and 1930.—With the opening of the administration of García Moreno in 1861, a semblance of order began to emerge, and during the following 15 years elementary education took fairly definite form. The teachers, religious and lay, were given

² *Ibid.*, p. 32.

³ *Primitivas del Consultorio Pedagógico del Guayas*. Guayaquil, Imprenta y Talleres Municipales, 1940. p. 8.

the choice of improving or resigning; of being models of kindness, honesty, and goodness, or seeking refuge outside the schools. Further, García Moreno brought the Christian Brothers and the Sisters of the Sacred Heart into the country to organize and direct Ecuadorian education. During the period from 1861 to 1875 the number of schools increased from 206 to 582, while the education budget rose from 15,000 or 18,000 pesos to 114,000. Elementary schooling became free and compulsory, scholarship awards were regulated, and free books were provided for children from financially needy homes. Secondary, technical or vocational, and normal schools were founded and numerous texts and reference works prepared.⁴ True to the period in which they were issued, these books were deductive in method and catechetical in form.

García Moreno's administration was followed by a period of little interest in education. However, church schools continued. During the latter part of the Nineteenth century lay teachers frequently went for months and even years without their meager salaries, until the saying arose that "The school teacher is the representative of the national hunger."⁵

Unrest, aspirations, and determination, nevertheless, were in the air. New men appeared on the scene, and in the early years of the twentieth century teachers from France, Germany, and the United States were asked to help in the establishment of normal schools. They advocated, besides educational advances in methodology and organization, that Ecuadorian education be made free, compulsory, and nonsectarian. In 1918 a group of six German professors arrived who introduced the Herbartian system, with its five-formal steps. Another German mission in 1922 brought Neo-Herbartian ideas and practices that gave the schools an "activity" orientation which has since been combined with the DeCrolyan emphasis on centers of interest.

National Congress of Elementary and Normal School Education.—In May 1930, the National Congress of Elementary and Normal School Education convened in Quito. Education officials, elementary and normal school teachers, and many other interested individuals and groups participated in the discussions. Subcommittees gave consideration to (1) reform of the School Law, (2) establishment of the Activity School, (3) rural education, (4) curriculum and school programs, and (5) teacher improvement. The findings and recommendations of this Congress,⁶ published by the National Ministry of Education, constitute the basic philosophy of the organization, and of much of the content of the country's educational activity today.

⁴ Jaramillo. *Op. cit.*, p. 88.

⁵ Jaramillo. *Op. cit.*, p. 89.

⁶ Ministerio de Educación Pública. Congreso Nacional de Educación Primaria y Normal. Quito, Imprenta "Kalenda," 1930.

Among the recommendations was one calling for the division of the 6-year elementary school into 2-year grade groups, with specific suggestions as to the predominant tendencies of children in each age group, the type of activities to be engaged in, and the minimum learning to be required. Curricular content appropriate for each grade, graduated according to the age of the pupils, the difficulty of the materials, and the needs of the particular community, was outlined in detail, and within the year began to be more or less systematically adopted along with "activity" methods of teaching in practice schools connected with normal schools and in a few of the elementary schools of Quito.

Education today.—Ecuador's real educational movement, however, did not get under way until 1938, when a new school law placed all public and private education under State control. The fruits of the endeavors of German, French, and North American educators, and of the National Congress of Elementary and Normal School Education, are now being ripened. New and hygienic school buildings are being constructed. Modern teaching methods are being tried out and new curricula developed. Teachers are being trained for more effective work. School lunches are served and medical diagnosis and treatment made available. Effort is made to call into play all the abilities of the pupils with frequent exhibitions of gymnastics, athletics, art, and handcrafts. The necessity for providing adequate equipment is recognized, and textbooks are being prepared and distributed, chiefly at the elementary level. More and more instructional materials are being made available, and education at all levels is being made more practical. Throughout the country the great desire for learning is readily apparent. In the chapters that follow, these various developments in Ecuadorian education are treated in detail.

According to the Constitution of 1945, education in Ecuador is a function of the State. Private education, adjusted to the laws, regulations, and programs of the public educational system, is protected. The aim of education is to make the student a useful social element through instruction based on a democratic spirit of Ecuadorian unity and human solidarity. Unity and adequate articulation must obtain throughout all the grades of public education, and the methods must be based on the activity of the students. Public education is free and nonsecular at all levels, but social services, such as lunches for poor students, medical attention, and the like, are to be furnished without discrimination to all students who may need them. Elementary education is compulsory and the public elementary schools must provide all necessary materials without charge. The State is to give special attention to the development of technical education in accordance with agricultural and industrial needs, and to the elimination of illiteracy.

Schools in zones of predominantly Indian population teach Quechua or the respective aboriginal language in addition to Spanish.

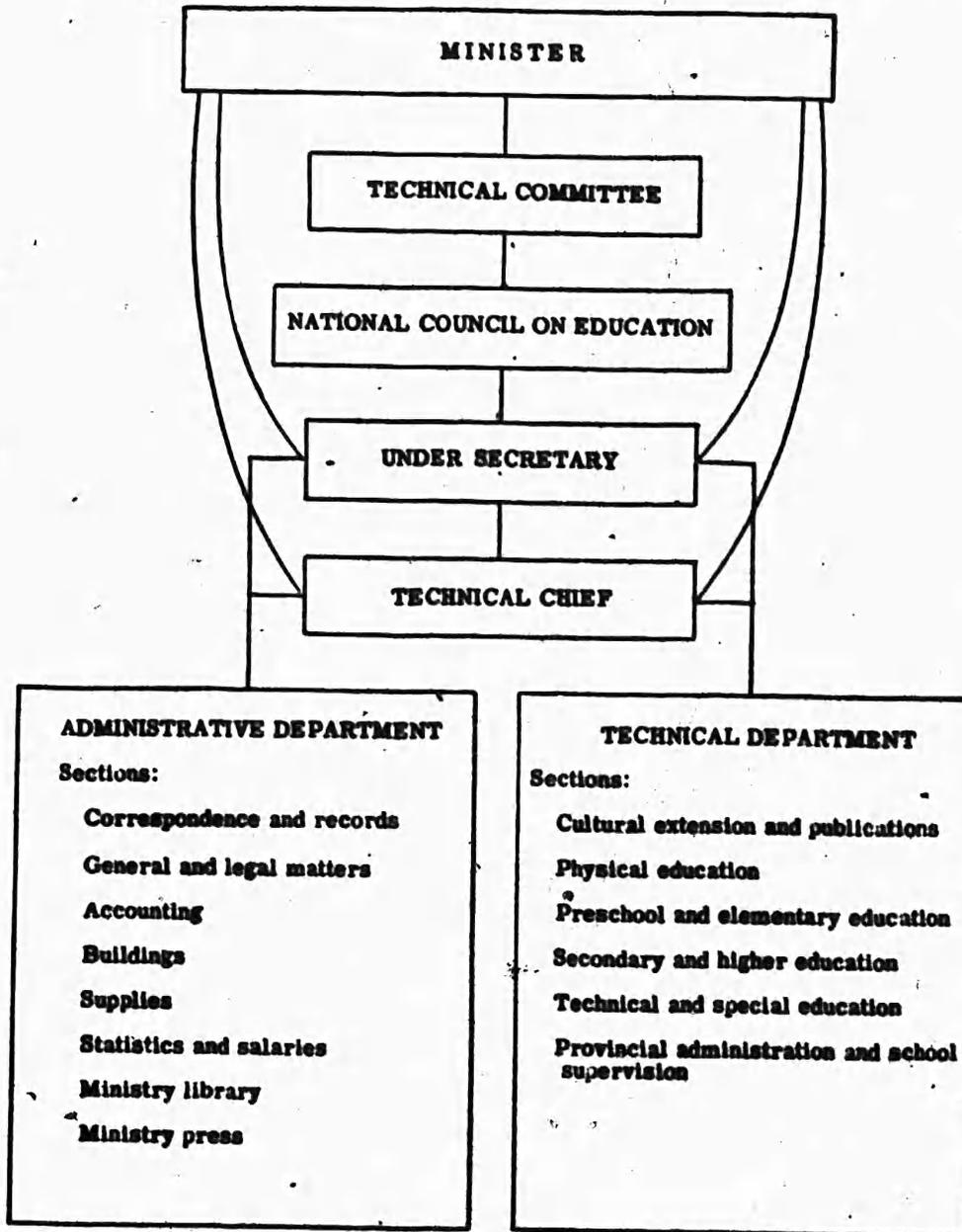
Freedom of teaching is guaranteed. The education law must assure the stability of educational workers at all levels by regulating appointment, promotion, transfer, separation from service, and remuneration. Both professors and students are granted freedom of organization. The amount and manner of student participation in matters concerning the direction and administration of educational institutions is to be determined by law. The universities are declared autonomous and are directed to attend especially to the study and the solution of national problems and the diffusion of culture among the popular classes. To guarantee this autonomy, the State is to secure the creation of an endowment for the universities. Further, the annual national budget is to include an appropriation for scholarships for needy students.

The new curricula and instructional procedures (p. 6), however, have not as yet been put into general practice. They are employed almost exclusively by the normal-school graduates of recent years, principally in the urban schools, and, even there, in the face of an almost overwhelming lack of the materials required for the new education. Dewey, Thorndike, Froebel, Montessori, activity school, Dalton and Winnetka plans, laboratory and project methods are more and more on the tongues of the new Ecuadorian teachers, but in most cases their import is little understood, and existing material conditions give little promise of immediate improvement. However, many individual teachers are doing remarkable work in spite of material handicaps, and the number is being increased through the addition of teacher training in the specialization cycle of the academic secondary schools (p. 28). The passage of a national law in 1944, establishing a fixed salary scale for teachers, has already proved a stimulus to professional betterment of in-service personnel and an incentive to an increasing number of young people for entering the field of teaching.

Administration.—The administration of Ecuadorian education is centralized in the Ministry of Public Education in Quito. Except for a few special schools conducted by other Ministries, such as those of National Defense and of Social Welfare and Labor, the Ministry of Public Education exercises administrative and supervisory control over all types of national, municipal, or private schools and related educational activities in the Republic, at all levels of instruction. Moneys allocated annually to education in the national budget are reallocated and disbursed by the Education Ministry.

At the head of the Ministry is the Minister of Public Education, appointed by the President of the Republic. The Minister is assisted administratively by an Under Secretary and by a Chief of the Technical Department (*Jefe del Departamento Técnico*), both of whom

maintain direct contact with the several general administrative and technical sections of the Ministry. The administrative sections are: Correspondence and records, general and legal matters, school accounts, school buildings, school supplies, statistics and salaries, the



Note: Both the Under Secretary and the Technical Chief deal directly with the individual section heads.

Chart 1.—Organization of the Ministry of Public Education, Ecuador, 1945.

Ministry Library, and the press. The technical sections deal, respectively, with cultural extension and publications, physical education, preschool and elementary education, provincial administration and school inspection, secondary and higher education, and technical and

special education. The following chart shows the structure of the Ecuadorian Ministry of Public Education.

Prior to August 1944 the Minister was assisted also by a Council of Education, of which he was chairman.¹ The other members were the Under Secretary, the Chief of the Technical Department, and a professor each of higher, secondary, technical, normal, and elementary education. On August 9, 1944, however, this Council was replaced through presidential decree by a Technical Committee and a National Council on Education.

The Technical Committee, composed of 5 educational experts in the capital appointed by the Minister of Education, meets at least once a week to consider technical or professional education problems, educational reform, and questions concerning school legislation. The National Council on Education, composed of the 5 members of the Technical Committee and 6 teachers from outside the capital city, elected by the Regional Executive Committees of the National Teachers Union, meets every 3 months to advise the Minister on matters pertaining to teachers, schools, and general school policy referred to it by the Technical Committee. Both of these bodies are empowered to enlist the services of teachers and Ministry officials for the solution of their problems. Members receive remuneration for each meeting of more than 2 hours' duration, and those who reside outside the capital are allowed travel expense and per diem.²

Of special interest is the Section of Cultural Extension in the Ministry of Public Education. This section arranges for the diffusion of general culture among the population by means of activities outside the regular plans and programs of the nation's schools. In 1944, for example, it organized a campaign for new school buildings. Through voluntary contributions stimulated by colorful public processions of school children bearing banners, it collected hundreds of thousands of sucres. As a result, fine concrete school buildings are being constructed in all parts of the country. The Cultural Extension Section also edits and publishes anthologies, textbooks, the monthly review of the Ministry, the biweekly mural newspaper for school children and workers, and other publications. It serves as a center of exchange of educational materials with Education Ministries of other countries and distributes books and magazines among the libraries of Ecuador. It arranges concerts, exhibitions, recitals, and theatricals of cultural value to the community. The performances of outstanding artists, who are under contract, are well patronized.

Finance.—State interest in the field of public education in recent years may be seen from the educational appropriations. Thus budget-

¹ *Leyes Orgánicas de Educación Primaria, Secundaria y Superior de la República del Ecuador*. Ministerio de Educación. Quito, Talleres Gráficos de Educación, 1948, Capítulo II.

² *Cuadernos Pedagógicos*. Publicación de la Sociedad de Profesores Grupo Pedagógicos, No. 24. Quito, November 1944. p. 124-126.

ary assignments for education rose from 20,271,260 sucres⁹ in 1941-42 to 23,803,634.92 sucres in 1943-44, the latter figure constituting more than 14 percent of the total national budget of 168,284,035.73 sucres. For 1944-45, the education allotment rose to 44,000,000 sucres, or 17.6 percent of the total national budget of 250,000,000. An indication of the major emphasis that is being placed on the provision of elementary and adolescent education may be seen from the following break-down of the education expenditures:¹⁰

	Sucres		Sucres
Office of the Minister....	655,848.59	Secondary education....	3,051,560.16
Preschool education....	398,958.80	Higher education.....	2,778,579.98
Elementary education... 10,978,240.37		Scholarships.....	472,088.00
Normal, rural, and vocational schools.....	286,544.51	Subsidies.....	39,439.92
Technical and business schools.....	540,637.35	Prizes and awards.....	28,210.00
Special schools.....	347,107.46	Fixed expenses of the Ministry.....	810,777.32
Other establishments... 178,544.20		Variable expenses.....	2,337,097.36

Approximately 70 percent of the total spent for education in 1943-44 went directly into elementary and secondary schools, in addition to scholarships, prizes and awards, salaries of the Ministry personnel, and other incidental items in which these lower level schools participated. Elementary school enrollments have increased from 236,159 in 3,100¹¹ schools in 1940, to 275,633 in 3,165¹² schools in 1944. An active campaign for new school buildings is being waged throughout the country. Educational facilities are being extended to adults in practically every province. Teachers' salaries have been raised appreciably. More free school lunches are being provided for the needy. Textbooks are being prepared and distributed, chiefly at the elementary level. More and more instructional materials are being made available, education at all levels is becoming more practical, and serious efforts are being made to augment school attendance.

Organization.—Ecuador's school system comprises nursery schools, kindergartens, rural and urban elementary schools, continuation, secondary, technical (vocational), special (art, music, commercial and physical education), rural and urban normal schools, and universities. There are also night schools for adults and praedial schools on large farms and industrial properties. The organization of education in Ecuador and the relationship among the various institutions are shown in the following chart.

⁹ The 1944 valuation of the Ecuadorian *sucre* was approximately 7 cents, U. S.

¹⁰ Informe que el Controlador General de la Nación presenta al Sr. Presidente de la República y a la Honorable Asamblea Constituyente. Quito, Talleres Gráficos del Ministerio de Economía, Julio de 1943 a Junio de 1944. p. 7.

¹¹ Jaramillo. Op. cit., p. 66.

¹² Report prepared for the author by the Head of the Elementary School Division, Ministry of Public Education, Quito, December 1944.

INSTITUTIONS									
Years of School	Years of Age	Medicine (Faculty)	Law and Social Science (Faculty)	Engineering (Faculty)	Chemistry and Pharmacy (Faculty)	Mathematical, Physical and Biological Sciences (Faculty)	Philosophy, Letters and Education (Faculty)	Economics (School)	UNIVERSITY
19	24								
18	23								
17	22								
16	21								
15	20								
14	19								
13	18								
12	17	2d Cycle							SCHOOL OF PHYSICAL EDUCATION
11	16	SECONDARY SCHOOL							
10	15								
9	14								
8	13	1st Cycle							
7	12								
6	11								
5	10								
4	9								
3	8								
2	7								
1	6								
0	5								
0	4								
0	3								

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Chart II.—Organization of the schools of Ecuador, 1945.

CHAPTER II

Elementary Education

ELEMENTARY EDUCATION in Ecuador embraces preschool or kindergarten instruction for children 3, 4, and 5 years of age, elementary schools for children between 6 and 12 years, and complementary or continuation schools for those who desire a 1- or 2-year extension of their educational growth after finishing the elementary school. The general aim, as expressed in the Educational Law,¹ is the preparation of capable individuals for the personal and social struggle for well-being and the incorporation into the national culture of all the groups which still exist at a lower educational level.

PRESCHOOL EDUCATION

KINDERGARTENS (JARDINES DE INFANTES)

Kindergartens are concerned with the preschool education of children 3, 4, and 5 years of age and work for such all-around development of the pupils as will prepare them for the most effective study in the elementary school proper. The child's physical development as a whole is aided gradually and harmoniously through games, imitative gymnastics, marching, walks, excursions, and practice in hygienic habits. Sensory development is directed through the well-known principles advanced by Froebel, DeCroy, and Montessori, so that the child enjoys almost unlimited freedom of spontaneous activity. Music, poetry, coloring, decoration, memory gems, the children's own dramatizations, and other means are employed for the cultivation of artistic appreciation and good taste. Nature study is introduced through direct observation, the care of flower gardens and pet animals, and similar activities. For the well-integrated and systematic evolution of the mental and moral potentialities of the child, appropriate exercises are introduced to bring out his dominant abilities and give them play, and at the same time to discourage those characteristics which are or appear likely to become detrimental to proper habits. Medical and dental care are given when needed, to the end that the children may be better able to take advantage of the varied offerings at this early stage of instruction.

Classes 30 minutes in duration, with 15- to 20-minute rest periods between them, are held from 8:30 to 11 a. m. and from 12:30 to 4 p. m. daily, except Wednesday and Saturday, when the afternoons

¹ *Leyes Orgánicas de Educación Primaria, Secundaria y Superior de la República del Ecuador. Ministerio de Educación Pública. Quito, Talleres Gráficos de Educación, 1942.*

are free. In general, the morning is given over to instruction which comprises games involving the fundamentals of arithmetic, drawing, coloring, stories, construction with blocks, paper cutting, songs, and the like. The afternoons are devoted to social games, music and dancing, walks, visits to parks and museums, and other active pursuits. Fruit is served in the middle of the morning and lunch in the middle of the afternoon. This schedule is not, however, too rigidly adhered to: the school authorities are fairly free to vary the program.

Number of kindergartens and enrollment.—In 1942 Ecuador had 41 kindergartens, taught by 145 teachers and enrolling 4,413 children. By 1944, the number of schools had increased to 54, with an estimated enrollment of more than 5,000 pupils, which is but a small fraction of kindergarten-age children. Official regulations provide for the division of the children into classes according to chronological age. Within the classes there may be sections of not more than 30 pupils, with each section in charge of a specialized teacher.

Buildings, materials, and methods of teaching.—Kindergarten buildings are required by law to have a large patio and garden, in addition to the customary classrooms for the various instructional activities, and to be located away from vehicular traffic. Ordinarily, the teaching materials employed in Ecuadorian kindergartens have been prepared or at least acquired by the teachers themselves, although the Ministry of Public Education does help to some limited extent. Paper, wooden blocks, sticks of various lengths and colors, pencils, crayons, coloring books, cut-out materials, scissors, and the like are common paraphernalia, and the children keep busy at tasks or activities pretty much of their own choosing. Froebel's "songs, gifts and occupations"; Montessori's butterfly freedom of activity and emphasis on sensory perception, reminiscent of the *Casa dei Bambini*; DeCroy's emphasis on observation, on a center of interest, and on "globalization" or integral education are all evident not only in the kindergartens, but also in the various grades of the elementary school. Modifications and improvements of these systems are also evident—especially in regard to the variety of materials and their uses.

Jardín de Infancia "Lucinda Toledo" in Quito.—Centrally located in the capital of Ecuador, on a quiet street near the National Museum, is the Lucinda Toledo Kindergarten. This school enrolled 175 children in 1944, the majority being girls. The daily attendance averaged between 130 and 140 children with an age range of from 8 to 5½ years. One first-year group, and two groups each of second- and third-year pupils are taught by the principal and 4 specially trained teachers. Four assistants and a supervisor (inspector) have charge of the preparation of the materials, order, and general hygiene of the children.

The school occupies a large two-story building, with spacious arcades around the inside patio on both floors—the typical architectural lay-

out in Latin American schools. A profuse array of multicolored plants and flowers lines the patio and numerous flower boxes brighten the upstairs, both inside and outside of the classrooms. The whole establishment seems alive with little children going about their many and different tasks amid the hum of happy voices.

The principal gave full assurance that the Lucinda Toledo Kindergarten is representative of the country's efforts at this level of instruction, with one notable addition. Each Ecuadorian kindergarten has a music teacher; but the Lucinda Toledo School enjoys the services of a first-class musician who comes regularly in the afternoon to provide the music for the many songs and dances in which the children engage. This musician writes his own scores and frequently encourages the children to suggest airs, tunes, rhythms, and words for his compositions. A master of piano and accordion, he conducts himself as though this hour with the children were the high spot of his day's routine.

ELEMENTARY EDUCATION

AIM

Elementary education in Ecuador has the definite aim of forming citizens capable of raising the national standard of living in all its aspects. The work of the school is directed toward the development of attitudes, knowledge, and habits that will be conducive to greater national solidarity, social cooperation, and the mutual responsibility of the school and the home. Such education is regarded as a necessity not only for the pupils in the schools, but also for the people in general. Emphasis is placed on intellectual, moral, and physical development, but there is a growing tendency toward the introduction of vocational instruction at the elementary level. "The school is also directing its attention to the inculcation of feelings of international cooperation, basically predicated on principles of Pan-Americanism. Peace through education, social harmony, elimination of social castes, democracy—these are the essential characteristics of Ecuador's school movement. Far from neglected, however, are the problems of personal and social hygiene, national economy, alcoholism, and fanaticism in general."¹

Article 36 of the Education Law declares attendance to be compulsory for all children between the ages of 6 and 14 years through the sixth grade in urban schools and through the fourth grade in rural schools.² Public education is further declared to be gratuitous and nonsectarian. Formerly, elementary education was coeducational, but a recent regulation prohibited coeducation after the fourth grade.

¹ Special report prepared for the author by the Director of Elementary Education. Ministry of Public Education. Quito, December 1944.

² *Leyes Orgánicas*. Op. cit., p. 14.

NUMBER OF SCHOOLS

In 1944 Ecuador had a total of 3,165 elementary schools, including the 54 kindergartens. Of these schools 2,500 were fiscal or State-supported; 365, municipal; and 310, private. Approximately three-quarters of these elementary schools were rural, nine-tenths were day schools. Two-fifths of them were complete 6-year schools. Three-fifths were incomplete schools offering only 3 or 4 years of instruction. Seventy-eight percent were served by 1 or 2 teachers. Besides these 3,165 schools, 17 complementary or experimental vocational institutions were operating in various parts of the Republic.

SCHOOL YEAR AND DAY

The official school year is from October to July—a regular 10-month period. Legal school holidays, in addition to the normal 2 days a week are: October 9 and 12; November 2; December 24 to January 6, inclusive; Monday and Tuesday or "Carnival" (Palm Sunday to Easter Tuesday); May 23 and 24; and 1 day in honor of the school principal. Occasionally, other holidays are observed locally, and still others are especially decreed by government authorities. The year thus comprises slightly more than 180 actual school days.

ENROLLMENTS

According to the 1944 school census, 456,788 of the nation's population were of compulsory school age—6 to 14 years. Of this number, 275,633 were enrolled in the schools. The average daily attendance was 270,124,* approximately 98 percent of the enrollment, but only about 59 percent of the total school-age population. The main causes of the low enrollment and attendance have been: Lack of sufficient school buildings, and the fact that existing ones are located principally in the more densely populated areas; the meager salaries paid to elementary school teachers; the inconveniences with which teachers in remote villages are constantly faced; and the erstwhile lack of cooperation on the part of rural parents in sending their children to school. The National Ministry estimates that about 3,000 additional school buildings will be needed to accommodate the full school-age population. Teachers are being prepared for these additional schools as they are completed.

About 15 percent of the pupils who finish the elementary school continue their education in secondary schools. About 18 percent enter business, trade, or vocational schools. The remaining two-thirds enter employment or remain at home.

BUILDINGS

In the larger cities, school buildings with relatively few exceptions are typical old plaster or adobe edifices that once were used as resi-

* Special report. Op. cit.

dences, as offices, or for other noneducational purposes. Classrooms are generally of good size, and there is usually a large patio which not only affords a place for the pupils' recreation but also serves to improve illumination and ventilation. Officials in the Ministry of Education regard 10 percent of the country's schools as being "fairly satisfactory, according to modern educational requirements." They also stated that only 20 percent of the schools are the property of the State, and that the valuation of privately owned schools is more than three times that of the State-owned institutions. Official 1942 figures⁶ concerning Ecuador's school plants are presented in table 1.

Table 1.—Number and valuation of Ecuador's school plants

Kind of school	School plants owned		School plants rented	
	Number	Valuation	Number	Valuation
1	2	3	4	5
State.....	259	5,061,200.73	1,281	49,958.99
Municipal.....	204	1,885,695.00	132	2,023.00
Private.....	122	15,721,000.00	150	43,648.23
Total.....	585	22,667,961.73	1,563	96,630.22

METHODS OF TEACHING

Although the trend has for some years been away from the formalized procedures popularized by the *Ratio Studiorum* of the Jesuits, the *Conduct of Schools* of LaSalle and the Christian Brothers, and the *Five Formal Steps* of Herbart and his followers, many of Ecuador's teachers still employ the old methods of imparting knowledge. In many of the schools visited, the pupils were obliged to sit motionless in a certain position, to speak only when called upon, to introduce their recitation with a form of polite address, to express themselves in close agreement with the exact words that had been dictated by the teacher, and in general to conform to practices definitely dated as of the nineteenth century. However, an ever-increasing proportion of Ecuador's teachers are experimenting with activity procedures, with centers of attention and interest, with considerable freedom of pupil movement and expression, with laboratory and project activities, and with actual group discussion of important phases of the day's work as a regular part of the teaching process.

THE CURRICULUM

The studies included in the curriculum of the Ecuadorian elementary school are those which provide the pupil with knowledge necessary for

⁶ Oscar A. Romero. *Estadística y Escalafón*. Quito, Ministerio de Educación Pública, 1942. p. 313-314.

effective participation in everyday life through intelligent adaptation to the environment. As officially outlined⁶ they consist of: (a) Morality, etiquette, and civic education; (b) national language—oral expression, reading, recitation, composition, dictation, transcription, penmanship, and grammatical exercises; (c) numbers, measurement, and form—arithmetic, metric system, and geometry; (d) natural science—botany, zoology, anthropology, physics, and chemistry; (e) geography and history; (f) artistic and social behavior practices; (g) physical education; and (h) manual and graphic activities. The first and second grades have a schedule of 25 hours a week; the third grade, 29 hours; the fourth, 31 hours; and the fifth and sixth grades, 32 hours.

In presenting these studies, teachers are advised to employ activity school principles in order to give to the pupils the greatest possible opportunity to develop their abilities and interests in an environment of reasonable freedom. At the same time, however, pupils must acquire and assimilate a certain minimum of knowledge and, through the processes of instruction and learning, attain skill in observation, reasoning, and the practical application of their learning to the solution of their everyday school and extraschool problems.

MATERIALS AND LIBRARIES

The Ministry of Public Education furnishes educational materials to the State schools and to some extent to the municipal schools. Plans of study and outlines of individual subject-matter fields, maps, charts, pictures, chalk, erasers, and the like are provided for the teachers; readers, notebooks, pencils, pens, ink, paper, water colors, crayons, and so forth, for the pupils. Recent figures on school furniture were not available; but in 1938 there were 67,361 pupils with desks, as against 65,055 without. In that same year, 3,326 classrooms had blackboards and 3,294 did not.⁷ Each of the 17 provincial departments of education (p. 2) has a school library, open 8 hours a day, for the use of teachers and pupils, and in each school a smaller library is maintained, offering technical works for the teachers; and textbooks, stories, fables, and other forms of literature for the pupils.

"ISABELA LA CATÓLICA" SCHOOL, NO. 15

This State elementary school in Quito, with an enrollment in 1944 of 617 girls and an average daily attendance of 540, offers the complete 6-year official course. A principal who is a university graduate, 14 regular teachers who are normal school graduates, and 3 special teachers constitute the teaching staff. The school is housed in a large two-

⁶ Plan de Organización y Trabajo y Reglamento de Jardines de Infantes. Plan de Estudios y Programas para Escuelas Primarias Urbanas y Rurales. Quito, Ministerio de Educación, 1943. p. 19.

⁷ Marietta Picco de Allón y Carlos Allón Tamayo. Organización y Prácticas Escolares. Quito, Talleres Gráficos de Educación, 1939. p. 111.

story building which encloses several large patios. It has a fair-sized swimming pool that is much used and enjoyed during the scheduled physical education hours. English is taught in all grades and sections, and pupils come from all parts of the city to take advantage of this offering. Among "manual activities" are home economics and child care, taught by one of the special instructors. The methods employed are highly inductive. Instruction proceeds from the known, concrete, and familiar to the unknown and the abstract. In the science class visited, for example, the teacher gave five or six demonstrations of simple physical and chemical phenomena, to which the pupils gave undivided attention. After each demonstration several girls were called upon to explain what had been done and what had taken place as a result, and when a child erred somewhat in her report, she was allowed to repeat the experiment herself before the class. Following the series of concrete examples presented in the demonstrations, the children were asked for generalizations covering the entire series.

Through the generosity of a retired teacher, who gives his pension for the maintenance of a school dining room for the poor and undernourished, 50 hot lunches are served daily in the Isabela la Católica School. Three courses are regularly included in the daily meal: soup, a plate of solid food—meat, rice, and vegetable—and dessert. In the National Ministry of Education preparations were being made in December 1944, to extend free school lunch service to public, municipal, and private institutions throughout the Republic, with the twofold aim of providing aid for poor children and of supplementing the educational offering by having the pupils cooperate in the work involved.

MUNICIPAL SCHOOLS

In 1944, a total of 365 schools were maintained by the municipalities, Guayaquil leading the country with 25 schools. They all conform to the official 10-month school year—October to July in the highlands, and April to December in the lowlands or the Coast, and to the official organization, curricula, and other general requirements established by law. According to Art. 101 of the Organic Law of Public Education, each municipality of the country must spend at least 15 percent of its income for public education. Moneys thus set apart may be used for teachers' salaries, school materials, or school buildings. Article 102 specifically prohibits the use of public funds for the maintenance or support of religious schools.

In many cases, because of high educational interest on the part of the authorities, and sufficient available funds, municipal schools are able to provide, by all local standards, a high grade of instruction. The Eugenio Espejo School in Quito, for example, with a daily attendance of 524 boys and girls in its 6 grades, taught by 23 normal-school-trained teachers, offers instruction in typewriting, drawing,

physical education, and English. This school has a library of about 2,000 books; a moving picture projector for the showing of educational films related to geography, history, biology, and other subjects; a swimming pool and a row of shower baths, use of which follows the rather strenuous physical education exercises; and a well-stocked medicine chest for first-aid purposes. Each classroom has a bulletin board for news and other items of interest. The services of a school physician are free for financially needy children. Free lunches are served for the poor and undernourished.

The school occupies a typical 2-story, 12-classroom building with patios. More space is needed, however, and the Municipal Council has recently provided a plot of 8,100 square meters for the construction of a new school plant and allocated 1,600,000 sucres for building purposes.

RURAL SCHOOLS

Rural education is offered in 4-year elementary schools in small towns and rural regions. By far the great majority of Ecuador's schools are of this type. The instruction is essentially agricultural or industrial, depending on the interests of the area in which the school is located. The principal objective is the formation of rural citizens for the greatest and best utilization of the country's natural resources. Instruction is coeducational. In these schools night and Sunday classes are frequently held for adults.

Course of study.—Spanish, arithmetic, nature study, artistic and social exercises, drawing and manual arts, and physical education are taught in each of the 4 years. Morality, etiquette and civics, and geography and history are additional offerings in the third and fourth years. Agriculture is included in the manual arts work of the last 2 years. To awaken interest in new products such as wheat, barley, beans, and other vegetables, and to promote agricultural education in general, the Ministry of Agriculture distributes seeds among the schools.

"October 12" School (Escuela "12 de Octubre").—This school is located at El Inca, a tiny community of pure Indian race, in the central highland of Ecuador. The entire population lives by agriculture, most of the families having a small piece of farm land from which they derive an average monthly income of between 400 and 500 sucres (\$28 to \$35, U. S. money). All are said to be intensely interested in the work of the school and to cooperate with the teachers in many ways.

In the 4 grades of this school, 3 teachers instruct 100 pupils—63 boys and 37 girls. The building is a 5-room structure in good condition, but much too small. As there are only 70 single desks, 30 of the children are obliged to share their narrow seats with a classmate. The school has several good maps of Ecuador, South America; and the United

States, and each pupil has his own textbook, different in each grade, purchased by his parents. A small collection of newspapers, magazines, and pamphlets serves as the library.

Adjacent to the school is a tract of land measuring 2,000 square meters, in which corn, onions, potatoes, sweetpotatoes, peas, beans, and such medicinal plants as wild marjoram, balm gentle, and coriander are cultivated. Close to the school building there are large patches of carnations, dahlias, gladiolas, and other colorful flowers. The children work individually and collectively in the cultivation of the different agricultural products, which they are permitted to take home to their parents.

A special problem confronted by the teachers of the school is that of language. Most of the children speak only the Indian Quechua in their homes, but they are avid learners and soon master the Spanish to the point of being able to read and understand the new language very readily. Several of the graduates now hold positions as teachers in other rural schools where a knowledge of the Quechua tongue is necessary.

COMPLEMENTARY OR CONTINUATION SCHOOLS (ESCUELAS COMPLEMENTARIAS)

The Education Law provides for the establishment of complementary schools in centers to be determined by the Minister of Public Education, for children who finish elementary school but "lack capacity for the work of secondary education."⁵ Schools of this category are to be established in both urban and rural communities. Urban complementary schools are to provide rudimentary industrial education in addition to further study of elementary school subjects.

As far as possible, the rural complementary school is to be a residential farm school (*escuela granja con internados*), and will aim to provide practical preparation for the development of the land, the improvement of known systems of farming, and the promotion of related industries important in the region in which the school is located. Along with the vocational or trade training, the basic subjects of corresponding years in the regular 6-year elementary school are included in the curriculum. In 1944, only three of these schools were functioning. They provided a 2-year course, still in the process of development, in which a large proportion of the activities were carried on cooperatively. In Anafó, Province of Imbabura, and Patate, Province of Tungurahua, rural complementary schools were opened, and in Babahoyo, the urban type. The Minister of Public Education in 1943, however, pointed out in his annual report to the National Congress⁶ that the funds allocated in the budget for the founding and

⁵ *Ley Orgánica. Op. cit., Art. 48.*

⁶ *Informe a la Nación. Ministerio de Educación Pública. Quito, Talleres Gráficos de Educación, 1943. p. 23.*

maintenance of these schools has been "absolutely inadequate." There are only the "beginnings of shops"; sufficient tools and implements are lacking, and those on hand are fast becoming worn and useless. The limited industrial installations are largely of the domestic type, and even these cannot be operated to capacity because of the lack of raw materials. In 1942, the most recent year for which complete statistics were available, the complementary schools had 32 teachers and 549 pupils, and had graduated 16 of their pupils.¹⁰

PRAEDIAL SCHOOLS

Proprietors of estates and farming enterprises assessed at between 100,000 and 500,000 sucres (\$7,000 and \$35,000, U. S. money) are required by Ecuadorian law to pay an annual tax of 600 sucres (\$42, U. S. money) for the establishment and maintenance of rural schools known as farms or praedial schools. When the holdings exceed 500,000 sucres, the annual tax is 1,200 sucres. Industrial establishments situated in regions in which there are no public schools, and whose assessed valuation is 200,000 or more sucres, are also taxed 600 sucres annually for the same purpose. Mine managements employing 100 or more resident workmen are required to maintain elementary schools for the school population and cultural extension offerings for the adults: they must provide the grounds, the building, the furniture, and the equipment necessary for the functioning of the schools. Teachers are appointed by the Provincial Supervisor of Education and receive from the State salaries established in the national budget for rural school teachers. The schools are coeducational and follow the official rural school course of studies. In 1942 Ecuador had 244 praedial schools, of which 106 also provided night classes for adults.

EXPERIMENTAL SCHOOLS (CENTROS ESCOLARES)

For experimentation in the pedagogical, economic, and social aspects of Ecuadorian education, 3 experimental schools have been functioning under ministerial direction, with a total enrollment of about 1,500 children—slightly more boys than girls—taught by 55 teachers. These schools provide day-to-day observation and experimentation in connection with the educational development of the pupils and their natural relationships with children of the other grades, ages, and social and economic backgrounds.

One of these schools, the *Centro Escolar Eloy Alfaro, No. 1*, in Quito, had an enrollment in 1944 of 480 pupils in its 6 grades and an average daily attendance of 450. Numerous applications for admission are received each year, but because the building is too old to warrant expenditures for additional classroom and other facilities, only a limited number of children can be accepted. The work of this experi-

¹⁰ *Estadística y Sociología*. Op. cit., p. 222.

mental institution is carried on by a staff of 17, including a director, 13 grade teachers, and specialists in music, manual activities, and physical education. Technical orientation is provided through 5 special staff committees, one each on: (a) psychopedagogical research, statistics, and school organization; (b) methods and procedures; (c) discipline, school hygiene, and decoration; (d) artistic, recreational, and economic affairs; and (e) social, cultural, and promotional activities, including publications. Each committee is charged with the formation of a program of readily realizable activities, in harmony with the school's possibilities, and with directing, checking, and evaluating the results.

Each teacher keeps a record book (*Anotaciones didácticas*) in which he records from week to week the activities of his respective group of children. Objective psychological and achievement tests are administered in each grade at 8-month intervals and constitute the basis for grade placement. An individual cumulative record card, dealing in great detail with the home and social life; physical condition; instinctive, emotional, and intellectual characteristics; and other general data, is kept for each pupil in the school.

With numerous modifications in the light of the Ecuadorian scene, the experimental schools follow activity school principles and practices. Groups of pupils work together on the same projects. An atmosphere of freedom and happiness pervades the entire establishment. Everyone appears occupied in an interesting task of some kind. Here a group of pupils is preparing a wall-newspaper for their room, with maps, colored pictures, poems, questions, and news items; another group is busy making shoe polish, which will be used by children of all the groups; still another group is at work sweeping a paper-cutting workroom before the arrival of the next class. Meantime, out in the patio various sections are receiving different forms of physical education exercises, while half a dozen little tots play "Ring around a rosy." From classrooms come the sounds of children's voices in song and in recitation. Regular classwork in the ordinary elementary school subjects is carried on without hard and fast rules and regulations governing seating, verbatim repetition, silence, and other school practices common to South and Central American countries.

EDUCATION IN THE EASTERN PROVINCES (EL ORIENTE)

Since 1944 the 2 provinces east of the Andes Mountains, formerly in charge of the Ministry of National Defense, have come within the jurisdiction of the Ministry of Public Education. Because of the great distances involved and the absence of transportation and communication facilities, progress in providing schools adequate to the needs of this extensive territory has been rather limited. In 1943 the

State maintained 59 schools here—54 coeducational and 5 for boys only. Catholic missions conducted 27 private schools and had charge of some of the State schools. Daily attendance averaged about 3,879 pupils, or 1.4 percent of the country's total school attendance. Seventy-four of the teachers of both sexes, including 17 who taught in the mission schools, were State or public-school teachers, who receive a bonus because of the remoteness and the inconveniences connected with their jobs. Only a few of the buildings are State owned, the vast majority being rented or church owned, and few are educationally and hygienically adequate.¹¹ The curriculum and courses of study are practically identical with those of the rural school, with special emphasis on agriculture and the various industries common to the particular area of the school concerned.

This isolated region of el Oriente, remnant left to Ecuador by arbitration in the border controversy with Peru in the early 1940's, is now considered by many as the country's greatest promise of prosperity.¹² Petroleum, gold and other minerals, commercial and medicinal plants, and fine and valuable woods have been found along the eastern slopes of the Andes and in the forests beyond them. The population estimated at 200,000 to 300,000 is almost all Indian. Their language is unknown even to the Quechuas of the highlands, who constitute the great bulk of Ecuador's aborigines. For the effective development of this region—commercially, industrially, and agriculturally—many new schools are planned and nation-wide interest is being stirred to bring about the success of the movement. Existing schools are being provided with equipment such as agricultural implements and sewing machines to facilitate more practical instruction.

SCHOOL SUPERVISION

Supervision of Ecuador's schools is the responsibility of regional, provincial, and district school officers. The Education Law of 1938¹³ provided for two regional supervisors of elementary education under the Technical Department (p. 8) in the national Ministry—one for the coastal region, with headquarters in Guayaquil; the other for the interior, with headquarters in Quito. These supervisors must be regularly certificated teachers with appropriate experience and are charged with the supervision of preschool, elementary, complementary (continuation), rural normal, and special education, such as music and art. They direct the supervisory service in the Provinces; keep the Technical Department in the Ministry informed as to the pedagogical,

¹¹ Informe a la Nación. Ministerio de Educación Pública. Quito, Talleres Gráficos de Educación, 1943. p. 23.

¹² Alejandro Ojeda V. Lo poco que nos queda del Oriente es todavía la máxima promesa de prosperidad. In *Revista de la Unión Nacional de Periodistas*. Año I, No. 2, Noviembre de 1944. Quito, p. 16.

¹³ Leyes Orgánicas. Op. cit., Art. 73.

hygienic, administrative, and economic status of the schools, and in general oversee and direct the activities of the provincial directors of education in their respective zones.

The provincial supervisors are responsible for the fulfillment in their respective provinces of the laws, regulations, plans, and programs of study and the other directives of the Ministry of Public Education. They direct and supervise the technical and administrative aspects of education and constitute the immediate superior authority over the school supervisors of the various districts of the province. In individual schools, of course, the principal is responsible for the proper functioning of the institution, in accord with the suggestions and cooperation of the district supervisor.

District school supervisors (*inspectores escolares*) are appointed by the Minister of Public Education, who may transfer them to another province after 1 year of satisfactory service. The provincial supervisor of education may transfer them from one district to another every 3 months. It is the district school supervisors who have most direct contact with the schools, the teachers, the parents, and the communities in their respective districts. They see to the establishment of school lunchrooms and libraries, take charge of the school census and the problems connected with compulsory instruction, stimulate meetings of the Parents' Associations, promote cooperation in school affairs, and visit the individual school plants to guide and help the teachers in their work. Subject matter, teaching methods and procedures, child study, teacher study, educational equipment and instructional materials, school organization, professional attitude, teacher improvement—everything that has to do with the smooth running of the institution and the general improvement of instruction in the Republic is included in the multiple duties of the district school supervisor. In 1943, there were 48 of these officials.

PARENTS' ORGANIZATIONS (COMITES DE PADRES DE FAMILIA)

If the home and the school are to have the same objectives in regard to the general all-around development of the child, parents must cooperate with the teachers in the educational process, particularly in the early stages. Acceptance of this principle is implied in the report of the Minister of Education in 1943, that "almost all kindergartens, elementary, and complementary schools have their respective Parents' Organizations." These groups have given land and building materials, and have contributed their own labor to the repair and physical improvement of school buildings. Through them many schools have acquired libraries, medicine chests, museums, farming implements, and various kinds and quantities of school materials. Pupil enrollment and attendance have been increased; the inculcation of

proper personal and social habits has been furthered; the general cultural improvements of the parents themselves; and a heightened interest in the work of the school—all have resulted.

LITERACY CAMPAIGN (CAMPAÑA DE ALFABETIZACIÓN)

In 1934 the newspaper *El Telégrafo* of Guayaquil, by publishing weekly lessons in its pages, instituted a literacy campaign which was made official 3 years later through a decree creating "Literacy Missionaries" (Misioneros del Alfabeto) to teach reading and writing to members of communal councils who lacked those skills. In 1942, Dr. Frank Laubach visited Ecuador in behalf of his anti-illiteracy system of instruction, and the following year a Learn-to-Read group (Lea) was founded in Guayaquil, with the support of the press and various cultural and social organizations of the city. The success of this movement led in 1944 to the literacy campaign which is being conducted throughout the Republic under the auspices of the National News-writers Union.

The Laubach method, by which an illiterate who has learned to read must teach his newly acquired skill to someone unable to read, has been adopted; but individual participants in the adult education program are at liberty to employ whatever means they see fit for the attainment of the desired ends. Literacy centers (Centros de Alfabetización) have been established in all parts of the Republic—48 in Quito alone, and instruction and directions have been provided for individuals interested in the campaign. University, normal, and secondary school students; members of clubs and social organizations; trade unions and the clergy are now giving their services in this effort to overcome illiteracy. The primer (cartilla), notebook and pencil are provided by the State free of charge to the learners. It is planned to grant a Diploma of Citizenship (Diploma de Ciudadanía) to those who learn to read, and a Diploma of Patriotism (Diploma de Patriotismo) to those who generously give their time and effort to the teaching.

By May 1945, more than 8,500 persons had been taught to read and write and some 30,000 were under instruction. According to the Quito newspaper *El Comercio*, of May 19, 1945, colonists in the Galapagos Islands have requested a supply of the campaign primers.

EDUCATIONAL ACTIVITIES OF THE MINISTRY OF WELFARE AND LABOR

Among the many pressing problems of the Republic of Ecuador is that of abandoned and delinquent children. Thousands of children are neglected "as a result of low wages, broken homes, parental indifference, labor conditions, orphanage, and similar causes."¹⁴

¹⁴ Informe a la Nación—Junio y Julio de 1944. Ministerio de Previsión Social y Trabajo. Quito, Imprenta Nacional, 1944, p. 48.

Through the Ministry of Welfare and Labor (Ministerio de Previsión Social y Trabajo) the Government is making an effort to care for these future citizens. An average of 2,500 children a year are provided for in welfare homes (Hogares de Protección Social) where they receive food, clothing, instruction, and all-around education, including a measure of training in a trade or craft. Poor, neglected, and obviously undernourished children are taken, sometimes shortly after birth, and given the advantages of this service until the age of 18 years, when they emerge from the work schools (Escuelas de Trabajo) fairly well prepared to earn a living. Undernourished and sick children of the coastal regions are taken into health camps (Colonias) for varying periods of time.

The following institutions are maintained by the Ministry of Welfare and Labor: At the preschool level—8 nurseries (casas cunas), located in Quito, Guayaquil, Ibarra, Latacunga, Ambato, Riobamba, Cuenca, and Esmeraldas; 2 maternal homes (casas maternales), both in Quito; at school level—2 children's homes (hogares infantiles) for boys and girls, in Machachi and Quito; re-educational—observation homes (casas de observación), a work school and a home for the re-education of girls in Quito and Guayaquil, and a work school in Porto Viejo; and physical recuperation camps (colonias de recuperación física) in Conocoto, Quito, and Otavalo. Most of these plants are rented and unsatisfactory, but construction of 3 new and adequate buildings is already under way and the construction of a complete plant combining all the above offerings (Ciudadela de Hogares de Protección—literally "Citadel of Protective Asylums") is projected.

The nurseries accept children 3 years of age, and the maternal homes accept children from 4 to 6 years. For this reason, and to provide attentions that are more truly educative than the present organization permits, the idea of transforming them into kindergartens is under consideration. When sufficient funds are made available, this type of service may be provided in all provincial capitals. In the children's homes, admission is granted to minors of from 7 to 14 years of age for instruction through the sixth grade of elementary education; and to enable the "graduates" to enter some kind of remunerative employment instead of merely walking the streets, officials of the Ministry advocate the establishment of complementary or continuation industrial schools.

The work schools are for wayward and abnormal boys ordered to this type of institution by the juvenile courts. These schools for social readjustment have been provided with equipment for the teaching of such trades as tailoring, carpentry, mechanics, printing, shoemaking, barbering, and weaving; but the equipment is inadequate and the need for more schools is clearly recognized. In the observation homes the children sentenced by the juvenile courts are held for a time before

they are placed in the work schools. During their stay there, their abilities are studied so as to facilitate their proper placement in the work school. The homes for the re-education of girls correspond to the work schools for boys. As yet, however, their organization and equipment leave much to be desired.¹⁵

The Ministry of Welfare and Labor has a division (Sección de Divulgación y Cultura Popular—literally “Division of Dissemination and Popular Culture”) which puts the people, especially the country’s workers, in touch with useful information by means of books, bulletins, pamphlets, and other materials. A booklet on communicable diseases, issued by the United States Public Health Service, for example, was translated into Spanish and 10,000 copies were printed and distributed. In Quito, this division of the Ministry recently established a circulating library for the benefit of the proletariat, and other such libraries are planned. Lectures, discussion groups, and short courses have been organized, and radio programs are broadcast from time to time. In this way it is hoped that vices will be corrected, good habits and customs will be engendered, and at least a sprinkling of knowledge imparted for the good of the learners in their everyday living.

Another division of the Ministry of Welfare and Labor, the Division of Physical Education, Sports, and Recreation (Departamento de Cultura Física, Deportes, y Recreación), aims to popularize physical education and to establish norms for the teaching of that subject in the public schools. This division plans to promote physical education and athletics through the construction of modern stadiums in Quito and Guayaquil; and gymnasiums, recreation centers, public baths, athletic fields, and playgrounds for children throughout the Republic. For the most effective direction of its broad program, officials of the division plan the establishment of an advisory council composed of the Ministers, or their representatives, of Welfare and Labor, National Defense, Education, the National Sports Federation, the Department of Public Health, the National Labor Confederation, the universities, and the press.

¹⁵ *Ibid.*, p. 47-48.

CHAPTER III

Secondary Education

AIMS

Secondary education in Ecuador is by law a continuation of elementary schooling and aims primarily at general culture. It seeks to raise the cultural level of the country by developing citizens who will be conscious of their social obligations. The secondary school aims also to prepare its students for further education in the university or in the professional or technical school, and through selection and guidance to develop their abilities to the end that they may become useful elements in society. In the words of the head of the Secondary School Section in the National Ministry, however, "the principal function of the secondary schools has been preparation for university study."¹

ORGANIZATION

In line with the general practice of secondary schools in Latin American countries, the Ecuadorian secondary school or *colegio* is organized into 2 cycles: the first, a 4-year cycle of general culture studies; the second, a 2-year cycle of specialization in one of the following options: biological science, physics and mathematics, philosophy and social science, or educational science. On completion of the first cycle, the student may enter one of the above-mentioned specialization fields or transfer to a technical or business school. Graduates of the 6-year course in the *colegio* receive a diploma for the degree of baccalaureate in secondary education (*bachillerato*); graduates of the technical secondary school (p. 42) receive the title of skilled workman (*perito*) in the trade concerned.

A *colegio* offering major work in educational science is known as a *colegio normal* (secondary normal school) and is required by law to have an attached elementary and a continuation school for observation and practice teaching purposes. If it is a school for girls, it must also have a kindergarten.

ADMINISTRATION

Supervision of secondary education, both public and private, is the responsibility of two zonal supervisors, one for the interior and one for the coast. These supervisors visit each school in their respective

¹ Report prepared for the author by the head of the Secondary School Section, Ministry of Public Education, Quito, December 1944.

zones at least twice a year and submit to the Minister of Education a report concerning the instructional and administrative situation in each institution. They are authorized to attend all official school or faculty meetings and to visit classes and other school activities. Suggestions and directions for the improvement of the work of the school are presented directly to the principal (rector), who may, if he desires, appeal to the Minister of Education for modification or revocation.

Within the individual *colegio* the principal is the supreme authority. He is responsible for the smooth and effective functioning of the school and has the right to take whatever steps he deems necessary to that end. He does not necessarily have to be a teacher. A Faculty Council (Junta de Superiores y Profesores) composed of all the teachers and internal inspectors with the principal as chairman, elects the vice principal (vice rector) and the three members of the Directive Board, and proposes pedagogical and disciplinary measures for the betterment of the school. The Directive Board (Consejo Directivo), also composed of teachers and presided over by the principal, administers the income of the school, confers the titles and diplomas, approves the final examination reports to the Ministry of Public Education, and names the following four permanent three-man committees of the faculty: technical-education; discipline; sports and school entertainments; and cultural extension.

Each of the six classes of the school has a Class Council (Junta de Curso), composed of all the teachers who instruct the students in that class or year's work. The Class Councils check the students' progress, propose special honors and awards, present to the principal the names of students exempted from final examinations, and in general work for uniformity in method and subject matter of parallel courses.

INTERNAL INSPECTORS

In each *colegio* with an enrollment of more than 500 students, discipline and student welfare are in charge of a chief inspector (Inspector General) and a corps of inspectors and under-inspectors, all of whom are required by law to be at least graduates of a secondary school, that is, to have completed the studies and final examinations of a *colegio* or a *colegio normal*. Actually, the requirement is not enforced for there are not enough unemployed graduates. All Ecuadorian secondary schools have these internal inspectors (inspectores), who see that the students take proper care of school buildings, furniture, and materials; record and report absences, misconduct, and illness; take charge of classes in the absence of the teachers; help the students with their lesson preparation; supervise between-class activities; and perform numerous other duties determined by the principal of the school. These inspectors, who are for the most part university students, receive room and board and a nominal honorarium.

SCHOOL SUPPORT

Funds for the maintenance and support of public secondary schools derive from the following sources: (1) Income from school property; (2) government subsidies; (3) registration and examination fees, and other fees authorized by the Ministry of Public Education; (4) salary deductions and fines imposed on staff members in accordance with the Education Law; (5) gifts and legacies; and (6) the proceeds of special taxes and other income allowed by law or decree. School funds must be employed and surplus moneys invested in conformity with the law. The Directive Board of the institution determines these investments in the light of the interests of the school. In 1943, the Government spent a total of 4,679,810.44 sucres in secondary education, including 2,667,539.88 for salaries and administration; 101,169.79 for laboratories and libraries; 443,357.12 for buildings; and 538,616.68 for miscellaneous expenses.

NUMBER OF SCHOOLS AND ENROLLMENTS

In 1944, Ecuador had 25 public *colegios* of secondary level, including 4 *colegios normales* (p. 57) and 25 private *colegios*. The professional and technical schools of secondary level mentioned at the beginning of this chapter will be discussed under Vocational Education in Chapter V. There were also 4 new schools called lower secondary schools (*escuelas secundarias*), recently founded in Pelileo, El Angel, San Gabriel, and Otavalo. These lower secondary schools were founded to provide a 4-year general culture course (first cycle), corresponding to that of the *colegios* but more limited in character, and at the same time to guide the pupils toward the various trades and technical careers important in the locality in which the new schools function. They are being founded in the principal cities of the provinces, and if results are satisfactory, their number will be greatly increased.

Accurate data concerning enrollments in secondary schools for the years 1943 and 1944 were not available. The head of the Secondary Education Section in the National Ministry made the following estimates: In Quito and Guayaquil—an average of 180 in the first year; 150, second year; 50, third year; 30 each in fourth, fifth, and sixth years. In the provinces—80, first year; 50, second year; 30, third year; 20, fourth year, and 15 each in fifth and sixth years. In 1942,² total enrollments in the 24 public *colegios*, including 4 *colegios normales*, were 6,985 pupils, with an average daily attendance of 6,312. Twenty-one of the 25 private *colegios* in the same year showed an enrollment of 1,770 and an average daily attendance of 1,767; the other 4 failed to submit their statistical reports to the Ministry. Figures on enroll-

² Informe a la Nación. Ministerio de Educación Pública. Quito, Talleres Gráficos de Educación, 1943. Table facing p. 156 of Appendix.

ments in the newly established *escuelas secundarias* had not yet been collected. It is estimated that slightly more than 10 percent of the pupils who start secondary education remain to finish the 6-year course leading to the baccalaureate degree.

SCHOOL PLANTS

Secondary school buildings are generally large, many-roomed edifices constructed around one or more patios, which considerably improve illumination, ventilation, and communication from classroom to classroom. Characteristically, wide, airy, open corridors line the patios on all floors—usually two. School grounds are ordinarily limited to the space offered by the patios, although several institutions have additional facilities for athletic purposes. The classrooms are adequate in size and seating arrangements; blackboard space, and other details are usually satisfactory. Sanitary installations, including drinking fountains and in some instances shower baths and swimming pool, are fairly modern and well cared for. As in other Latin American countries, the administrative personnel constitutes a rather high proportion of the total staff and occupies a correspondingly large share of the school plant. In 19 public *colegios*, for example, out of a total of 25, there were 317 members of the administrative staff, 416 teachers, and 64 minor employees for janitorial and other services.

LIBRARIES

All schools of secondary level have small libraries averaging about 1,500 volumes, largely reference books. These libraries are open ordinarily throughout the school day and students have access to the shelves during the hours left free by the absence of teachers from school and when special assignments have been made. As a general rule, books may not be taken out of the library by the students, although there are exceptions. The teachers are permitted by law to borrow books by signing for them and assuming responsibility for their return. A few schools have opened the doors of their libraries to the general public, the Colegio Nacional "Mejía," in Quito, even cutting a new door from the street to facilitate access of private individuals to its library offerings. According to the Education Law, the school librarian must keep detailed accounts of library holdings and circulation; but information in this regard for 1944 was not available for the present study. In 1942, the 23 school libraries had a total of 55,660 volumes and a monthly reader average of 12,816.

LABORATORIES

Most of the public *colegios* have reasonably adequate laboratory equipment, but it is generally kept in cabinets and used mainly by the teachers for demonstration purposes. Except for simple experi-

ments in chemistry and physics, the students do not engage in experimental work. The Colegio Nacional "Mejía," in Quito, which had an enrollment of 1,109 boys in 1944-45, has a psychological laboratory consisting of several large rooms and containing first-class apparatus and equipment in great profusion. The majority of the numerous delicate and costly psychological instruments were given to the school by the Ministry of Defense when it closed its military training and experimental post. The apparatus is used in physics and psychology classes.

SCHOOL YEAR AND DAY

The school year extends from October to June in the interior and from April to December in the coastal region. The daily schedule varies with the locality, but according to law the classes must come between 8 a. m. and 5 p. m. Girls' schools may operate on a single session basis. No student is permitted to take more than 6 classes a day, nor more than 30 a week. Further, not more than 4 classes may be taken consecutively in the morning nor more than 2 in the afternoon. Sunday and the afternoons of Wednesday and Saturday are regular holidays. Other holidays and vacations are those established for public schools by the Ministry of Education (p. 15).

ENTRANCE REQUIREMENTS

For admission to Ecuador's *colegios* of secondary education the applicant must be at least 12 years of age, in good health, and have completed the 6-year elementary school. Prior to 1944 an entrance examination was also required in Spanish, mathematics, and Ecuadorian history and geography. Students applying for admission to years other than the first must pass examinations in the work of the years for which credit is desired.

STUDENT FEES

Secondary school students pay a regular registration fee of 5 sucres for each subject taken in the first cycle and 6 sucres per subject in the second cycle. These fees are doubled for special or late registrations. Diploma fees are 5 sucres for the general culture (first cycle) certificate and 35 for the diploma for the baccalaureate of secondary education or for the title earned in a professional or technical school. Final examinations cost 2 sucres per subject—4, if the examinations are taken outside the regularly established period. If the regular monthly or bimonthly examinations are missed and the student must take them at a later date, he must pay 2 sucres per subject. The Directive Board may exempt students in financial need from these payments. It may exempt also students who have attained exceptionally high grades during all 6 years of the school's work from payment of the degree

fee. Schools which offer boarding and dormitory facilities have, of course, established fees for such services.

SCHOLARSHIPS

In compliance with an executive decree of October 2, 1941, the National Government grants a number of scholarships to financially needy but able students in secondary, special, and university schools. As far as possible, these scholarships are distributed equally among the provinces. Aspirants must be citizens of Ecuador and must present, along with their applications, certificates of birth, health, previous study, and financial condition of parents or guardian. For a scholarship for foreign study the applicant must post a bond guaranteeing subsequent service to the Government:

Holders of scholarships in *colegios* and *colegios normales* must agree to teach for a period of time corresponding to the duration of the scholarship. The scholarships cover tuition and board, and may not be held by more than one person of the same family in the same institution. Good conduct in and out of school and a successful scholastic record must be maintained by recipients of these State grants. In 1942, 83 students in public *colegios* received a total of 74,880 sucres through these scholarships.

CURRICULUM

Education at the secondary school level proposes to call into play both the student's powers of learning and his activity, and teachers are authorized to employ whatever means they have to develop investigative and critical abilities. The official plans of study² prepared and distributed by the Ministry of Public Education, are given in tables 2 and 3.

METHODS OF INSTRUCTION

Lectures by the teacher, and note-taking, memorizing, and recitation by the students, constitute the prevailing practice in Ecuador's academic secondary schools. In the almost complete absence of textbooks and of adequate reference works and materials, the student's numerous notebooks are filled with data supplied through direct dictation, heterogeneous items gleaned from lectures, explanations, and reading, and select items copied from the note collections of fellow students. To a great extent, answers to the teacher's questions must be given verbatim, according to the text of the teacher's dictation. Officials in the Education Ministry attribute this situation to the fact that a striking proportion of the teachers are not professionally educated, but are business and professional men who engage in teaching

² Reglamento General: Plan de Estudios y Programas de Educación Secundaria. República del Ecuador. Quito, Talleres Gráficos de Educación, 1932.

Table 2.—Plan of studies in the secondary schools (colegios), general culture cycle

Subject	Hours a week per school year			
	I	II	III	IV
1	2	3	4	5
Spanish language and grammar.....	4	4	4	4
Spanish literature.....	4	4	4	4
Arithmetic.....	4	4	4	4
Algebra.....	4	4	4	4
Plane geometry.....	4	4	4	4
Ecuadorian and American history.....	4	4	4	4
Ancient and medieval history.....	4	4	4	4
Modern and contemporary history.....	4	4	4	4
Physical geography.....	3	3	3	3
Human, political, economic geography of Ecuador.....	3	3	3	3
Geography of America and Asia.....	3	3	3	3
Geography of Europe, Africa, and Oceania.....	3	3	3	3
Foreign language.....	3	3	3	3
Morality.....	2	2	2	2
Civics.....	2	2	2	2
Botany.....	2	2	2	2
Zoology.....	2	2	2	2
Physics.....	2	2	2	2
Chemistry.....	2	2	2	2
Anatomy, physiology, and hygiene.....	2	2	2	2
Biology and social hygiene.....	2	2	2	2
Logic.....	2	2	2	2
Psychology.....	2	2	2	2
Drawing.....	2	2	2	2
Music appreciation.....	2	2	2	2
Choral singing.....	2	2	2	2
Physical education.....	2	2	2	2
Practical manual activities ¹	2	2	2	2
Total.....	28	30	30	30

¹ For boys: Agriculture, typing, shorthand, carpentry, etc. For girls: Home economics, cooking, sewing, gardening, typing, and shorthand.

as a means of supplementing their other income. Other explanations involve the lack of textbooks, laboratory equipment, and materials, together with the long-accepted tradition of factual knowledge as a basis for university admission. Nevertheless, many teachers—mainly recent graduates of the normal schools and the Pedagogical Institute—are introducing reforms in educational procedure that allow discussion groups and other forms of student participation in the learning process, calculated to produce results more in keeping with the country's need.⁴

EXTRACLASS ACTIVITIES

Students in the *colegios* engage in a number of activities outside their regular school program. Several of the schools publish student newspapers and magazines. Many have organized school clubs (*Asociaciones de Estudiantes*) and most of them have joined to form a National Federation of Secondary, Normal, and Special School Students (*Federación Nacional de Estudiantes de Enseñanza Secundario, Normal y Especial*). There are also sports and dramatic clubs

⁴ Special report prepared for the author by the head of the Secondary Education Section of the National Ministry, December 1944.

Table 3.—Plans of study in specialization cycle of secondary schools (5th and 6th years)

Subject	Hours a week per year, by specialization field					
	Biology		Mathematics and physics		Philosophy and sociology	
	V	VI	V	VI	V	VI
I	2	3	4	5	6	7
Elements of economics.....	2		2			
Social-economic problems of Ecuador.....		2		2		
Outline of world literature—especially Spanish.....	2		2		2	
History of American literature—especially Ecuadorian.....		2		2		2
Introduction and history of philosophy (Ancient).....	2		2			2
Medieval and modern philosophy.....		2		2		
Foreign languages (continuation from 1st cycle).....	2	2	2	2	2	2
Physical education.....	2	2	2	2	2	2
Chemistry.....			2	2		
Inorganic chemistry.....	4					
Organic chemistry.....		4				
Physics.....	2	2	2	2		
Biology.....	2	2				
Psychology.....	2	2				2
Botany.....	2					
Zoology.....	2	2				
Geology.....	2					
Mineralogy.....		2				
Anatomy.....	2					
Physiology.....		2				
Algebra.....			2	2		
Plane and solid geometry.....			4			
Analytic geometry.....				2		
Trigonometry.....				2		
Geology and mineralogy.....			2	2		
Cosmography.....				2		
Mechanical and geometric drawing.....			2	2		
Elements of political and constitutional law.....					2	2
History of ancient and medieval civilization.....					2	2
History of modern and contemporary civilization.....						2
History of Ecuadorian art.....						2
Philosophy.....					4	4
History of Ecuadorian literature.....					2	2
Geography.....					2	2
Logic.....					2	2
Total.....	20	20	20	20	26	26

and other organizations of similar character. Swimming, basketball, football (soccer), tennis, baseball, and boxing are the most popular sports. Extraclass activities are, in general, only beginning to be accepted as of educational value.

EXAMINATIONS AND GRADING

All students at the secondary school level are required to take bimonthly examinations and an annual final examination in each subject of the program of studies. The bimonthly examinations are written group tests of 45 minutes' duration, given under the direction of the teacher of the subject, and may consist of one or several questions covering the work of the 2-month period. No test is administered in choral singing. In physical education, the test is practical and individual. After the teacher has finished grading the papers, they are



returned to the student and the grades are reported to the Directive Board of the school.

Within 20 days after the examinations, the student's grades are reported to his parents by the supervisory corps of the school. The marks used in grading the bimonthly examinations are: 0, lowest (pésimo); 1-9, failure (deficiente); 10-13, fair (regular); 14-16, good (bueno); 17-19, very good (muy bueno); and 20, excellent (sobresaliente).

The final examinations are administered during the last month of the school year by a board composed of three teachers appointed by the principal. These examinations may be repeated during the first month of the following year if necessary. To be eligible for the final examinations, the student must present receipts for payment of all fees, a registration slip, class attendance and conduct records, and an official statement of the average grade received on the bimonthly tests. For students in the first cycle the final examinations are written; for those of the second cycle, they are both written and oral. Public-school students whose bimonthly grades total at least 76 points are exempted from the final examinations, but private school students have no such exemption.

A set of topics or questions, covering the year's work in each subject and identical for both public and private schools, is prepared by the teachers and numbered 30 days before the date established for the examinations. Corresponding numbers are placed in an urn, and on the day of the examination the student draws one in each subject field and answers it in writing, being graded by the examining board on the 0-20 scale. The day before the examination, students in the specialization cycle draw a number from a set covering the work of the general culture cycle and another in their respective major field, and these questions form the basis of their oral examination the following day. All other questions are drawn by lot and answered in writing, and all, both oral and written, are graded as in the case of the general culture cycle examinations. Oral examinations are administered by the principal or his representative and two teachers. A 10-minute time limit is set for each subject. In the case of foreign languages, the written examination is supplemented by an oral test of the student's ability to read, translate, and converse in the language.

The final grade for the year is determined by the Board by averaging the bimonthly and final examination grades. It is expressed as follows: 50-60, fair; 61-75, good; 76-90, very good; and 91-100, excellent.

A student who fails to attain a minimum of 10 points on a given examination is required to repeat it at the beginning of the next school year; should he fail again, he must repeat the entire year's work. A student who receives a "bad conduct" mark during the year is regarded

as "suspended" in all his classwork until he passes the final examinations; if he is also graded "failing" in one or more subjects, he automatically fails the year's work.

Parents or their representatives have the right to appeal the final examination grade within 3 days following the school secretary's report of the results, and if the appeal is sustained by the principal, the examination paper is reviewed by another board or another examination is administered. The original examining board holds all papers until the expiration of the 3-day time limit.

BACCALAUREATE EXAMINATION

Upon successful completion of the 4-year lower or general culture cycle a secondary school diploma (diploma de estudios secundarios) is awarded. When the student has passed the final examinations of the last year of the 2-year specialization cycle, he requests the Directive Board of the school to declare him a candidate for the bachelor's degree in his major field. He then must take another written examination in a topic each from the general culture and the specialization programs of study. The topics again are drawn by lot and the student is allowed an hour and a half on different days to answer each topic. The examining board in this case is made up of the principal and the respective teachers. In addition, the student takes an oral examination administered by an examining board consisting of the principal and 4 teachers, one of whom is the teacher of his foreign language. The oral examination covers all the subjects studied during the 2 years of specialization and lasts between 50 and 60 minutes.

The degree examination is graded as follows: 6, fair; 7 and 8, good; 9, very good, and 10, excellent. A grade of 6 or more entitles the candidate to the degree. The degree is conferred in biological sciences, physico-mathematical sciences, philosophy and social sciences, or in educational sciences, according to the field of specialization. The degree in educational sciences is regarded as equivalent to the title of elementary school teacher (professor normalista) conferred by the urban normal schools.

NATIONAL COLEGIO "24TH OF MAY"

The National Colegio "24th of May" (Colegio Nacional 24 de Mayo) was founded in 1984 in answer to the imperious demand and need of Quito's girls for a sound, modern education on the secondary school level. Directed by a principal (rectora), 6 administrative officers, and 4 supervisors, it is organized into 3 sections taught by a staff of 42 teachers. The academic section consists of the regular 2-cycle, 4- and 2-year set-up, with 297 students in the general culture level and 73 in the 2 specialization groups—of philosophy and social sciences

and of biological sciences. Students completing the work of this section receive the bachelor's degree.

The commercial section has 3 first-year groups and 1 each in second and third year of prevocational commercial education and 2 groups of first year vocational study in bookkeeping, stenography, and typing. Enrollments in this section total 231. Graduates of this section receive a diploma in either bookkeeping or stenography and typing.

The third section consists of groups, both regular students and girls and young women from outside, who desire 1 or more years of extension work in various fields. In 1944, 181 enrollees were registered in the following courses: stenography, typing, English, art in the home, home economics, dress designing and sewing, weaving, rhythmic gymnastics, music, and first aid. All the 782 students of these 3 sections are affiliated in one or more of the following extraclass activities: Students' Club, Committee on Peace, Girl Scouts "Amazonas," Association of Historical Studies, Association of Geographical Studies, Literacy Groups, and various Sports Clubs. The school places considerable emphasis on artistic education and has organized a 160-voice glee club, a dancing class, and a dramatic club.

In general, the National *Colegio* "25th of May" is governed by the law and regulations established by the Ministry of Public Education for secondary and business schools. In view of the fact that it is a girls' school, however, it has been authorized to provide special work that it may deem desirable for its students. Each student, accordingly, must take in addition to the prescribed program 1 of the following 3 special courses: child care—2 years of practical exercises followed by 2 years of scientific instruction given by the physician-teacher of the school; women's problems—a course dealing with the issues directly connected with women and their legal rights; and a practical course based on activities and problems intimately related to the home.

In answer to insistent requests and demands by parents that their daughters should not have to venture into the streets so frequently, the school inaugurated in 1944 a single session program from 7:30 a. m. to 12:45 p. m. The students may, however, register in any of the extension courses which are offered in the afternoon.

In addition to their regular instructional duties, the teachers are required to be active members of one or more of the following groups: directive board, teachers council, leaders council, professional committee, committee on discipline, committee on cultural extension, and committee on entertainments and sports.

PRIVATE SECONDARY SCHOOLS

Ecuador's private secondary schools are maintained and conducted almost entirely by religious organizations. Their support comes from gifts, bequests, and student fees for tuition, board, room, examinations,

and so forth. They are required to conform to the regulations of the public schools in such matters as program of studies, examinations, grading system, and other technical aspects of secondary education. They are not authorized to confer legally valid titles or degrees; but their students may be presented annually by the private school principal for final examinations in a public-secondary *colegio* in order to make their work official, and for degree examinations upon the termination of their specialization cycle to legalize their bachelor's degree and thus facilitate entrance into the university. The principal of each private school is required to submit to the Minister of Public Education a detailed annual report on the *colegio* under his direction. Teachers in private schools enjoy all the advantages prescribed by law for corresponding public-school personnel.

AMERICAN SCHOOL OF QUITO

Located in the northeastern residential section of the capital city of Quito, this school was opened in October 1940 with 112 students and 12 teachers. By 1944 the student body had increased to 320 and the administrative and instructional staff to 28. In 1944-45 the American School occupied two buildings—one for elementary level pupils and one for secondary school students. Two new buildings were planned for the near future to accommodate a total of 600 students. Seven members of the teaching staff in 1944-45 were North Americans who held college degrees and appropriate teaching credentials. The school is strictly a coeducational day school, with morning sessions from 8:30 to 12:15 p. m. and afternoon sessions from 2 to 4:30 p. m. The academic year begins in the first week of October and ends about the middle of July. Secondary school students who enroll for the official State program of studies prescribed by the Ministry for all academic secondary schools in Ecuador instead of for the school's regular program of United States high-school work, start in mid-October and finish the school year about June 20.

All students pay a registration fee of 30 *sucre*s (1 *sucre*—about 7 cents, U. S. money) a year, which covers not only registration, but also the cost of school publications and minor contributions for charity, parties, special excursions, and the like. Shares in the American School may be purchased by persons, generally Ecuadorians, approved by the Board of Trustees. The shares cost 100 *sucre*s each and are sold according to the number of children in the family who are expected to attend the school: for one child, 10 shares; two children, 15; three children, 18; and four children, 20 shares. They may be paid for in full, or 10 percent down and the remainder in 5 equal monthly installments. The purchase of shares is not obligatory. Shareholders pay in addition a tuition fee of 65 *sucre*s a month per child in school. The regular tuition fee for the child of a nonshareholder is 130 *sucre*s

a month. Children of Ecuadorian parents who are in need of financial assistance may be granted partial scholarships amounting to half the tuition fee, even though their parents are not shareholders. Several school busses are operated for the convenience of the students at a small extra charge per month.

In 1944-45 the American School provided instruction in the following school grades: prekindergarten, kindergarten, 8 years of elementary school, and the first 2 years of high school. In 1945-46 the junior year of high school was added and it is planned to add the senior year in 1946-47. The elementary division endeavors to satisfy the requirements of the Ministry of Public Education of Ecuador and at the same time those of the average public and private schools in the United States, so that graduates may enter higher schools in either country without loss of time. Instruction is consequently divided equally between Spanish and English, and every effort is made to make the children bilingual as soon as possible. No previous knowledge of either language is necessary. Elementary school subjects taught in English are: reading, composition, penmanship, spelling, music, physical education, dancing, social studies, natural science, health and hygiene, and art. Taught in Spanish are: history and geography of Ecuador, grammar, spelling, reading, arithmetic, and civics of Ecuador. No homework is assigned through the fifth grade, and a special school psychologist visits the school daily to check on pupil progress and provide remedial exercises for those who need them.

For secondary school children who plan to attend Ecuadorian universities, the official State program of studies is provided (p. 33), and the final year examinations are taken either at the National Colegio "Mejia" (p. 32) or the National Colegio "24th of May" (p. 37). Upon termination of this 6-year course, students receive the degree of bachelor of secondary school studies. Children who wish to prepare for university work in the United States and who have considerable ability in English may after finishing the work of the elementary school program enter a special private high-school section with a curriculum corresponding closely to that of United States high schools at the junior and senior high school level. Upon completion of the 6 years of study in this section, they receive a high-school diploma instead of the degree of bachelor of secondary education.

The American School of Quito has a library of more than 10,000 volumes, the majority of which are in English and Spanish. There are good-sized collections in French and Latin, also, as well as a few works in other languages. The library is open to all students and, beginning with the fourth grade, each class has a special weekly period in which the students visit the library and select the books they wish to take out for the following week. Membership cards are issued each year

to any persons in Quito who may wish to join the adult section, which has a large collection of good modern and classical English and American works. A fee of 15 *suces* is charged for a library card which is valid for 9 months. Books may be taken out for periods of 2 weeks.

There is no daily school uniform corresponding to those required for the students of most other Ecuadorian schools. There is, however, a parade or dress uniform which is colorful and attractive. Boys wear long white trousers, white shoes, white socks, a white long-sleeved shirt which buttons at the neck, a white tie, and a red wool sweater with long sleeves. Girls wear a white pleated skirt, white shoes, white socks, and a red wool sweater with short sleeves, as well as a tricolor ribbon in their hair.

The American School of Quito believes that every child should have 11 hours of nightly sleep, and recommends that parents exercise great care in regard to diet, fresh air, and general health conditions. It maintains a modern health room with all necessary facilities for taking care of sick or injured children. A school nurse is on duty throughout the school day and a complete health record is kept for each child. Periodical physical examinations are made by the school physician and a specialist gives a complete eye-ear-nose-throat examination twice a year. The physical education program is well developed, and softball, baseball, volleyball, basketball, football, handball, soccer, tennis, badminton, ping-pong, and horseshoes are all popular, in addition to track activities.

CHAPTER IV

Vocational Education

TECHNICAL SCHOOLS

IN CHAPTER II mention was made of the agricultural and industrial instruction provided in rural and continuation schools under the direction of the division of elementary education of the National Ministry of Education. At the secondary school level education and training for the various trades and nonacademic professions is carried on under the direction of the division of technical and special education, (educación técnica y especial) in the National Ministry. Educators and businessmen recognize the need for technical training at this higher level, and a growing interest in the vocational school is apparent throughout the Republic. Postwar expansion of national industries is contemplated and foreign firms are being induced to establish branches in the country, manned with competent technical personnel. In the meantime, influence is being brought to bear on the Government for more adequate facilities for the preparation of native workmen in the technical field.

NUMBER OF TECHNICAL SCHOOLS

In 1939 Ecuador had 9 vocational schools (profesionales técnicas y especiales), and one of prevocational instruction. Their 453 students were taught by 23 technical teachers, 57 shop directors, and 5 cultural subject teachers. By 1944 the number of schools had risen to 24—9 for boys and 15 for girls—with a total enrollment of 1,976. The schools for boys show a decided preference for mechanics; those for girls, for dressmaking and business education.

ADMINISTRATION AND ORGANIZATION

Internally, these technical schools are administered in the same manner as the academic *colegios* (p: 28). Instruction is organized in 2 cycles of 3 and 2 years, respectively: The first, for the training of skilled workmen (*expertos o peritos*) in one of the various fields of specialization; the second, for the additional technical training leading to the title of master craftsman (*maestro*). Some schools provide only the first cycle, and some provide an additional preparatory and exploratory course of 1 year, to enable the school authorities to ascertain the potentialities of the student for trade work.

ADMISSION REQUIREMENTS

Article 159 of the law governing secondary education states that the diploma of secondary school studies, that is, satisfactory completion of the first 4 years of the regular secondary school, is required for admission to the second cycle of the country's technical schools (*escuelas profesionales y técnicas*), which is regarded as comparable to the specialization cycle of the *colegio*. Entrance to the first cycle is based principally on termination of the 6-year elementary school; although in some instances, where only 4 years of this schooling are provided, exceptions are made to this requirement. Good health and character and evidence of vocational aptitude are also necessary.

Students who enter the technical schools of Ecuador still come largely from the working and the middle classes. Gradually, however, technical instruction has succeeded in making its value felt among people of all social and economic levels, so that during the last decade, an increasing percentage has come from the moneyed group. The unprecedented accomplishments of technology in recent years, especially in relation to the Second World War, have had a profound effect on the youth of the country in general and on the technical schools in particular. Already, technicians and prospective technicians in the fields of radio, mechanics, engineering, and electricity are regarding themselves as better off professionally and economically than the traditional lawyer.¹

FEES

Instruction in the technical schools is free. A few have a nominal initial registration charge, but there are no examination nor title fees. Most vocational schools provide boarding and dormitory facilities for a limited number of students, many of whom hold State scholarships covering room and board. The students must furnish bed linen, dishes, wearing apparel, and the necessary school materials. They are also held accountable for damage to school property and equipment.

AIMS AND CURRICULA

In general the technical school is concerned with the threefold development of the student. First, it educates the whole personality, physically, morally, and intellectually. Second, it provides technical-professional training, which includes the unfolding of manual skills and the imparting of the scientific and technical information necessary for successful practice of a trade or profession. Third, it strives to produce workmen who will be effective citizens, made conscious of their social obligations through a general knowledge of conditions in their country and of the means by which a greater Ecuador may be produced.

¹ Special report prepared for the writer by the head of the Section of Special Education in the National Ministry of Public Education. Quito, December 1944.

In the 3-year first cycle, the boys' schools provide training in three or more of the following trades: General mechanics (including wagon making, blacksmithing, electrical work, and foundry); radio and telegraphy; carpentry (including cabinet making, upholstery work, wood carving, and gilding); graphic arts (including typography, printing, photogravure and photo-lithography); spinning and weaving (cassimeres, carpeting, and tapestries); shoemaking; toymaking; and minor industries. In the last three trades the training is complete. Completion of the first cycle gives the student the title of "expert" in the trade of his choice.

The technical cycle provides 2 years of more specialized training and instruction in the more profound theoretical aspects of the trade or profession. Upon satisfactory completion of this cycle the title of "maestro" is conferred in one of the following fields: Industrial mechanics; automotive mechanics; electrotechnics; radiotechnics; foundry work; carpentry and cabinet making; wood carving and gilding; typography and printing; linotypy; photography and photo-lithography; and photo-, wood-, and metal engraving.

At the schools for girls, specialized study and practical training are provided in dressmaking, home economics, embroidery, spinning and weaving, furriery, bookkeeping, basketmaking, and the like. The periods of specialization vary according to the field in which the student works. Thus bookkeeping requires 4 years; and home economics, a minimum of 2 years. Titles conferred on completion of the course correspond with those of the boys' schools. The Industrial School for Girls (*Escuela Industrial de Señoritas*) in Quito has been planning the addition of a complete course in typewriting, but lack of funds has prevented the purchase of necessary equipment.

In all technical schools the offering includes both general culture and technical (trade) courses. The former are taught usually in the morning; the latter, in the afternoon. The student load varies from 28 to 32 hours a week, and is divided fairly equally between the two types of learnings. The general culture subjects follow the pattern commonly found in the academic secondary schools, but with much less emphasis on their mastery. As far as possible, they are presented in such a way as to bring out their relationships with the practical trade or shop work.

METHODS OF INSTRUCTION

To a very great extent the method of instruction in the general culture subjects at vocational secondary schools is identical with that in the *colegios*. Information is imparted by the teachers through lectures and dictation. The students take notes and write down from dictation. When drawings are made on the blackboard, the students diligently copy them in their notebooks. Some teachers are very

effective in their work. They see that the students' notes contain the most significant facts and figures, and then make sure that everything is well understood by the entire class or group. They invite questions and patiently explain and illustrate, using words, drawings, models, and actions to clarify the point at issue.

In regard to the shopwork, the student learns through actual doing. Except for their age, the teachers in the various schools visited were hardly distinguishable from their students. They guided the work, lent a hand now and then, asked questions, had different students repeat an operation or perform it in another manner, demanded reasons for procedures and sequences of procedures, and otherwise saw to it that the students understood the what, why, and how of their various activities. During the school year the students make more or less frequent visits to shops and factories to observe methods and procedures in actual everyday work situations. Before he is considered ready for the title in his major field, each student must complete at least one semester of work in an establishment approved by the school.

EXAMINATIONS AND GRADING

Oral, written, and practical examinations are held every 3 months. At the end of each school year promotion examinations are administered. For students completing either cycle special "degree" or title examinations are required, corresponding to those held in the *colegios* for the baccalaureate of secondary education. In the technical schools, however, particular emphasis is placed on the practical aspect of the test. In general, the examinations are graded according to the official scale of 1 to 20 points, with 11 as the required lowest mark for passing.

BUILDINGS AND EQUIPMENT

Both school buildings and equipment are inadequate to the needs of modern educational requirements in the technical field. Almost without exception the buildings are old and lacking in space and adaptability to modern needs. Practically all the machinery—lathes, saws, drill presses, reamers, planers, printing presses, linotype units, sewing and shoemaking machines—dates from the early years of the century and shows many signs of wear and repair. Parts have deteriorated or become broken, putting much of the machinery out of commission until reconversion makes replacements available. According to the 1943 report of the Minister of Public Education,² scarcely a technical school exists in the country that is not struggling with the problem of lack of adequate mechanical equipment and of the raw materials necessary for acceptable technical instruction.

² Informe a la Nación, 1943. Ministerio de Educación Pública. Quito, Talleres Gráficos de Educación. pp. 156-164.

STATE CENTRAL TECHNICAL SCHOOL (ESCUELA CENTRAL TECNICA DEL ESTADO)

Among the better equipped technical schools in the Republic is the State Central Technical School of Quito, which in 1944-45 had an enrollment of 262 students in its regular sections—an increase of approximately 80 percent over the 1940-41 enrollment of 147. The 6 shops (talleres) of this school—radio, mechanics, carpentry, shoe-making, graphic arts, and weaving—provide training in 17 special trades.

The *Central Técnica*, as it is generally called, maintains a 1-year prevocational or preparatory course that is regarded as equivalent to the first year of secondary education and accepts students as follows: For the preparatory course, upon completion of the sixth year of elementary school; for the first or apprenticeship cycle, upon completion of the preparatory course or of the first year of secondary education; for the second or specialization cycle, upon completion of the first cycle of any technical school in the country. A student in the upper years of academic secondary education may transfer to the apprenticeship cycle. Offered also is a 2-year course for students who have completed the fifth or sixth year of a secondary school and who desire the title of *experto* in handcraft or manual arts.

A special school of telegraphy for improvement of the nation's telegraphers functions in the establishment. The national Government pays its telegraphers their full salaries during attendance in the 1-year course provided. Students enrolled in the radio and telegraphy sections of the Central Technical School are granted admission to the work of this school.

Although favored by the Government because of its central location, its tradition of effectiveness, and its national leadership in the field of technical education today, the State Central Technical School is poorly housed and its mechanical equipment leaves much to be desired. The spinning and weaving shop, for example, is equipped with primitive hand looms and spinning jennies. Many of the machines in the other shops have become worn or broken and have been soldered together, have been repaired with wire and bolts, or have gone out of use entirely. Others cannot be used because they lack the necessary accessories. In 1942 a special appropriation of 100,000 sucres was given to the school for the purchase of new equipment. The amount appropriated was recognized as inadequate to the needs of the school, but hopes were high for an increased appropriation in 1944.

The *Central Técnica* in Quito provides a rather heavy program of studies, averaging about 44 hours a week throughout the 5 years. Other institutions offer fewer hours of mathematics and science, and correspondingly fewer hours of shopwork. The plan of studies of the

Central Técnica for the titles of *experto* and *maestro* in mechanics is presented in table 4.

Table 4.—Plan of studies in mechanics at the State Central Technical School in Quito

Subject	Hours a week per school year				
	Experto			Maestro	
	I	II	III	IV	V
1	2	3	4	5	6
Arithmetic.....	3	3	-----	-----	-----
Geometry.....	3	3	-----	-----	-----
Algebra.....	-----	-----	2	1	1
Trigonometry.....	-----	-----	1	2	-----
Spanish.....	2	2	-----	-----	-----
English.....	2	2	-----	-----	-----
Physics.....	2	2	2	-----	-----
Chemistry.....	2	-----	2	-----	-----
Biology and personal hygiene.....	1	1	-----	-----	-----
History, geography, civics.....	2	2	-----	-----	-----
Drawing.....	3	3	3	3	2
Physical education.....	2	2	2	3	1
Shop theory.....	2	2	2	2	2
Shop practice.....	20	21	20	22	26
Practices in electricity.....	-----	-----	2	3	2
Practices in foundry.....	-----	-----	3	-----	-----
Technology of mechanics.....	-----	-----	3	2	-----
Electrical theory.....	-----	-----	2	2	1
Applied mechanics.....	-----	-----	-----	2	3
Industrial hygiene.....	-----	-----	-----	2	2
Automotive practice.....	-----	-----	-----	1	-----
Strength of materials.....	-----	-----	-----	-----	2
Professional didactics.....	-----	-----	-----	-----	1
Labor legislation.....	-----	-----	-----	-----	1
Industrial bookkeeping.....	-----	-----	-----	-----	1
Total.....	44	43	44	44	46

Most of the shopwork done in the school is on "jobs" that are solicited in the capital city. Besides all kinds of machine and other repair work, the school makes gears, tools, implements, clinical apparatus, electric irons and heaters, iron ranges, batteries, wood and iron beds and other articles of furniture, doors, windows, tricycles, decorative iron grating and railing, school desks, gold-plated wood carvings for furniture and other uses, newspapers, magazines, posters, price tags, signs, leaflets, printing cuts in all kinds of metals, cassimeres, tapes, necktie materials, and many other products. Ordinarily, the customer provides the materials. Prices are moderate. Money coming into the school through this channel is divided as follows: 60 percent for the school, 20 percent for the student and 20 percent for the teacher. According to the director, this practice has brought excellent results. Production has greatly increased; the school has been enabled to buy materials and minor equipment; the teachers and students have been stimulated to work without waste and always on practical products; and as the customers' satisfaction is the accepted criterion

of efficiency, workmanship and accuracy have been considerably improved. As a general rule, the student's share of the income is retained by the school until the course is concluded, when it is given to the young man in the form of a complete kit of tools for his trade.

The school has a small library of some 2,500 to 3,000 volumes, largely technical works in the various specialization areas. Most of the books come from either Argentina or the United States. According to the librarian, the circulation is fairly heavy—both teachers and students seeking to broaden their knowledge and to find new ideas, new patterns, and new methods for their work.

There is a great demand for the graduates of the second or specialization cycle of the Escuela Central Técnica, in national industries and in schools which provide technical training. A few of the graduates go to Chile on Government scholarships and to the School of Arts and Trades in Santiago, to continue their training at a higher level. In 1941, for example, at least nine students went to Chile to study mining engineering. The Ecuadorian Government had under advisement in 1944 the founding of a Polytechnical School which would provide opportunities for advanced study for graduates of the country's technical schools.

In 1944, the school opened a store stocked with tools, working clothes, and other articles of frequent use in the technical field, which are sold at cost. Students, other technical schools of the Republic, and the small, independent craftsmen of Quito, such as carpenters, painters, tailors, shoemakers, mechanics, and plumbers, are free to take advantage of this new service.

BUSINESS EDUCATION

AIMS

The schools of business and administration (escuelas de comercio y administración) have as their aim the preparation of skilled workers and of specialists in the fields of business, industry, banking, and public administration. They also provide the necessary background for entrance to the Faculties of Economics in the Universities of Quito and Guayaquil.

ADMINISTRATION

According to law,² these schools must be located in cities in which the population and the number of industries and commercial houses warrant their establishment. They may be State, municipal, or private. Ordinarily, they have been opened in connection with already

² Plan de Organización y de Estudios de las Escuelas de Comercio y Administración. Ministerio de Educación Pública. Quito, Talleres Gráficos de Educación, 1943. Art. 2.

existing academic secondary schools and function under the directive board of the *colegio*. A special supervisor has been appointed by the Minister of Education to see that prescribed requirements are met with reference to laws, regulations, and plans and programs of study.

ORGANIZATION

Business and administrative education in general is organized into the following progressive cycles or stages: Prevocational, 3 years; vocational, 1 year; subprofessional, 1 year; and professional, 1 year. Schools comprising only the prevocational and vocational cycles are called schools of business and administration; those which provide the professional cycle also are given the name professional business and administration schools.

The prevocational cycle is divided into 2 stages, the first 2 years being practically the same as the corresponding years in the *colegio*, with the addition of 3 hours a week of typewriting the first year and 4 hours the second. In the third prevocational year the general culture courses characteristic of the secondary school are rounded out and sufficient vocational work is presented to enable the teachers to determine the pupils' aptitudes for business education. Students from the regular secondary school may enter this third year provided they pass an examination in typing.

Either bookkeeping or stenography and typewriting may be taken in the 1-year vocational cycle. The 1-year subprofessional cycle offers the student a choice between becoming a secretary-stenographer and a commercial accountant. In the last or professional cycle graduates of the preprofessional cycle are given training leading to the title of expert accountant (*Perito Contador*).

PLAN OF STUDIES AND DIPLOMAS CONFERRED

The plan of business studies is given in table 5. Successful completion of each cycle is marked by a certificate which is the prescribed requirement for entrance to the next higher cycle. Graduates of the prevocational course receive the certificate of typist, upon demonstration by test of their ability to type 240 letters a minute in approved fashion. In each case the candidate for a diploma or certificate is required to pass a theoretical and practical examination. Other fields of specialization may be established in the professional cycle. Thus, for a major in parliamentary stenography additional work must be provided in stenography, philosophy, psychology, logic, literature, political, administrative, and constitutional law, public finance, and history of civilization. Additional work for a major as stenography teacher includes principles of education, general and special methods, school organization and legislation, logic, psychology, and literature.

Table 5.—Plan of studies of schools of business and public administration

Subject	HOURS A WEEK PER SCHOOL YEAR								
	Prevocational— Typist			Vocational		Subprofessional		Professional— Expert accountant	
				Stenog- rapher	Book- keeper	Typist- secr- etary	Com- mercial ac- count- ant		
	I	II	III	IV	IV	V	V	VI	
1	2	3	4	5	6	7	8	9	
Spanish grammar and composi- tion.....	5	4							
Business Spanish.....			4	3	3				
Literature.....						3	3		
English.....	3	3	3	4	4	5	4	4	
Arithmetic.....	5	4							
Business arithmetic, algebra, geometry.....			4		3		4		
Mathematics of finance.....								3	
Statistics.....									2
History.....	4	4	2						
Geography.....	3	3	2	3	3				
Political economy.....						2	2		
Social economics of Ecuador.....									2
Anthropology.....				2	2				
Civics and etiquette.....	2	2							
Professional ethics and civics.....				2	2				
Philosophy.....									3
Psychology, publicity, propa- ganda.....						2	2		
Penmanship and drawing.....	3	2							
Typewriting.....	3	4	3	3					
Biological sciences.....		2							
Physics and chemistry.....				3	3				
Social hygiene.....						1	1		
Stenography.....			4	4					
Business principles.....			2	2	2				
Principles of administration.....				2		2			
Bookkeeping.....			4		3		4		
Typewriting and stenography.....					3	5			
Business law.....						2	2		
Common law.....						2	2		
Fiscal and administrative law.....									2
Accounting.....									3
Science of finance.....									2
Salesmanship.....									3
Office organization and practice.....									3
Physical education.....	2	2	2	2	2	4	4	8	
Promilitary training (Domestic science, child-training, or phys- ical education—for girls).....	2	2	2	2	2	2	2		2
Total.....	32	32	32	32	32	32	32	34	

DEGREE OR TITLE EXAMINATIONS

Before the degree or title is conferred for completion of the work of the professional cycle, the candidate must engage successfully in practical work, during a period of at least 6 months, in a State, municipal, business, banking, or industrial establishment approved by the Directive Board and must prepare a thesis dealing with a national problem related to his specialization field. Candidates for the title of parliamentary stenographer, for example, are required to take down a speech at the rate of 120 words a minute and to pass a test of mental agility and briefing—materials for this test being taken from the

Records of the National Congress. The practical examination for the title of stenography teacher requires the teaching of 3 classes in different commercial subjects offered in the school. Titles conferred on completion of the professional cycle are regarded as equivalent to the bachelor's degree of secondary education and permit entrance to the Economics Faculty of the University.

Private schools of business and public administration are required to conform to the regulations established for public schools. Each private institution, as in the case of the private academic secondary schools, has its work guided and supervised by a neighboring public school in which the private school students must register and to which they must report annually for final or promotional examinations if they desire officially valid certificates, diplomas, or titles. Individuals who prefer to study business subjects under the direction of independent private teachers may similarly have their work officially recognized through examination in a State school, and may receive officially valid diplomas and titles.

EVENING CLASSES IN BUSINESS EDUCATION

Both the regular academic secondary schools and the business schools may provide evening classes in stenography, typewriting, English, accounting, and other subjects for the benefit of day workers who are unable to attend school during the day. The evening course covers 2 years of instruction and requires for admission completion of the 6-year elementary school. No diplomas or titles are conferred for this type of learning.

NUMBER OF BUSINESS SCHOOLS AND ENROLLMENTS

Owing to the recency of the organization of business education by the National Ministry (1942-43), statistics were not available. A number of schools have been founded, however, and sections of business education have been created in some of the *colegios*. The great volume of this type of training is in a state of transition, of organization or reorganization. The need and importance of business education is being increasingly recognized by the people, by employers, and by the Government, and there is strong indication that economic support for it will be forthcoming in a measure comparable to that envisaged for technical education.

NATIONAL SCHOOL OF PHYSICAL EDUCATION

Prior to 1936, instruction in physical education was the work of foreign teachers, particularly from Sweden, Spain, Germany, North America, and Chile. After 1936, however, intensive courses for the training of native personnel were provided in the Juan Montalvo Normal School, the Mejía Colegio, and the State Central Technical

School. The complete training consisted of 2 years of study, 30 to 35 hours a week. The regard in which this type of education is held may be seen in the fact that each *colegio* in the Republic has a titled physical education teacher on its staff and several of the larger schools have as many as five such teachers. Generally, 3 hours a week is required in this subject for secondary school students. The elementary schools provide a half hour daily, but ordinarily there are no special physical education teachers at the elementary level, except in the very large schools. Each province has a supervisor of physical education for elementary schools and each rural zone, one for the rural schools.

OBJECTIVES

In December 1943, by presidential decree, a National School of Physical Education was created. This new school, which in 1944-45 had an enrollment of 48 students, has the following objectives: (1) To prepare teachers of physical education; (2) to prepare reserve officers for the armed forces, sports coaches, teachers of rhythmic gymnastics and dancing, and other specialists; (3) to conduct investigations in the field of physical education and to experiment with methods of teaching the subject in Ecuador; (4) to stimulate and popularize knowledge and practices in physical education; and (5) to provide opportunity for physicians and other professionals who may desire to specialize in related fields.

REQUIREMENTS FOR ADMISSION

The school offers a 3-year course. Entrance to the first or general background year is granted to students who have completed the 4-year general culture cycle of the secondary *colegio* or the normal school; to third-class teachers with 3 years of experience and good rating; and to teachers whose titles were obtained in rural normal schools, business schools, or other educational institutions recognized by the State. Entrance to the second or specialization year is granted to students who finish the first year's work; to those holding the baccalaureate degree of secondary education in any field; to students of medicine, and to nontitled teachers of physical education in secondary, professional, or other similar schools with 4 or more years of experience. To the third or professional improvement year, graduates of the second year and titled secondary education teachers are admitted. Further requirements for admission are: Moral and physical qualities compatible with the demands of physical education; manifest interest in and aptitude for this type of training; and successful performance in entrance, medical, and aptitude examinations. Practically all students receive scholarships from the various national ministries and departments, municipalities, or industrial organizations.

PLANS OF STUDIES

The regular 8-year course of studies leads to the title of physical education teacher (profesor de educación física) or of teacher of a specific aspect of the field. For coaches (entrenadores) and massagists (masajistas), the regular work of the first year is followed by a specialized 22 hours a week second year in football, basketball, or general athletics. A 2-year course of 23 hours a week is also provided to train girls as teachers of rhythmic gymnastics and dancing (profesoras de gimnasia rítmica y danzas). Table 6 presents the plan of studies for regular physical education teachers.

Table 6.—Plan of studies in the National School of Physical Education¹

Subject	Hours a week per year		
	I	II	III
	1	2	3
Anatomy in physical education.....	3	3	.....
Physiology and hygiene.....	4	.....	.....
Military physiology and hygiene.....	.....	3	.....
Biology and chemistry.....	3	.....	.....
Biochemistry and nutrition.....	.....	.....	2
Physical measurements.....	.....	.....	2
Kinesiology (body mechanics and kinesiphylaxis).....	.....	2	.....
Kinesitherapy.....	.....	.....	3
Applied psychology.....	2	.....	.....
History of physical education.....	1	.....	.....
Pedagogy of physical education.....	.....	2	.....
Legislation and organization of physical education.....	.....	.....	2
Methodology.....	.....	2	3
Standard practices and class criticism.....	.....	2	.....
Investigations and practical activities.....	.....	2	.....
First aid.....	.....	.....	5
Teaching practice.....	.....	2	.....
Training techniques and methods.....	.....	.....	6
Gymnastics and school games.....	.....	.....	2
Gymnastics and presport games.....	4	.....	.....
Sports.....	.....	2	.....
Athletics.....	4	2	2
Self-defense.....	4	3	1
Scout work.....	.....	1	.....
Swimming.....	1	1	.....
Military training (rhythmics for girls).....	3	3	3
Foreign language.....	1	1	1
Music and singing.....	1	2	.....
Total.....	23	23	23

¹ Reglamento General y Plan de Estudios de la Escuela Nacional de Educación Física. Ministerio de Educación Pública. Quito, Talleres Gráficos de Educación Pública, 1944. p. 4-5.

OTHER SPECIAL SCHOOLS**NATIONAL SCHOOL OF FINE ARTS**

Ecuador maintains a National School of Fine Arts (Escuela Nacional de Bellas Artes) in Quito, which in 1943 had an enrollment of 61 students—55 men and 6 women. This school has the same administrative set-up as the *colegios*. Courses are provided in drawing, painting, sculpture, modeling, art anatomy, history of art, lithog-

raphy, and other graphic arts. Twenty-two teachers, the majority without a teaching title, handle the instruction.

SCHOOLS OF MUSIC

Three Conservatories of Music (Conservatorios de Música), similarly administered, are also maintained in Quito, Guayaquil, and Cuenca. Courses are provided in most of the customary music school offerings, including brass, reed, and stringed instruments, harmony, composition, voice, and the like. Elocution is also taught. The 1943 enrollment in the three institutions totaled 771 students, of whom 278 were men and 493, women

Since 1944, increasing attention and support are being accorded to these schools. Ecuador has always taken great pride in her artists and musicians, and is determined that education in these fields shall receive the emphasis it deserves. New buildings, or the thorough renovation of the old ones, are planned, as well as more adequate provision of necessary equipment and materials and salary increases for the instructional personnel.

MILITARY AND NAVAL SCHOOLS

The Ministry of National Defense (Ministerio de Defensa Nacional) maintains and controls the Eloy Alfaro Military School, the Infantry and Cavalry, Aviation, and Naval Schools, a special infantry course, and the War Academy. Data concerning administration, organization, courses of study, examinations, grading, titles, and enrollments in these institutions were not available.

CHAPTER V

Teachers

NUMBER AND CLASSIFICATION OF ECUADOR'S TEACHERS

ACCORDING TO THE MOST RECENT complete statistics available,¹ Ecuador had 6,429 teachers in its schools in 1942. Of these, 4,489 were in State schools, 694 in municipal schools, and 1,246 in private schools. They were classified as follows: 1,316 with degrees or titles from urban normal schools; 113, certificates or titles from rural normal schools; 491, baccalaureates of secondary education; 70, first-class elementary teachers; 81, second class; 2,838, third class; 272, other titles; and 1,248, without titles. "Other titles" includes lawyers; doctors; pharmacists; engineers; diplomaed graduates of the technical schools; and special teachers in the fields of music, art, home economics, minor industries, foreign language, physical education, and manual arts. Late in 1944, teachers without titles were given 6 months to take examinations under the direction of the Ministry to permit them to continue teaching.

In the elementary schools in 1944, as recorded in the Ministry of Public Education,² there were 8,198 teachers: 2,528 State, 365 municipal, and 305 private. Of the total number 45 percent, or 1,439 teachers, held the title of Normalista (graduates of normal schools who had fulfilled the extra requirements and passed the extra examinations for the title). Eighteen percent held no title whatsoever. In addition to these teachers, 3,112 elementary school teachers with various titles were engaged in teaching in urban and rural normal, continuation, agricultural, secondary, and other schools of the Republic, making a grand total of 6,310.

Figures relating to the staffs of the different types of schools in 1944 were not available, but in 1943³ there were 52 teachers in the rural normal schools, 100 in the urban normal schools (colegios normales), 416 in the academic secondary schools (colegios), 45 in the technical schools, 32 in the continuation schools (complementarias), 75 in the schools of fine arts, and 33 in the pedagogical institutes (p. 63).

QUALIFICATIONS AND SALARIES

In general, teachers must be of high moral character, hold the professional title corresponding to the position held, be free of communi-

¹ Estadística y Escalafón. Ministerio de Educación Pública. Quito, Talleres de Educación, 1942. p. 331-332.

² Special report prepared by the chief of the Elementary School Section, December 1944.

³ Estadística y Escalafón. Op. cit., p. 332-333.

cable disease, and have no physical disability detrimental to effective work as teacher. Recognizing the deplorable professional and economic conditions of the nation's teachers, the new Government in 1944 decreed the sum of 3,000,000 sucres for salary increases and public-school construction and equipment. Salaries of less than 400 sucres were to be increased by 25 percent; salaries from 400 to 600 sucres, by 15 percent; and those above 600, by 10 percent. The provisions of this decree were to be effective as of August 1 of that year. It was immediately seen, however, that this action did not provide a satisfactory solution to the problem because of the great inequalities in remuneration and rank without regard to preparation for teaching. Reclassification of the country's teaching personnel was necessary to overcome this situation. Consequently, work was begun on a new law governing the teachers' salary scale (*Ley de Escalafón y Sueldos del Magisterio Nacional*), which was adopted in December 1944.

Under the new law⁴ Ecuador's teachers are grouped according to the degrees or titles held, as follows: (a) Third-class teachers; (b) second-class teacher; (c) rural normal school graduate and first-class teacher; (d) teacher with the baccalaureate of secondary education; (e) urban normal school graduate or bachelor of educational science; and (f) secondary school teacher, a title conferred by the universities, the higher institutes of education, or the Ministry of Public Education. Special titles such as teacher of music, art, or physical education are fitted into these various categories in the light of the amount and level of the training required to obtain them. Those acquired through examination in the Ministry of Labor or in private institutions are regarded as equivalent to third-class teacher; those conferred by lower vocational schools (*escolares profesionales y técnicas*), to second-class teacher; and those granted by the schools of fine arts or by the second cycle of official (public) technical schools, to the baccalaureate of secondary education. Titles acquired in foreign institutions are evaluated by the Minister of Public Education, upon the advice of the Technical Committee of the Ministry.

The new scale and salary schedule provides for the following categories of teachers:

1st category.—Second-class teachers with up to 4 years of service and third-class teachers with up to 8 years of service, 300 sucres a month.

2d category.—First-class teachers and rural normal school graduates with up to 4 years of service, second-class teachers with 4 to 8 years of service, and third-class teachers with 8 to 12 years of service, 330 sucres.

3d category.—Bachelors (teachers with the baccalaureate of secondary education) in fields other than educational science with up to 4 years of service, rural normal school graduates and first-class teachers with 4 to 8 years of service, second-class teachers with 8 to 12 years of service, and third-class teachers with 12 or more years of service, 365 sucres.

⁴*Ley de Escalafón y Sueldos del Magisterio Nacional. Quito, Nov. 18, 1944.*

4th category.—Urban normal school graduates or bachelors in educational science with up to 4 years of service, bachelors in other fields with 4 to 8 years, rural normal school graduates and first-class teachers with 8 to 12 years, and second-class teachers with 12 to 16 years, 400 sucres.

5th category.—Secondary school teachers with up to 4 years of service, normal school graduates or bachelors of education with 4 to 8 years, non-education bachelors with 8 to 12 years, rural normal school graduates and first-class teachers with 12 to 16 years, and second-class teachers with 16 or more years, 440 sucres.

6th category.—Secondary school teachers with 4 to 8 years of service, urban normal school graduates or bachelors in education with 8 to 12 years, noneducation bachelors with 12 to 16 years, and rural normal school graduates and first-class teachers with 16 to 20 years, 485 sucres.

7th category.—Secondary school teachers with 8 to 12 years of service, urban normal school graduates or bachelors in education with 12 to 16 years, noneducation bachelors with 16 to 20 years, and rural normal school graduates and first-class teachers with 20 or more years, 535 sucres.

8th category.—Secondary school teachers with 12 to 16 years of service, urban normal school graduates or bachelors in education with 16 to 20 years, and noneducation bachelors with 20 or more years, 600 sucres.

9th category.—Secondary school teachers with 16 to 20 years of service and urban normal school graduates or bachelors in education with 20 to 24 years, 680 sucres.

10th category.—Secondary school teachers with 20 or more years of service and urban normal school graduates or bachelors in education with 24 or more years, 725 sucres.

Elementary school teachers who hold no title are not included in the new scale but are paid a minimum salary of 250 *sucres* a month. Teachers whose salaries would have been reduced by the provisions of this new law, receive their former salary until by service or acquisition of a higher title they come into a category which carries greater remuneration.

ELEMENTARY SCHOOL TEACHERS

PREPARATION-

For the preparation of teachers for its elementary schools, including kindergartens, Ecuador has 4 normal schools (*colegios normales*), 2 or 3 academic secondary schools which offer specialization in pedagogy in addition to their regular university preparation, and 7 rural normal schools (*escuelas normales rurales*). Article 214 of the Organic Law of Public Education of 1938 reorganized the old urban normal schools in the form of *colegios* of secondary education, with a general culture cycle of 4 years followed by a specialization cycle of 2 years. Administration, organization, admission requirements, staff qualifications, examinations, and other phases of educational activity are all practically identical with those of the regular academic secondary school or *colegio*.

The *colegio normal*, however, provides only teacher training in its second or specialization cycle, and imposes a heavier student load than

regulations provide for the traditional *colegio*. Whereas the latter requires an average of 29 hours a week, the normal school program calls for 32 hours in each of the 6 years of its course. In the first cycle, additional work is required in Spanish, penmanship, music, art and manual training, or home economics, and 1 hour a week is devoted to "orientation in education" in the fourth year. Table 7 gives the plan of studies of the second or teacher-education cycle in the normal schools and the *colegios* which provide for this specialization.

Table 7.—Plan of studies for specialization in educational sciences¹

Subject	Hours a week per school year	
	V	VI
1	2	2
Spanish literature.....	2	2
History and geography of Ecuador.....	2	2
Philosophy.....	2	2
Foreign language (English or French).....	2	2
Educational psychology.....	3	3
Principles of education: new schools.....	3	
History of education.....		2
School hygiene.....		1
Organization, law, and professional ethics.....		2
General methods of teaching.....		3
Methods of teaching Spanish.....	2	
Methods of teaching mathematics.....	2	
Methods of teaching the social sciences.....	2	
Methods of teaching the natural and physical sciences.....	2	
Methods of teaching music and art.....		1
Methods of teaching the graphic and manual arts.....	1	
Methods of teaching domestic and industrial arts.....		1
Methods of teaching physical education.....	1	
Physical education.....	1	1
Practice teaching.....	6	10
Total	32	32

¹ Reglamento Especial y Plan de Estudios de los Colegios Normales. Ministerio de Educación Pública. Quito, Talleres Gráficos de Educación, 1943. p. 79-80.

METHODS

Subject matter is presented in teacher-education classes in much the same manner as in the academic *colegios*. Textbooks are scarce, and despite themselves the instructors are obliged to resort to the lecture, dictation, and recitation procedures, with considerable emphasis on notetaking and memory work on the part of the student. This situation is even more apparent in the education sections of the regular *colegios*, where, following tradition, students who are preparing themselves for university study in biology, mathematics and physics, or philosophy and social sciences regard their teacher-training schoolmates as somewhat inferior in intellectual potentiality. On the other hand, normal school teachers frequently make serious efforts to incorporate modern principles and practices in their instructional

activities. Class discussion and debates, group activities, library assignments, individual reports, and student questions all receive increasing attention. Much of the student's work is of a practical nature, involving initiative and originality as well as individual interest and aptitude.

All students must learn to plan their teaching and make their own teaching materials and devices; and in the special methods courses they are required to relate both theory and practice to the officially established programs for the various grades of the elementary school. The teacher's role in this respect is that of guide and friendly supervisor; but the student is held responsible for his own effectiveness, which is checked in practice teaching. Learning thus takes place through actually doing the things that will have to be done on the real job in later years.

DIPLOMAS AND TITLE

As in the case of the academic secondary school, upon successful completion of the first or general culture cycle, the student receives a certificate or diploma of secondary school studies (diploma de estudios secundarios), which permits entrance to either the second cycle or to a professional or technical school. When the student has passed the final examinations of the second year of the specialization cycle, he requests the Directive Board of the school to declare him ready (apto) for the examinations for the title of teacher-bachelor of educational sciences (profesor-bachiller en ciencias de la educación), accompanying the request with his diploma of secondary studies and the certificates of matriculation and promotion corresponding to the 2 years of second-cycle work. The average grade attained during the 2-year period is computed from these certificates on a scale ranging from 50 to 100 points (p. 36) and the tenth part is taken as representative of the student's achievement, for further averaging with the grades earned in the title examinations, which are assigned on a scale of 6 to 10 points (p. 37).

The title examinations consist of the following: (1) Practice teaching, including the preparation of written lesson plans and the teaching of a 45-minute class in each of the three 2-year divisions of the elementary school; (2) a written examination of approximately 2 hours in one subject each of the first and the second cycle drawn by lot by the student; and (3) an oral test of at least 60 minutes dealing with an aspect of each of the following: Pedagogy, educational psychology, school organization and management, foreign language, and the critique of the practice teaching performed by the student. A different examining board has charge of administering and grading each of these three tests, which are eliminatory in the order given. A minimum grade of 6 is required in each of the three parts of the examina-

tion. All three marks made by a successful candidate are then averaged in with the cycle grade described in the preceding paragraph. The title examinations are administered during the last month of the school year and the first month of the succeeding year. Only two opportunities to pass them are allowed. Following the passing of the oral examination, the title of teacher-bachelor of educational sciences is conferred, the Ministry of Public Education and the Provincial Supervisors of Education are notified, and the new teacher's name is entered on the National Teachers Register as available for employment.

NORMAL SCHOOL TEACHERS

Teachers in the normal schools or in the education sections of academic secondary schools which provide teacher training must hold the title of secondary school teacher (*profesor de educación secundaria*) or of teacher-bachelor of educational sciences. In the latter case they must have had a minimum of 5 years of successful teaching experience at the elementary level, and teachers in annexed or associated practice schools have preference in appointments made. Other requirements are the same as for regular secondary-school teachers. Corresponding to the internal supervisors of the *colegio* (p. 29), and with the same duties, are the teacher-supervisors of the normal school, who must hold the bachelor's degree or title.

RURAL NORMAL SCHOOLS

In 1935, in answer to the need for teachers especially trained for instructing children in rural areas, the first rural normal school was founded in Uyumbicho in the Province of Pichincha. Five more were established in 1936, and by 1938 the number had risen to 11. A decree in 1941, however, called for the gradual closing of all but the Uyumbicho school, on the ground that the number was excessive and adequate materials and equipment were lacking.⁵ The money saved in this way was to be invested in materials and equipment for the continuation and the arts and trades schools. By 1944, 4 of the rural normal schools had ceased to function entirely, 6 were providing only the last 2 of their original 4 years of instruction, and only the Uyumbicho school continued in full operation.

Uyumbicho Rural Normal School.—Efficiently organized and in relatively sound economic condition, the normal school at Uyumbicho is doing a fine job of teacher training for the Ecuadorian uplands. This school, with an enrollment of 133 students, including 15 girls, provides a 1-year preparatory course and 4 years of normal school instruction above the 4-year rural school offering. Academic subjects such as history, geography, language, mathematics, elementary sci-

⁵ *Informe a la Nación. Ministerio de Educación Pública. Quito, Talleres Gráficos de Educación, 1942. p. 42.*

ences, and civics are taught; but the principal emphasis is placed on such portions of these materials as are deemed practical for the needs of the rural and largely Indian populations in which the school's graduates will teach. From the date of its founding this school has served as a laboratory for the study of the needs of the rural uplands population, of the psychopedagogical potentialities of Indian and mestizo youth, of the development of an effective curriculum and of procedures for the implementation of the school's program.

The students, all of whom must be at least 14 years of age, receive dormitory facilities and board, an annual outfit of clothing, and gratuitous instruction. Each student is allotted a small parcel of land to work individually, and various groups cultivate the remainder of the school's 64 hectares (about 178 acres) in more extensive tracts. Manual training is provided in a good-sized carpenter shop, a weaving shop, and a more or less makeshift machine shop. Furniture, school equipment, and agricultural implements are made and repaired; a good grade of hats, baskets, woolen materials, and other woven articles are produced; new buildings are constructed and old ones kept in condition—all by the students, under the direction and guidance of the teachers. The agricultural products of the institution are consumed in the school or sold at moderate prices in the immediate community.

Ten months of class and practical work constitute the school year. A rural school in the town of Uyumbicho and another in Macuchi, both offering the full 6 grades of elementary instruction, provide the normal school with many students and also meet the needs for practice teaching. Since many of the students come from rural schools which provide only 4 years of instruction, a preparatory section is maintained to insure the possession of the necessary background for the regular teacher education offered.

The students in this school are Indian and mestizos, and instruction in the Quechua tongue is a regular part of the school's program. All students live together under regulations which provide equal rights, privileges, and duties. The principal (director), who participated in the organization and establishment of the school in 1935, has selected a staff of teachers who are sensitive to the Indian's problems and truly interested in their solution; as a consequence, cooperation, friendship, and affection characterize the relationships between teachers and students as well as among the students themselves.

The title of Rural Normal School Graduate (Normalista Rural).—Upon completion of the 4-year course at a rural normal school students who pass all their final examinations are required to take a degree or title examination similar to that administered in the urban normal *colegio*. In the rural normal school examination, how-

ever, major emphasis is laid on practical teaching situations in which the problems of the Indian rural population are studied and for which workable educational programs are evolved by the examinees. The oral and practical sections of the test are regarded as of much more significance than the written exercises. Success in this examination entitles the candidate to the diploma of rural normal school graduate or titled rural school teacher, and gives him ranking at the level of the second category in the teachers register (Escalafón). Up to October 1944, the Rural Normal School of Uyumbicho had conferred this title upon 85 of its graduates. Statistics concerning graduates of the other rural normal schools were not available.

SECONDARY SCHOOL TEACHERS

Regular secondary school teachers are appointed by the Minister of Public Education upon nomination of the respective school principal. Appointments are temporary for the first year of service, during which time the work of the new staff member is supervised by the regional supervisors and the directive board of the school. Teachers of first cycle courses must be either regularly titled secondary school teachers (Profesores de educación secundaria) or holders of the baccalaureate degree. For the specialization cycle, they are required to hold a university degree or the professional title which corresponds to the field in which they teach. In addition to the regular teachers there are substitutes (profesores accidentales), who must have the same qualifications as the regulars. These substitute teachers are appointed by the principal on the nomination or proposal of the regular teacher. Foreigners may be contracted as regular teachers for periods ranging from 1 year upward and are subject to the same requirements as Ecuadorians.

Secondary school teachers are expected to cooperate fully in the maintenance of good order and discipline; to attend punctually to all their regular duties in connection with classes, examinations, and other school activities; to conduct their instruction in accordance with official plans, programs, and regulations; to give prepared lectures when called upon by the principal; and to take advantage of every opportunity in their instruction to keep alive the love and devotion of the pupils for their country. The minimum load of weekly classwork has been established as 12 hours; the maximum, 16. Teachers are not permitted to engage in paid tutoring, either of pupils in the school or of those who may wish to prepare themselves to enter the school.

In 1942, the most recent year for which even partial statistics were available, 901 secondary school teaching positions, of which 585 were in the State schools, were filled by 516 teachers. Many of these teachers, although possessors of a degree of some kind, had no legal teach-

ing license. Very few held the title of "secondary school teacher" conferred in the higher institutes of education and letters (p. 68). In a group of 11 large secondary schools, the combined staffs, totaling 536 positions with overlappings, were made up as follows: 133, or 25 percent, *normalistas* or elementary school teachers; 127, or 24 percent, *bachilleres* or holders of the secondary school baccalaureate; 56, or 10 percent, professional men, mostly lawyers; 55, or 10 percent, holders of a special title in physical education, manual arts, needlework, music, or other field; 43, or 8 percent, holders of the legal secondary school teacher's title; 19, or 3 percent, *licenciados* or licentiates of the university; and 103, or 20 percent, no title or degree whatever. In general, these figures and percentages are representative of the situation in all secondary schools in Ecuador.

PREPARATION

Teachers for the nation's secondary schools are prepared in 2 higher institutes of education and letters. One of these institutions is in Guayaquil, where until 1942 it functioned in the building of the Vicente Rocafuerte *Colegio*, providing the first 2 years of the legally prescribed 4-year course for the higher institutes. In 1942 the institute moved into rented quarters of its own and by executive decree was named the José Luis Tamayo Higher Institute of Education and Letters. By 1944 its offering had developed into the full 4-year course.

HIGHER INSTITUTE OF EDUCATION AND LETTERS OF QUITO (INSTITUTO SUPERIOR DE PEDAGOGIA Y LETRAS DE QUITO)

This school is an institution of higher education which, by legislative decree in 1939, replaced the old Faculty of Education and Letters of the Central University. According to its own regulations,* it prepares secondary school teachers, promotes the intensification and broadening of studies related to teacher training, and in general fosters the extension of culture in the Republic. For the accomplishment of these objectives, the higher institute provides specialization work in the following major fields: Philosophy, history and geography, language and literature, exact sciences, and biological sciences. As circumstances warrant, these broad fields may be subdivided and new ones may be added.

Administration.—Under the Ministry of Public Education, administration of the Higher Institute of Education and Letters of Quito is in charge of a General Council of Professors, and Administrative Board, the Rector, and the Vice Rector. The General Council of Pro-

* Reglamento del Instituto Superior de Pedagogía y Letras de Quito. Departamento Técnico. Ministerio de Educación Pública. Quito, Talleres Gráficos de Educación, 1940

fessors, composed of all the principal and associate professors with the Rector or the Vice Rector as chairman, deals with general administrative and internal issues brought to its attention by the Rector. The Administrative Board, made up of the Rector, the Vice Rector, and 8 principal professors designated annually by the general Council, corresponds to the Directive Board of the individual Faculty in the University (p. 76); but being in a comparatively independent institution, it performs many additional functions. It formulates and reforms the plan of studies. It is responsible for the title examinations and the granting of the degree or title. It organizes special courses, lectures, and other cultural offerings. It prepares the Institute's annual budget and checks on general expenditures. It recommends the appointments of new teachers to the Minister of Public Education and also the removal or transfer of instructional and administrative personnel connected with the Institute. And, in justifiable instances, it grants up to 60-day leaves to teachers or other employees.

The Rector of the Higher Institute of Education and Letters must be a native Ecuadorian, at least 30 years of age; must hold a university or a secondary school title, must have had at least 4 years of teaching experience in a university or secondary *colegio*, and must be a recognized authority in his chosen field. The Rector is responsible for the smooth running of the institution in regard to both administrative and instructional aspects. He sees that all laws and other regulations are carried out. He convokes the General Council of Professors for its meetings; appoints and presides over the examining boards; submits all reports to the Minister of Education; and signs all general inventories of the establishment.

Professors.—Teaching in the Higher Institute is carried on by principal or full professors (*principales*), associate professors (*agregados*), and temporary professors (*interinos o accidentales*). Each departmental staff meets during the first 15 days of the school year and designates one of its number to be principal for that year. The duties of this officer correspond to those of a department head in the American college or university. Associate professors teach the subjects and materials which, in agreement with the principal professor, the Rector of the Institute assigns to them. Temporary professors are ordinarily "contracted" teachers whose qualifications and duties vary with the contracts they hold. Principal professors are required to hold a university or higher institute title, to have had at least 4 years of experience in secondary education or the university, and to be recognized as an authority in the field of specialization. The same qualifications hold for the associate professor, except for the experience requirement, which is generally only 2 years and may be waived entirely by the

Minister of Education in the case of men who have received official awards for their contributions to scientific advancement.

The teaching staff of the Higher Institute of Education and Letters in Quito consists of 21 professors, as follows: 10 with the title of secondary school teacher, 5 lawyers, 2 physicians, 2 chemists, 1 engineer, and 1 doctor of mathematics. Several chairs, including those of paleography and mineralogy, are occupied by honorary professors (*profesores ad-honorem*), who serve the Institute without remuneration. All the others teach an average of 8 hours a week each, and in 1944 received identical monthly salaries of 525 sucres.

Admission and fees.—To enter the Higher Institute of Education and Letters the candidate must be at least 20 years of age, hold the title of bachelor, and have completed or been exempted from compulsory military service. Teachers of elementary school or kindergarten, actually in service, must show at least 2 years of successful experience. Matriculation is by the year and may not be in more than one department or field of specialization. The following fees are charged: For registration, 20 sucres a year; for examinations, 30 sucres; and for the degree or title, 50 sucres. An extra fee of 10 sucres is charged for late registration and for each subject in which a repeat examination is necessary.

School year and day.—In Quito, the school year opens between the 1st and the 15th of October and closes between the 20th and 30th of June. In Guayaquil, opening and closing dates are 1st to 15th of April and 20th to 30th of December, respectively. Vacations and holidays are those officially established by the Ministry of Public Education for all the nation's schools. During the first fortnight of the academic year the administrative board of the respective institution determines the daily schedule of classes to be followed. Morning, afternoon, and evening classes are held, according to needs.

Plan of studies.—The 4-year course of studies includes a few subjects in education, psychology, foreign language, and hygiene which are required of all students, regardless of specialization. Otherwise, the studies of the individual student are closely confined to the major field. Table 8 gives the plan of studies for all departments, as adopted in 1943.⁷

The Higher Institute of Education and Letters of Quito from time to time offers special free courses and lecture series for the diffusion of culture. The various professors are required to prepare and deliver lectures or short courses dealing with their respective areas of interest when so directed by the Rector. These activities attract much attention. In 1944, a course on national and international folklore was given. In 1948, a special training course for English teachers was

⁷ *Ibid.*, pp. 19-22.

Table 2.—Plan of studies of the Higher Institute of Education and Letters in Quito, by department

Subject	Hours a week per year, by department																				
	Philosophy				History and geography				Literature and language				Biological science				Exact science				
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
Psychology.....																					
Principles of education.....																					
Educational psychology.....																					
Methods of teaching.....																					
Hygiene.....																					
Foreign language.....																					
Philosophy.....																					
History of philosophy.....																					
Logic.....																					
Ethics.....																					
Sociology.....																					
Theory of knowledge.....																					
Economics.....																					
Experimental psychology.....																					
Metaphysics.....																					
Esthetics.....																					
General history of civilization.....																					
American history.....																					
Universal and human geography.....																					
Geology.....																					
Palaeontology.....																					
Social and political history of Ecuador.....																					
Mapmaking.....																					
Economic geography (especially Ecuador).....																					
History of art.....																					
Astronomical geography.....																					
Ethnology and archeology.....																					
Spanish.....																					
Latin.....																					
Greek.....																					
Spanish literature.....																					
Comparative literature.....																					
Romance philology.....																					
American and national literature.....																					
Historical grammar.....																					

	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
Comparative grammar																				
General and inorganic chemistry																				
Botany																				
Biology																				
Inorganic chemistry																				
Biology and physiology																				
Anatomy																				
Organic chemistry																				
Zoology																				
History and embryology																				
Biological chemistry																				
Child development																				
Experimental physics																				
Plane and solid geometry																				
Algebra																				
Trigonometry																				
Mechanical drawing																				
Mineralogy																				
Descriptive geometry																				
Analytic geometry																				
Industrial chemistry																				
Mathematical physics																				
Total	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	20

attended by 46 teachers in service. The instruction was given by North American specialists in the fields of language teaching and phonetics. Twenty members of the student group held scholarships granted by the Office of the Coordinator of Inter-American Affairs. For the betterment of the Institute's offering in teacher training in general, the opening in 1945 of a secondary *colegio* for practice teaching purposes was planned.

Examinations, grading and titles.—Trimonthly, final promotional, and degree or title examinations are administered as in the *colegios*. Trimonthly and promotional examinations are graded on the 0 to 20 scale, with 10 as the minimum for passing. The year-grade is the total of all averages of subject grades, which combine trimonthly and promotional examination scores, and is expressed as follows: 40 to 50, fair (regular); 51 to 60, good (buena); 61 to 70, very good (muy buena), and 71 to 80, excellent (sobresaliente).

Upon successful termination of the full 4-year course, the student, through the Rector, submits a thesis outline to a tribunal of three professors. The chairman of the tribunal is delegated by the department of the student's major field. A period of at least 3 months is required after the thesis outline is accepted, before the thesis proper may be presented to another tribunal appointed by the Rector. This tribunal consists of the Rector or Vice Rector, two professors of the major field of study, one professor of education, and one professor of the foreign language taken by the student. Acceptance of the finished thesis is followed by an oral examination of at least 1½ hours in duration. Both the thesis and the oral examination are graded on the 1 to 20 scale. Upon success in the examination the Institute confers on the student the title of Secondary School Teacher (Profesor de Educación Secundaria) in his field of specialization.

Enrollment and graduates.—In December 1944 the Higher Institute of Education and Letters in Quito had an enrollment of 119 students. Of this total, 34 were majoring in philosophy; 21, in history and geography; 23, in language and literature; 17, in exact sciences; and 24, in biological sciences. Fifty-three of these students were enrolled in the first year.

Prior to 1944, the majority of graduates of the Higher Institute did not prepare their theses and take the oral examinations required for the degree or title. From 1939 to 1944 the total number of degrees conferred was only 27. As stated earlier in this report (p. 68), only 43 out of a total of 536 teachers in secondary *colegios* actually held the title of secondary school teacher in 1943. At the present time, however, as a result of the passing of the new law governing teachers' ranks and salaries and other evidences of the national government's interest in public education, the picture has changed radi-

cally. Most of the 1944 graduates have chosen to fulfill the final requirements for the secondary school title, and many former students have presented outlines of theses with the intention of improving their status on the National Teachers Register.*

School plant.—The Higher Institute of Education and Letters of Quito occupies a large two-story building constructed around a patio in the fashion characteristic of educational architecture in Latin America. Opening onto the wide inside porch-corridor that faces the patio on all sides are 12 large, well-equipped and well-illuminated classrooms, 3 laboratories, the library, an immense entertainment salon, and the administrative offices. About 50 students daily consult the library, which contains approximately 5,000 volumes and is open from 8 a. m. to 12 m. and from 3 to 7 p. m. The biology, botany, and chemistry laboratories are barely satisfactorily equipped, but it is hoped that this circumstance will be improved as soon as purchases abroad can be negotiated. Because the Institute lacks a physics laboratory, most of the practical work in that field is carried on in the University.

TECHNICAL AND PROFESSIONAL SCHOOL TEACHERS

Teachers in the technical, professional, industrial, business, and other special schools are legally required to hold titles corresponding to the position held and the educational level of the instruction provided. Actually, however, largely because of the great lack of qualified individuals resulting from the old inequitable teacher rank and salary law, and because of the low esteem in which nonacademic pursuits have been held, many of the teachers in these schools have not been obliged to fulfill the legal requirements. Nor has there been any incentive to invest their time and meager money in self-improvement. With the coming into power of the new People's Government and the adoption late in 1944 of a more equitable salary scale for teachers, great enthusiasm has developed for the attainment of officially recognized titles and the higher salaries which go with them.

In all these schools, teachers of the regular academic subjects usually hold the title of elementary school teacher (*normalista*) or of bachelor (*bachiller*) in one of the specialization fields of the secondary *colegio*; but many lawyers, pharmacists, chemists, accountants, and even physicians are also engaged in this work. Subjects dealing with theoretical materials are taught ordinarily by men and women who have graduated from technical or industrial schools with the title of expert (*perito*) or special teacher (*maestro* or *profesor especial*) in a particular craft or trade, such as: mechanics (*mecánica*), graphic arts

* Special report prepared for the author by the Secretary of the Higher Institute of Education and Letters of Quito. December 1944.

(artes gráficas), dressmaking (modistería), embroidery (bordado), housekeeping (labores), and numerous others. Many of the teachers of these crafts or trades, however, and most of the shop heads (maestros de taller), hold no official title. Directors or principals of the technical and other types of schools in the vocational field are almost without exception normal school graduates with the title of *normalista*. An outstanding exception was the director of Quito's State Central Technical School, who held no title whatever: in this case, in compliance with the law, the subdirector held the title.

Under the new law governing rank and salary of teachers in Ecuador (p. 56), all these teachers will be allowed to continue in their present positions and their salaries will not be reduced. New appointments, however, must be made in accordance with the new law—a provision which serves as an additional stimulus to the attainment of the legal qualifications for teaching positions.

TEACHER IMPROVEMENT

In 1936, when more than half of the nation's elementary school teachers held no officially recognized title or teaching license, a supreme decree provided that individuals actually engaged in teaching could acquire the title of third-grade teacher (preceptor de tercer grado) by showing on the supervisor's report filed with the Ministry a 3-year average rating of at least "good" and by passing an examination prepared under the direction of the National Ministry. This privilege was granted alike to teachers who had only elementary education and to those who had completed any number of years of the secondary *colegio*—the experience requirement being waived in the case of persons who had completed the first cycle of secondary schooling. Preparation for these examinations, which lasted a maximum of 90 minutes and dealt with questions in Spanish, arithmetic, geometry, geography, history, natural science, and civics,* amounted to an individualized form of teacher improvement.

School Centers for Educational Study, commonly known as Educational Centers (Centros Pedagógicos), have functioned in Quito and other parts of the country since the middle 20's. These organizations had as their objectives the development of professional bonds among teachers, the improvement of the individual teacher's educational background, and the general advancement of education. Meetings were held fortnightly in the pursuit of these objectives. In 1936, the Government gave official sanction to these groups of the nation's teachers, and the Ministry of Public Education issued a Resolution²⁰ governing

* Marietta Picco de Aillón y Carlos Aillón Tamayo. *Organización y Prácticas Escolares*. Quito, Talleres de Educación, 1939, p. 127.

²⁰ Reglamento de Organización y Funcionamiento de Centros Pedagógicos de la República. Quito, Julio 31 de 1936.

their organization and functioning. The aims were expressed as follows: (1) stimulate in-service improvement of rural teachers; (2) unify effort; (3) determine the type of education most needed by the respective sections of the country, according to existing conditions; (4) study the findings of educational experimentation; (5) foster cooperation among teachers; and (6) encourage group activities among the pupils.

COURSES IN TEACHER IMPROVEMENT

Each year special courses are provided by the Ministry in the capital and in the various provinces for the improvement of teachers. Some of these offerings are designed to help the rural school teacher; some, the urban elementary teacher; some, the special teacher; and some, the secondary school (colegio) teacher. Most of them are held in vacation time and planned so as to give the successful teacher-student the official title corresponding to the position he holds. In the great majority of cases the Government—national, provincial, or municipal—provides free tuition and also defrays the students' expenses during the course.

NATIONAL TEACHERS' UNION (SINDICATO NACIONAL DE EDUCADORES)

By supreme decree of April 13, 1938, answering a petition to the Ministry of Public Education for the compulsory unionization of Ecuador's teachers—a resolution to this effect having been taken in Teachers' Conferences in 1935 and in 1937—the National Teachers' Union was organized. The decreed aims of this body are the following: (1) To work for the solidarity and defense of the nation's teachers; (2) to strive for the improvement of the child, the school, and the teacher; (3) to intensify the nation's cultural progress; (4) to give a modern orientation to Ecuadoran culture; (5) to unify effort, stimulate initiative, develop the feeling of responsibility and of consciousness of kind; (6) to raise the economic level of the members, through the establishment of cooperative undertakings, among other means; and (7) to maintain the systematic training of the membership as a fundamental basis of educational activity.

Membership in the National Teachers' Union includes all elementary and special teachers of the Republic actually in the service of the State or of the municipalities, and those teachers of private institutions who may desire to join; all professionals employed in secondary or other types of schools, in the Ministries of Education, Social Welfare, or other Government agencies; and all retired teachers who may desire membership.

A National Executive Committee, composed of a representative of each provincial branch, has its headquarters in Quito. In each provin-

cial capital there is a provincial committee made up of two representatives from each cantonal branch. Each canton has a committee, whose membership is determined by the teachers of the canton. All representatives must be bona fide members of the Union.

Support for the organization comes from membership fees, State and municipal funds, and institutional and private donations. The sum of 35,000 sucres was originally allotted from the national emergency fund to put the National Teachers' Union on a working basis:

As soon as the country returned to normal after the political upheaval which ended in May 1944, the National Teachers' Union held a congress that was attended by members from the remote corners of the Republic. New educational organization, curricula, and procedures were outlined and studied, and the groundwork for a sweeping reform in the nation's schools was carefully laid. Since this congress, in which the teachers clearly showed their determination to labor for the advancement of their country, the National Teachers' Union has been working unremittingly and successfully to bring their careful planning to actual realization.²¹

²¹ Cuadernos Pedagógicos. Publicación de la Sociedad de Profesores Grupo Cuadernos Pedagógicos, Número 24. Quito, Noviembre de 1944. Notas editoriales.

CHAPTER VI

Higher Education

HIGHER EDUCATION in Ecuador is provided by the Central University of Quito, the Universities of Cuenca and Guayaquil, the University School of Loja, and the two Higher Institutes of Education and Letters in Quito and Guayaquil. Other institutions of higher education may be created by law as the need for them arises. In regard to technical functions and administration the universities are legally autonomous. Article 6 of the Law of Higher Education,¹ however, prohibits the use of the name of the institutions in connection with political propaganda.

Economic autonomy is planned to come gradually through enabling legislation and appropriations. In the meantime, the State includes appropriations for the various institutions of higher education in the national budget. All other income derives from student fees, which are identical in all institutions; from the rent of university property; from sources such as industrial facilities; and through contributions, donations, and bequests. Without the specific authorization of the Minister of Public Education, the universities and the higher institutes of education may not sell, exchange, or mortgage their properties. All balances on hand at the close of the academic year are added to the general endowment of the respective institution.

Table 9 presents expenditures of Ecuadorian universities during 1943,² the most recent year for which accurate figures were available.

Table 9.—University expenditures in 1943

Institution	Salaries and administration	Laboratories and libraries	Buildings	Other	Total
1	2	3	4	5	6
	<i>Sucres</i>	<i>Sucres</i>	<i>Sucres</i>	<i>Sucres</i>	<i>Sucres</i>
Central University of Quito.....	1,337,433.00	67,514.50	14,115.09	457,868.92	1,876,932.71
University of Cuenca.....	481,685.39	5,116.15	75,693.83	280,979.02	843,474.38
University of Guayaquil.....	724,834.71	86,089.74	23,862.50	121,298.10	952,222.55
Loja Law School.....	73,185.00	4,023.75		133,187.46	234,296.71
Total.....	2,617,138.70	162,744.14	113,672.01	993,333.50	3,886,938.35

¹ Leyes Orgánicas de Educación Primaria, Secundaria y Superior de la República del Ecuador. Quito, Talleres de Educación, 1943. (Ley de Educación Superior, con reformas introducidas desde 1938 hasta 1942.)

² Informe que el Controlador General de la Nación presenta al Sr. Presidente de la República y a la Honorable Asamblea Constituyente, Julio de 1943 a Junio de 1944. Quito, Talleres Gráficos del Ministerio de Economía, p. 61.

- According to the Organic Law of Higher Education the universities have uniform requirements in regard to internal regulations, plans of study, and minimum individual course content. When necessary or advisable, they must establish technical and administrative ties with the higher institutes and among their own various schools for the most effective utilization of professors, laboratories, and other educational facilities involved in the higher education program.

OBJECTIVES OF HIGHER EDUCATION

Ecuador's universities and institutes of higher education aim at national progress through the enrichment of culture in general, through the democratization of university teachings, and through the collaboration of State and private institutions in the study of the country's social and economic problems, and the coordination of these two systems in the orientation of a national consciousness divorced from party politics. Through scientific study and investigation, they work for the advancement of international research, for the development of the nation's natural resources, and for the biological conservation of human and natural resources of the Republic. To these ends they engage in the training of professional workers and the legal protection of the various professions.

ADMINISTRATION

Under the provisions of the 1938 Organic Law of Higher Education,³ which was in process of revision at the time this study was made (1944),⁴ the highest authority in university education is the Minister of Public Education. The Minister is authorized to ratify the statutes of all institutions of higher learning, to approve all budgets, and to decree the reorganization or the closure of any institution not functioning according to law. He gives legality to professorial appointments. Either personally or through a representative, he is a member of each university council, with power to make the final decision in questions concerning university policy.

SUPERIOR UNIVERSITY COUNCIL (CONSEJO SUPERIOR UNIVERSITARIO)

Among the first acts of a committee, which was convened in 1944 for the reform of the Law of Higher Education, was the creation of a Superior University Council, which had as its main objective the coordination of those aspects of university activity that are common to all of Ecuador's institutions of higher learning. The degree of autonomy and the specific attributes of the individual institutions,

³ Op. cit., Art. 20.

⁴ The new Political Constitution of 1945 made the universities autonomous. Immediately on its adoption work was begun on a new Organic Law of Higher Education.

as determined by their respective environments and offerings, however, are not to be interfered with in any way.

THE RECTOR

In each university the administrative head and legal representative is the rector, who must be a native Ecuadoran, at least 35 years of age, and the holder of a university title. Elected by majority vote of the University Assembly, the rector performs practically the same functions as his counterpart, the university president in the United States. He directs and supervises the various activities of the university and is responsible for the fulfillment of the laws and regulations appertaining thereto. In addition to his numerous other duties and obligations, he is required by law to teach a university subject. At the close of the academic year he submits a detailed report of university activity to the Minister of Public Education.

UNIVERSITY COUNCIL (CONSEJO UNIVERSITARIO)

The University Council, characteristic of Latin American institutions of higher learning, is composed of the rector, the vice rector, the deans of the faculties, the Minister of Education, a professor elected by the University Assembly, and one native student from each faculty elected from among the members of the last 2 years of study. Within the provisions of the Law of Higher Education, this body formulates the statutes by which the university concerned is governed, approves the regulations and study plans proposed for the different faculties and schools, establishes general rules in connection with internal administration and instruction, and authorizes the creation or the suppression of course offerings and even of faculties and other dependencies of the institution. It nominates new members of the staff, removes unsatisfactory teachers, grants leaves and scholarships, regulates student and professor exchange within the respective university and with other institutions, and generally promotes the advancement of culture and science throughout the Republic. It regulates the revalidation of foreign study and, at the proposal of the faculty concerned, confers the title of *Doctor Honoris Causa* upon deserving native or foreign scholars. Finally, it prepares the annual budget and authorizes all expenditures.

UNIVERSITY ASSEMBLY (ASAMBLEA UNIVERSITARIA)

The combined faculties of a university form its University Assembly, which for the transaction of business requires the attendance of two-thirds of all members. This body, corresponding to the *Claustro Pleno* in some other Latin American universities, elects the rector and vice rector and determines the course of action to be pursued in the event of their resignations. It also deals with matters which seriously affect the running of the university. Its sessions are called usually

3 days in advance by the University Council, which states the object of the meeting.

FACULTY COUNCIL (JUNTA DE FACULTAD), DIRECTIVE BOARD (CONSEJO DIRECTIVO DE FACULTAD) AND DEAN

Each faculty is governed by a Faculty Council, a Directive Board, and a dean. The Faculty Council is composed of the honorary, principal, and associate professors and a number of Ecuadorian students equal to one-third the number of professors in the faculty. The dean serves as chairman. Among the duties of the Faculty Council are the election of the dean and of the assistant dean, the election of the professors and the student for membership on the Directive Board, the formulation of internal regulations (Reglamento interno) for the government of the faculty and of proposals to the University Council of measures conducive to the improvement of the university or the faculty concerned.

Consisting of the dean, as chairman, the assistant dean, two professors, and one of the students on the Faculty Council, the Directive Board formulates the study plans and daily programs; regulates extra courses and university extension work; approves or modifies the course outlines submitted by the professors at the beginning of the academic year; organizes the practical activities and the various seminar offerings; determines the qualifications and duties of the associate professors; names the examination committees; and handles all requests with reference to enrollment, examinations, degrees, and titles. The University Council ratifies all regulations proposed by the Faculty Directive Board.

The dean is the administrative head and the representative of the faculty concerned, and is required by law to be a principal professor actually teaching in the University. He is elected by a majority vote of the Faculty Council for a 2-year period and is eligible to reelection. The dean is a member of the University Council and calls and presides over the meetings of the Faculty Council and the Directive Board. It is the duty of the dean to see that all regulations, statutes, and laws are followed and that the teaching, as well as the plans and programs of study of the faculty, conform to university law. He directs the publications of the faculty, checks expenditures, reports monthly to the rector on the progress of faculty activities, and serves as director of the school in which he teaches.

PROFESSORS

In Ecuador's universities there are five kinds of teachers: honorary, principal, associate, free, and temporary. Honorary professors are men with outstanding reputations in science, letters, or other fields.

who at the proposal of the faculty concerned have been nominated by the University Council. These honorary professors generally lecture without compensation other than the prestige attached to university teaching.

Principal, associate, and temporary professors are also appointed by the University Council, from a panel of names submitted by the respective Faculty. These appointments are for 4 years and may be extended. To be included in the panel of principal professors, the candidate must hold a professional title acquired at least 2 years before, and show competence in his field through written works or studies and teaching experience in the university. To be included in the panel for associate professors the same requirements obtain, except that the title may have been acquired only 1 year before. Temporary professors are employed for part-time instruction in special fields, and, as in the case of professors of free courses, their qualifications vary according to the nature and length of the course to be taught. In any case, the necessary classroom, laboratory, and other facilities are placed at their service for the duration of the course.

Only with the approval of the University Council may another public office be held simultaneously with a university professorship. In such cases, the University Council determines the salary to be paid for teaching—the maximum being 50 percent of the regular university salary. At the request of the Minister of Public Education, the rector of the university, or the Directive Board of a Faculty, principal, associate, and temporary professors may be removed from their posts by the University Council for duly substantiated deficiencies. After each 5 years of teaching service the university professor enjoys the legal right to not more than a year of foreign study, during which time the institution pays at least the regular salary and 50 percent of the traveling costs.

Professional men—lawyers, physicians, engineers, and the like—who desire to become associate professors in the university, must submit their applications to the respective faculty, setting forth their desire and enclosing the documents which substantiate their claim to competence. Acceptable applicants are then included in the panel prepared for filling the vacancy. The great majority of Ecuador's university professors are professional men who devote only a small proportion of their time to teaching, but who bring to their classes the realities of everyday experience.

ACADEMIC YEAR AND DAY

In the highlands, classes begin in October and continue, with the legally established holidays excepted, until July. In Guayaquil, the course runs from April to January. Lectures and laboratory or other

practical activities extend from 7 a. m. to 6 or 7 p. m. Some special lectures, meetings, and entertainments are held in the later evening.

LIBRARY AND LABORATORY FACILITIES

Each institution of higher learning has a fair-sized central or main library of technical, historical, and literary volumes, supplemented by faculty and school libraries. The Central University of Quito has the most extensive collection, numbering well over 50,000 volumes. In addition, students in the capital city have the facilities of the National Library, with more than 110,000 volumes. The laboratories, in general, are adequate to the needs; but there are instances in which there is a lack of essential apparatus, due partly to insufficient funds, partly to wartime conditions, and partly to the lack of emphasis on this phase of instruction.

ENTRANCE REQUIREMENTS

For admission to university study in Ecuador, the applicant must be at least 18 years of age, hold the degree of bachelor from a secondary school, have completed or be exempt from compulsory military service, and pass an entrance examination of scholastic aptitude. Graduates of normal schools, with the title of *normalista* or elementary school teacher, may enter the university for study leading to the title of secondary school teacher (*profesor de enseñanza secundaria y normal*). In January 1945, the Higher Institute of Education and Letters, which formerly had been a university faculty and later a university school, was again brought under the direction of the Central University of Quito, with the exclusive aim of preparing teaching personnel for the academic secondary schools of the country. At the same time the possibility of permitting normal school graduates to matriculate in all university faculties was under favorable consideration. Students graduated by secondary *colegios* with the title of business experts (*peritos comerciales*) are granted admission to university Faculties of Economic Sciences without the bachelor's degree.

PREPARATORY COURSES

As a guarantee of better-prepared students and at the same time to provide a smoother transition from secondary to university study, the University Council of the Central University authorized the establishment of 1-year preparatory courses in the various schools of the university. Admission to these courses is on the same basis as that established for the university proper, the students who fail to pass the entrance examination being required to take the preparatory course. Starting with the year 1945-46, both the entrance examination and the preparatory courses will be discontinued.

ADMISSION OF FOREIGN STUDIES

Students from countries with which Ecuador has negotiated reciprocal agreements⁴ in regard to examinations and degrees, are required to proceed as follows to obtain admission to an Ecuadorian university: (1) Apply to the dean of the appropriate faculty, giving full name, age, place of birth, nationality, full names of mother and father, and faculty or school to which admission is desired; (2) enclose with the application all diplomas and other documents showing previous education, birth certificate, and a legal passport; and (3) present evidence to the effect that the studies pursued, examinations taken, and degrees or titles held are equivalent to those required normally for admission to the Ecuadorian university. Examinations must be passed in all subjects included in the Ecuadorian requirements but not studied previously by the foreign student.

Students from nonagreement countries who engage in university study in Ecuador are granted admission on the reciprocity basis, and in the absence of precedent, they are required to comply with the regulations established for Ecuadorians. An Ecuadorian student who obtained his baccalaureate of secondary education in a foreign country is required to submit practically the same sort of documentation as a foreign student.

FEES

A registration fee and an examination fee, each of 30 sucres, are charged annually. Late registration costs 50 sucres, and repeat or special examinations, 15 sucres for each subject of study. The laboratory fee is 30 sucres, except for chemistry, which is 45. There is also a 10-sucro physical education fee. Other fees are: For the title of licentiate, 100 sucres; for the doctorate or engineering degree, 300; and for obstetrician and for stenographer-typist, 50. Transfer students from other universities pay a fee of 50 sucres. Foreign students' fees are three times those paid by Ecuadorians. The University Council of the respective institution may exempt a student in financial need from payment of all or any part of the regular university fees.

SCHOLARSHIPS

The State annually grants a number of scholarships, varying with the demand and other conditions, for university study in the Republic or abroad. Candidates for these grants must be excellent students whose economic status would otherwise prevent their receiving advanced professional instruction. For the selection of the successful candidates, the respective university holds competitive examinations, admission to which requires the baccalaureate of secondary education,

⁴Tratados Internacionales con el Ecuador. Universidad Central, Quito, Imprenta de la Universidad Central, 1932. pp. 67-70.

submission of the student's scholastic record, various notarized proofs of his economic status, birth and medical certificates, and a statement of the number of brothers and sisters who are dependent upon the same father, mother, or legal guardian as the applicant. A scholarship holder is required to post a bond which is forfeited if he fails in a given year's work, drops out of the university, or refuses in the event that his services are needed, to engage in Government employment, until the amount of the scholarship has been repaid. For scholarships in a foreign country, an additional examination is administered in the spoken and written language of the country to which the student wishes to go.

ENROLLMENTS AND GRADUATES

In 1942, the most recent year for which complete statistics were available,⁵ the four universities of the Republic enrolled a total of 1,885 students. The Central University of Quito had 874; the University of Guayaquil, 590; the University of Cuenca, 347; and the Law School in Loja, 174. Of the total enrollment, 210 were women and 1,675 were men. The combined teaching staffs totaled 225 professors. There were in addition 178 administrative officers and employees—1 for each 10.6 students. Enrollments in the Central University of Quito in 1943-44 were 1,160, distributed as follows: Law, 408; medicine, 426; science, 326. There were 1,042 men and 118 women; 1,056 were nationals and 104, foreigners.

During the 6 years from 1937 to 1942, inclusive, the four Ecuadorian universities graduated a total of 524 students, 400 of whom took their degrees in law or medicine. Two hundred and twenty-six were lawyers; 174, physicians; 43, dentists; 27, civil engineers; 16, agricultural engineers; 31, pharmacists, and 7, obstetric nurses.

CENTRAL UNIVERSITY OF QUITO

The Central University of Quito has a Faculty of Law and Social Science (Facultad de Jurisprudencia y Ciencias Sociales), with Schools of Law and of Economics; a Faculty of Medicine (Facultad de Ciencias Médicas), with Schools of Medicine and Surgery, of Dentistry, and of Nursing, and an Institute of Anatomy; and a Faculty of Mathematical, Physical, and Biological Sciences (Facultad de Ciencias Matemáticas, Físicas, y Biológicas), with Schools of Engineering, of Architecture, of Chemistry and Pharmacy, and of Agriculture. Approximately 1,000 students were enrolled in these three faculties during the year 1945. With the return of the Higher Institute of Education and Letters in 1945, the former Faculty of Philos-

⁵ Estadística y Escalaçon. Ministerio de Educación Pública. Quito, Talleres Gráficos de Educación, 1942. p. 327.

ophy and Letters (or of Education and Letters) is expected to be reestablished.

In 1943, the first School of Journalism in Ecuador was established at the University. In 1944, it had 44 students in the preparatory section and 18 in the first year of the regular 3-year course.

Aside from the regular academic activity, the Central University of Quito is making a singular contribution to the nation's progress through its extension work, which was inaugurated in 1940. Access to this type of instruction is granted free to anyone who desires it. For any course for which there are as many as 20 applicants a professor is provided by the university. Registration for 1945 totaled 510 students in the following subjects: Spanish, bookkeeping, commercial correspondence, mechanical drawing, practical electricity, electrotechnics, nursing and first aid, French, English, construction materials, combustion engines, journalism, and stenography. There are no entrance requirements other than completion of elementary education, except in the case of journalism, for which the baccalaureate of secondary education is necessary.

As a result of a strong demand, a School of Minor Industries was opened early in 1945. Actual practical work and laboratory observations are emphasized in the instruction provided in this new school, which gives instruction in 12 different minor industries. Consultation service is also offered for industries and trades.

PLANS OF STUDY

The course provisions of each faculty and school of the universities are such that a student of one institution may transfer to another without loss of credit. Electives are few. Practical activities in laboratories and elsewhere are being increasingly emphasized throughout all university study.

In the School of Architecture of the Central University of Quito, for example, the 5-year plan of studies^a is stated in problems and exercises, rather than in hours a week. Thus, the number of exercises for each of the various subjects of the first year are: Refresher work in elementary and higher algebra, 20; plane geometry and trigonometry, 20; differential calculus, 15; plane analytic geometry, 15; geometrical and wash drawing, 100; ornamental drawing and water color, 5; descriptive geometry, 30; and translations in French or English, 15.

Throughout the next 3 years this practice continues, as shown by the following subjects and corresponding number of exercises: Second year—integral calculus, 30; analytic geometry (solid), 20; mathematical physics, 20; chemistry for engineers, 8; drawing, perspective,

^aPlan de Estudios de la Escuela de Arquitectura de la Facultad de Ciencias de la Universidad Central. Quito, Noviembre de 1943.

shading and washing, 20; ornamental plastics, 15; and French or English, 15. Third year—rational mechanics, 15; strength of materials, 30; graphical statics, 20; topography and topographical drawing, 12; elements of architecture, 30; history of art, 10. Fourth year—industrial or applied mechanics, 20; reinforced concrete, 10; architecture II and III, 6; urbanization and city planning, 10; civil constructions, 20.

In the last or fifth year the work of the student consists largely of projects and reports: Architecture IV (public buildings), 8 projects; civil construction (heating, ventilation, sanitary installations, room arrangement, etc.), 8 projects; urban legislation (labor laws, municipal ordinances, etc.), 2 reports; and construction economics, 4 reports.

The School of Nursing of the Medical Faculty also makes definite and specific provision for practical activities.¹ In the first year of the 3-year course, anatomy, physics, chemistry, and deontology are each studied 1 hour a week and nursing principles and Spanish, each 2 hours. In addition, the student makes daily visits to patients in the hospital in which the school is located, attends and bathes designated patients, administers medicine, and carries out the orders of the physician. Second-year students study physiology, clinical work, therapeutics and pharmacy, and kinesitherapy 1 hour a week each and hygiene and sanitation and nursing principles, 2 hours. In this year the practical activities consist of hospital visits, solution of problems requiring professional initiative, collection and preparation of materials for the clinical laboratory, preparation of diets, and practice in massaging. In the third year, clinical surgery, contagious diseases, pediatrics, dietetics, and bacteriology and parasitology are each studied 1 hour a week and principles of nursing, 2 hours. Practical activities include preparation of patients for operations, giving the anesthetic, assistance during the operation, postoperative care, a daily written report to the physician, and between times, the care of child patients.

The plans of study of the Schools of Medicine, Engineering, Chemistry and Pharmacy, Agriculture, Law, and Economics, respectively, in the Central University of Quito which sets the pattern for the other universities of the Republic, are given in the following tables:

¹ Escuela de Enfermeras: Reglamento General, Reglamento Interno, y Plan de Estudios. Universidad Central. Quito, Imprenta de la Universidad, 1942. pp 9-10.

Table 10.—Plan of studies for the School of Medicine, Faculty of Medical Sciences

Subject	Hours a week per year							
	Preparatory	I	II	III	IV	V	VI	VII
1	2	3	4	5	6	7	8	9
Medical physics.....	1	---	---	---	---	---	---	---
Inorganic chemistry.....	4	---	---	---	---	---	---	---
Botany.....	4	---	---	---	---	---	---	---
General and descriptive anatomy (dissection).....	---	3	6	---	---	---	---	---
Organic chemistry.....	---	3	---	---	---	---	---	---
Normal histology.....	---	2	---	---	---	---	---	---
Biology.....	---	2	---	---	---	---	---	---
Parasitology.....	---	---	3	3	---	---	---	---
Biological chemistry.....	---	---	3	---	---	---	---	---
Hospital practice.....	---	---	12	---	---	---	---	---
Bacteriology.....	---	---	---	3	---	---	---	---
Physiology.....	---	---	---	---	---	---	---	---
Topographical anatomy.....	---	---	---	---	---	---	---	---
Embryology.....	---	---	---	---	---	---	---	---
Internal pathology.....	---	---	---	---	---	---	---	---
External pathology.....	---	---	---	---	7½	---	---	---
Anatomy and pathological histology.....	---	---	---	---	3	---	---	---
General pathology.....	---	---	---	---	3	---	---	---
Ophthalmology and otorhinolaryngology.....	---	---	---	---	4	---	---	---
Propaedeutic clinic and semiology.....	---	---	---	---	---	3	---	---
Therapeutics.....	---	---	---	---	---	6	---	---
Operative medicine.....	---	---	---	---	---	2	---	---
Clinical/pediatrics.....	---	---	---	---	---	---	3	---
Psychiatric and neurological clinic.....	---	---	---	---	---	---	4	---
Electroradiology and physiotherapy.....	---	---	---	---	---	---	2	---
Medical clinic.....	---	---	---	---	---	---	6	---
Surgical clinic.....	---	---	---	---	---	---	3	---
Endocrinology, dietetics, and nutrition.....	---	---	---	---	---	---	3	---
Hygiene and phthisiology.....	---	---	---	---	---	---	---	3
Dermatology and syphilography.....	---	---	---	---	---	---	---	3
Legal medicine and deontology.....	---	---	---	---	---	---	---	3
Gynecological clinic.....	---	---	---	---	---	---	---	3
Urological and venerological clinic.....	---	---	---	---	---	---	---	3
Obstetrical clinic.....	---	---	---	---	---	---	---	3
Tropical medicine.....	---	---	---	---	---	---	---	3
Children's surgical clinic.....	---	---	---	---	---	---	---	2

Table 11.—Plan of studies for the School of Engineering, Faculty of Mathematical, Physical, and Biological Sciences

Subject	Hours a week per year						
	Preparatory	I	II	III	IV	V	VI
	1	2	4	5	6	7	8
Arithmetic.....	1	.....	.....	.....	.....	.....	.....
Trigonometry.....	1	.....	.....	.....	.....	.....	.....
Geometry.....	3	.....	.....	.....	.....	.....	.....
Algebra.....	3	.....	.....	.....	.....	.....	.....
Physics.....	3	.....	.....	1	.....	.....	.....
Chemistry.....	4	.....	.....	.....	.....	.....	.....
English.....	2	2	2	.....	.....	.....	.....
French.....	2	2	2	.....	.....	.....	.....
Plane analytic geometry.....	.....	2	.....	.....	.....	.....	.....
Differential calculus.....	.....	3	.....	.....	.....	.....	.....
Petrography.....	.....	2	.....	.....	.....	.....	.....
Geology.....	.....	3	2	.....	.....	.....	.....
Descriptive geometry.....	.....	1	2	.....	.....	.....	.....
Mechanical drawing.....	.....	1	2	1	.....	.....	.....
Integral calculus.....	.....	.....	2	.....	.....	.....	.....
Solid analytic geometry.....	.....	.....	2	.....	.....	.....	.....
Rational mechanics.....	.....	.....	2	1	.....	.....	.....
Industrial chemistry for engineers.....	.....	.....	2	.....	.....	.....	.....
Strength of materials.....	.....	.....	.....	7	.....	.....	.....
Graphical statics.....	.....	.....	.....	2	.....	.....	.....
Topography.....	.....	.....	.....	10	4	.....	.....
Astronomy and spherical trigonometry.....	.....	.....	.....	11	.....	.....	.....
Architecture.....	.....	.....	.....	3	2	2	3
Electrotechnics.....	.....	.....	.....	.....	4	4	.....
Hydraulics.....	.....	.....	.....	.....	3	.....	.....
Reinforced concrete.....	.....	.....	.....	.....	3	.....	.....
Geodesy.....	.....	.....	.....	.....	2	.....	.....
Masonry.....	.....	.....	.....	.....	.....	2	.....
Theory of structures.....	.....	.....	.....	.....	.....	2	.....
Highways.....	.....	.....	.....	.....	.....	4	2
Industrial economics.....	.....	.....	.....	.....	.....	.....	1
Sanitary engineering.....	.....	.....	.....	.....	.....	.....	3
Stone and concrete bridges.....	.....	.....	.....	.....	.....	.....	3
Wood and metal structures.....	.....	.....	.....	.....	.....	.....	2
Industrial mechanics and thermodynamics.....	.....	.....	.....	.....	.....	.....	5 1/2

Table 12.—Plan of studies for the School of Chemistry and Pharmacy, Faculty of Mathematical, Physical, and Biological Sciences

Subject	Hours a week per year				
	I	II	III	IV	V
I	3	3	4	5	6
Inorganic chemistry—theory and practice	4½				
Qualitative, inorganic analytical chemistry—theory	4				
Qualitative, inorganic analytical chemistry—practice	12				
General botany, theory	3				
General botany, practice	3				
Physics applied to chemistry and pharmacy	2				
Mathematics applied to chemistry and pharmacy	2				
Organic chemistry		3	2		
Quantitative, analytical chemistry—theory		2			
Quantitative, analytical chemistry—practice		12	2		
Botany applied to pharmacy—theory		2			
Botany applied to pharmacy—practice		3			
Survey of organic species			2	2	
Inorganic preparations			1		
Theory of volumes			3		
Pharmacognosy			4		
Organic preparations				1	
Pharmacy				2½	
Biological chemistry				2	
Practical volumetry				1	
Bacteriology				3	
Galenic pharmacy					2
Bromatology					2
Toxicology and legal chemistry					2
Hygiene					2
Legal medicine and deontology					2
French	2	2			

Table 13.—Plan of studies for the School of Agriculture, Faculty of Mathematical, Physical, and Biological Sciences

Subject ¹	Hours a week per year									
	I		II		III		IV		V	
	Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice
1	2	3	4	5	6	7	8	9	10	11
Agricultural botany.....	2	2	1	...	...	...	...	...	...	...
Agricultural zoology.....	2	2	...	...	...	...	...	...	...	...
Chemistry applied to agriculture.....	3	...	...	...	...	...	...	...	...	...
Geology.....	2	...	...	...	...	...	...	...	...	...
Algebra and geometry.....	4	...	...	...	...	...	...	...	...	...
Drawing.....	2	2	...	2	...	...	...	...	...	...
Meteorology.....	3	...	...	...	...	...	...	...	...	...
Farming implements.....	2	1	...	...	...	...	...	...	...	...
Climatology and agricultural geography.....	2	...	...	...	...	...	...	...	...	...
Anatomy and exterior of domestic animals.....	...	...	2	...	...	...	...	...	...	...
Organic chemistry.....	...	...	3	...	...	...	...	...	...	...
General agriculture and horticulture (temperate).....	...	...	3	1	...	...	...	...	...	...
Agricultural microbiology.....	...	...	3	...	...	...	...	...	...	...
Topography.....	...	...	3	...	...	...	...	...	...	...
Drainage.....	...	...	2	...	...	...	...	...	...	...
Farming motors.....	...	...	2	...	...	...	...	...	...	...
Qualitative analytical chemistry.....	...	...	2	...	...	...	...	...	...	...
Edaphology.....	...	...	...	...	2	2	2	...	...	...
Special agriculture (temperate).....	...	...	...	...	4	1	...	...	...	...
Fruit trees.....	...	...	...	...	2	2	2	...	...	...
Agricultural entomology.....	...	...	...	...	2	2	2	2	...	...
Plant pathology.....	...	...	...	...	2	2	2	2	2	...
Animal hygiene and feeding.....	...	...	...	...	2	...	...	...	...	...
Quantitative chemistry.....	...	...	...	...	2	...	...	...	...	...
Oenology (wine making).....	...	...	...	...	2	...	2	...	...	...
Irrigation.....	...	...	...	...	2	...	...	...	...	...
Forestry.....	...	...	...	...	3	1	...	...	...	...
Zootechnics.....	...	...	...	...	2	...	2	...	...	...
Tropical agriculture.....	...	...	...	...	...	...	2	...	3	...
Plant pathology (tropical).....	...	...	...	...	...	...	...	...	2	2
Dairying.....	...	...	...	...	...	...	2	2	...	...
Plant technology.....	...	...	...	...	...	...	2	1	...	...
Viticulture (wine growing).....	...	...	...	...	...	...	2	...	...	...
Aviculture.....	...	...	...	...	...	...	2	...	...	...
Farm buildings.....	...	...	...	...	...	...	2	1	...	...
Legal techniques—appraisements and valuations.....	...	...	...	...	...	...	...	...	...	2
Tropical zootechnics.....	...	...	...	...	...	...	...	...	...	3
Agrarian law and economics.....	...	...	...	...	...	...	...	...	...	2

¹ These courses are taught during the first 8 months of the year. The rest of the time the students live and engage in practical agricultural pursuits under the direction of the school staff on one of the farms owned by the University.

Table 14.—Plan of studies for the Law School, Faculty of Law, Social and Economic Sciences

Subject	Hours a week per year					
	I	II	III	IV	V	VI
1	2	3	4	5	6	7
Civil code (persons).....	3	---	---	---	---	---
Roman law (history—persons).....	1	---	---	---	---	---
Political economy.....	3	---	---	---	---	---
Political science and civil law.....	2	---	---	---	---	---
Science of finance.....	---	3	---	---	---	---
Administrative law.....	---	2	---	---	---	---
Civil code (things).....	---	2	---	---	---	---
Roman law (things).....	---	1	---	---	---	---
Sociology.....	---	2	---	---	3	---
Statistics.....	---	1	---	---	---	---
Civil code (wills and testaments).....	---	---	2	1	---	---
Roman law (wills and testaments).....	---	---	1	---	---	---
Public international law.....	---	---	2	2	---	---
Private international law.....	---	---	---	---	---	3
Penal science and criminology.....	---	---	2	2	---	---
History of law.....	---	---	2	---	---	2
Legal psychology.....	---	---	2	---	---	---
Civil code (obligations).....	---	---	2	---	---	---
Roman law (obligations).....	---	---	---	3	---	---
Labor legislation.....	---	---	---	1	---	---
Territorial law.....	---	---	---	3	---	---
Diplomatic and consular law.....	---	---	---	---	3	---
Commercial and mining law.....	---	---	---	---	2	---
Penal code.....	---	---	---	---	3	---
Civil procedures.....	---	---	---	---	3	---
Civil procedures (code).....	---	---	---	---	2	---
Penal procedures.....	---	---	---	---	3	---
Court penal procedures.....	---	---	---	---	---	2
Legal medicine.....	---	---	---	---	---	1
Legal medicine.....	---	---	---	---	---	1

Table 15.—Plan of studies for the School of Economics, Faculty of Law, Social, and Economic Sciences

Subject	Hours a week per year		
	I	II	III
1	2	3	4
Civil law.....	2	---	---
General bookkeeping.....	2	2	---
English.....	2	2	2
Statistics.....	2	---	---
Economic geography and history.....	2	2	---
Mathematics.....	2	3	---
Economic theory.....	2	2	3
Finance.....	2	2	---
Currency and credit.....	---	2	---
Practical economics.....	---	3	---
Accounting.....	---	2	---
Administrative law.....	---	---	2
History of Ecuadorian economics.....	---	---	3
Commercial law.....	---	---	3
Fiscal law.....	---	---	2
Seminar on national problems.....	2	2	1

METHODS OF INSTRUCTION

As indicated throughout this chapter, especially in the study plans of the different university schools, instruction at the higher education level is becoming increasingly practical. The professors provide the

theoretical background of their subjects in their lectures and, according to many of the students, they employ illustrative materials in the lecture room with growing regularity. Much of the teaching, however, takes the form of laboratory and other out-of-class activities, in which the students do the things they hear about in the lectures. However, in this and other countries, memory work is still a common requirement in many subjects and in certain parts of all subjects.

EXAMINATIONS AND GRADING

In general, trimonthly grades, based on class attendance, practical exercises, student investigations, reports, and oral or written tests, are given to students in all university schools. At the end of the academic year, during the last month, written, oral, and practical examinations of the comprehensive type are administered in each subject, at the discretion of the professor. In both cases grades are calculated on the basis of a 1 to 10 scale, 6 being commonly regarded as passing. The examining boards for the final examinations comprise three members, one of whom is the principal professor of the subject. The total of the trimonthly grades and the final examination grade are entered separately on the certificate covering the year's work. The total of both kinds of grades constitutes the year grade and is interpreted as follows: 40 points, excellent (*sobresaliente*); 35-39, very good (*muy buena*); 30-34, good (*bien*); 28-33, fair (*regular*); below 28, failed (*reprobado*). Depending upon the specific regulations of the different faculties in the different universities, students who fail in a given subject may be required either to repeat that subject or to repeat the entire year's work. Ordinarily, however, the opportunity of taking another examination is granted. Two consecutive failures in a subject generally result in the student's being dropped from the faculty rolls.

Degree examinations are required of all applicants for degrees, after the successful completion of the comprehensive examinations of the final year's work. In this case, the examining board usually consists of five professors. The examinations are a combination of oral, written, and practical tests, having to do largely, but not exclusively, with the student's thesis, and lasting an hour to an hour and a half each. Each section of the examination is graded on the 1 to 10 scale, a minimum of 6 points being required in each case for passing.

DEGREES OR TITLES

Ecuadorian universities are authorized by law to confer degrees or titles according to the faculties they maintain. Requirements for any given degree are identical in all institutions which may confer it. The following titles are conferred, by faculty, with the number of years of university study required in each instance:

Faculty of Medical Sciences (Facultad de Ciencias Médicas)

Titles:

Physician-Surgeon (Médico-Cirujano)—7 years in the Medical School.

Dentist (Odontólogo)—5 years in the Dental School.

Specialist in Surgery, Urology, or other field (Doctor Especialista en Cirugía, Urología u otro ramo de ciencia médica)—Physician-Surgeon degree, plus at least 2 years of specialized experience, a monograph dealing with the field of specialization, and a written, oral, and practical examination.

Midwife (Obstetriz)—4 years in the School of Obstetrics, a practical examination in the Maternity Hospital and a theoretical examination in the Medical School.

Practitioner-midwife (Obstetriz práctica)—same as for midwife, but without the theoretical examination.

Nurse (Enfermera)—3 years in the School of Nursing and a theoretical-practical examination. The bachelor's degree is not required for admission to the School of Nursing.

Faculty of Law and Social Sciences (Facultad de Jurisprudencia y Ciencias Sociales)

Titles:

Licentiate (Licenciado)—successful completion of all courses and examinations in the public sciences (ciencias públicas), plus an oral degree examination.

Doctor of Jurisprudence (Doctor en Jurisprudencia)—6 years of study in the Escuela de Derecho, the title of *Licenciado*, a thesis, and a 2-hour oral examination.

Lawyer (Abogado)—the degree of Doctor en *Jurisprudencia* from any law school of the Republic and a special application in writing to the Dean of the Faculty of Law.

Economist (Economista)—3 years of university study in the School of Economics and the title examination.

Faculty of Mathematical, Physical, and Biological Sciences (Facultad de Ciencias Matemáticas, Físicas, y Biológicas)

Titles:

Engineer (Ingeniero)—6 years of university study in the Engineering School, and a degree examination.

Agricultural Engineer (Agrónomo)—5 years of university study in the School of Agriculture and the degree examination.

Architect (Arquitecto)—5 years of university study in the School of Architecture and the degree examination.

Pharmaceutical Chemist (Químico-Farmacéutico)—5 years of university study in the School of Chemistry and Pharmacy and the degree examination.

TITLE IN JOURNALISM (PERIODISTA)

The recently established School of Journalism (p. 81), which according to 1944 plans may become a part of the restored Faculty of Philosophy and Letters in the Central University of Quito is authorized by law^a to confer the title of *Periodista* upon its graduates.

^a Ley de Educación Superior, 1933. Art. 15.

According to an item in the newspaper *El Universal* of Guayaquil, May 17, 1945, a similar School of Journalism was planned to function in the newly established Faculty of Philosophy and Letters of the University of Guayaquil. The sum of 50,000 sucres had already been appropriated for the new school and enthusiasm among prospective students was high.

FACULTIES IN OTHER UNIVERSITIES

In 1944 the three universities of Quito, Guayaquil, and Cuenca each had Faculties of Medicine, Law, and Sciences. The School of Chemistry and Pharmacy in the University of Guayaquil had been raised to faculty status by a decree in 1942. The University Council (*Junta Universitaria*) in Loja maintained only a Law School. In 1945, a Faculty of Sciences was added in this latter institution and Faculties of Philosophy and Letters, in the Universities of Quito and Guayaquil.

HIGHER EDUCATION IN ECUADOR TODAY

A general picture of the University of Quito, written by an Ecuadorian historian on 1943 but still valid, is fairly representative of the state and spirit of higher education throughout the Republic. The writer says:*

Although political activity has in the past convulsed the life of the University in an academic way, the actual present is moving in a channel of serenity and organization. The atmosphere of today is more conducive to learning. The number of graduates is increasing . . . but the fact is that the cultural atmosphere has become more intense and its manifestations are growing daily in number. Today the Central University is the home of all kinds of educative expression, not a cenacle for initiates. Its doors are always open and its teachings competent for the discovery of knowledge, the analysis of science or the strengthening of all fields of learning. All social strata enter its halls—the minorities representing an aristocracy of culture, as well as the great masses who desire to improve their intellects. The Section of Cultural Extension has helped to produce this growth of confidence on the part of the common people who formerly eyed the institution suspiciously from a distance. Today, the factory worker, the craftsman in overalls, the working girl, move through the corridors of the University to the various classrooms where, without any legal degree requirements nor burdensome registration fees, gratuitous instruction is provided in short courses.

* Germanía Moncayo de Monge. *La Universidad de Quito: Su Trayectoria en Tres Siglos. In Anales de la Universidad Central del Ecuador, Tomo LXXI, Nos. 319-320, Julio-Diciembre de 1943, pp. 193-374.*

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