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ABSTRACT

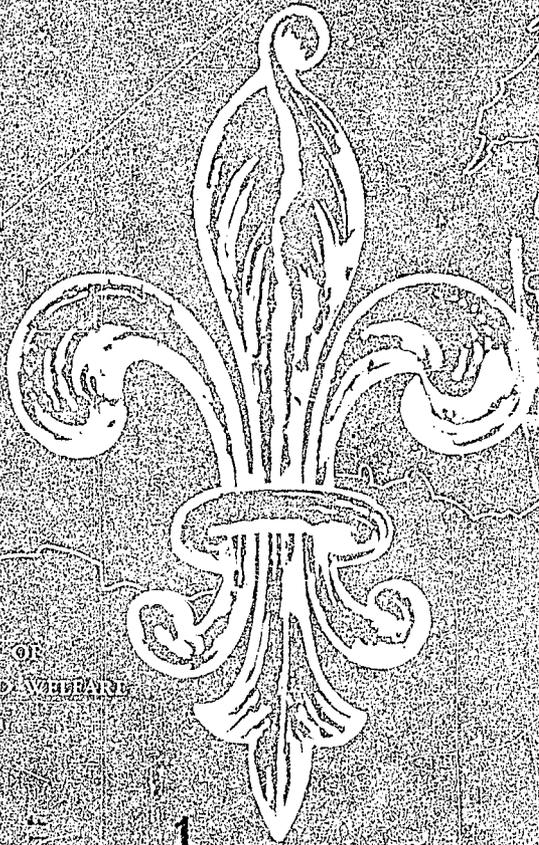
"The broader perspective gained from examining educational systems of other countries has long been important and is especially so at the present time. France is of particular interest because of its strong educational traditions and its dedication to democratic principles. In the process of gathering information for this study, the author visited schools in France, interviewed teachers and other school officials, and analyzed materials published in France, as well as those in the U.S." Major chapters in the 200-page study included: History of French Education; Administrative Structure; Nursery School and Kindergarten; The Elementary School; Academic Secondary Education; Vocational Education; and Higher Education in France. Curriculum, teacher training, teaching methods, examinations, subjects, and enrollments, to mention a few, were included. Some highlights were: school enrollments have rapidly increased in France; the amount and kind of education needed is changing with shifts in the French economy; and educational reform in France included raising the compulsory school age, paying more attention to student aptitudes, and allowing higher status for vocational education. (Author/SLD)

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EDUCATION *in France*



U.S. DEPARTMENT OF
HEALTH, EDUCATION AND WELFARE
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HIGHLIGHTS

- School enrollments have increased so rapidly in France as to attain the nature of a "school explosion." The increases are particularly striking at the secondary and higher education levels.
- The amount and kind of education needed by individuals in France are changing in response to shifts within the French economy. There is a noticeable increase in occupations requiring more advance knowledge, more administrative skill, and more technical knowledge.
- The educational reform under way in France includes (a) raising the compulsory school age to 16; (b) more attention to aptitudes of students, particularly at the age of 12 and 13; (c) higher status for vocational education; and (d) extension of educational opportunity to all groups in France.
- Under various other reforms, French national examinations have come under attack, and France has acted to relieve a shortage of scientists and engineers and other technical personnel.

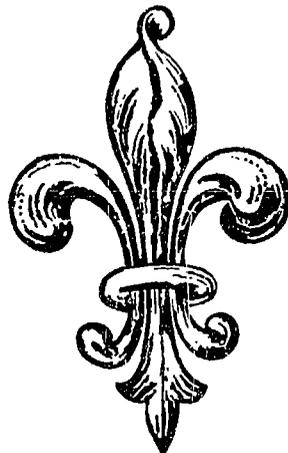
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No. 33

Education *in* France

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U.S. DEPARTMENT OF
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Foreword

THE BROADER PERSPECTIVE gained from examining educational systems of other countries has long been important and is especially so at the present time. France is of particular interest because of its strong educational traditions and its dedication to democratic principles.

The present bulletin on education in France is another in the Office of Education's long established series on education in other countries. In the process of gathering information for this study, the author visited schools in France, interviewed teachers and other school officials, and analyzed materials published in France, as well as those in the United States.

Officials in the French Ministry of National Education were helpful in arranging the author's visits to schools, as were Mrs. E. Hatinguais and others at the International Center for Educational Study at Sevres. Gratitude is acknowledged to the many teachers and principals who extended the hospitality of their schools to the author.

It is hoped that the present study will be of particular value in providing a broader understanding of American education through knowledge of the educational traditions of another country.

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*Acting Associate Commissioner and Director,
Bureau of International Education.*

FREDRIKA M. TANDLER,

*Director, Division of International
Studies and Services.*

VII

Chapter I

GENERAL CHARACTERISTICS

FRANCE, one of the larger countries of Western Europe, has an area of 216,659 square miles. It is over twice as large as Great Britain, though only about four-fifths the size of Texas.

The French population numbers approximately 45 million, of which 14½ million are under 20 years of age.¹ It was reported in 1958 that 47 percent of the total population lived in small communities of less than 2,000 people.² Writing in 1956, André Maurois, in his "A History of France," reported the French population as being composed of 800,000 Protestants, 200,000 Jews, 38 million Catholics, of whom 8 million are regular church attendants, and 2 to 3 million who were born Catholics, but are now outside the Church.³

Over 80 percent of the French school children go to public schools. Catholic private schools are particularly numerous in the *départements* (similar to a county) of Vendée, Haute-Loire, and Maine-et-Loire, the only 3 of the 90 *départements* of France where there is more private education than public; in two other *départements*, public and private secondary education are equal in size.⁴

There is a tendency for writers, both within and without France, when speaking of France and its educational system, to point to the emphasis on cultural values. This is applied to the elementary schools as well as the secondary schools, though, as the French themselves point out, these schools do about the same job as elementary schools in other countries.⁵ Nonetheless, the French are said to regard themselves as the guardians of the human values of the world.⁶

France has long been considered a country of intellectuals with a high degree of training. The average Frenchman, however, is either a farmer or a factory worker with only an elementary school education and possibly some additional vocational or apprenticeship train-

¹ Ministère de l'Éducation Nationale. *La Vie Scolaire en France*. Paris: 1961. p. 6.

² UNESCO/International Bureau of Education. *Facilities for Education in Rural Areas*. Paris: 1958. p. 96. (Publication No. 192.)

³ New York: Straus and Cudahy, 1956. p. 565.

⁴ *Education in France*, No. 11, September 1960. p. 42. [Published by the Cultural Services of the French Embassy, New York.]

⁵ *La Vie Scolaire en France*, *op. cit.*, p. 50.

⁶ Ullich, Robert. *The Education of Nations: A Comparison in Historical Perspective*. Cambridge, Mass.: Harvard University Press, 1961. p. 134.

ing. Large numbers of French youth stop their schooling at the age of 14 or 15. As of 1960, less than 12 percent of the eligible age group received a diploma from either an academic or a vocational school, indicating completion of a full secondary school program, and only 3.3 percent were able to secure the first university degree (*licence*), or an equivalent diploma.⁷

At the top echelons of French life there are men predisposed toward intellectualism, as is the system of academic secondary schools from which they graduated. Paradoxically, France has been viewed by outsiders, until quite recently, as a country where modern ideas did not always take root readily.

The answers to the paradox lie, of course, in the history of France, in the traditions which have developed, and also in the educational system, which is both a product and a producer of French culture.

Table 1.—Public and private school enrollment in France, by type of school and percent in public schools: 1961-62¹

Types of schools	Public	Private	Total	Percent in public schools
Total			10,078,500	
Kindergarten and nursery.....	1,200,000	170,000	1,370,000	87.6
Elementary:				
Elementary school.....	4,837,000	781,000	5,618,000	
Elementary school classes attached to academic secondary schools.....	55,000	165,000	220,000	
Total			5,838,000	83.8
Lower Secondary (grades 6, 7, 8, 9) (<i>cours complémentaires</i>).....	630,000	146,000	776,000	81.2
Secondary (academic):				
Academic secondary schools.....	822,000	320,000	1,142,000	
Technical sections in academic secondary schools.....	35,000	14,000	49,000	
By correspondence.....	24,000		24,000	
Total			1,215,000	72.5
Secondary (vocational):				
National vocational schools (E.N.P.), technical secondary schools (<i>collèges techniques</i>).....	170,000	45,000	215,000	
Apprenticeship centers (full-time).....	225,000	130,000	355,000	
Apprenticeship centers (part-time).....	23,000		23,000	
By correspondence.....	18,000		18,000	
Total			611,000	71.4
Higher Education:				
Universities.....	235,000	2,000	237,000	
Grandes Ecoles.....	22,500	9,000	31,500	

¹ *Education in France*, No. 16, January 1962, p. 6.

⁷ *L'Education Nationale*, 15 février 1962. p. 12.

GENERAL CHARACTERISTICS

3

Among the notable features of the old system which attracted the attention of educational reformers in France was the emphasis on verbal and theoretical analysis, by itself considered a virtue, but not when combined with under-attention to application of ideas. Under the existing situation, now changing, only a small percentage of the youth of the country received a full secondary education and the intellectual stimulus associated with that type of education.

In the last 10 years a sizeable expansion has taken place at all levels of French education. Thus, the total enrollment, public and private, for 1950 was 6¼ million compared to 9½ million in 1960. Of the 3¼ million increase, 86.2 percent attended public schools.⁸ Total enrollments for 1961 in France at the elementary, secondary and higher education levels equalled 10,078,500. Enrollments for 1961 in elementary education declined slightly from the previous year because the great number of children born after World War II have now

Table 2.—Number of schools and teachers in France, by type of school, public and private: 1960-61, and prediction for 1970-71¹

Types of schools	1960-61		Predicted for 1970-71
	Schools	Teachers	Teachers
Totals.....		346,550	469,000
Kindergarten and Nursery:			
Public.....	5,400	26,450	37,450
Private.....	183		
Elementary:			
Public.....	73,059	174,050	204,700
Private.....	10,018	39,000	
Lower secondary (<i>cours complémentaires</i>):			
Public.....	3,000	23,000	37,100
Private.....	1,600		
Vocational secondary:			
Public.....	1,250	25,800	64,200
Private.....		7,000	
Academic secondary:			
Public.....	900	33,500	63,000
Private.....	1,650	18,939	
Agriculture (below university level):		2,150	10,350
Universities:			
Public.....	16	3,500	29,000
Private.....			
Physical Education: Public.....		7,100	21,000

¹ Ministère de l'Éducation Nationale. *La Vie Scolaire en France*. Paris 1961. p. 7-11; Ministère de l'Éducation Nationale. *The Educational Movement in France During the Academic Year 1960-61*. Paris 1961. p. 10; *Informations Statistiques*, mai 1960, p. 221 and septembre-octobre 1960, p. 342; *Éducation Nationale*, 16 février, 1962. p. 11. The figures for private elementary school teachers and private vocational school teachers are reported in *Education in France*, No. 18, May 1962. p. 23.

⁸ Poignant, Raymond. *The Planning of Educational Expansion in Relation to Economic Growth: I-France*. Paris: Organisation for European Economic Co-operation, 1961. p. 33.

moved on to the secondary school. The overall growth of education in France is symbolized by the title of a new book called "The School Explosion" (*L'Explosion Scolaire*), which predicts enrollments by 1970 of "16 times more students in academic secondary schools and 20 times more students in the universities as compared to the year 1900."⁹

Table 3.—Growth of public and private education in France, by type of school and enrollment: 1951-52, 1957-58, 1961-62¹

Types of schools	In thousands of students								
	1951-52			1957-58			1961-62		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Totals.....	5,325.9	1,375	6,700.9	7,167.2	1,657	8,824.2	8,221	1,779	10,000
Nursery schools and kindergartens.....	1,000	221	1,221	1,097	210	1,307	1,200	176	1,376
Elementary schools ²	3,336	801	4,137	4,655	976	5,631	4,882	946	5,828
Lower secondary (<i>Cours Complémentaires</i>).....	218	60	278	351	93	444	630	146	776
Apprenticeship centers.....	143	70	213	159	90	249	222	130	355
Academic secondary.....	353	138	539	569	242	811	822	320	1,142
Vocational secondary ³	124	35	159	142	44	186	205	59	264
Teacher training schools.....	15	—	15	18.7	—	18.7	25	—	25
Universities.....	136.9	2	138.9	175.5	2	177.5	235	2	237

¹ *The Planning of Education in Relation to Economic Growth*, vol. IV. Paris: Organisation for Economic Co-operation and Development, February 1962. p. 30.

² Including those in elementary classes attached to academic secondary schools.

³ Including those in vocational sections in academic secondary schools.

Table 4.—Percent of age groups in school: 1950, 1954, 1960, and predicted for 1966 and 1970¹

Age	Percent of age groups				
	1950	1954	1960	Predicted for	
				1966	1970
15.....	35	45.0	55.0	79.0	100
16.....	27	37.0	45.0	60.0	73.0
17.....	15	23.0	28.0	35.0	42.0
18.....	—	13.2	17.5	24.0	28.7
19.....	—	8.3	10.4	13.4	15.6
20.....	—	5.7	6.6	8.1	9.8
21.....	—	4.0	4.5	5.6	6.7

¹ *Education in France*, No. 16, January 1962, p. 3. Data for ages 18-21 taken from: *Targets for Education in Europe: A Study of Policy Considerations Related to Economic Growth*, by Ingvar Svennilson, Friedrich Edding and Lionel Elvin. Paris: Organisation for European Economic Co-operation, 1961, p. 59. Data for 1950 taken from *The Young Face of France*. Paris: Published for le Centre de Diffusion Française 1958, p. 7.

⁹ Cros, Louis. *L'Explosion Scolaire*. Paris: Comité Universitaire d'Information Pédagogique, 1961. p. 5.

As indicated in the foregoing tables, enrollments in French schools have been increasing rapidly. In addition, the percentage of the group remaining in school after reaching the age of 14 is increasing, though large numbers of French youth aged 14-17 are not in school. Official figures indicate that in 1960-61, 31 percent of the 14-year-olds were not in school, and in 1954, 44 percent of this group was not enrolled.¹⁰

The predicted enrollments for the next 10 years in France indicate a steady decline in the percentage of the 15-17-year-old pupils who drop out of school. Yet the figures also indicate that in 1970 three-fourths of the young people will get less than a full secondary education; 42 percent of the 17-year-old group will be in school, and traditionally, half of these fail the final examinations at the end of the secondary school.

In France there is a growing awareness that more needs to be done in the field of education. From the point of view of the interaction of education and economic development, the aim is not just to maintain the present economy of France, but to accelerate its evolution to an advanced level. It is now realized that a highly developed economy is no longer a matter of material resources alone, but rather is a work of imagination, of invention, of intellectual resources, all of which highlight the need for more and better education for increasing numbers of people.¹¹ It is being suggested that the number now receiving secondary education be multiplied by 3 or 4, and that a larger proportion of the oncoming generations receive higher education, one proposal being that over 25 percent of an age group needs and should be given higher education.¹²

Table 5.—Total number, and percent of eligible age groups receiving secondary school diplomas and first university degrees: 1920, 1950, and 1960, and predicted for 1970¹

Year	Public and private schools			
	Academic and vocational secondary school diplomas		First university degree (<i>licence</i>) and comparable diplomas	
	Number	Percent of age group	Number	Percent of age group
1920.....	17,500	2.2		
1950.....	33,500	5.0	14,500	2.0
1960.....	63,000	11.5	20,000	3.3
1970 (predicted) ²	180,000	23.5	57,000	7.2

¹ *L'Education Nationale*, 15 février, 1962. p. 12.

² Of the 180,000 secondary school diplomas predicted for 1970, 30,000 will be from vocational schools.

¹⁰ *Education in France*, No. 16, January 1962. p. 3.

¹¹ Cros, Louis. *L'Emplois Scolaire*, op. cit., p. 44.

¹² *Ibid.*

The amount and kind of education needed by members of the various occupations in France are changing as the nature and relative importance of occupations undergo important shifts within the French economy. The changes have been underway for some time and can be seen readily in agriculture which claimed 42 percent of the population of France in 1901 and only 27 percent in 1954. By 1975 the figure is expected to decline to 15 percent.

At the same time an increasing proportion of the people in France are engaged in what is called the tertiary sector, i.e., those occupations requiring more advanced knowledge, more administrative skill, and more technical knowledge. The proportion identified with these more intellectual tasks has increased from 28 percent in 1901 to 36½ percent in 1954, and is expected to reach 45 percent by 1975. On the same basis of calculation, the figures for the tertiary sector in the United States are 34 percent for 1901, 57 percent for 1954, and 65 percent predicted for 1975.¹³

The plea for an enlargement of educational facilities in France is more broadly based than on the economic factor alone. Social justice has long been a rallying cry for those who would extend educational opportunity to all classes of people in France. To this demand in more recent times has been added a growing realization that political and social changes are taking place on a worldwide scale, and at a pace so rapid as to tax the intellectual resources of individuals and nations alike.

¹³ *Ibid.*, p. 18-27.

Chapter II

HISTORY OF FRENCH EDUCATION

Rise of Public Schools From 18th Century

THE IDEA of public education in France dates back at least to the decades of the 1700's immediately preceding the French Revolution. During the Revolution itself several proposals to establish a public school system were considered but none took root. The Guizot Law of 1833 often is taken as the beginning of the public school system of France, although the secondary schools (*lycées*) established by Napoleon were State-supported and controlled. Prior to the Revolution, whatever had been provided in the way of rudiments of learning was chiefly through the Roman Catholic Church.

At the time of the French Revolution (1789) more than 75 percent of the women and 50 percent of the men were still illiterate,¹ in spite of ordinances passed in 1698 and 1724 ordering each community to provide itself with a teacher.² Schooling was not free nor did the State have sufficient funds to provide free education. Children of the poor often went to work at the age of 8.

There were some secondary schools called *collèges* which provided education to a few, mostly under the direction of the Catholic order of Jesuits. The willingness of the government prior to the Revolution to leave secondary education under the control of the Church has been explained as follows:

The Jesuit *collèges* insisted on the kind of classical scholarship that suited the French sense of Roman heritage; they also took care of good and formal manners; they provided knightly sports and games, and theater, and a highly competitive spirit with unquestioned authority. What more could the absolutist government demand of a school system that cost so little?³

¹ *Education in France*. Paris: Editions France Actuelle, 1956. p. v.

² Deblèsse, Jean. *Compulsory Education in France*. Paris: UNESCO, 1951. p. 15.

³ Ulrich, Robert. *The Education of Nations: A Comparison in Historical Perspective*. Cambridge, Massachusetts: Harvard University Press, 1961. p. 144.

The 18th century came to be known as the "age of reason," but French education up to the eve of the French Revolution remained under the control of the clergy.

French Revolution

During the 1790's church schools were confiscated, and many plans were introduced in the revolutionary parliament to establish schools in towns and villages. The prevailing idea was that education should be organized by the State, should be secular, and open to all.

Among the plans presented in the 1790's was that of Talleyrand which would have opened education to all and eliminated any restrictions on teaching. There was no request for compulsory schooling, however. His plan was followed by others, including Condorcet's, but the Legislative Assembly was too engrossed in other considerations to carry through a major educational reform. The constitutions of 1791 and 1793 did proclaim the right to education and the duty of society to insure that education was accessible.

Napoleonic Era

Soon after Napoleon's coming to power it became clear that elementary education was to be placed again in the hands of the Church. Napoleon made a Concordat with the Church in 1801, and the law of 1802 cleared the way for resumption of church control over elementary education. Napoleon was more interested in secondary education and the training of a small corps of leaders and civil servants.

The Church thus regained its preferential position, and priests were appointed as principals and teachers in public schools. The licensing of private teachers could be effected through the bishop of the Church rather than the authorities of the State.⁴ This policy continued after the Restoration in 1815.

The law of 1802 did provide the framework for a state system of secondary education under public control. As the 19th century proceeded, the national government gradually took an interest in education of the people and a public school system free of religious control eventually was established against much opposition from the Catholic Church. Yet the Catholic Church remained a strong power in education in the 19th century, particularly when the forces of conservatism held sway. Thus, the influence of the Church over schools increased under the Restoration (1815-30), decreased under the regime of 1830-48, became strong again under the Second Empire (1852-70), and finally lost much of its strength under the Third Republic (1870-1940).⁵

⁴ Butts, R. Freeman. *A Cultural History of Western Education: Its Social and Intellectual Foundations*. New York: McGraw-Hill Book Company, 1955. p. 353.

⁵ *Ibid.*, p. 345.

In the field of secondary education Napoleon established a system of public secondary schools (*lycées*) supported and controlled by the national government. Within a short time similar secondary schools (*collèges*) were established by local communities. The *lycée* typically was a boarding school and came to be the special preserve of the aristocratic classes through such devices as charging fees, offering a classical type of curriculum, and by filling a large number of its vacancies with pupils from the elementary classes attached to the secondary school.

In 1806, higher education, which was languishing, was reorganized and, along with secondary education, was brought under an administrative agency of the State called the Imperial University or The University of France. This administrative structure was to be under the direction of an official called the Imperial Grand Master.

It has been pointed out that the school situation at the time when Napoleon assumed direction of the country was one of chaos.⁶ In fact, the seizing of church property and the dispersion of the clerical members of the staffs of church schools during the Revolution, along with laws passed to close church secondary schools (*collèges*), not only broke the monopoly of the Church over education, but also left France virtually without schools for some 10 or more years. Napoleon's contribution was essentially an administrative one, in that order was restored and centralized in the national government "whose authority extended to every last detail of educational activity and whose obligation included the establishment of uniform curricula and uniform standards to be administered largely through the device of endless formal examination."⁷

The Restoration, 1815-1830

Under the Restoration the Bourbons sought to consolidate and strengthen their hold on the country by using the Church to control much of education, particularly elementary education. The national government continued to support the public *lycées* but also extended aid to the secondary schools (*collèges*) of the Church, and even tolerated the illegal "pre-seminaries" of the Jesuits "which were expanding beyond all reason and rapidly becoming the most important educational influence in the country."⁸ The government retained control over higher education but many of the priests held positions of authority; for example, in 1821 a priest, Monsignor de Frayssinous, was appointed head (Grand Master) of the entire educational system.

⁶ Fox, Edward W. "The History of French Education." *Current History*, August 1958. p. 65-67.

⁷ *Ibid.*, p. 67.

⁸ *Ibid.*, p. 68.

Under his regime such liberal professors as Guizot and Cousin were dismissed from their university posts.

The Church was not content, however, and sought to extend its control and in so doing produced a reaction. In 1829, Cousin and Guizot were reinstated in their teaching positions, and the educational activities of the Jesuits were restricted. The July Revolution came in 1830 and shortly thereafter France took a significant step toward the creation of public elementary schools.

1830-1848

This period, although essentially conservative, was less clerical⁹ in nature and was more hospitable to the idea of public schools. By this time, also, the growth of industry in France had begun to create a demand for trained workers.¹⁰ At the same time, the middle class began to accumulate money and power, and this group has traditionally been one to appreciate the value of schooling and to insure its development.

Another influence resulted from the gradual transformation in attitude toward mankind which grew out of the work of Rousseau and others of the preceding century. In essence the new outlook was one of considerable faith in man and in his capabilities, if they were developed. To these influences had been added the impact of the French Revolution and the various plans proposed for public education. Though not implemented at the time, the idea of a public school system had been planted and was to reappear in the 1830's when conditions in France were more favorable.

Much the same thing had occurred in the United States where the American Revolution and the writings of men like Jefferson established the principle of representative government and the need for an enlightened citizenry. Jefferson had stressed that the leaders of a society must be held to account by the populace. Yet, he said, this would be impractical and even dangerous unless the people were educated. With this in mind Jefferson introduced a bill in the legislature of Virginia in 1779 to establish a system of public schools. Though modest in scope, the plan was rejected.

Yet, at this same time there were signs that some American people were giving public endorsement to the principle of public education to produce an educated citizenry. Thus, several of the early state constitutions in the 1770's, for example, Pennsylvania, Georgia, North Carolina and Vermont, called for the establishment of public schools. Moreover, both the Federal Government and the state governments gave various forms of aid to public schools, including land grants. During the period 1800-1830, various states passed laws concerned with public schools, though these laws often amounted only to giving

⁹ *Ibid.*

¹⁰ Deblasse, *op. cit.*, p. 18.

local areas permission to build public schools should they so choose. Nonetheless, public elementary and secondary schools, and even public colleges, were founded during the period 1790-1830. It was not until the 1830's, however, that public schools in the United States were established on a broad scale.

By 1830 other countries, Prussia in particular, were in the process of building up national strength through a system of public schools. In 1831 the Frenchman, Victor Cousin, was sent to Prussia to observe the organization of schools. His report on Prussian schools was widely circulated both in France and in the United States. On June 28, 1833, the Guizot Law was passed in France. It is regarded as a legislative milestone in the development of the French educational system.

Guizot was the first Minister of National Education under the regime (July Monarchy) which came to power in 1830. He has been characterized as a Protestant historian who was opposed to universal suffrage but in favor of rule by the middle class.¹¹ In his memoirs he stated the purpose of the 1833 law as follows:¹²

The permanent existence of schools and the means of meeting their material needs were thus insured, independent of the intelligence or eagerness of the people destined to benefit from them, and the central power would never be without weapons against their lack of will power or their apathy.

Guizot envisaged a public school in every district, well-paid and well-housed teachers, and a teacher training school in each of the *Départements* of France.

The law of 1833 did not establish compulsory education but required each commune to establish a public elementary school, to provide the school building, and to pay the teachers. In addition, the larger towns and cities were to establish higher elementary schools which offered a measure of educational opportunity beyond the elementary school in the form of vocational preparation for commerce, agriculture, or industry. All these schools were to be supported in part by fees charged the students, though the very poor were to be admitted free. Moreover, a tax to raise additional revenue was to be levied by the council of the commune, and, if necessary, by the council of the *département* (a unit of government similar to a county, but larger than a community). If not so levied, these taxes were to be instituted by royal decree, and the national government was to grant funds to make up any deficiencies.

To supply teachers for the public schools, the law of 1833 authorized each *département* to establish a normal school to train teachers.

¹¹ Maurols, André. *A History of France*. New York: Straus and Cudahy, 1956. p. 387.

¹² Thabault, Roger. "Fiscal Management in France." *Yearbook of Education 1956*. London: Evans Bros. Ltd., n.d. p. 370. (quoted from F. Levy Guizot. *Mémoires pour Servir à l'Histoire de Mon Temps*).

The issuing of licenses to teach in public schools and the appointment of teachers were taken over by the civil authorities. Private schools were allowed to continue but their teachers had to be certified by the mayor of the commune, as well as by the bishop of the Church.

The religious emphasis in public elementary schools was not entirely absent, and the local priest was a member of the communal council which controlled and supervised the teacher; but where parents objected, a child was not required to have religious instruction. Free, secular public schools were not established until 1882, about the same time that compulsory education was instituted.

During the period 1830 to 1848, the number of schools, public and private, increased from 30,000 to 62,000 and enrollments grew from 1,950,000 to 3,530,000. By the end of the period, 72 teacher training schools were in operation. This expansion of educational enterprise was facilitated by the general prosperity which prevailed.¹³ Illiteracy among men, as shown by military recruits, declined from 50 to 33 percent. On the other hand, the entire appropriation for public education "on the eve of the Revolution of 1848 was a mere twelfth of the subsidy of public worship."¹⁴ Moreover, the law of 1833, while seemingly requiring the establishment of schools, left the financial arrangements somewhat vague, and communities tended to vary in the extent to which schools were provided. Those established were mostly for boys.¹⁵

Classes frequently were large, sometimes as many as 400 pupils in a school having only four teachers. The teaching method often consisted of taking and memorizing dictation from the teacher. Men of high caliber were not attracted to teaching by the low salaries which the government had established.¹⁶ Education was neither free nor compulsory at the end of the July Monarchy in 1848, nor was it entirely free of religious control. On the other hand, a sizeable system of public schools had developed under stimulus from the national government.

1848-1870

During the Revolution of 1848 many elementary school teachers displayed a sympathy for democracy and for increased opportunity for the masses. Others asserted that elementary education should be free, public and compulsory. The Catholic Church at this point was hopeful only that it might secure what it called "freedom of education," i.e., the right for its schools to exist. One authority reasons

¹³ Deblesse, *op. cit.*, p. 19.

¹⁴ Fox, *op. cit.*, p. 68.

¹⁵ France. Ministère de l'Éducation Nationale, l'Institut Pédagogique National. *Encyclopédie Pratique de l'Éducation en France*. Paris: 1960. p. 96-97.

¹⁶ Peterson A.D. C. *A Hundred Years of Education*. London: Gerald Duckworth and Company, 1952. p. 16.

that the honoring of this request was in doubt until "the desperate insurrection of the June days" when under the threat of class warfare the government decided that "the stabilizing influence of Church training" was needed.¹⁷

Louis Napoleon had been elected president of the Second Republic by universal suffrage which was newly established in 1848. The eligible voters had increased from 250,000 to 9,000,000 under this change and the power of the Catholics was thereby strengthened. Louis Napoleon sought to appease the Catholics first by organizing an expedition on behalf of the Pope against Mazzini's Roman Republic. In the field of education there followed the Falloux Law of 1850, which led Montalembert to say, "We must have our own Rome expedition, here at home."¹⁸

Under the Falloux Law bishops were made members of the committee which appointed the heads (rectors) of each of the major administrative units for education, which were called academies. Moreover, the bishops were given prominent places on the councils in each of the academies, and it became easier for members of the clergy to teach in public schools. At the same time, liberal teachers were hunted down and accused of being revolutionaries.

The law of 1850 made no significant improvement in elementary education. In 1851 there were 800,000 children of elementary school age not attending any school.¹⁹ The law of 1850 did have a significant effect on secondary education. After the French Revolution, private secondary schools had received little legal recognition or aid from the government. Under the law of 1850, however, any French citizen could open a private school provided he was 25, had taught 5 years, and had the *baccalauréat* certificate or equivalent diploma. Moreover, communes and departments could give financial aid to private schools. Bishops of the Catholic Church were free in their dioceses to open private schools under their sole direction, except for a limited amount of inspection by the government.²⁰

The Falloux Law intensified the conflict between Church and State. For more than half a century to follow small French communities were split, with the priest as symbolic head of one side and the village public school teacher as head of the other.

When Louis Napoleon became emperor in 1852, liberal teachers were persecuted further. Private and religious schools were urged to compete with public schools, and normal schools were put under close surveillance to prevent them from spawning liberal ideas.²¹ It had even

¹⁷ Fox, *op. cit.*, p. 39.

¹⁸ Maurois, *op. cit.*, p. 414.

¹⁹ Deblèsse, *op. cit.*, p. 20.

²⁰ *Encyclopédie Pratique de l'Éducation en France, op. cit.*, p. 21-22.

²¹ Butts, *op. cit.*, p. 355.

been suggested that the bishops should appoint all public school teachers, but this measure was too extreme, and the job was left to the heads (prefects) of local governmental units.²² The timetable for the elementary schools (for boys) of the city of Paris, in 1852, reserved 6 hours for religion out of a school week of 33 hours.²³

In order to maintain his position of control, liberal ideas were suppressed by Louis Napoleon through such devices as regulation of the press and dissolution of many workingmen's associations. In addition, the national government prescribed the curriculum of the schools and kept close watch over classroom teaching to avoid the dissemination of liberal ideas.²⁴

Near the end of his reign Louis Napoleon lost support from all sides and vacillated in his policy. Aroused by Garibaldi's attacks on the Pope, the French clerics called for another expedition to Rome and for a purge of French teaching personnel.²⁵ What in fact happened in 1867 was the passage of the Duruy Law, which stimulated attendance at public schools.

Duruy, as Minister of National Education, had hoped to make public education free and compulsory but achieved neither aim. His law of April 10, 1867, did stimulate school attendance by the aid it gave to poor children. According to the law, all budget restrictions on support of education were to be eliminated, with education free for needy children. Moreover, communes wishing to do so were authorized to raise money to provide free public education, and communes of 500 or more inhabitants were required to establish public elementary schools for girls.²⁶

With the overthrow of Louis Napoleon and the rise of the Third Republic in 1870, public education came into its own in France, but not without a struggle, which extended into the 20th century. Attempts to establish a public school system were bitterly resisted by the Church. The struggle which ensued was not a clear-cut religious matter, since most of the people on both sides were Catholics. It is true that some of the outstanding leaders of the public school movement, such as Guizot and Ferry, were Protestants, but no changes could have been made without considerable support from the Catholic populace. There were forces at work which made it unlikely that France would continue to neglect the education of large numbers of her people, or to leave that education under the control of the Church.

²² Maurois, *op. cit.*, p. 414-415.

²³ "Règlement pour les Ecoles Communales Laïques de Garçons de Ville de Paris" reprinted in Arnold, Matthew. *The Popular Education of France*. London: Longman, Green, Longman, and Roberts, 1861. p. 261.

²⁴ Ersang, Robert. *Europe since Waterloo*. Boston: D. C. Heath and Company, 1954. p. 135.

²⁵ Maurois, *op. cit.*, p. 436.

²⁶ Deblesse, *op. cit.*, p. 20.

1870-1940

Some authorities have singled out nationalism as the most important force behind the building of a public school system in France in the 19th century. Certainly it helps to account for the centralized form which public education assumed.²⁷ Napoleon I was following in the tradition of such strong monarchs as Louis XIII and Louis XIV when he reestablished strong central government at the beginning of the 19th century.

Such public schools as were established were characterized as "godless" by the Catholic Church. On the other hand, leaders of the Revolution and leaders of the more liberal regimes of the 19th century looked upon the Church as hostile to liberal political ideas, and upon church schools as one source of clerical and anti-Republican ideas.

Liberal ideas of the 18th century were again gaining currency in France. The rights of the individual, and of the child particularly, were being proclaimed, including the right to develop latent potentialities. Gradually came the movement to provide education for all.

The new Republic demanded citizens who could read and write and think. Freedom to think and freedom from dogmatism in teaching were in order. Fortunately, the general prosperity prevailing in France from the middle of the 19th century insured the necessary financial backing for a widespread system of education. Under Louis Napoleon, railroads had tripled their mileage, and canals were built. The lower classes secured more jobs as industry expanded 100 fold, and agricultural production increased 10 fold. Child labor was no longer so essential to the economy, and many more children were free to attend school.

Even so, the Third Republic had a difficult time in establishing public schools. In fact, the pattern of conservative reaction seen under the Second Republic reappeared in the early stages of the Third Republic, which seemed "sufficiently frightened by the threat of Revolution—the Commune—to seek the support of the clergy in the inculcation of conservative virtues in the population through education."²⁸

State support of church schools was continued and the clergy was given an important place in the national council, which was the main advisory body for public education. Similarly in higher education, the right to grant degrees was extended to private institutions, and immediately four Catholic universities were founded.

Not till the end of the 1870's did defenders of the Republic begin to push universal education. There were already many elementary schools with a sizeable enrollment, though attendance was erratic and often of short duration. More important from the point of view

²⁷ See Britts, *op. cit.*, p. 353 and Mallinson, Vernon. *An Introduction to the Study of Comparative Education*. New York: The MacMillan Co., 1957. p. 39.

²⁸ Fox, *op. cit.*, p. 70.

of the Republicans was the fact that over half of the schools were run by the Church. Similarly at the secondary school level, the Jesuit schools dominated.²⁹

Around 1880 political feeling was high, and schools were a cause of much controversy. The conservatives in France, the Catholic party and the extreme Right, were vigorously opposed to mass education organized by the State. The Catholic party was particularly alarmed at the idea of public school teachers being appointed by the national government, rather than being appointed, paid and supervised by local authorities—which were more likely to be receptive to the wishes of the Church.

On the other hand, such leaders of the Republic as Gambetta wanted to build a strong nation through universal education. Moreover, separation of church and state was seen as essential in order to compensate for the favored position occupied by the church under Louis Napoleon, and to mitigate the anti-Republic sentiments of the Church. Yet, both the Left and Right in France had been alarmed by the military defeat of the country in 1870 which was interpreted as a victory of the Prussian schools.³⁰ Improvement of French education was widely considered a necessity.

The election of 1878 reduced the strength of the Right. Soon after, Jules Ferry, as Minister of National Education, instituted a series of measures which laid the foundation for a strong system of public schools free of control by the Church. Meanwhile, in 1880, the government took steps to enforce existing laws against unauthorized religious communities, and activities of certain of the orders were restricted, particularly those of the Jesuits, the Marists, and the Dominicans.

Ferry believed in the strength of lay morality, and public schools were made secular through a series of laws which eliminated religion from the curriculum of the public schools, though teachers were urged to inculcate universally accepted ethical principles. In public secondary schools the course in philosophy gained added importance. Thursday was made a school holiday so that those who so wished could attend religious services.

Fees were abolished from public elementary schools by a law of June 16, 1881, and by the law of March 28, 1882, compulsory schooling was established for children from the age of 6 to 13. The same law of 1882 repealed the provisions of the law of March 15, 1850, which had given clerics the right of inspection and supervision in public schools and the right to nominate teachers. By the law of October 30, 1886, only secular staff was allowed to teach in public

²⁹ *Ibid.*

³⁰ *Ibid.*, p. 69.

schools. Private schools were to be more strictly supervised to insure that the laws and spirit of the Republic were not being undermined. At the same time the scope of public education was extended by encouraging the expansion of higher primary schools to provide educational opportunities at the post-elementary school level.

Under the law of 1886, the national government assumed extensive control over such aspects of public education as curriculums, selection of textbooks; examinations and appointment of teachers. Thus, the centralized system of education was retained by the Third Republic in order to meet the challenge of the Church and of other opponents of public education, and to finance and direct the huge expansion of public education which was to take place in the last quarter of the 19th century.

As public education grew there was such a need for building classrooms as to cause Ferry to comment, "My ministry has turned into a regular factory for schools. It is building on an average three schools or classrooms per day."³¹ From 1882 to 1900 there was an increase of about 70,000 classrooms.³² The national government assumed the major portion of expenditures for public elementary schools. The illiteracy rate dropped from 20 percent in 1872 to 4.2 percent in 1910.³³

Public education for girls at the secondary school level had begun with the law of 1880 which authorized the establishment of *lycées* and *collèges*. The program of study in these secondary schools was only 5 years in length, compared to the 7-year schools for boys, and it included no classical languages and only elementary mathematics and science. Previously, the only secondary education open to girls had been in convents or in a few private schools.

The public school system in existence by 1900 retained such aristocratic features of earlier French education as one set of schools, rather limited in scope and prestige, for the lower social classes, and another set of schools for the middle and upper classes. On the other hand, the public schools were secular and relatively free of church control. But the quarrel between public and church schools was not yet settled, nor was it to be for many years to come.

The bitterness of the struggle was illustrated in Victor Hugo's statement addressed to the priests:

I have no confidence in your kind of building. I would not have you entrusted with the education of children, the care of their souls, the development of young minds just awakening to life, the moulding of the spirit of coming generations; in fact, with the future of France.³⁴

³¹ Deblèsse, *op. cit.*, p. 23.

³² *Ibid.*

³³ *Education in France*. Paris: Editions France Actuelle, 1956. p. V.

³⁴ From *Compte Rendu des Séances du Sénat*, IV, p. 9119 as quoted in Deblèsse, *op. cit.*, p. 21-22.

Opposition to the growth of public education was typified by the statement of Senator Chesnelong of the French Parliament:

You say that you want compulsory schooling throughout France, but this is only half your intention; your real aim is to give the whole population an anti-Christian education and thus to destroy Christian education³⁵

However, during the papacy of Leo XIII (1878-1903) relations between church and state began to improve. The Pope announced the duty of all Catholics to support the government under which they lived. Anticlericalism was revived, however, with the Dreyfus case (1894-1906) as liberals rallied to the cause of the Jewish army officer accused and convicted of treason and later exonerated. At the time, the Catholic Church was identified with the forces of conservatism and reaction which refused to acknowledge the injustice done to Dreyfus.

In 1900 a move against unauthorized associations was launched. These religious associations had grown in size and in wealth and were rivals of the regular clergy. In 1901 a bill forbidding members of unauthorized orders to teach in any school was passed with little opposition. The government used this Association Law to force thousands of monks and nuns to leave institutions, which were then closed.³⁶

After the death of Pope Leo XIII in 1903, friction developed between the new Pope Pius X and the French Government. Finally, diplomatic relations with the Pope were severed after a series of incidents, and demands grew for a complete separation of church and state.

A government circular of April 9, 1903, reminded school officials that no religious symbols were allowed in public school buildings. A further step toward separation of church and state came with a law of 1904 specifying that all teaching by religious orders, even authorized orders, was to cease in 10 years. This was preliminary to the Separation Law passed in December 1905 which ended Napoleon's Concordat with the Pope and relieved the state of the obligation to pay the salaries of the clergy. Church property was placed under government supervision through a supplementary law of January 1907.

Initially, over 13,000 Catholic schools were closed, and many of the teachers who were members of religious orders left France.³⁷ The attempt to break the control of the Church over private schools failed,

³⁵ *Ibid.*, III, p. 324 as quoted in Debliese, *op. cit.*, p. 22.

³⁶ Ergang, *op. cit.*, p. 180.

³⁷ Wykes, Olive. "The Fifth Republic and the Catholic Schools." *Melbourne Studies in Education, 1959-1960*. Melbourne, Australia: Melbourne University Press, 1961. p. 70.

however; Catholic schools, reopened by individual teachers and groups of parents, in fact remained under the strict control of the Church.³⁸

The expense of maintaining a network of schools was too heavy, however, and in 1909 the Catholic bishops of France announced that Catholic children could attend public schools as long as they continued to receive adequate religious instruction outside of school.³⁹ Enrollments in Catholic schools dropped sharply but rose again after World War I.

The need for national unity during World War I led the government to suspend enforcement of the law closing private schools conducted by religious orders. From then to World War II, when the law was removed from the books entirely, members of religious orders continued to teach in private schools. The ratio of public to private elementary schools remained rather fixed, at 80 percent public to 20 percent private, over the period 1910 to 1950.⁴⁰ Private secondary enrollments, virtually all of which were in Catholic schools, increased from 92,000 in 1920-21 to 240,000 in 1938-39.⁴¹

As time went on, the fierceness of the struggle between public and Catholic schools lessened. The Republic became secure, and fear of its being overthrown abated. Between World War I and World War II the Christian Socialist movement among younger priests lessened the conservatism of the Catholic Church. Under the Vichy government of the early 1940's, however, old wounds were reopened as the government gave public money to church schools and made religion a compulsory subject in the public schools. The latter produced such opposition from public school teachers that the decree was rescinded later in 1941. A decree of 1942 abrogated the Association Law of 1901 and allowed religious orders to organize legally. All this was encouraged by the German occupation forces as a means of dividing and weakening France.

Development From 1945

At the end of World War II, the wartime unity between parties of the Left and the Catholic parties was destroyed by the issue of the use of public money for church schools. The Socialist congress of September 1944 called for an end of government subsidies to private schools. The leaders of the Left agreed to this, and the subsidies were stopped for a short time over increased Catholic resistance.

Catholic schools were particularly numerous at the secondary school level. Reportedly, some parents enrolled their children in Catholic

³⁸ Hans, Nicholas A. *Comparative Education: A Study of Educational Factors and Traditions*. London: Routledge and Kegan Paul Ltd., 1949, p. 201.

³⁹ Wykes. "The Fifth Republic and the Catholic Schools," *op. cit.*, p. 70.

⁴⁰ Debiesse, *op. cit.*, p. 90-91.

⁴¹ Wykes, *op. cit.*, p. 71.

secondary schools because of the rigorous system of examinations in public schools which allowed only a few to enter and even fewer to graduate. Moreover, there was a long tradition of Catholic private schools, and many parents and church leaders regarded these schools as an important arm of the Church in confirming children in the Catholic religion. With the necessity for expansion of school facilities to meet the needs of France after World War II, the presence of a well developed system of Catholic schools helped to stimulate pressure for a diversion of some public funds to these private schools.

At the end of the 1940's various organizations representing the Catholic clergy, teachers in private schools, and parents with children in private schools began to hold meetings to urge that public money be given to private schools. The Catholic point of view gained more support because of the close balance of power in the French National Assembly. Proposals in 1951 to give public money to the Catholic schools caused a political crisis which broke up the alliance of the Catholic party with the Radical and Socialist parties, both of which were opposed to giving government funds to church schools. The break was final when aid was authorized under the Pleven Government with the passage of the Marie and Barangé Laws. Some members of the Radical party voted for these laws.

The Barangé Law provided a grant from the national government for every pupil in elementary schools, both public and private, from the age of 6 to 14. In the case of public schools, the money was distributed to the department councils to be used for upkeep of school buildings. The grants for private school pupils went to parent associations with the hope that the funds would be used to increase teachers' salaries, and that such salary raises would in turn improve the rather low standards of training prevailing among private school teachers. In 1953 the national government paid 3,112,000,000 old francs to private associations of parents.

The Marie Law made national scholarships available to pupils in both public and private schools as long as the private schools met national standards for buildings, qualifications of teachers and hours of instruction. The private schools approved as suitable were allowed 5 years to raise the qualifications of their teaching staffs. When the time limit expired, 609 of the 891 private schools were disqualified by the Ministry of National Education for failing to reach the standard.⁴² The private schools' share of the total secondary school enrollment, including both academic and vocational secondary schools, declined from a high of 35.2 percent in 1951-52 to 28.4 percent by the fall of 1959.⁴³

⁴² *Ibid.*, p. 77.

⁴³ *Informations Statistiques*, No. 34-35, décembre 1961. p. 211.

In December 1959, with the Catholic school supporters in a majority in Parliament, a law was passed establishing a new procedure whereby government aid to private schools could be increased. Private schools are now free to choose one of four plans which differ in the amount of public money provided and in the degree of government control and supervision to be exercised over the private schools.

Government control and supervision may become a political issue when the plans reach full-scale operation. Already the Association of Parents of Children in Private Schools has claimed that the decrees issued to implement the law have gone beyond the intent of Parliament, and the association threatens continued opposition unless the decrees are modified.⁴⁴

Considerable resistance to the idea of granting public money to private schools continues to be expressed, and journals and newspapers have been filled with articles, some supporting the law and others denouncing it as divisive.⁴⁵

Shortly after the 1959 law was passed, a campaign began to secure 16 million signatures on petitions to urge its repeal. It remains in force, however, and the monetary effects are becoming evident. It was reported in 1961 that the national government's budget for education had increased 93,000 million francs over the previous year and that 20,000 million of this total was to provide aid to private schools as stipulated by the law of 1959. It was also noted in 1961 that the 1959 law has imposed a burden on the public school inspectors who must now exercise some degree of supervision over teachers in private schools.⁴⁶

Private school authorities reported in the spring of 1962 that over half of the private schools had chosen the so-called simple contract, which involved the least amount of government control and the lowest degree of financial support from the government. One disadvantage of the simple contract is that private schools cannot use the public school bus service. About one fourth of the private schools chose an intermediate position (contract of association) which brought them more money from the government, but subjected them to more government supervision and regulation.⁴⁷

The unanswered questions which remain have been listed by one authority as follows:⁴⁸

1. Where will the vast sums of money come from to finance the subsidization of private schools? The implicit assumption here is that the cost of financing private schools far outweighs any saving to the state

⁴⁴ Wykes, *op. cit.*, p. 81.

⁴⁵ For example, see *L'Actualité Pédagogique à l'Étranger*, février 1960. p. 16-47.

⁴⁶ Ministère de l'Éducation Nationale. *The Educational Movement in France During the Academic Year 1960-1961*. Paris 1961. p. 4.

⁴⁷ *Education in France*, No. 18, May 1962. p. 26-27.

⁴⁸ Wykes, *op. cit.*, p. 82.

which might result from having private facilities take some of the burden off public schools.

2. Will public education be starved even further? The 1959 law disregarded a major recommendation of the 1959 report of a national commission established to study the problem of private schools, namely the recommendation that any grants to private schools be accompanied by increased grants to public schools.
3. Will church schools use the money to raise standards or will they take advantage of the vagueness of the law and build new schools to compete with public education?
4. Will the Church now require all Catholic children to attend church schools?

In 1962, it was reported that the Catholic Church in France needed to raise \$200 million in the next 8 years if Catholic schools were to hold their own with public schools. It was noted that the percentage of French school children, both elementary and secondary, entering non-public schools dropped from 19.9 in 1955 to 16.2 in 1961.⁴⁹

The cost of operating private schools has increased as the private school authorities find it necessary to hire an increasing number of lay teachers. At a convention of French private school authorities, held in the spring of 1962, it was reported that the proportion of lay teachers in private schools is increasing: There are now 74,000 private school teachers, of whom 45,000 are laymen. Private elementary education has 39,000 teachers, of which 25,000 are laymen. The teachers for private secondary schools include 12,000 priests or monks and 16,000 laymen. Private vocational education has 7,000 teachers, including 3,000 churchmen.⁵⁰

Changing Structure and Content

Aside from the question of whether French education should be public or private, there has long been the matter of altering both its structure and content so as not to perpetuate existing inequalities between social classes in France. This became a topic of great interest as demands for education reform grew after World War I.

The old system effectively cut off the majority of children from access to certain types of prestige-bearing schools, such as the *lycée*, which in turn, opened doors to higher education and to the important positions in government, business, and the higher professions.

This lack of opportunity to even try the type of schooling which had high status was all the more odious since it appeared to affect rural and lower class city children chiefly. Upper middle class and upper class children gained access to the *lycées* in advance by being

⁴⁹ "News from the Field." *Catholic Educational Review*, March 1962. p. 201.

⁵⁰ *Education in France*, No. 18, 1962. p. 26.

enrolled in the preparatory divisions at the age of 6, after paying the required fee, preference being given to those with relatives already enrolled in the school.

The difficulty of moving from one kind of educational track into another was increased by the system of entrance examinations. Moreover, it was claimed by the reformers that academic secondary education was "bookish" in the worst sense, and out of touch with really important issues of life. Such education, it was contended, often did not develop creative minds nor encourage the expression and fulfillment of man's many facets of intelligence and personality. Children from the lower socioeconomic groups, who lived so close to the stark realities of life, were little inclined to pursue such an education, in contrast to children from the middle and upper income groups whose parents pressured them to do so. Critics of the academic schools had to acknowledge, however, the existence of a small group of eminent literary figures in France, most of whom had gone to the academic schools.

In time, the elementary schools were shaped by the psychological and pedagogical ideas which began to gain ground in the 20th century. Such things as respect for individual differences and for the stages of growth and development through which children progress, came to be commonly accepted principles among educational theorists in France, as elsewhere in the world. And after World War I vocational education began to grow and to provide a new means of developing thousands of children. Academic secondary education, however, remained tied to past traditions and habits.

École Unique

Such was the general situation when a group of French teachers, still in uniform in World War I, met to form an organization to improve French education and French life. Calling themselves "The Advocates of the New Educational System (*Les Compagnons de l'Université Nouvelle*)" they sought to build a new French society by making significant changes in French education. This was in keeping with the aims of the larger parent organization, *Association Nationale pour l'Organisation de la Démocratie*, which hoped for a new and better world.

Seeking to implement certain basic principles of democracy, these French teachers advocated a single school system for all (*école unique*) to replace the prevailing pattern of one system of schools for the lower classes and another for middle and upper class children. Fees were to be eliminated, and transfer between types of schools and different levels of instruction was to be made easier for children whose aptitudes and interests warranted such transfer. In this way the doors of educational opportunity were to be opened to all.

Of fundamental importance was the proposal that children from all walks of life should receive a common education from the ages of 6 to 13 in the single school system (*école unique*). Upon completion of this basic elementary education, pupils would go on to one of several more specialized schools which would develop their particular talents. For this purpose more vocational schools, continuation schools, and schools for girls were to be built. These schools would be different, but not of such great variation in prestige as to cause noneducational factors to enter into the selection of students.

In support of their proposals, the educational reformers attracted much attention through articles in newspapers, existing educational journals, and a journal they established themselves. Progress was slow, although the way was being paved for future educational reforms.

In 1924 the French Government appointed a commission to consider ways to extend educational opportunity to all, regardless of social background. The following year the curriculum of the fee-charging elementary school classes attached to *lycées* and *collèges* was made the same as that of the regular public schools attended by most children.

During the 1930's tuition fees in secondary schools were abolished. It took time, however, for the lower socioeconomic groups to realize that secondary education in the schools of prestige (*lycées*) was now accessible to those children who had the required academic ability. Talk of educational reform continued in the 1930's, and was highlighted by the Congress of Le Havre in 1936 and the Jean Zay Plan of 1937.⁵¹

Congress of Le Havre

The Congress of Le Havre, May 31–June 4, had some 300 participants. Originally proposed by the educational periodical, *L'Enseignement Scientifique*, the conference was placed under a committee representative of leaders in education, commerce, and industry.

It was the first congress of its kind in France. Among the participants were such people as Paul Langevin; Gustave Monod, later director general of secondary education and promoter of experimental classes (the "New Classes"); Alfred Weiler, later a member of the Langevin Commission to reform French education, and director of the experimental secondary school at Montgeron; and Mademoiselle Roboy, one of the two inspector generals assigned to the "New Classes," the major reform experiment of the 1940's and early 1950's.

⁵¹ For an analysis of these two developments see: Miles, Donald C. *Recent Reforms in French Secondary Education*. New York: Teachers College, Columbia University, 1953. Chapter 2.

The purpose of the congress was to examine problems in French secondary education and to recommend changes. It acted as a forum for educational ideas of the time and revealed the existing tendencies toward reform. Among the ideas put forward in the reports presented at the congress were: (a) the need for better coordination of subject matter areas as well as a better balance of intellectual and non-intellectual activities; (b) the value of giving students added responsibilities and greater opportunities to practice self-discipline. Such suggestions of additional duties for the school rendered even more critical the problem of an already overloaded and "encyclopedic" curriculum.⁵²

Some of the reports stressed such basic principles of the *école unique* movement as the need to consider the developing personality of students, and also the physical, social, and ethical aspects of education. The Jean Zay Plan of 1937 evolved rather naturally from such principles, as did the "New Classes" of the post-World War II era.

Jean Zay Plan

The Jean Zay Plan had been preceded in 1936 by the raising of the compulsory school age from 13 to 14. A large number of students with diversity of ability and interest were thus added to the potential secondary school population. It was the hope of the Jean Zay Plan to direct students into the proper avenue of study after completion of the elementary school, without regard to their social or economic background.

As Minister of National Education, Jean Zay took the first step to implement his plan in 1937 by changing the official terminology to suggest a ladder system rather than two separate systems of schools. Thus, there was to be Education of the First Degree (elementary education) followed by Education of the Second Degree (secondary education). Aside from terminology, the idea was to bring the elementary grades attached to the *lycées* and *collèges* under the same jurisdiction as the regular elementary schools. Both were to use the same curriculum, the same methods, and the same kind of teachers. Thus, for the first 5 years of elementary education there would be something resembling the *école unique*.

In order to link more closely Education of the First Degree and Education of the Second Degree, an attempt was made to lessen the differences in training of teachers by requiring completion of the academic secondary school (receipt of the *baccalauréat*) for elementary teachers, and by requiring some work in pedagogy (practice teaching, lectures on teaching methods, etc.) in the training of secondary school teachers.

⁵² *Ibid.*, p. 31-34.

Education of the Second Degree was to be unified somewhat by having the same program of study for all students in the first year. In the second year there were to be three separate sections (classical, modern, technical), but so organized as to insure a common base of study in order to facilitate passage from one section to another.

Most important of all was the plan of giving much attention during the first year or two to the discovery and encouragement of pupil aptitudes and interests. Once discovered, these qualities were to be the bases for assigning pupils to different types of schools or to different sections within a school.

The Jean Zay Plan was approved by the Cabinet of Ministers of the National Government and discussed by the education committee of the French parliament, but was not enacted into law. Parts of the plan were put into operation, however, through the initiative of Jean Zay himself as Minister of National Education.

Zay attached so much importance to the pupil orientation provision of his plan that he did not wait for legislative approval, but used existing authority available to him to issue a ministerial order of May 22, 1937, establishing 50 centers where orientation was to be incorporated into the first year (6e) of the secondary schools as a trial basis for the year 1937-38.

Called guidance or orientation classes (*classes d'orientation*), the first year classes were to facilitate the selection and placement of pupils on the basis of aptitude as opposed to family pressure, social prestige, and the like. This called for careful observation of students and implied a new method and spirit of teaching.

These orientation classes became a proving ground for such new concepts as (a) the activity method, (b) centers of interest, (c) group work, and (d) coordination of teaching. Considerable freedom was given to the teachers, but they were under obligation to cover the amount of subject matter required for admittance to the next grade (5e) of the secondary school.

Pupil participation was considered important if teachers were to know the many facets of each student; hence, efforts were made to encourage dramatics, school publications, and student programs at Easter and Christmas. At the same time, the amount of homework was reduced.

The teachers began to hold regular meetings (an innovation for French secondary education) as they felt the need to consult with each other about individual students, and about the best ways of teaching to achieve the new goals which had been set. They also felt a certain need for support from each other since the highly organized and regulated nature of French education did not encourage or reward the innovator.

All the teachers of these orientation classes met together in January 1938, to discuss such matters as electives for the students, the need for parental cooperation, and to evaluate the results of the experiment thus far. There was general agreement that better coordination of subject matter had been achieved and that pupils were better adjusted and happier. On the other hand, the acquisition of subject matter had suffered some and the load on the teacher was heavier under the new system. They agreed that there was a need to incorporate into teacher training an introduction to these new methods of teaching.

Another meeting was held in May 1938 at the *Musée Pédagogique* in Paris. Resolutions were passed calling for entrance examinations to eliminate pupils unfit for academic secondary education, homework not to be compulsory; abandoning of the system of ranking students within a classroom; and for transfer into other kinds of training of those found to be unfit for academic secondary education.⁵³ The experiment with orientation classes ended with the outbreak of World War II.

A listing of the major changes in French education between the two world wars⁵⁴ would include such measures as free secondary education and raising compulsory education to the age of 14. A further step toward giving all French children something in common came when all elementary classes were placed under the same jurisdiction and made subject to the same inspection.

Some shift in emphasis was to be noted as physical education became a requirement and the physical sciences gained a place in the last year of the academic secondary school, alongside the traditional majors of mathematics and philosophy. Vocational and technical education which had begun to develop after World War I continued to do so, but their lack of respectability was to be a source of concern to reformers in the post-World War II period.

The basic spirit prevailing in the classrooms and underlying the methods of teaching was not that of the Jean Zay Plan, although the official instructions to teachers began to encourage new methods and concepts of discipline.

The over-loaded curriculum remained, and pupils continued to be over-worked. The heavy emphasis given to language study, including Latin and Greek, was a matter of dispute.

Excessive memorization and second-hand analysis remained the order of the day. Competition for marks was fierce to the neglect of such human values as concern for others and ability to work with others. Social pressures still operated in the educational system and interfered with the proper selection, placement and transfer of pupils.

⁵³ *Ibid.*, p. 40.

⁵⁴ See: Dobinson, Charles H. "French Educational Reform." *Comparative Education Review*, June 1959. p. 6; and Miles, *op. cit.*, p. 42-43.

These were matters to which the reformers returned after World War II.

"New Classes"

In the post-war period, the trend continued toward diversification of offerings on the secondary school level to meet the evergrowing variety of aptitudes and interests of secondary school-age youth. Educational reformers continued to call for further reform of the French educational system. Their pleas were answered at the secondary school level by the creation of experimental classes, called the "new classes." These are described later on in this book in chapter VI on the academic secondary school.

Chapter III

ADMINISTRATIVE STRUCTURE

FRANCE has a highly centralized system of education. Most of the schools in France are public and these are closely controlled by the national government in Paris. The French constitution states that "the organization of a public, free and secular education at all levels is a duty of the State."¹

National Control

The centralized system is established firmly in France and has the weight of tradition behind it. The long struggle to unify the various small territories into a single French nation was accompanied by a growing tendency to concentrate power and responsibility in the hands of the ruling authority. By the time of the reign of Louis XIV in the 17th century the power of the central authority had grown greatly.

With the rule of Napoleon in the early years of the 19th century, it was definitely settled that in education, as in most other matters, the central authorities in Paris would decide all important questions. The minor details left to local discretion include the provision of heat and light for school buildings, and construction of new buildings. Even here, however, the national government may supply a sizeable portion of the money required, and when local officials fail to act promptly, an official (prefect) appointed by the national government may step in and order construction of the school building.

Local authorities have no control over the curriculum of the public school. Such matters are decided at the national level and then carried out in the schools under the supervision of inspectors who act as field representatives of the Ministry of National Education in Paris.

Most of the money for public education, including the salaries of all public school teachers, comes from the national government; local governments pay approximately 15 percent of the costs of public education and the national government pays the other 85 percent.

¹ France. Ministère de l'Éducation Nationale. *La Vie Scolaire en France*. Paris: 1961. p. 6.

The French Parliament has occasion regularly to discuss educational policy in the course of deciding how much of the national budget shall go for education. This sometimes has the effect of mixing political considerations with educational matters and of slowing down proposed reforms of French education.

In 1958 an estimated 3.5 percent of the gross national product went to education, and by 1970 it is expected to be 5 percent.² The proportion of the national budget which is devoted to education increased from 1/14 in 1950 to 1/10 in 1958.³ This is a reflection of rising school enrollments and also of a growing tendency of local areas to seek more financial support from the national government for this or that phase of education. An inspector-general in the French Ministry of National Education analyzed this trend as an indication of the further withdrawal of local areas from active participation in school matters and of their reliance more and more on the state to decide educational questions.⁴

Local areas sometimes seek to have a locally operated technical secondary school (*collège technique*) replaced by a national vocational school, or to persuade the national government to establish an apprenticeship center. The local authorities, unless the national government is vigilant, may then try to have the national school or center take the place of a locally operated vocational school.

It is worth noting that since World War II the national government in England has gained a larger measure of control over the English system of schools, which nevertheless remains essentially a decentralized system. Moreover, the sizeable reduction in the number of school districts in the United States in the last decade through the process of consolidation can be cited as evidence of growing centralization; the powers of the national government in the field of education, however, continue to be quite limited.

In France, the largest share of the money coming from the national government goes for the salaries of teachers, principals and inspectors. Of the money spent on elementary education by the national government in 1950, approximately 84 percent was for salaries.⁵

In the case of nationally operated vocational schools and academic secondary schools (*lycées*) the entire cost of operation is paid for by the national government. The cost of the school building and its main-

² *Target for Education in Europe: A Study of Policy Considerations Related to Economic Growth*, by Ingvar Svennilson, Friedrich Eddling, and Lionel Elvin. Paris: Organisation for European Economic Cooperation, 1961. p. 102; *L'Education Nationale*, 15 février 1962. p. 12.

³ France. Ministère de l'Éducation Nationale. *Le Problème Scolaire: le Voici*. Paris: 1959. p. 30.

⁴ Thabault, Roger. "Fiscal Management in France." *Yearbook of Education 1956*. London: Evans Bros. Ltd., n.d. p. 369-379.

⁵ Debliesse, Jean. *Compulsory Education in France*. Paris: UNESCO, 1961. p. 49.

tenance in the case of public elementary schools and locally operated secondary schools is borne by the local government (*commune* or *département*) but the national government provides help in the form of subsidies up to 85 percent of the cost. For example, the national government may grant funds to the *départements* and *communes* to pay the interest on loans which they floated to build elementary schools. The national government may also help by loaning such instructional materials as films to the schools. Where such extra services as a school cafeteria (*canteen*) are provided by the local government, the national government may pay up to 50 percent of the cost of the building and equipment.

All private schools in France must secure authorization from the mayor of the *commune* and the school inspector before beginning operation.

Until 1959 the national government exercised little control over curriculum or teaching methods in private schools, though it retained the right of supervision to insure that the instruction given was not in violation of law or morality, and that the buildings met required standards for safety and sanitation. Under a law passed in 1959 procedures were established whereby private schools may secure larger grants of public money from the national government in return for entering into a closer relationship with the government. The public school supporters urge that these private schools be controlled to the point of making them over into public schools, while the private schools hope to receive larger grants of public money with no appreciable increase in public control.

French authorities now state that "private schools belonging to individuals, organizations or religious communities are subject to supervision by the inspectors-general of public education."⁶

In actual practice the national government has long exerted considerable indirect control over the curriculums of the private schools through the system of national examinations and national certificates. Entry into many professions, occupations, and institutions of higher education is dependent on passing the examinations set up for public schools by the Ministry of National Education. Most private school pupils take one or more of these examinations, and the private schools, of necessity, offer a program of study similar to that of the public schools.

The control maintained by the national government over public education, aside from the control over educational funds exercised by Parliament, functions chiefly through the Ministry of National Education, which is headed by a minister of Cabinet status.

⁶ "France." *World Survey of Education III: Secondary Education*. Paris: UNESCO, 1961. p. 477. Text prepared by the French National Commission for UNESCO.

The Minister of National Education is appointed by the Prime Minister and approved by the President of France. With the frequent downfalls of French governments there have been many changes of ministers, 12 different men having held the office of Minister of National Education in the 12 years of the Fourth Republic.

The powers of the Minister of National Education are very broad, and include the right to appoint or to delegate the appointment of most of the teaching personnel in public secondary and higher education. Through his corps of school inspectors he receives reports on every teacher in the public schools, and their promotions and transfers are controlled by him through one of the 16 regional units (*académies*) which act as sub-units of the Ministry of National Education.

The Minister is responsible to Parliament but his discretionary powers are wide. He can issue decrees which are binding on schools until such time as Parliament chooses to countermand them. Many important changes in French education have been brought about in this way.

The Ministry of National Education issues curriculums for the various types of public schools, along with detailed instructions on the teaching methods to be used, the time schedule of classes, and the rate at which textbooks and syllabuses are to be covered.

Such matters as changes in curriculum usually are initiated by inspectors and others in the Ministry of National Education, and then are submitted for approval to a number of commissions which advise the Ministry of National Education. The most important of these is the Higher Council of National Education (*Conseil Supérieur de l'Éducation Nationale*) established by the law of February 27, 1880.

This council has approximately 80 members, some ex officio, some appointed by the Minister, and others elected by various teacher groups, both public and private. Teachers have a majority on the council. The Minister of National Education is chairman.

The council meets twice a year and on other occasions when convened by the Minister. He is obligated to consult this body on such important areas as curriculum, teaching methods, organization of examinations, and approval or disapproval of school textbooks.

Local Control

Below the national level, there are three governmental units which have some responsibility for schools, namely the academy, the department, and the commune. The academy (*académie*) is an educational administrative unit; metropolitan France is divided into 16 such *académies*, in each of which there is a university. The head of each university is called the rector (*recteur*), and he is at the same time the head of the public schools of the nearby area (*académie*).

The rector acts as an agent of the Ministry of National Education, and the *académie* system is more an administrative device than an example of local control of education.

The rector is appointed from among the professors at a university by the President of France, upon nomination by the Minister of National Education. The interests of the rector center chiefly on secondary and higher education. Under his jurisdiction there is an inspector-general of elementary education and a corps of school inspectors who supervise the elementary schools of the *académie*.

On matters concerning academic secondary schools, the rector consults regularly with the Academic Council for the *académie*. The composition of this council has remained unchanged from an earlier time when it dealt with both higher education and secondary education, but its higher education functions have been taken over by councils within the universities. Included on the Academic Council are the deans of the faculties of the university, school inspectors, two principals of academic secondary schools, and six representatives of the teachers of the academic secondary schools.

The *académies* vary in size from less than a million inhabitants to 10 million (Paris). Each of the 16 academies includes several *départements* (5 or 6 usually). In 1962 certain *départements* were detached from existing *académies* to create three new *académies* located at Nantes, Orleans and Reims; also under consideration is the establishment of a fourth new *académie* at Amiens. The Paris *académie*, with nine *départements* and one-fourth of the school population of France, will be reduced to the Paris region, namely the *départements* of Seine, Seine-et-Oise, Seine-et-Marne, and Oise. Nevertheless, the boundaries of this new Paris *académie* will encompass more than 9 million people.

There are 90 *départements* in metropolitan France, but these are not natural units in terms of geography or economics. They are fairly small in size, though some in the Paris area have large populations.

The *départements* are headed by a prefect who is appointed in Paris by the Minister of the Interior. Attempts to gain some extension of local control have won for the *départements*, and for the smaller units, (the communes), the right to have popularly elected councils. The council of the commune also elects the mayor who is the important personage of the commune.

As administrative head of the *département*, the prefect has general control over public elementary schools in his area. In addition, each *département* has a head inspector of schools, who has a corps of inspectors working under him. Known as the *académie* inspector, he acts as an agent of the *académie* and ultimately of the Ministry of

National Education. His immediate responsibility is to the director-general of elementary education of the *académie* and to the rector of the university.

The *académie* inspector is chiefly concerned with elementary schools, although he also inspects secondary schools. Much of the inspection of secondary schools is done by an inspector-general who is assigned to one of the school subjects, such as mathematics or French. In 1956 there were 41 of these inspectors, several for each of the school subjects. The inspectors are based in Paris in the Ministry of National Education and visit schools all over France.

In 1956 there were about 500 elementary school inspectors working under the *académie* inspectors; about 10 percent were women. There are no supervisors between the elementary school inspectors and the teachers; the principal of a school is not authorized to comment on the teacher's work in any official way, though he may help to orient his new teachers.⁷

The *académie* inspector usually has had several years of teaching and experience as a principal of a school, or as an inspector. About 90 percent of the inspectors are former teachers from academic secondary schools, *lycées* usually. All have an undergraduate degree (*licence*) from a university and most have spent a year or more in additional study to secure either the secondary school teacher's certificate (C.A.P.E.S.) or to pass the much esteemed examination known as the agregation (*agrégation*).

In addition to the inspector in charge of schools in a *département* there is an advisory council on elementary education, which owes its origin to a law of October 30, 1886. The prefect is chairman of the council and the head inspector is vice-chairman. Other members of the council include four persons selected by the general council of the department, which is an elective body; four public elementary teachers selected by their fellow teachers; the principals of the two normal schools for training elementary school teachers; two representatives of private schools in the department; and two inspectors of elementary schools, appointed by the Minister of National Education.

The advisory council on education for the department usually meets every 3 months and on other occasions when called by the prefect. The council has few powers with regard to the actual teaching in the schools. Members of the council may visit schools, chiefly to consider the adequacy of the physical facilities. Periodically the council studies the need for new school buildings and the matter of approving new private schools in the *département*.

⁷ UNESCO/International Bureau of Education. *School Inspection*. Paris/Geneva: 1956. p. 166. (Publication No. 174.)

This council has certain powers to discipline teachers, is responsible for the appointment of teachers to permanent positions, and for drawing up a list of teachers for promotion. The prefect, as the politically appointed agent of the national government, formerly appointed the teachers. Since 1946 the actual formulation of the list of appointments has been delegated to a newly created joint administrative commission which is composed of members of the teaching profession.

The joint administrative commission was established by a law of May 18, 1946. The head school inspector for the *département* is chairman, and others on the commission include the principal of either the men's or the women's normal school which trains elementary school teachers in the *département*; three elementary school inspectors; and five representatives from teachers in the schools.

While the joint administrative commission is only an advisory body, it exerts an influence. Its creation was in keeping with the wishes of some of the teaching profession who would like to see the centralized bureaucratic control of French education tempered by giving more control to the teaching profession. The joint administrative commission does not take the place of the advisory council on education, which has a broader representation and reserves the right to decide such matters as the obligation of the municipality to give teachers an allowance in lieu of providing them with housing accommodations.⁸ The *département* may, if it wishes, raise the salaries of teachers by paying a sum of money out of *département* funds, which is added to the basic salary paid by the national government.

The local government proper, namely, the commune, has little actual control over the local schools. There are some 38,000 communes in France, varying greatly in size and population. Some are large cities, but most communes have less than 1,500 inhabitants; 23,000 of the communes have less than 500 people.⁹

Each commune has a mayor elected by the communal council and responsible to the prefect of the department. The mayor may suggest new school buildings, recommend the opening of private schools, and seek to promote school attendance. He is advised in these matters by the general council of the commune. The commune is required to provide the building for a public elementary school, which then remains the property of the commune. The laws do not require a local community to provide lower secondary, academic secondary or vocational schools, but upon permission from the Ministry of National

⁸ *Ibid.* p. 177.

⁹ Steinberg, S. H., editor. *The Statesman's Yearbook, 1960-61* New York: St. Martin's Press, 1960. p. 981.

Education, the commune may build and maintain these other types of schools.

There are school boards for the communes but the duties are so unimportant and authority so meager that some communal councils refuse to appoint boards and members appointed sometimes refuse to serve. School boards have no control over curriculum or the teacher. When school boards of communes find their decisions being overridden by the prefect or by the advisory council on education of the *département* they sometimes refuse to continue to meet.

The prefect, acting through the *département* council, can open or close a school in the commune without regard to action by the commune, but the approval of the Ministry of National Education must be secured. The usual procedure is for the prefect, when he sees the need for a new school, to have the mayor of the commune discuss the matter with the council of the commune within 30 days. At the end of this period, regardless of whether the commune has acted, the prefect may take the matter to the department council: in such cases he and the *académie* inspector work closely together. Sometimes the council of the commune initiates the request for a new school, either on its own or after being requested to do so by the elementary school inspector.¹⁰

The school board of the commune is supposed to keep the school census and insure adherence to the compulsory school attendance law. It also administers a small school fund to help provide extra services, such as a school cafeteria. Some of the money comes from the national government and some is raised by the commune through taxes and license fees it levies on such things as land, dogs and the sale of animals. The commune also receives a share of certain taxes levied by the national government.

The administrative structure of the French educational system, with its Ministry of National Education, *académies*, *départements*, and communes, has the overall effect of giving parents little direct control over the schools. The voice of the individual citizen must be brought to bear on a distant Ministry of National Education, chiefly through the representative of his local area who sits in the French Parliament. A small number of citizens participate in policy making through the various consultative bodies which advise the Ministry of National Education. Many of these citizens are members of the teaching profession or officials of the Ministry of National Education.

Lacking an established role in policy making in educational matters, the French citizen reportedly tends more and more to leave such matters to the national government. In the process, the vitality and

¹⁰ France. Ministère de l'Éducation Nationale. *Encyclopédie Pratique de l'Éducation en France*. Paris: 1960. p. 109-110.

sense of initiative of local areas are dissipated.¹¹ Yet, strangely enough, the French people have an active interest in general educational issues, and wide coverage is given to education in the daily press.

Though there is criticism of the effects of centralization in education, the system is the product of several hundred years of molding the French people into a nation, and there is little likelihood of change. It is significant that proposed educational reforms seldom strike at the principle of centralization itself, although the reforms call for more flexibility, variety and diversity, which, if carried out, might prove in practice to be somewhat incompatible with nationally controlled examinations, books, and courses of study.

Recent instructions from the Ministry of National Education encourage the teacher to exercise initiative, but the detailed uniformity of textbooks, curriculums, courses of study and examinations poses a formidable barrier to an adventurous teacher. One observer has noted that the course of study for the elementary schools in France remained virtually unchanged from 1887 to 1923 and only slight changes were made in 1923. He goes on to point out that under a centralized system so few teachers have had an opportunity to experiment with new ideas or practices that a proposed innovation may fail for lack of skill or understanding on the part of the teacher.¹²

Educational reform in France sometimes flounders because a change in one public school must be accompanied by a change in all public schools, if uniformity is to be maintained. The magnitude of such an upheaval, to say nothing of the cost, is such as to delay reforms indefinitely.

On the other hand, by a "single stroke of the pen" the Minister of National Education can effect changes in all public schools of France overnight. Such a ministerial decree, however, can be overturned later by parliamentary action.

The outsider's view of the French educational system is typified by the following comment:¹³

The French educational system has hitherto been characterised by strong centralization, with almost complete disregard for local feelings, local conditions and the wishes of parents.

In France, centralization has been seen as a vital instrument to build cultural solidarity. Other advantages of centralized education have been listed by one French educator as including (a) a relatively better paid teaching profession than where there are many employers

¹¹ Thabault. *Yearbook of Education, 1956. op. cit.*, p. 377-378.

¹² Kandel, Isaac L. *The New Era in Education: A Comparative Study.* Boston: Houghton Mifflin Company, 1955. p. 117.

¹³ Kerr, Anthony. *Schools of Europe.* Westminster, Maryland: The Canterbury Press, 1961. p. 143.

of teachers; (b) efficiency—the ability to get a complete picture of such things as building needs; (c) economy—bulk buying, central service for school furniture, and so on; (d) uniformity in standards. On the other hand he warns:¹⁴

This centralized system, which had been created by the Catholic Church to spread a state religion, would be a danger to individual liberties if France in general, and members of French universities in particular, were not liberal in outlook and if the new group to which this system has given birth were not—whatever may have been said about them—remarkably public spirited.

France's centralized system of education would suggest a considerable attempt at coordination within the field of education. To this effort has been added, as of 1951, coordination of education with such other parts of the social sector, as housing and health, as part of an overall planning procedure, including 4-year plans to promote the economic development of France. In 1951, a government planning committee for education (*Commission du Plan d'Equipement scolaire, universitaire, scientifique et artistique*) was established as part of the overall planning commission. The education committee included private citizens and representatives of several government ministries, among them the Ministry of National Education.

Education was included in the national plan at first because it is one of the more important public services and also one of the most costly.¹⁵ Later, a connection between manpower needs and education was recognized; more recently, investment in education has come to be considered a means of stimulating and directing economic development.

Some in the teaching profession feared that schools would lose out by being included in an overall plan, which many thought was guided chiefly by goals alien to education, namely economic ends. Those who have participated in the planning process in France maintain, however, that education has been given top priority largely because its needs have been presented simultaneously with other sectors of the economy and as part of an overall plan.¹⁶

¹⁴ Thabault. *Yearbook of Education 1956*. *op. cit.*, p. 378.

¹⁵ For a description of the planning process as it pertains to education see: Polgnant, Raymond. "France." *The Planning of Education in Relation to Economic Growth*. (Volume IV of Policy Conference on Economic Growth and Investment in Education, Washington, 16th–20th October 1961.) Paris: Organisation for Economic Co-operation and Development, February 1962. p. 9–32.

¹⁶ *Ibid.*, p. 28.

Chapter IV

NURSERY SCHOOL AND KINDERGARTEN

COMPULSORY EDUCATION in France begins at the age of 6, when children enter elementary school. Many children, however, will have had some prior experience in nursery school or kindergarten.

In France, nursery school and kindergarten are combined in a school called *école maternelle*. Children may enter such a school at the age of 2. Most of the administrative seats of local government, and the larger towns have an *école maternelle*; there are approximately 5,500 such schools.¹ In towns under 2,000 inhabitants the *école maternelle* may be replaced by infant classes (*classes enfantines*) in the annex of an elementary school for girls. These classes frequently do not take the child until the age of 4 since the rural mother remains more at home than the city mother and has less need of supervisory care of her children. In some places the Red Cross has organized child care centers (*crèches* or *maisons d'enfance*) for children under the age of 3 to assist working mothers. Public nursery schools in France are free and open to children of both sexes and of all races and religions.

In 1961-62, 1,370,000 children were enrolled in *écoles maternelles* and infant classes, the majority (87.6 percent) in public schools. Pre-war enrollment in public nursery schools (not including the *classes enfantines*), reached a high of 379,000 in 1937 and then dropped below 300,000 during World War II. In 1947, the 1937 level had been reached again, and thereafter an extremely rapid increase occurred. By 1958 the enrollment in public nursery schools was close to 800,000; and with the enrollment in public *classes enfantines* added the total was 1,094,441.² Enrollments continued to increase slowly and for the year 1961-62 there were 1,200,000 children in public *écoles maternelles* and *classes enfantines*. In at least 4 regions (*académies*) of France,

¹ France. Ministère de l'Éducation Nationale. *Encyclopédie Pratique de l'Éducation en France*. Paris: 1960. p. 78.

² *Informations Statistiques*, No. 21, mai 1960. p. 225.

however, enrollments in 1960 were lower than in 1954.³ It is estimated that 40 percent of French children between the ages of 2 and 6 are enrolled in some kind of kindergarten or nursery school.⁴

Table 6.—Number of nursery schools (*écoles maternelles*) and number of pupils enrolled: selected years, 1923 to 1959¹

[Not included are pupils enrolled in *classes enfantines*, which are attached to elementary schools]

Year	Number of schools			Number of pupils		
	Public	Private	Total	Public	Private	Total
1923-24.....	3,030	716	3,746	231,000	34,000	315,000
1928-29.....	3,115	564	3,679	341,000	33,000	374,000
1933-34.....	3,332	476	3,808	374,000	26,000	400,000
1938-39.....	3,430	396	3,826	375,000	21,000	396,000
1947-48.....	3,463	185	3,648	373,000	14,000	387,000
1950-51.....	3,788	198	3,986	493,000	18,000	511,000
1955-56.....	4,484	181	4,665	672,000	22,000	694,000
1958-59.....	5,395	183	5,578	787,000	20,000	807,000

¹ *Annuaire Statistique de la France, Rétrospectif*. Paris: Institut National de la Statistique et des Etudes Economiques, 1961. p. 61.

Nursery schools in France date back to 1826 at least, and even cited as a forerunner is the knitting school for young children, founded in 1770 by Frédéric Oberlin, a pastor in Alsace.⁵ About the same time, the infant schools of England began to develop under the leadership of philanthropists and reformers, such as Robert Owen, as a means of countering the problems created by the new industrial revolution.

Such schools were seen by men like Owen as a means of providing children a small measure of care and education in contrast to letting them work in factories or be without supervision as their mothers increasingly began to work in factories.

Infant schools were popular in the United States in the first two or three decades of the 19th century, and were replaced in the 1830's and 1840's by the new public school systems developing in the cities.

The establishment of nursery schools (called *salles d'asiles*) in France in the 1820's coincided with the growth of industrialization and of the number of women working outside the home. In 1837 a royal decree gave such schools official recognition but characterized them as charity institutions.

³ *Education in France*, No. 15, October 1961. p. 32.

⁴ UNESCO/International Bureau of Education. *Organization of Preprimary Education*. Paris/Geneva: 1961, p. 132 (Publication No. 230).

⁵ An excellent summary of French nursery schools is found in: Madame Herbliniere-Lebert. "The French Ecole Maternelle." *Educational Review: Journal of the Institute of Education, University of Birmingham*, November 1954. p. 55-70.

In 1847 a private school for the training of teachers of nursery schools opened in Paris. A government decree of April 28, 1848, changed this school to a public institution with Mrs. Pape-Carpentier as director.⁶ In 1867 Victor Duruy asked Mrs. Pape-Carpentier to examine the status of nursery schools. She found the existing ones inadequate; her suggestions for change were later implemented by Mrs. Kergomard who was designated by Jules Ferry in 1879 to work with Ferdinand Buisson in organizing what came to be known as the *école maternelle*.⁷

Not until the 1880's when free public elementary education was established in France did the nursery schools receive recognition as educational institutions. In 1887 they were given the name, *école maternelle*. These schools after 1891 were staffed by teachers with the same training as those in elementary schools. This is in contrast to such nearby countries as Belgium and The Netherlands where the training of nursery school teachers is 1 or 2 years shorter than that of elementary school teachers.

General Organization

A commune in France may choose to open a public *école maternelle* or to establish infant classes but it is under no compulsion to do so. Upkeep of the buildings and teaching materials and equipment must be provided by the commune. A public nursery school may receive sizeable subsidies (from 40 to 85 percent) from the national government but in accepting such subsidies the commune pledges itself to keep the school in operation for at least 30 years. The salaries of teachers in the public nursery schools are paid by the national government and are the same as those of elementary school teachers. This, too, is in contrast with nearby European countries where salaries of nursery school teachers are lower than those of elementary school teachers. The teacher of the French *école maternelle* frequently lives in the school rent free.

The typical school day includes a 3-hour session in the morning (8:30-11:30) and a 3-hour session in the afternoon (1:30-4:30). The schools sometimes stay open 10 or 12 hours a day depending on the needs of the locality; about one-third of the children spend the entire day at school. In some places the school opens as early as 6:30 a.m. or 7 a.m. when the factories begin work. This illustrates the dual function of these schools—to provide both education and child care services. For children coming from homes where the mother cannot take care of the child, the school provides bathing facilities and

⁶ *Encyclopédie Pratique de l'Éducation en France, op. cit.*, p. 98.

⁷ *Education in France*, No. 13, March 1961. p. 25.

teaches the child to keep clean. Meals and even clothing are given to children not adequately provided for at home. In some cases, the schools sponsor lectures for the mothers on such topics as child care. All of the children receive medical examinations, including X-ray and tuberculosis tests.

Such schools are looked upon as a social agency to protect the children of working parents, particularly. At the same time, an increasing number of children from middle class homes are entering these schools to receive educational services. The result has been that the public nursery school serves the additional social function of bringing children from various groups in society together at an age and in an atmosphere where mutual respect and understanding are encouraged.

Official instructions of January 5, 1957, specify that the nursery school should include such facilities as a medical room and a recreational room. In the larger cities, the staff of the nursery school may include not only teachers but social workers and attendants (*gardiennes*) who take over on Thursday holidays when the teachers are not on duty. In addition, there are women custodians (*femmes de service*) who look after the buildings and the physical needs of the children. The nonteaching members of the staff are appointed by the headmistress of the school with the consent of the mayor of the commune. The teachers and the headmistress are appointed by the rector of the academy, the names of candidates being supplied by the head inspector of the department.

The headmistress is required to have taught 5 years in a nursery school. The infant classes are supervised by the principal of the elementary school where the classes are held. There are approximately 40 women inspectors from the Ministry of National Education who visit the nursery schools. In some rural areas the inspector of elementary schools inspects the nursery schools as well.

Curriculum

The program of study in the nursery school must be approved by the Ministry of National Education and includes "in order of importance: games, progressive exercises in movement accompanied by songs, handwork and drawing, elementary instruction in ethics; simple general knowledge, exercises in correct speaking, tales and stories; rudiments of arithmetic, writing and reading (the last applying only to children over 4.)"⁸

These schools usually have three separate sections: one for the 2- and 3-year old children, one for those 4, and one for those 5 years of age. The syllabus is not rigidly fixed, nursery schools being the first

⁸ UNESCO. *World Survey of Education II: Primary Education*. Paris: The Organization, 1958. p. 384.

Table 7.—Hours per week devoted to subjects in nursery school and kindergarten
(*école maternelle*)¹

Subjects	Hours
Recreation and cleanliness.....	5
Rhythmic exercises.....	2½
Sensorial and observation exercises.....	2
Modelling, drawing.....	2
Handicrafts.....	2
Singing and music.....	2½
Stories.....	2
French (elocution, reading, writing).....	10
Arithmetic.....	2

} For those who
have reached
the age of 5.

¹ Dehlesse, Jean. *Compulsory Education in France*. Paris: UNESCO, 1951. p. 61.

area in which French teachers were given some freedom to adjust the program to local circumstances. The spirit of this type school reportedly has had a beneficial influence on the elementary schools.⁹

The *école maternelle* does not claim to be a follower of one educational method, such as that of Decroly or Montessori. Instead, teachers are introduced to the ideas of many educators in their training. A recent French publication¹⁰ characterizes this school as one which uses the technique of learning by doing. A veteran American observer¹¹ maintains that the chief theoretical influences on the curriculum of the French *école maternelle* comes from foreign educators and psychologists, particularly Piaget, Claparède, and Ferrière of Switzerland, Decroly of Belgium, and Montessori of Italy.

The guiding principles of the *école maternelle* have been listed by an inspector of the Ministry of National Education as follows:¹²

1. Respect for the child's personality.
2. Use of active methods.
3. Education of the senses through creative activity.
4. Wider use of all means of expression.
5. Moral and social education through activity and life in a community.
6. Physical education through play.
7. Intellectual education through free and controlled observation.
8. An atmosphere of freedom as a prerequisite for developing discipline.

⁹ Kandel, Isaac L. *The New Era in Education: A Comparative Study*. Boston: Houghton Mifflin Company, 1955. p. 220-221; this view is repeated by official French sources in UNESCO. *World Survey of Education II: Primary Education*. Paris: The Organization, 1958. p. 384.

¹⁰ *The Young Face of France*. Paris: Published for le Centre de Diffusion Française, 1959. p. 10.

¹¹ Kandel, *The New Era*, *op. cit.*, p. 220.

¹² Herbinlere-Lebert, *op. cit.*, p. 33.

In other words, the teacher supervises and encourages without hindering and she is sensitive to the importance of maturation and rate of growth. All this involves delicate perception and a sense of timing. Great importance is given physical and manual activity which provide opportunities to create, construct, and experiment. Often the physical exercises and breathing exercises are accompanied by music.

A head inspector of nursery schools in France describes them as progressive schools in the forefront of educational progress. Being already reformed, she says, they are not mentioned in the projects to reform French education.¹³

Starting with 5-year olds, some exercises are provided to initiate the children into reading, writing and arithmetic. Recently, attempts have been made to reduce the emphasis on teaching reading and writing in the nursery school, but parents have shown little enthusiasm for this innovation and continue to press for an early start on these tool subjects. The same is true of England where an effort is made to teach 5-year-olds to read and write.¹⁴

Parents in France in the 1960's continue to press the *école maternelle* to teach reading and writing to young children. An *école maternelle* will devote a large amount of time to such endeavors as painting, sewing designs on tablecloths and napkins, making reed baskets, using putty to make dishes, dancing to music, and the like. The same children, at the age of 4, are required to start practicing penmanship—first, by drawing wavy lines on paper, then circles, and finally, by copying the letters of the alphabet in their notebooks. Five-year-olds will go on to copy the entire sentences.

The following translation of a law of February 22, 1905, was distributed by the Ministry of National Education in March 1960, to a group of visiting American school administrators to help explain the *école maternelle*:

. . . the personnel (of Maternal Schools) should remember the decree issued in 1887 which expressly states that the subjects of Reading and Writing should be reserved for children . . . (Over 5 years of age); that these subjects are not the main purpose of the Maternal School but appear as only sixth and last point on the list of subjects.

It must be added that . . . (early) in 1889, a Commission was appointed to inquire into the disastrous effects which . . . premature intellectual education has on the physical development of the child and on its health . . . (The Commission) recommends that all work requiring immobility be abolished in Maternal Schools; that, at least, no two

¹³ *Ibid.*, p. 64.

¹⁴ For a comparison of American and English children on achievement level in spelling and reading, see: Scholl, Geraldine T. "The Reading and Spelling Achievement of a Group of English Children." *University of Michigan School of Education Bulletin*, April 1960. p. 105-107.

intellectual courses be given consecutively and that an intellectual course should be separated from a manual course by 15 minutes of physical activity.

Parents and teachers are greatly responsible for the errors committed in the Ecole Maternelle: ignorant and unduly ambitious parents demand that their children learn to read and write before being able to speak or understand what is said to them; teachers of Primary Education, misjudging the danger of the initial intellectual effort, blame the Directrice of the Maternal School if the children in her care do not know how to read, write and count before entering Primary School. Neither parents nor teachers seem to be aware that the future progress of intelligence is vouchsafed if the child has made a habit of personal observation and if it has been methodically acquainted by vision with the objects of its surroundings.¹⁵

¹⁵ Translation of Law of February 22, 1905. Distributed in mimeographed form by Institut Pédagogique National in March 1960 to Seminar for American School Administrators, Paris, France.

Chapter V

THE ELEMENTARY SCHOOL

THE ELEMENTARY SCHOOL (*école primaire élémentaire*) of France offers 8 years of study. Practically all children of compulsory school age (6-13 years inclusive) are enrolled in school; most attend the elementary school, though some of the 11-13-year-old group will be found in secondary schools. The stated goal of the elementary school is that children on leaving the school should be equipped with academic knowledge which at the same time is practical and solid.¹

The elementary school has 30 hours of instruction per week with classes on Saturday but not on Thursday. There are 3 hours of instruction in the morning and 3 in the afternoon over a 5-day week. After subtracting various holidays, including summer vacation, the school year consists of approximately 185 days. For most French children elementary education begins at the age of 6 and continues until they are 14 when they leave school in large numbers. Some continue their schooling in apprenticeship or vocational classes and some enter a vocational school earlier at the age of 13, or even 12.

The typical French child receives 8 years of elementary schooling under teachers who have an education equivalent to completion of the academic secondary school plus one additional year in pedagogy (education courses in teaching methods, practice teaching, etc.) Some of his teachers may have only completed the academic secondary school with no work in pedagogy and some may have completed only the 9th grade of a lower secondary school.

The last 2 years of the 8-year elementary school are intended for children who are not excelling in their school work or whose parents do not want them to enter secondary education. The teaching is not of secondary level and the aim is essentially practical, i.e., to dispense knowledge which can be applied rather readily.²

¹ Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale, 1960*. Paris: 1960. p. 35.

² *Education in France*, No. 4, December 1958. p. 16.

For a relatively small number of French children (less than 20 percent of the age group) elementary education ends at the age of 11 upon completion of 5 years of elementary schooling. At this point they enter an academic secondary school (*lycée* or *collège*) with a 7-year program. Some enroll in the modern section of this school, which begins with one foreign language, while those in the classical section begin Latin, along with a modern foreign language.

An even smaller group of French children are in the *cours complémentaire* (lower secondary school)³ which they enter after completion of 5 years of elementary education. The classes of the *cours complémentaire* cover grades 6-9 inclusive and frequently are held in the same building as the 8-year elementary school. Less than 4 percent of the elementary schools have *cours complémentaires*.

The intent is that the work in the *cours complémentaire* should be similar to the first four grades of the modern section of the academic secondary school. Some people claim, however, that the level is lower in the *cours complémentaire*; these classes are taught by former elementary school teachers trained at a lower level than the teachers in academic secondary schools.

Some students enter a vocational school upon completion of the seventh grade of elementary education and others, upon completion of the eighth grade. In France, vocational education has had low prestige compared to academic education. This is a matter of interest both to those who are concerned about the wide disparity between social groups and types of occupations; and to those who think in terms of national strength and the need for technical manpower.

The academic secondary school has high prestige and for all practical purposes is the major road leading to higher education and to the important positions in government, in industry, and in French life in general.

Thus, after grade 5, the system is at least a tripartite one. If vocational schools are included, there are actually four diverging pathways of education. The majority of students, however, continue on in the 8-year elementary school.

In a sense, the future leaders and followers have been determined at the age of 11, and for most children the doors of hope, of ambition, and of opportunity to improve their standing in comparison to their peers, have been closed. The reform of 1959, which is described in detail later, sought to rectify this situation, in part, by making it easier to transfer from one type of school to another, though the separate pathways remain.

³ The *cours complémentaire* is translated as complementary course by some writers and as continuation course by others. In this paper it will be called a lower secondary school in order to give the American reader a better understanding of the organization of French education.

French educational reforms have long sought to eliminate those features of French education which in practice meant one type of education for children of the lower socio-economic groups and another for the well-to-do. In elementary education the problem has centered around the preparatory divisions attached to the academic secondary schools of high prestige and offering 5 years of elementary schooling. Theoretically, the small number of places in these academic secondary schools were open to applicants from any elementary school but those in the preparatory divisions received preference. Moreover, acceptance into the preparatory divisions was influenced by whether one had brothers and sisters already enrolled in the division or in the attached academic secondary school.

An important step was taken after World War II by treating the preparatory divisions as part of the regular elementary school system, thus placing them under the general supervision of the elementary school inspector in the same way as a regular village elementary school. Moreover, the curriculum of the preparatory divisions was to be brought into line with the public elementary school curriculum.

The preparatory divisions still remain, though enrollments are decreasing; 55,000 children were enrolled in them for the first five grades of public elementary education in 1961.⁴ Critics continue to suggest that these pupils are in a privileged position, and that in some respects children from different socio-economic groups are separated, not after 5 years of elementary schooling in common, but rather from the very beginning of school at the age of 6, or even earlier, since nursery school classes are sometimes included in the preparatory divisions.

Enrollments

In the school year 1961-62, 5,838,600 pupils were enrolled in elementary education, of which 83.8 percent were in public schools. For the public elementary schools in 1960-61 there were 174,050 teachers. There are approximately 73,000 public and 10,000 private elementary schools in France.

Enrollment figures for the period 1910-50 show a rather steady ratio of about 80 percent public and 20 percent private in the field of elementary education. The public school share dropped below 80 percent in the early 1940's under the Vichy regime but by 1950 was above 80 percent and increasing.⁵ About two-thirds of the private elementary schools are for girls. Almost all of the private

⁴ *Education in France*, No. 16, January 1962. p. 6.

⁵ Debiesse, Jean. *Compulsory Education in France*. Paris: UNESCO, 1951. p. 83.

elementary schools are Catholic, although a few are Protestant, Jewish, or nondenominational.

It is difficult to settle on a specific enrollment figure for elementary education because the data given often include nursery school enrollment and the *cours complémentaires*. The first year or two of the academic secondary school have 11- and 12-year-old students, but these are counted in secondary school enrollments. The matter is complicated further by the fact that academic secondary schools (*lycées* and *collèges*) often have attached preparatory divisions offering the first 5 years of elementary education; these enrollments often are not included in the figures for elementary education but instead appear as a separate entry under secondary education data.

A peak in elementary school enrollment was reached in 1937. During the years of World War II, public school enrollments dropped below 4 million and did not return to the 1937 level until 1954. Enrollments in public elementary education have increased steadily since then, passing the 5-million mark in 1958. The expansion of elementary education, both public and private, has stopped for the time being; enrollment figures for 1961-62 are slightly below those of the previous year.

The 73,000 public elementary schools in 1958 were fairly evenly divided between boys' schools, girls' schools, and coeducational schools. Almost all of the coeducational schools are 1-room, and the remainder have on the average about two classes per school. Approximately twice as many boys' schools have a *cours complémentaire* as do girls' schools, and only 38 of the coeducational schools have these schools. All told, only 2,705 public elementary schools, or 3.7 percent of the total, had a *cours complémentaire* in 1958.

Table 8.—Elementary education, public and private, by number of schools and number of pupils: selected years, 1920-62¹

Year	Number of schools			Number of pupils			Percentage in public schools
	Public	Private	Total	Public	Private	Total	
1920-21.....	67,014	12,333	79,347	3,561,000	891,000	4,452,000	80.0
1923-24.....	69,198	12,250	81,448	3,175,000	798,000	3,973,000	80.0
1928-29.....	68,312	11,806	80,118	3,303,000	796,000	4,099,000	80.6
1933-34.....	68,420	11,529	79,949	4,280,000	920,000	5,200,000	82.3
1938-39.....	70,295	11,517	81,812	4,494,000	928,000	5,422,000	82.9
1947-48.....	70,014	11,003	81,017	3,736,000	899,000	4,635,000	80.6
1950-51.....	69,970	10,982	80,952	3,832,000	894,000	4,726,000	81.1
1955-56.....	71,997	10,630	82,627	4,845,000	1,028,000	5,873,000	82.5
1959-59.....	73,688	10,218	83,906	5,054,000	968,000	6,023,000	83.9
1961-62.....	73,059	10,018	83,077	4,892,000	946,000	5,838,000	83.8

¹ *Annuaire Statistique de la France, Rétrospectif*. Paris: Institut National de la Statistique et des Etudes Economiques, 1961. p. 61. Data for 1961-62 taken from *Education in France*, No. 16, January 1962. p. 6.

Table 9.—Number of public elementary schools (boys', girls', and coeducational) and number of classes 1960-61¹

Types of schools	Number schools	Number classes
Coeducational schools:		
1-room school.....	19,010	19,010
2 or more classes.....	1,658	3,132
Boys' schools:		
With <i>cours complémentaires</i>	2,303	13,525
Without <i>cours complémentaires</i>	24,511	58,980
Girls' schools:		
With <i>cours complémentaires</i>	1,150	8,627
Without <i>cours complémentaires</i>	26,636	61,883
Total.....	74,968	165,167

¹ Statistiques de l'Enseignement Élémentaire Public, 1960-61. *Informations Statistiques*, No. 38, mars 1962, p. 83.

General Organization

Among the chief laws governing French elementary education is that of June 16, 1881, establishing free tuition in public elementary schools, and that of March 28, 1882, requiring compulsory school attendance. The latter law also freed the public schools from supervision of the Catholic Church and from the requirement of teaching the Catholic religion to public school children.

The law of October 30, 1886⁶ required every commune to have at least one public elementary school. The same requirement applies to any hamlet with 15 or more children and located more than 3 kilometers from the main school of the commune. Any commune with 500 or more inhabitants must provide a separate school for girls. In some instances, upon request from the council of the commune, the department council may authorize a coeducational elementary school. Coeducation most generally occurs in smaller villages in the lower grades. Of the 69,387 public elementary schools in France in 1956-57 almost one-third (actual number, 22,268) were coeducational. Of the private elementary schools 10½ percent were coeducational.⁷ Usually women are hired to teach coeducational classes, but the department council may, as a temporary measure, authorize the hiring of a man.⁸

The usual steps in creating a public elementary school involve a proposal from the council of a commune or municipality which then must be approved by the council of the *département* presided over by the prefect. Finally, the Ministry of National Education must ap-

⁶ *Ibid.*, p. 64.

⁷ *Annuaire Statistique de la France, 1958. op. cit.* p. 44.

⁸ Brûle, Hélène. "The Training of Teachers in France." *The Education of Teachers in England, France, and the U.S.A.*, by Brûle, C. A. Richardson, and Harold E. Snyder. Paris: UNESCO, 1953. p. 187-188.

prove the request. In practice the council of the *département* decides the number and location of public elementary schools for that region.

In small villages the public elementary school is sometimes housed in the building where the offices of the communal government are located, including that of the mayor. In such cases the girls occupy one wing and the boys another. This is convenient for the teacher of the boys since he often takes on the additional duty of clerk for the commune.

Public elementary schools are free and since the law of August 22, 1946, family allowances are paid as long as the children are enrolled in compliance with compulsory attendance regulations. School attendance in rural areas, however, traditionally has not been enforced closely. Some pupils secure permission from the school board of the commune to stay at home to help their parents for periods up to 3 months per year, and the *département* council may excuse children for 2 school days per week throughout the year. Other children do not bother to attend school regularly. It has been suggested that "by loose inspections of attendance the old order of education for only a selected few is being maintained."⁹

There is a regular procedure whereby absence from school is noted by the teacher, and if such absences continue, the matter is brought to the attention of the *académie* inspector. In extreme cases, parents of the absentees may be brought before a court and fined or imprisoned. In practice, the teacher is expected to use all his resources in consulting with the parents to make them see the importance of regular school attendance for their children.¹⁰

School attendance is also stimulated by the school fund (*caisse des écoles*) which supplies needy children with clothing, school materials, money for after-school supervised study, and so on. The school fund began as a voluntary activity in 1849. A law of 1882 required all communes to establish a *caisse des écoles*; school fees were abolished at the same time.

Money for the work of the *caisse des écoles* comes partly from local and national government funds and partly from gifts, legacies, and subscriptions paid by people who join the society administering the funds. A committee of citizens operates the *caisse*, with the mayor of the commune in charge.

In France, the problem of school attendance is aggravated when schools are not readily accessible. A school transportation system (*services de ramassage*) is available in some regions. In addition, some of the communes have established school cafeterias or canteens

⁹ "Rene's French Schooling." *Students Speak Around the World*, edited by Robert E. Belding. Privately printed, n.d. (approximately 1959), p. 29.

¹⁰ France. Ministère de l'Éducation Nationale. *Encyclopédie Pratique en France*. Paris: 1960. p. 101-103.

(*cantines scolaires*) to provide low-cost meals to the children during the lunch hour.

French parents do not care much for central schools which require school bus transportation, and one of the reasons why private schools flourish in rural areas is that they more frequently provide boarding facilities for students than do public schools.

Two-thirds of the 38,000 communes, i.e., some 24,000 have a public school with only one-teacher.¹¹ In 1959, the teachers in one-teacher schools (public) constituted 19.9 percent of all public elementary school teachers, and the pupils in one-teacher schools were 17.4 percent of all pupils receiving public elementary education.¹² Most elementary school teachers have had teaching experience in such a school, usually at the beginning of their careers.

The difficult task of one teacher providing for the various age groups and meeting the needs of rural life makes this a trouble spot in French education. Consideration is being given to the possibility of abolishing a number of rural schools and of forming central schools which would draw children from several communes. There is opposition to such a change on the grounds that it would clash with the prevailing social and economic pattern and that it would encourage an existing tendency toward desertion of rural areas for the cities. The communes have a strong antipathy toward the idea of their children being transported to some distant place.¹³

Teachers and Their Training

The small rural areas tend to get the new inexperienced teachers fresh from the training school (*école normale primaire*), since in France, as in many countries, the cities serve as a lure and some of the more experienced rural teachers seek transfers, especially to the Paris area. On the other hand, many teachers desire to remain in the villages where they are likely to become people of respect and stature. Most of these teachers grew up in the same area (*département*) of France where they attend the teacher-training school, and where they also teach.¹⁴ Such teachers traditionally have traveled very little outside their own *département*.

Some of the areas which are short of teachers have to hire people who have only completed the ninth grade of the lower secondary school¹ i.e., they have passed the examination for the *brevet élémentaire*

¹¹ UNESCO. *World Survey of Education II, Primary Education*. Paris: the Organization, 1958. p. 385.

¹² UNESCO/International Bureau of Education. *The One-Teacher School*. Paris/Geneva: 1961. p. 127. (Publication No. 228.)

¹³ Deblesse, *op. cit.*, p. 70-71.

¹⁴ For an analysis of the provincialism of the French elementary school teacher, see Jean Boorsch, "Primary Education." *French Education*. New Haven, Conn.: Yale French Study, 1959. p. 38-43.

which is given after 9 years of schooling and which, according to the law of June 16, 1881, authorizes a person to teach in the elementary school. Most of the teachers in the public elementary schools, however, are graduates of the teacher training school.

The training school for elementary school teachers (*école normale primaire*) enrolls them at an early age (15) midway through their secondary schooling; in the 4-year program the aim is to have them complete the equivalent of a full secondary education of the type offered in the modern section of a *lycée*, plus 1 year of higher education in pedagogy (methods courses, practice teaching, etc.).

Life in the training school is closely regimented and planned, in keeping with the youth of the students and French ideas of how to rear children. It is reported that French elementary school teachers tend to read very little after leaving the training school; few new books or plays reach this group of French adults.¹⁵ In fact, one authority asserts that there are not more than 20,000 adults in all France who devote themselves seriously to literature.¹⁶ On the other hand, an Englishman in comparing the general cultural level of England and France states:

... French newspapers presuppose a higher level of education and general culture than English papers read by the corresponding social classes. They assume a public more intellectually awake, interested in a wider range of topics and commanding a larger and more precise vocabulary.¹⁷

Some change may be occurring with the growth of radio and television in France, and with the entrance into elementary school teaching of some who completed the academic secondary school and received a secondary school diploma (*baccalauréat*). On the other hand, the shortage of teachers has led to the hiring of many who have not yet finished a secondary school.

Many of the best students in the teacher-training schools do not enter elementary school teaching. Instead, upon completion of the 4-year program they are encouraged to enter a higher normal school (at Fontenay-aux Roses or St. Cloud) where they will secure the equivalent of a university degree and be qualified to teach in academic secondary schools (*lycées, collèges*). This loss of highly qualified people from elementary school teaching is defended in terms of equality of opportunity. The point is made that the lower social groups have come to consider elementary school teacher-training as a chief means to secure a complete secondary education. Thus, the best of

¹⁵ *Ibid.*, p. 40.

¹⁶ Park, Julian, editor, *The Culture of France in Our Time*. Ithaca, N.Y.: Cornell University Press, 1954. p. 54.

¹⁷ Kerr Anthony. *Schools of Europe*. Westminster, Maryland: The Canterbury Press, 1961. p. 153.

these students should have access to higher education to develop their capabilities, even if it means that the elementary schools lose some teachers of high academic ability.

Those who enter elementary school teaching, upon completion of the training-school program, become part of a closed system which consists of elementary school education, training school and back to the elementary school as a teacher. This inbreeding has produced a kind of elementary school mentality which secondary school teachers and other intellectuals sometimes disparage as provincialism. One is reminded of the "normal school mentality" in the United States which was readily apparent in teachers college people of only a generation ago. Here, too, the result was a combination of high devotion to public school teaching, along with a certain narrowness in outlook.

In France, there are many who defend the outlook of the elementary school teacher, and characterize it as follows:¹⁸

It has been disparagingly called *primaire*, a term denouncing a tendency among half-educated people to judge of all things without a cultural background sufficient to support a well-balanced and well-informed appreciation; but this is usually a groundless assertion; the real gist of this spirit resides in the desire to provide the people and all the people with an education that will enable them to rise from rags to riches. This spirit infuses the body of schoolmasters with a missionary drive that urges them to impart instruction to all the underdogs in a country where secondary schools and universities are still far from open to the lower incomes, in spite of great progress since the last war.

There is another facet to his mentality, moreover, which puts the French elementary school teacher in the role of leader of liberal thinking in his village in opposition to conservatism, both secular and religious. This is partly a heritage of the 19th century struggle between public school advocates and defenders of the Republic on the one hand, and conservative and pro-church school people on the other. In part, it stems from the reformist zeal which pervades the training schools and fills prospective teachers with a strongly developed sense of idealism and desire to remake the world into something better.

This distinctive outlook on life found in the elementary school teacher of France is summed up in the following quotation from an authority on France who grew up there and describes himself as one who "spent all his childhood and most of his youth in the world of [French] primary school teachers" and "has gone back often to visit them, out of gratefulness, with a warm appreciation for their human qualities and an indulgent disposition toward their shortcomings."¹⁹

¹⁸ Le Gallo, H. *The Elementary School in France*. Paris: Institut Pédagogique National, March 8, 1960. p. 6.

¹⁹ Boorsch, Jean. "Primary Education." *French Education*. New Haven, Conn.: Yale French Studies, Yale University, 1959. p. 18.

He describes the outlook of the French elementary school teacher as follows:

It is a clear-cut rationalism, often dogmatic, heir to eighteenth-century ideology as revamped by the founders of the school system during the last years of the nineteenth century, F. Buisson, P. Bert, etc.; optimistic in its outlook, longing for an ever better society which should be organized on more just lines, and therefore inherently revolutionary, favoring a continuous revolution, not necessarily a violent one; mostly deist or atheist, frequently anti-clerical; normally pacifist, or even anti-militarist, but susceptible to patriotic emotions; fond of ideological discussions, playing with abstract ideas, and in fact bordering on a kind of scholasticism (I remember a number of passionate discussions, on such vast topics as: It is ideas which lead the world!—The dispute ended in the defeat, although not conceded, of the materialist side). All in all, a very generous outlook on life, tinged with idealism, of the type of Hugo, Jaurès, Anatole France, and rendered more human by the contact with young children, to whose education they dedicate themselves with total devotion and abnegation. A remarkable breed indeed, unique and lovable.²⁰

Some French teachers would assert that the foregoing description no longer fits many of the newer French elementary teachers, since so many temporary and emergency teachers are being hired who have not followed the old pattern of entering an *école normale* at the age of 15. Occasionally one hears the assertion that in contrast to the period 1887–1939, when elementary teachers left the *école normale* filled with a faith in the nation, democracy and humanism, “today we catch only a distant echo of such a faith.”²¹ Such a statement reflects a concern for the status of the teaching profession, a concern shared by many other countries, including the United States. The worldwide problem of preserving, and if possible enhancing, the status of the teaching profession was recognized as early as 1953 and analyzed in detail in the Yearbook of Education, 1953, edited jointly by Teachers College, Columbia University, and the University of London Institute of Education.

The French elementary school teachers have an intellectual tinge which sets them off from the peasants and workers, who have had considerably less schooling. Many of these elementary school teachers, however, come from peasant or worker families in which the parents sought a higher occupation and status in life for their children. Teaching still offers this opportunity to move up the social ladder in France. Elementary school teachers, in turn, want their children to attend the *lycée* and to go on to the university or to one of the specialized institutes (*grandes écoles*) which lead to the better positions in business and in government.

²⁰ *Ibid.*, p. 40–41.

²¹ Husson, J. “French Training Colleges.” *The New Era in Home and School*, February 1960. p. 25.

The elementary school teacher becomes an integral part of community life and a personage of some stature because of the out-of-school duties which he frequently performs. Thus, the male elementary school teacher is often the clerk of the municipal government, and in the course of his duties may be required to issue birth, death, and marriage certificates, and to help in the preparation of the budget, in taking the census, and in conducting elections. Many of the elementary schools in France have men teachers, in contrast to elementary schools in the United States.

Women teachers in France are not required to give up teaching when they marry. In fact, graduates of the training school pledge themselves to teach for at least 10 years, and marriage does not nullify the pledge. The law of December 30, 1921 (Loi Roustan) makes it easier for husbands and wives to get jobs in the same *département* or even the same commune: Each year the wives of men teachers get first chance at 25 percent of the vacancies in the *département*. As a result, there are many cases where the husband and wife both teach, sometimes in the same village.

Teaching Methods

As graduates of the training school the elementary school teachers rely heavily on the rules of teaching learned there. They are encouraged to do so by the inspectors who visit their classes and file reports on them for the Ministry of National Education, and by the French system of education which lays out a plan of study in great detail which students and teachers are expected to follow closely. The timetable and list of materials to be covered each month, as approved by the inspector of elementary education, must be posted in the classroom.²²

As seen through the eyes of an Englishman the atmosphere in a French elementary school is Victorian and puritanical, with the grim, grey overalls, desks rigidly aligned and "little of the music, dancing, games, play acting and miscellaneous messing around to which the average English primary school owes so much of its charm and inefficiency."²³

This is corroborated by a French student who points out the lack of facilities or equipment for play or physical exercise. He goes on to describe the classroom itself as involving much memorization and reciting in chorus.²⁴ A former teacher recalls in his own case that the children memorized the names of the *départements*, the list of kings from Clovis on down, and lines of poetry, though in recent years, he says, much of this has been changing. At the same time,

²² Brûle, *op. cit.*, p. 184.

²³ "France at School—I," *The Economist*, January 2, 1960. p. 37-38.

²⁴ "Rene's French Schooling," *op. cit.*, p. 28.

however, he ends by defending much of the system as good training of the mind and as necessary preparation for secondary education.²⁵ An American observer sums it all up by characterizing French education as consisting of the authoritarian teacher, rigid adherence to state textbooks and curriculum, and much copying of dictation into an exercise book and memorizing and reciting of the material copied.²⁶

The preceding descriptions of French education have tended to harden into a stereotype of docile French children. Such a picture has been encouraged both by the critics of French education, within and outside France, and by those who in the process of reacting against unruly and active children of other countries have exaggerated the virtues of French education. The stereotype is not a completely accurate portrayal of French children, at least not of French children of the 1960's.

It is true that French children jump to their feet when an adult enters the room, and when they sometimes fail to do so promptly, the teacher, particularly a male teacher, may snap his fingers to indicate the desired response.

It is also true that recitation is often formal, particularly in the time-honored practice of having a pupil stand and answer a number of questions put by the teacher. This often becomes a painful, stumbling process of pulling out brief factual answers with little in the way of extended analysis of a concept or idea. When the pupil hesitates the teacher may turn to the whole class which chants the word or phrase called for.

There is, however, among French children much more life and animation and willingness to speak in class than the old stereotype would suggest. In a lively classroom discussion children wave their hands and bounce up and down in their seats to indicate their desire to answer; quite a bit of leeway is tolerated in allowing talking and sometimes children volunteer their comments without waiting to be called on. There is a tendency to rise when called on to recite, but in many classrooms this is not the practice. Some still rise out of their chairs part way in a halfhearted gesture to the old system.

French educational authorities in describing French elementary education in a recent UNESCO publication state that as an alternative to the authoritarian system of training children "a system which aims at the cultivation of the mind and development of the personality is gaining ground. . . . Primary education is thus based on constant exercise of the pupil's attention, judgment and spontaneous interest." These French authorities go on to say that the methods used "are not simply mechanical" nor are they a series of

²⁵ Boorsch, *op. cit.*, p. 30-32.

²⁶ Butts, R. Freeman. *A Cultural History of Western Education*. New York: McGraw-Hill Co., 1955. p. 409.

dull lessons. Instead, "experimental work in which pupils take an active part is, for instance, preferred when possible to passive observation."²⁷

Similarly a French publicity brochure prepared for English speaking countries describes French education as follows:²⁸

Present teaching methods in these schools make a point of drawing extensively on the pupil's own activity, his taste, his interests and his needs. They depend less and less on textbooks and tend to rely on the cooperation of students grouped together in little teams. The class gradually becomes organized in a democratic way, and children go there to seek knowledge instead of to have it given them.

In 1961 an official French journal suggests that in addition to the basic subjects the elementary school should provide:

excursions, research and study projects, reports, dramatics, with all they entail in the way of personal initiative and teamwork in order that ideally these activities finish by being directed by the students themselves, under their own responsibility, so that the child who seeks and creates succeeds the child of the past who was only to listen.²⁹

A former teacher from France says that French education seeks to give the child "a sense of discipline, a feeling for beauty and for elegant verbal expression." He goes on to state that the external discipline is used so effectively that French youth adapt to French army life readily. On the other hand, the lack of training in self-discipline in school is noted and explained by (a) tradition; (b) rigorous and regimented training in the normal schools for future teachers, who in turn expect it of their pupils; (c) the advantages of the system—well mannered children are pleasing; (d) need—i.e., large classes which can only be handled by tight organization and discipline.³⁰ Physical manhandling of children, however, is forbidden in French schools. The only punishments which the teacher can impose, aside from verbal tongue lashings, are extra school work assignments, deprivation of recreation periods, or detention after school. In extreme cases, the pupil may be expelled from school. Recent publications indicate that in France, as in many other countries, school discipline is less severe than in earlier times.³¹

Basic to the teaching in French schools is the close reading and analysis of a textbook. While the purpose is to render the text alive, the dangers of this approach were noted by a commission of the Ministry of National Education in the 1930's and noted again in 1959.³² Aside

²⁷ UNESCO. *World Survey of Education II, Primary Education, op. cit.*, p. 386.

²⁸ *The Young Face of France*. Paris: Published for le Centre de Diffusion Française, 1959. p. 10.

²⁹ *Education in France*, No. 13, March 1961. p. 4.

³⁰ Boorsch, *op. cit.*, p. 22-30.

³¹ France. Ministère de l'Éducation Nationale. *La Vie Scolaire en France*. Paris: 1961. p. 47.

³² Castex, Pierre Georges. "Literary Analysis of French Texts." *Education in France*, No. 7. September 1959. p. 13-16.

from the boredom likely to result from plodding along line by line, there is the grave danger of spending much time on the form of the language and insufficient time on the content or the ideas and principles contained in the chapter or book. Yet, some spokesmen for the French educational system³³ favor "minute analysis of literary texts" and the practice of all reading the same page in the same book at the same time.

In practice, the books are not the same in all classrooms and not all teachers rely on a single textbook. The national government itself does not select the school books, though at several points in the selective process its representatives can influence the selection. There is a regular procedure³⁴ whereby teachers in a region (canton) meet with the elementary school inspector to draw up a list of books desired. The list is then forwarded to the academy inspector and examined by a commission composed of inspectors, normal school teachers, and representatives of the classroom teachers. The list then goes to the rector who may approve it, or he may send it to the Minister of National Education for approval. The national government does publish a list of forbidden books which offend against morals, the Constitution, and the laws. Neither private nor public schools may use such books. Moreover, the education yearbook for 1960 published by the Ministry of National Education³⁵ reiterates that no books, pamphlets or manuscripts, other than those authorized, can be used in the public school without written authorization from the academy inspector. To some extent this is probably designed to cut down on infiltration by religious propagandists. Yet, the effect must be to limit free inquiry and self-study by the student and to encourage heavy reliance on a few materials, i.e., textbooks. Only a few of the elementary schools in France have libraries of any size where students may turn for additional materials. Increasingly, however, in articles in journals published for teachers and in government circulars to teachers, one sees a concern for improving library facilities in the elementary schools of France.³⁶

French schoolbooks usually are published by private companies, though the government occasionally publishes a book (such as one on dressmaking), where the commercial value would not attract private

³³ See: *On the Granting of Credits for the French Baccalaureat*. New York: Published by the French Cultural Services in the United States, June 1956. p. 9.

³⁴ See: *Les Manuels Scolaires en France*. Institut Pédagogique National, Service de Documentation et d'Information, janvier 1959. p. 1-8; and UNESCO/International Bureau of Education. *Primary School Textbooks*. Paris 1959. p. 111-115. (Publication 204.)

³⁵ *Annuaire de l'Éducation Nationale, 1960, op. cit.*, p. 40.

³⁶ For example, see: Hassenforder, Jean. "Recherche et Action Éducative des Bibliothèques de Jeunes." *Le Courrier de la Recherche Pédagogique*, No. 15, janvier 1962. p. 33; and "Donner le Gout de la Lecture." *Journal des Instituteurs et des Institutrices*, 13 avril, 1962. p. 39.

publishers. Publishers are not controlled by the government but the books adopted for the public schools must fit the government syllabuses, which are rather detailed and specific. Many of the textbooks are written by normal school teachers and inspectors.

The inspectors through their visits to teachers (at least once every 2 years) try to spread word of new practices and to avoid the appearance of supervising or interfering. Yet, the inspector's report enters the teacher's file and influences his promotions, and the inspectors do expect close adherence to syllabuses and rules laid down by the national government.

The system is buttressed by periodic examinations for students, and they are given a rank in class at regular intervals. The use of examinations to determine promotion to the next class, however, is forbidden. A teacher may, on the basis of his judgment, hold a weak student back to repeat the year's work.³⁷ Reportedly, one out of every three students does not complete the elementary school in the normal length of time.³⁸ At the end of the school year 1959-60, one out of every five students in the fifth grade was failed, and told to repeat the grade. The reasons given for the high failure rate were overcrowded classes and shortage of qualified teachers.³⁹

Before leaving the topic of teaching methods, it is well to be reminded that many thousands of French elementary schools are 1- or 2-teacher rural schools. In such rural schools children in the age range 6 to 14 (grades 1 through 8) may be together in one or two rooms. Often there are at least two groups (the younger ones and the older) which the teacher handles in turn while the other group studies and prepares lessons. Where there is a second teacher she (sometimes the wife of the man teacher) may take the slow learners out of the group, or she may teach 20-30 of the children in the lower grades, while the man teaches a similar number in the upper grades.

Curriculum

Prior to the 19th century, the French elementary school had the children for a fairly brief period of time during which a limited amount of knowledge was imparted in a fashion consistent with the wishes and principles of the Catholic Church. Under Napoleon the pattern changed very little; he indicated that the general purposes of the elementary schools should be to produce citizens loyal to the Church, the State, and the Emperor.

³⁷ *Ibid.*, p. 41.

³⁸ Gal, Roger. "The Development of Education in France, 1945-1961." *Phi Delta Kappan*, November 1961. p. 61.

³⁹ *Informations Statistiques*, No. 38, mai 1962. p. 79.

The Law of 1833 specified that elementary education should consist of reading, writing, and arithmetic, plus religious instruction. In 1850, the curriculum was broadened to include history, nature study, geography, drawing and music.

Around the same time similar subjects were being added to American elementary schools. History and geography came into their own in order to satisfy and feed the rising tide of patriotism and nationalism, and in the case of the United States, to perform the additional function of Americanizing the large numbers of immigrants entering the country from the 1840's onward. Nature study, in part, was a reflection of the growth of science in the 19th century, and also of modern psychological and educational theories which began to suggest the value of observation and study by the child of the world close at hand.

In France, the system of higher elementary schools offered an avenue to some for further study of elementary school subjects, along with such new courses as surveying, agriculture, and commerce.

With the establishment of a widespread system of public elementary schools in the 1880's came a significant shift in the orientation of the elementary school. Religion was no longer to be taught in the school, and supervision or control of the public school by church authorities was ended.

The goals of the public elementary school were stated in a circular of July 27, 1882, and are still quoted:

The primary school's ideal is not to teach a great deal, but to teach it well. Children leave school with a limited knowledge, but what they have been taught they know thoroughly; their learning is restricted, but not superficial. They do not possess a half-knowledge . . . ; for what makes any education complete or incomplete is not the amount of information imparted, but the manner in which it is imparted.

Primary schools, owing both to the age of the pupils and to the careers that they are to follow, have neither the time nor the means for the same course of studies as that taken in secondary schools; what primary schools can do is to see that their pupils derive as much benefit and usefulness from their simpler studies as pupils in grammar schools do from secondary education; the idea is that all pupils in public schools should leave them with a certain fund of knowledge suited to their future needs and that they should above all, have acquired the habit of constructive thought, an open and alert mind, clear ideas, judgment, reflection, order and accuracy in thought and speech. "The aim of education," as has very rightly been said, "is not to teach all that can possibly be known about the various subjects, but to give a thorough grounding in what it is essential to know about them."⁴⁰

⁴⁰ Reprinted in Deblesse, *op. cit.*, p. 62-63.

The aims of the elementary school were further illustrated in the section on teaching methods in the same circular:

Method. Once the aim of education is thus defined, the method to be followed is self-evident. It cannot be confined to the progressive mastery of mechanical techniques nor to the teaching of the rudimentary means of communication, reading, writing, and arithmetic. Nor must there be a succession of dull lessons, merely laying before the pupils the various items of the curriculum.

The only possible method for primary education is to allow teacher and pupils to speak freely, each in his turn, keeping up a continual flow and exchange of ideas, varied, undogmatic and imperceptibly growing more complex. The teacher must always start from something which the children know, and then, passing from the known to the unknown, from easy to difficult things, lead them by oral questions and written exercises to discover for themselves the consequences of a principle, the applications of a rule, or, on the other hand, the principles and rules which they have already unconsciously applied in practice.

In all education, the teacher must begin by using tangible and visible objects making the children look at them and touch them, confronting them with material things: then, gradually, he accustoms them to considering those objects in abstract terms, comparing, generalizing and reasoning without help of concrete examples.

Thus primary teachers can succeed only if they appeal constantly to the attention, judgment and spontaneous intelligence of their pupils. It is essentially a matter of intuition and of appreciating the importance of practical considerations. The intuitive teacher counts primarily on children's natural common sense, the power of evidence, human beings' innate capacity to understand at a glance, and without being shown, not all the facts, but the simplest and most essential facts. With regard to practical considerations, teachers must never forget that primary school children have not time to waste on idle discussions, erudite theories, matters of purely academic interest, and that five to six years at school is all too short a time to provide them with the small stock of knowledge indispensable to their needs and, above all, to enable them to keep that knowledge and build upon it later. . . .

This confidence in the latent powers of intelligence which are only waiting to be developed, and the absence of any pretension to really scientific training, are appropriate in all elementary teaching but are particularly necessary in public primary schools which have to consider, not a few individual children, but the whole of the child population. Primary school teaching has to be collective and simultaneous; teachers cannot concentrate on a few children, their duty is to the whole class: it is on the results obtained by the class as a whole and not on those achieved by a few promising individuals that a teacher's worth should be judged. However different the levels of intelligence in a class, the teacher should be able to impart a minimum of knowledge and practical ability to all pupils, with a few very rare exceptions. Many pupils will of course easily progress beyond that minimum, but if it is not reached by all the rest of the class, this will mean that the teacher has not really understood his task or has not carried it out properly.

As indicated in a decree of January 18, 1887, (Article 27) the specific elementary subjects to be taught were as follows: ethics and civic education; reading and writing; arithmetic and the metric system; history and geography, with particular reference to France; elements of natural science; drawing and singing; and manual work, principally as applied to agriculture. In addition, there was to be physical education for all and needlework for girls.⁴¹

Some 36 years later, changes were made through the law of June 20, 1923, which modified the timetables and syllabuses and introduced some new teaching methods. The syllabuses were lightened and graded and the regulations of 1923 stated that "the worker, the citizen and the man are not three different beings, but three aspects of one and the same being. There is no real education if one does not strive at the same time to cultivate the human being and prepare him for life."⁴² Ministerial instructions issued in 1938 further stressed that schools must prepare young people for "tasks, duties, struggles and joys of life as a whole. Their physical qualities have to be developed and also their emotional and intellectual gifts which go to make workers, citizens and men."⁴³

Additional modifications of various syllabuses were made in 1945 (history, geography, arithmetic, nature study); in 1947 (terminal class—grades 7, 8); and in 1953 (science for rural areas). Such changes have been described as minor adaptations to changing conditions rather than indicating any basic shift in orientation of the elementary school.⁴⁴

The curriculum of the public elementary school is specified by the national government, either through laws passed by the parliament or by decrees issued by the executive part of the government; in addition, the Ministry of National Education issues ordinances which are binding on all schools.

Recent statements of French educational authorities indicate a continuance of the belief that the character of French education requires uniform curriculums and methods. These same authorities point out however, that there is a trend toward allowing some adaptation of the curriculum to local needs. Thus, recent changes in the eighth year of the rural elementary schools allow science to be tied in with practical aspects of agriculture, with the hope of improving local practices in agriculture.⁴⁵

⁴¹ France: *Annuaire de l'Education Nationale 1960. op. cit.*, p. 41.

⁴² Quoted in Brandicourt, M. "The French Primary School System." *Educational Review: Journal of the Institute of Education, University of Birmingham* (England). No. 8, November 1955. p. 31.

⁴³ *Ibid.*

⁴⁴ *Ibid.*

⁴⁵ UNESCO. *World Survey of Education II: Primary Education, op. cit.*, p. 384-5.

The 8-year elementary school is divided by years into the following periods for grades 1 through 8:

Age of beginning of school year	Grade	Period of study
6.....	1st—preparatory (<i>section préparatoire</i>).	1 year.
7, 8.....	2nd, 3rd—elementary (<i>cours élémentaire</i>).	2 years.
9, 10.....	4th, 5th—middle course (<i>cours moyen</i>).	2 years.
11.....	6th—higher (<i>cours supérieur</i>).....	1 year.
12, 13.....	7th, 8th—school leaving or terminal (<i>classes de fin d'études</i>).	2 years.

The curriculum for the 8 years of the French elementary school, shown in the following table, was established by ministerial decrees of October 17, 1945, and July 24, 1947, and modified by a decree of November 23, 1956:

Table 10.—Elementary school curriculum: by age and grades, and number of class hours per week for each subject¹

Age.....	6	7, 8	9, 10, 11	12, 13
Grade level.....	1	2, 3	4, 5, 6	7, 8
Hours per week				
SUBJECT				
Ethics.....	1¼	1	1	2
Reading.....	10	10½	9	6
French.....	2¼	1		
Writing.....	2¼	1		
Arithmetic.....	3¼	3¼	5	5
History and geography.....	0	1	1½	3
Science.....	0	1	1½	
Applied science, ² practical work, and drawing.....				6
Drawing or handicraft.....	1½	1	1	
Singing.....	1¼	1	1	
Music.....				1
Physical education.....	2¼	2¼	2¼	2¼
Recreation.....	2¼	2¼	2¼	2¼
Directed activities.....	2¼			2
Study period for home work.....		5	5	
	30	30	30	30

¹ This curriculum appears in: *France: Annuaire de l'Éducation Nationale 1960*. Paris: Publié par le Ministère de l'Éducation Nationale, 1960. p. 41-42. The change made in 1956 was to provide 5 hours per week of time within the school day to do homework assignments. This time was secured by taking ¼ hour or ½ hour per week from several different subjects.

² Applied science for the boys in rural areas includes the study of soil, crops and cattle breeding. Applied science, for both rural and urban girls, includes domestic economy, diet, housekeeping and child care.

Little time is devoted to science or to the social sciences (history and geography), the major portion of the class hours being spent on study

Table 11.—Hours per week and percent of total school time devoted to elementary school subjects¹

Year..... Age.....	I 6	II 7	III 8	IV 9	V 10	VI 11	VII 12	VIII 13	Total	Percentage of total school time
SUBJECTS	Hours per week									
Language (reading, grammar, etc.).....	11½	10½	10½	9	9	9	6	6	71½	32.50
Writing.....	2	1	1						4	1.82
Arithmetic.....	3½	3½	3½	5	5	5	5	5	36½	16.14
History and geography.....		1	1	1½	1½	1½	3	3	12½	5.68
Science ²		1	1	2	2	2	4	4	16	7.27
Civic and moral education.....	1	1	1	1	1	1	2	2	10	4.54
Physical culture and outdoor activities.....	2½	2½	2½	2	2	2	2½	2½	18½	8.41
Drawing ²	1	1	1	1	1	1	2	2	10	4.54
Music.....	1	1	1	1	1	1	1	1	8	3.64
Preparation of lessons in school.....	5	5	5	5	5	5	2	2	34	15.46
Total.....	27½	27½	27½	27½	27½	27½	27½	27½	220	100.00

¹ UNESCO/International Bureau of Education. *Preparation and Issuing of the Primary School Curriculum*. Paris: 1958. p. 163. (Publication No. 194).

² Handwork and practical work are associated with drawing and with science, and domestic science is associated with science.

of the native language, French. The following table, based on information supplied by French educational authorities, has been constructed by UNESCO specialists to indicate the portion of the total elementary school time devoted to each subject.

Typically one teacher will handle all the subjects within a particular grade of the elementary school. In some of the larger areas, such as Paris, there are special teachers for music or for domestic science who serve in several schools.

Some attempt is made in nursery school to teach reading, but writing really begins in the first grade as script writing, not printing.⁴⁶ Much time in the elementary school is spent on the study of the French language, including reading, writing, spelling, and grammar. It is felt that the nature of the French language necessitates this emphasis. The textbooks used are not always of recent origin. Certain editions have a life span of 50 years.⁴⁷ This in effect reflects an attitude of the French that not everything new is good, nor is everything old necessarily useless.

In spite of the emphasis on language, a recent report of the Ministry of National Education cites a falling off in spelling proficiency among those entering the first year (6e) of the academic secondary school.

⁴⁶ *Education in France*, No. 9, March 1960. p. 49.

⁴⁷ Boorsch, *op. cit.*, p. 36.

This deficiency is blamed on (a) overcrowding in elementary schools, (b) insufficient homework, (c) use of teachers with no training in pedagogy or professional education.⁴⁸

Even in arithmetic there is a literary emphasis to the point where, in the opinion of a former French teacher, the advanced vocabulary interferes with the learning of arithmetical concepts and makes for unnecessary difficulty in school work.⁴⁹

Memory work is an outstanding feature of arithmetic study, as it is in other subjects. This trait and the literary emphasis make up two of the three noticeable characteristics of French elementary education, the third, particularly noticeable in the study of history, being an emphasis on things French.

All countries indulge in glorification of the nation in the interest of building national unity, and France is no exception. A few years ago, Denis Brogan accused Americans of this when he said, "Nothing is more natural and understandable than the American assumption that all modern historical events are either American or unimportant."⁵⁰ In the French elementary schools the history and geography of France are studied in the lower grades, and current and general history, as related to the history of France, in the upper grades. The noncritical nature of the study of history is explained in terms of the immature minds of pupils.⁵¹

The French education system has a tendency to stress study of the past rather than an analysis of current social, economic, or political problems. In addition, the general examination given at the end of the elementary school emphasizes the accumulation of facts and information rather than critical thinking, and the work of the elementary school is shaped accordingly.

Examinations

The intellectuals in France criticize the elementary school for developing an elementary school mentality (*l'esprit primaire*) which amasses information without cultivating the ability to understand or to use it effectively.⁵² Teachers, in turn, blame the examinations given at the end of elementary schooling. These examinations change very little over the years, and a great deal of intensive preparation for them takes place in the upper years of the elementary school.⁵³

Those who continue through the 8 years of elementary schooling strive to secure the certificate indicating completion of studies (*cer-*

⁴⁸ *Ibid.*

⁴⁹ *Ibid.*

⁵⁰ Brogan, Denis W. *The American Character*. New York: Alfred Knopf, 1945. p. 146.

⁵¹ Boorsch, *op. cit.*, p. 36.

⁵² Kandel, Isaac L. *The New Era in Education: A Comparative Study*. Boston: Houghton Mifflin Co., 1955. p. 222-223.

⁵³ Brandicourt, *op. cit.*, p. 32.

tificat d'études primaires élémentaires), though not all succeed. The elementary school certificate is awarded to those who pass an examination given in all parts of France on approximately the same day in June. The examination can be taken by those who are 14 or who will be 14 before December 31 of that year. Before World War II an examination and certificate were given at the end of 5 or 6 years of elementary schooling.

The elementary school certificate carries prestige among the working population, since only about 60 percent of those in the eighth grade take the examination, and one out of five of these will fail to pass. Some employers require this certificate of their employees, and some technical schools require it for admission, although many vocational schools do not.

Children from the private schools may take the examination and many do, but they have a higher rate of failure than do public school children.

The examination is both oral and written and is conducted by a committee which includes the elementary school inspector, teachers from the teacher training school (*école normale primaire*), and teachers from secondary schools. The questions cover the work of the 8 years of elementary schooling, particularly as laid out in the syllabuses of the Ministry of National Education. Included in the examination are:

1. A dictation of not more than 15 words and 3 questions based on it (25 minutes).
2. Two practical problems in arithmetic (50 minutes).
3. An essay on a personal experience of the student (50 minutes).
4. One written question on history, one on geography (20 minutes).
5. Two written questions on applied science (20 minutes).
6. A practical exercise in drawing, in handicraft or in sewing (40 minutes).
7. Oral exercise in reading a passage, in singing and in questions on arithmetic.

A system of weighting is used with a total of 100 points. For example, arithmetic is worth 25 points and history and geography, 5 points each.

Education officials seek to modify the examination regularly and to improve it, but it is given to a "staggering" number of children over a 1- or 2-day period. In 1960, a total of 523,596 took the examination and 81 percent passed. Girls fail less frequently than boys.

What happens to a French child upon reaching the age of 14 has been analyzed for the school year 1959-60.⁵⁴ In this year 33 percent

⁵⁴ *Informations Statistiques*, No. 38, mars 1962. p. 79.

Table 12.—Results of examinations at end of 8-year elementary schooling, public and private, by number of candidates, and number and percent passing: 1959-60¹

Types of schools	Candidates	Passed examination	Percent passing
<i>Certificat d'Etudes Primaires (1959-60)</i>			
Public schools:			
Boys.....	229,082	183,447	80.1
Girls.....	205,855	171,289	83.2
Total.....	434,937	354,736	81.6
Private schools:			
Boys.....	44,291	32,749	73.9
Girls.....	44,368	34,382	77.5
Total.....	88,659	67,131	73.7
Total of public and private.....	523,596	421,867	80.6

¹ *Informations Statistiques*, No. 38, mars 1962, p. 110.

of the 14-year olds dropped out of school to take jobs and another 8.9 percent left school but remained at home, a total of 42 percent drop-outs. Of the remainder, 12 percent continued in the elementary school in an effort to complete grade 8; 29 percent entered vocational training, chiefly apprenticeship courses; 2.7 percent enrolled in agricultural programs; and only 1.5 percent were able to transfer into the academic secondary school. Another 9 percent transferred into the lower secondary school (*cours complémentaire*). The remaining 3 or 4 percent of the 14-year olds were in the miscellaneous or unaccounted-for category.

Trends and Changes

The effect of the reform of 1959 on the elementary school is not yet clear. According to its provisions, all children who reach the age of 14 in 1967, and each year thereafter, will be required to stay in school for 2 more years, i.e., until they are 16. Some predict that the old 8-year elementary school, found in every village, will be reduced to offering the first 5 years of elementary education. Education for the 11-15-year age group is becoming a more complex matter, what with the need for determination of aptitudes, elaborate guidance facilities, and a variety of curriculums, both academic and vocational, offered under the same roof. Hence, schools serving a larger area are foreseen, along with a more extensive bus transportation system.⁵⁵ Meanwhile, the French elementary school, like all French schools, is sub-

⁵⁵ Cros, Louis. *L'Explosion Scolaire*. Paris: Comité Universitaire d'Information Pédagogique, 1961. p. 59-62.

ject to rather persistent pressure for a reform of teaching methods and atmosphere.

Although French teaching has been described as tending to discourage any display of independence on the part of the child, there is in the writings of French educators an acknowledgment of the findings of psychology and educational psychology. Instructions issued to teachers now tend to stress the need for encouraging students to take a more active role in searching for knowledge in place of relying too heavily on the textbooks and "pat" answers. This is what Kandel calls the "grand bath of realism"⁵⁶ which French educators for years have suggested should be a counterbalance to the bookish emphasis of French education which makes knowledge a secondhand affair.

A regulation of August 1, 1957, permits the creation of some experimental elementary schools. Its accompanying explanation refers to a certain drawback in the uniformity of French education: the difficulty of introducing new ideas when any proposed change would affect not one, but rather thousands of schools if uniformity is to be maintained. The explanation notes the progress being made in psychology and in education, and the need to adapt to a world in constant state of evolution. Hence, it is proposed that there be educational experimentation on a limited scale.⁵⁷ For some time, moreover, there has been an attempt to make small changes in the curriculum to adjust to modern needs. Thus, French elementary schools, according to two decrees of November 28, 1958, were to add the teaching of traffic regulations and general rules of safety.⁵⁸

Private schools are not required to follow the official curriculums and methods, but in practice they do so. Reportedly, the private schools are having some success in modernizing their educational methods, and more and more are taking public schools as their models.⁵⁹ Private elementary schools are handicapped by the large number of their teachers who have less than a full secondary education.

The public schools have continued to work toward the formation of character in children within a secular framework, i.e. without tying school work to the doctrines of a specific church. The yearbook on education published in 1960 by the Ministry of National Education⁶⁰ reiterates that children cannot be taken from public schools during the regular school hours and sent to church for catechism or for reli-

⁵⁶ Kandel, *The New Era in Education*, *op. cit.*, p. 222-223.

⁵⁷ UNESCO/International Bureau of Education. *International Yearbook of Education 1958*. Geneva: 1959. p. 138 (Publication No. 202).

⁵⁸ *Education in France*, No. 5, February 1959. p. 38.

⁵⁹ Deblesse, *op. cit.*, p. 67.

⁶⁰ *France: Annuaire de l'Education Nationale, 1960*, *op. cit.*, p. 40.

gious exercises. An exception is made during the week preceding First Communion.

The load imposed on French school children has been lightened by a decree of November 23, 1956, which abolished written homework for children through the sixth grade. At the same time, 5 hours per week of study within the schoolday were provided for the completion of assignments. Arguments in justification of the change specified that excessive work had been demanded of the children and that their physical and intellectual development had suffered accordingly. It was also suggested that written work done at home by young children without the supervision of the teacher had limited value. It was added, however, that there was no intent to suppress all homework; for example, some time might be spent at home in reading or memorizing short passages.⁶¹

It is not yet clear how the reduction of homework will affect the after-school, supervised study programs carried on in some of the elementary schools. Typically, some children stay on after the close of school for 1½ to 2 hours of supervised study. A fee is charged for this service, though children from low income groups are often exempted. The regular elementary school teachers may volunteer for this after-school duty and receive extra pay for doing so. In no case is the study period to become an extension of school instruction which would handicap those children not attending.⁶² The supervised, after-school study periods, developed chiefly in response to the problem of caring for children of working parents, had little planning at first. Eventually, the national government regulated the system through a series of ordinances.

Attempts to improve the quality of French elementary education have had to contend with physical problems, notably lack of qualified teachers to keep pace with the expanding enrollments. French authorities describe the supply of teachers as "notoriously inadequate" and state that a large number of positions are still occupied full time by substitute teachers. The same authorities express the hope that an increase in the number of graduates from training schools, and inducements offered beginning teachers, will "make it possible in a few years to insure instruction under normal conditions to all primary school children."⁶³

Meanwhile, a system of hiring substitute teachers, many of whom only possess the *brevet élémentaire*, representing the completion of 9 years of schooling, was instituted by an ordinance of September 20,

⁶¹ *Ibid.*, p. 42.

⁶² *Encyclopédie Pratique de l'Éducation en France*, op. cit., p. 117-119.

⁶³ *Education in France*, No. 13, March 1961. p. 3.

1958. Under this ordinance a teacher's certificate entitled *brevet supérieur de capacité* will be issued to persons with less than a full secondary education who pass an examination covering pedagogy (child psychology, teaching methods, et cetera), and secondary-school level French, history and geography, science and hygiene. These teachers are eventually supposed to study for 4½ months at a training school, but because of the shortage, only about one-third do so.⁶⁴

Lower Secondary School

The lower secondary school (*cours complémentaire*) may exist as a separate school in the larger cities, but frequently it is housed with the 8-year elementary school. In the school year 1958-59 there were 2,705 public elementary schools with a *cours complémentaire* out of a total of over 70,000 public elementary schools.

In the last 6 years, public school enrollments in the *cours complémentaire* have more than doubled, reaching 630,000 in 1961. In that year, 146,000 students were enrolled in private *cours complémentaires* as compared to 77,000 in 1956.

The origins of the lower secondary schools go back to the late 19th century. They were free of cost and were regarded as an extension of educational opportunity for the few in those days who wanted more than the required 7 years of schooling, without undertaking a long period of academic secondary education which either their lack of aptitude or social background would have ruled out.⁶⁵

The *cours complémentaires* were popular in rural areas because they enabled the children to remain at home while continuing their schooling rather than attending boarding schools. At first, only 2 years of study were offered but later this period was raised to 4 years. This meant that a total of 9 years of schooling was available in the relatively few areas with a *cours complémentaire*. The regulations as originally established in the 1880's, and still in effect, do not require that communities establish a public lower secondary school but they may do so.

In recent years an attempt has been made to raise the quality of work in these schools to the level roughly of the first 4 years of the modern section of the academic secondary school (*collège*). At the same time it is part of official policy to encourage *cours complémentaires* to adapt their programs to the needs of the local community. Thus, the programs have come to include vocational as well as academic courses. The vocational course met a need in rural areas not

⁶⁴ *Ibid.*, p. 11.

⁶⁵ For a description of the *cours complémentaires*, see Brandicourt, *op. cit.*

capable of supporting a separate vocational school, and also was a recognition of the fact that for most students in the *cours complémentaires* it was the last schooling before entering the world of work. The vocational emphasis is a minor one, however; only about 10 percent of the students in the *cours complémentaires* are enrolled in the vocational sections.

In terms of the training of teachers, methods used and general atmosphere, the *cours complémentaires* are closer in spirit to the elementary schools. In fact, the teachers are elementary school teachers who are at least 25 years old, chosen from among those with at least 5 years of teaching experience. Within the last 3 years a new system has been instituted whereby some students in the normal schools (*écoles normales primaires*) after receiving the *baccalauréat* will enroll in a special section to prepare for teaching in the *cours complémentaires*. They then take a 2-year course. The first year is somewhat similar to the first year in a university, while the second consists of the pedagogy offered in the fourth year to regular students of the normal schools.

For those elementary schools teachers selected to teach in the *cours complémentaires* the advantages include a reduction in teaching load from 30 hours per week to 25, and a pay increase. Their teaching ability brings them respect, particularly from the school inspectors. Some observers, however, describe these teachers as poorly prepared and often unintellectual. It is claimed that few teachers of English in the *cours complémentaires* can actually converse in English or bother to read Anglo-American periodicals.⁶⁶ It should be pointed out, however, that in several European countries, and in the United States, teachers in the lower secondary school often will have had less training in an academic field than those in the upper grades of a secondary school, or they will be newer members of the teaching profession.

Until 1957, when the entrance examination to secondary schools was eliminated, students in France had to pass an entrance examination (*examen probatoire*) to enter the *cours complémentaire*. In times past about 80 percent of the applicants were accepted. Once enrolled, the student may take an academic or a vocational program; the latter includes commercial studies, trade training, agriculture, and home economics. The program of the academic section is as follows:

⁶⁶ "France at School—II." *The Economist*, January 9, 1960. p. 116; and Wykes, Olive. "Attendance at Secondary Schools in the French Fourth Republic." *School Review*, vol. 69, No. 1, 1961. p. 85.

Table 13.—Curriculum of *cours complémentaire* (academic section): by subject, grade, and class hours per week¹

Age..... Grade level.....	11 6	12 7	13 8	14 9
	Class hours per week			
SUBJECTS				
French.....	6	6	5	5
Civics.....	1	1	1	1
History and geography.....	3	3	3	3
Modern foreign language (English usually).....	5	5	4	4
Mathematics and geometric drawing..... (During second and third trimesters of ninth grade, girls have one hour less of mathematics.)	4	4	4	4
Manual work..... (During second trimester of the ninth grade, girls have 2½ hours of sewing and during the third tri- mester 2½ hours of child care.)	2	2	1½	1½
Science observation.....	1½	1½		
Physical sciences.....			3	3
Natural sciences.....			1	1
Drawing.....	1½	1½	1½	1½
Music.....	1	1	1	1
Physical education.....	2	2	2	2
Total.....	27	27	27	27

¹ Ministère de l'Éducation Nationale. *L'Organisation de L'Enseignement en France*. Paris: 1957, p. 25.

After 3 years in the *cours complémentaire*, or a total of 8 years counting elementary schooling, some students take a state examination and receive a certificate called the *brevet élémentaire*. Those who complete a ninth year of schooling in either the *cours complémentaire* or the academic secondary schools can take a state examination and receive a certificate of completion of the first part of secondary education (*brevet d'études du premier cycle du second degré*—B.E.P.C.).

The better students who complete the ninth year of schooling in a *cours complémentaire* may go on to a teacher-training school, or enter the 10th grade (class 2 by the French numbering system) of an academic secondary school.

Most of the prospective elementary school teachers are graduates of the *cours complémentaire*, which they leave at the age of 15. After passing an entrance examination, they enter a 4-year teacher-training school, the equivalent of grades 10 through 13.

Most of the graduates of the *cours complémentaire* go to work at the age of 15, many in the minor clerical positions in post-offices, other government agencies, and in business. The effect of such employment practices on the French economy, and on the young people themselves, has not been fully explored.

Proposed Reforms in Cours Complémentaire

The French reform announced in January 1959 calls for lengthening the program of the *cours complémentaire* to 5 years and changing the name to *collège d'enseignement général*, which links it more closely to academic secondary schools and the prestige and status attached thereto. The addition of a 10th year of schooling will increase educational opportunity, particularly in rural areas, and will prove helpful when the 1959 law raising the compulsory school age to 16 takes effect in 1967. In fact, the recent enrollment increase in *cours complémentaires* was taken as a sign of the timeliness of that part of the reform which increased the amount of compulsory schooling.⁶⁷

The addition of the 10th year to the *cours complémentaires* may also affect the training of elementary school teachers. Originally, it was intended that teacher training be based on 10 years of previous schooling. Thus, the first 2 years of teacher training were to provide the equivalent of grades 11 and 12 of secondary education and of passing the final examination (*baccalauréat*). The last 2 years of teacher training were to concentrate on pedagogy. As it has worked out, the first 3 years are spent on secondary education and only 1 year on pedagogy.

An attempt has been made to make the offerings in the *cours complémentaires* more comparable to those of the academic secondary schools, and in 1959 some of the lower secondary schools added a course in Latin, the teachers for which were to come from nearby *lycées* or *collèges*.⁶⁸

Some educators in France have seen the existence of the *cours complémentaires* threatened by proposals to join the schools to secondary education or to vocational education. Reportedly, such proposals stem from the desire to harmonize the divergent parts of the French educational system and, in the case of some academic and vocational teachers, the desire to eliminate a rival.⁶⁹ Such proposals stir up opposition on the financial ground of the waste involved in abandoning such schools. In addition, the lower classes have a great affection for the *cours complémentaires*, presumably more than for the *lycées* and *collèges* which few of their children attend and which in their minds are identified with the ruling classes.

The dramatic growth of the *cours complémentaires* may be stimulated even further when the compulsory school age is raised to 16 in 1967. It may even outstrip the academic secondary schools (*lycées*,

⁶⁷ Yale French Studies. *French Education*. New Haven, Connecticut: Yale University, 1959. p. 8.

⁶⁸ *L'Actualité Pédagogique à l'Étranger*, décembre 1959. p. 13.

⁶⁹ Brandicourt, *op. cit.*, p. 34-35.

collèges) in enrollment if this trend continues. At the same time the *cours complémentaire* is lengthening its program and seeking to raise its quality to a level similar to the academic secondary school. The reform of French secondary education, so long sought after, may therefore occur inadvertently as the *cours complémentaire* comes to play a larger role in French secondary education.

Chapter VI

ACADEMIC SECONDARY EDUCATION

DESPITE RECENT enrollment increases, there are two kinds of people in France, namely, the very large group which has had only an elementary schooling (8 years); and the relatively small group which has completed a full secondary education. As late as 1950, a French authority reported that four out of five French families could hope to give their children only 8 years of schooling, or at the best, the chance to attend a lower secondary school (*cours complémentaire*) offering grade 6 through 9.¹

Enrollments

At the secondary school level, the French have long administered vocational education separate from academic education, and the two types are usually, though not always, provided in separate schools. Very recently, the French have begun to include statistics for the *cours complémentaire* under secondary education, though separate from those of the academic secondary schools. Enrollment figures for the latter include 11-year-olds in the sixth grade (6e); these students are doing work which, except for foreign language study, is not essentially different in kind from that of the elementary school.

Less than 20 percent of the eligible age group enter academic secondary schools; at the 11th and 12th grade levels, less than 10 percent of the age group are in academic secondary schools.

In comparing the American 7th grader with a French 7th grader it is well to remember that the typical 7th grader in France will be in an 8-year elementary school, not in an academic secondary school. Similarly, at the 10th grade level the French child of 15 may be studying nothing; almost 50 percent of the 15-year olds in France have left school.

On the other hand, a considerably larger portion of children in France are now taking some academic secondary schooling than did

¹ Gal, Roger. "France." *Yearbook of Education, 1950*. London; Evans Bros., Ltd., n.d. p. 412-415.

a few years ago. Before World War II only 7 out of every 100 children entered an academic secondary school.² As late as 1948-49 only 9 children out of every 100 at the 6th grade level entered an academic secondary school (*lycées* or *collège*) whereas 15.4 out of 100 did so in the fall of 1955.³

Enrollments in other kinds of secondary schools also are growing rapidly. At the opening of the school year in the fall of 1959 enrollment increases over the previous year were greatest in the *cours complémentaires* (16.9%) followed by vocational education (13.8%) and academic secondary education (11.8%).⁴

More students are enrolled in academic secondary schools than in the lower secondary schools or in vocational schools. In large measure this is because 7 grades are offered by the academic secondary schools as compared to 4 in the *cours complémentaires* and 3 usually in the vocational schools.

By 1959 the enrollments of the *cours complémentaires* showed signs of catching up with those of the academic secondary schools; in 1959 as many 6th graders entered the *cours complémentaires* as the *lycées* and *collèges*. In September 1961, 53.5 percent of those entering secondary education at the age of 11 chose the *cours complémentaires*, 43.9 percent the academic secondary school, and 2.6 percent the vocational schools.⁵

The steady growth in enrollment was not due primarily to population increase, because the increased birth rate, which began in 1946, did not show up in secondary education until around 1958. The increase in secondary school enrollment can be credited, in large part, to a more widespread desire for secondary education. The huge growth in academic secondary education is seen when one compares the public school enrollment figure of 307,000 for 1947 with the figure for 1961-62, which is over 800,000.

Public secondary education of the academic type is given either in schools called *lycées*, which are operated by the national government, or in secondary schools, *collèges*, usually locally operated. Of the 533 public *collèges* listed in 1960, 457 were operated by local governmental units and 76 by the national government.⁶ There are usually separate schools for boys and girls and some coeducational schools,

² "France: Educational Progress in 1954-55." *International Yearbook of Education, 1955*. Paris/Geneva: UNESCO/International Bureau of Education, 1955. p. 158 (Publication No. 169).

³ "France: Educational Progress in 1955-56." *International Yearbook of Education, 1956*. Paris/Geneva: UNESCO/International Bureau of Education, 1956. p. 157 (Publication No. 180).

⁴ *Education in France*, No. 8, December 1959. p. 1.

⁵ *Education in France*, No. 15, October 1961. p. 35.

⁶ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale, 1960*. Paris: 1960. p. 53.

particularly among the *collèges*. For public secondary education in 1957 there were 262 *lycées* and 585 *collèges* in a country of some 44 million people. In addition, there were over 1,600 private secondary schools. Private education plays a larger role at the secondary level than at the elementary, although approximately 60 percent of those in academic secondary education are in public schools. Taking all kinds of secondary schools, vocational and academic, only about 25 percent of the students are in private schools.

Table 14.—Secondary school enrollment, public and private, by types of schools: 1960-61¹

Types of schools	Number of pupils, 1960-61		
	Public	Private	Total
<i>Secondary (academic):</i>			
Academic schools.....	755,000	294,000	1,049,000
Vocational sections in academic schools.....	30,000	13,000	43,000
Total.....			1,092,000
<i>Lower Secondary (grades 6, 7, 8, 9) (cours complémentaire)</i>	542,000	131,000	673,000
<i>Secondary (vocational):</i>			
National vocational schools (E.N.P.), technical schools (<i>collèges techniques</i>).....	156,000	40,000	196,000
Apprenticeship centers (full-time).....	198,000	110,000	308,000
Apprenticeship centers (part-time).....	21,000		21,000
By correspondence.....	16,000		16,000
Total.....			541,000
Grand total.....	1,718,000	588,000	2,306,000

¹ *Education in France*, No. 12, December 1960. p. 27.

Table 15.—Number of academic secondary schools (public and private), and total enrollments: 1956-57¹

Types of schools	Number of schools	Total enrollments, 1956-57
Public schools.....		641,013
<i>lycées:</i>		
(boys).....	127	
(girls).....	90	
(mixed).....	45	
<i>collèges:</i>		
(boys).....	182	
(girls).....	210	
(mixed).....	193	
Total.....	847	
Private (all types).....	1,637	423,474
Totals.....	2,484	1,064,487

¹ Institut National de la Statistique et des Etudes Economiques pour la Métropole et la France d'Outre-Mer. *Annuaire Statistique de la France 1958*. Paris: Presses Universitaires de France, 1958. p. 46.

Writing in 1954, one public school educator in France⁷ explained the growth of private secondary schools in the last 25 years as due to (a) religious causes; (b) social prestige factors; (c) lower academic standards in private schools; and (d) insufficient number of and overcrowding in public schools. There are probably other factors which have contributed to the growth of the private schools, but these may be the most significant.

Table 16.—Number and percent of candidates passing baccalauréat examinations after 11 and 12 years of public, private, and individual study: 1956–57¹

Schooling	Number of candidates	Number passed	Percent passed
Part I (after 11 years of schooling):			
Public.....	65,400	39,900	61
Private.....	25,300	13,100	52
Individual study.....	4,600	1,100	25
Total.....	95,300	54,100	57
Part II (after 12 years of schooling):			
Public.....	53,500	37,700	70
Private.....	14,100	9,000	65
Individual study.....	5,600	2,300	40
Total.....	73,200	49,000	67

¹ Institut National de la Statistique et des Études Économiques pour la Métropole et la France d'Outre-Mer. *Annuaire Statistique de la France*. Paris: Presses Universitaires de France, 1958. p. 48.

The salaries of the *lycée* teachers are determined and paid by the national government, as are the salaries of the teachers in the *collèges*. Other expenses of the *lycées*, including upkeep of buildings, are paid by the national government, whereas such expenses in the *collèges* are usually paid by the local government. Increasingly, however, the national government is being asked to provide additional financial support for the *collèges*,⁸ and some are now operated by the national government.

General control over the *lycée* is exercised by the Ministry of National Education through the rector of the *académie*, and more specifically through the *académie* inspector who is in charge of education in the *département* where the *lycée* is located. The *collège* is now subject to the same inspection as the *lycée*.

Day to day control of the *lycée* or *collège* is exercised by a principal; in the boys' *lycée* he is called the *proviseur* and in the boys' *collège* the

⁷ Umstattd, J. G., editor. *Secondary Education in Europe: The Proceedings of Seminar Conferences with European Educators during the Summers of 1954 and 1955*. Austin, Texas: University of Texas Extension Division, August 1956. p. 40–41.

⁸ Thabault, Roger. "Fiscal Management in France." *Yearbook of Education 1956*. London: Evans Bros., n.d. p. 372.

title is *principal*. The head of a girls' school is called the *directrice*. The principal has an assistant in charge of business affairs of the school who is called either the *intendant* or the *économiste*. Often there is an additional person in charge of discipline and supervision of study, called a *censeur* in a *lycée* or a *surveillant général* in a *collège*.

For each *lycée* or *collège* there is a council or board of control which helps the school work out a proposed budget, to be sent to the Ministry of National Education or to the local government. The board of control includes the principal of the school, the inspector from the *académie*, representatives of the parents and alumni, and such governmental officials as the prefect and the mayor. The board has the right to visit the school and to inspect the physical facilities.

Since many of the schools are not coeducational, a town usually has two *lycées*, or two *collèges*, one for each sex. In cases where no facilities exist for girls, some may be permitted to attend a boys' *lycée*. Occasionally, younger boys are admitted to the lower grades of a nearby *lycée* for girls, particularly if they have sisters already enrolled there.

At many of the *lycées* and *collèges* some of the students live at the school as internes or boarders. Of the 1,064,500 enrolled in academic secondary education in 1956-57 approximately one-fourth were boarders. In 1961 only 11.3 percent of those entering secondary schools were boarders.⁹ The decline has been attributed in part to the development of a school transportation system. Another contributing factor is that the majority are entering lower secondary schools, which usually are close to the students' homes. Living at the school is more common in the private schools.

Educational Opportunity

The boarding school aspect of *lycées* and *collèges* is described by some in France as a democratic feature in that it enables children to attend a secondary school when there is none nearby. This points up the fact, however, that facilities for academic secondary education are not readily available to every community in France. Some of the poor and less cosmopolitan families are not so ready to send their children off to a distant boarding school. These children are more likely to settle for a shorter span of secondary education in a *cours complémentaire*. Yet, only a few of the neighborhood elementary schools have a *cours complémentaire*.

Lack of educational opportunity is made more serious by the importance attached to successful completion of the academic secondary school. Moreover, in France much reliance is placed on diplomas and certificates from various types of schools, and in many instances the

⁹ Ministère de l'Éducation Nationale. *Encyclopédie Pratique de l'Éducation en France*. Paris: 1960. p. 59; *Education in France*, No. 15, October 1961. p. 35.

individual does not get the chance to demonstrate his capabilities if he lacks the specified diploma or certificate.

Theoretically there is little difference between a public *lycée* or a public *collège*. The *lycée*, however, is the older institution, dating back to Napoleon's time, and carries much prestige. Napoleon established the *lycée* not to open up opportunities for secondary education to the people but rather to train a small number of officials to hold posts in his government. In time, attendance at the *lycée* came to be almost the only way to enter the more important posts in government, in the professions and in most segments of French life.

Eventually, each of the major political units (*départements*) of France had at least one *lycée*. Until very recently, however, the road to opportunity presented by the *lycée* was a narrow one, even after tuition fees were abolished in the 1930's. A leading French educator and proponent of reform in French education, writing in 1950, acknowledged that there was a steady increase in the number of students receiving academic secondary education, but he insisted that "in spite of the efforts so far made, secondary education remains an aristocratic education, one which has not even the merit or the excuse of an aristocracy equitably recruited."¹⁰

The cost may no longer be the decisive factor, since tuition is free and scholarships are available which pay as much as 25 percent of the cost of room and board for boarding students. In 1955 about 25 percent of the students in secondary schools had scholarships.¹¹ More important was the fact that as late as the 1950's most parents apparently did not consider academic secondary schools to be open to their children. This was pointed out in some detail by the Minister of National Education in presenting his plan to reform French education to the French National Assembly in 1956.¹²

He maintained that from the age of 11 on, the education of children in France is decided by socioeconomic factors to the detriment of children of the lower classes. The statistics cited indicated that a very high percentage (over 80 percent) of the children of higher officials, executives, and of parents in the learned professions attend academic secondary schools, but that only 8 percent of the children of parents classified as workers do so. The Minister claimed that 55 percent of the children in academic secondary schools got there through academic success in previous schooling. Other factors cited as important in determining the type of school attended by a child included

¹⁰ Gal, Roger. "France." *Yearbook of Education 1950*. London: Evans Bros., n.d. p. 418.

¹¹ "France: Educational Progress in 1954-55." *International Yearbook of Education, 1955*. Paris/Geneva: UNESCO/International Bureau of Education, 1956. p. 159. (Publication No. 169.)

¹² "Guiding Principles of French Educational Reform." *International Review of Education*, Vol. III, 1957, No. 4, p. 471-73. [Translated by W. H. Bennett from *l'Education Nationale*, No. 85, décembre 1956.]

his social origin, proximity to an academic secondary school, and the tradition among the lower classes of children going to work at an early age. Proposed educational reforms have sought to minimize the socioeconomic factors on the grounds of social justice and the need to conserve and develop human talent.

The lack of academic secondary schools readily available to rural children, and to those living in workers' sectors of cities has been a major obstacle. In the early 1950's, whole sectors of the Paris area inhabited primarily by workers had no academic secondary schools; instead, they had apprenticeship centers and *cours complémentaires*.¹³ These were the so-called "red belt" areas which elected Communist majorities to their municipal councils.¹⁴ In some rural areas of France lower secondary schools are also much more likely to be found than academic secondary schools.

In 1958 an investigating committee from the Organisation for European Economic Cooperation (OEEC) brought back word from France that the location of schools was one of the greatest stumbling blocks to providing adequate secondary education, and that a program was underway to disperse secondary education facilities more widely. Through such means, the potential sources of talent were to be increased 3 or 4 times over, in contrast to the situation where talent was drawn chiefly from "cultured families" and only rarely from rural areas.¹⁵ In 1961 a planning commission for France indicated its desire for locating new schools in strategic places with regard to the economic development of the country.¹⁶

The recent enrollment increases in both the *lycée* and *collège* represent more than a normal increase due to a general population growth in the whole country, and amount to a significant widening of the road of opportunity. Even so, less than 20 percent of the 11-year olds in France enter a full-length academic secondary school and thereby have a chance to compete for future positions of leadership.

When first established by the local authorities, it was hoped that the *collège* would offer a more modern program of study than the *lycée*, with its heavy emphasis on classical studies, i.e., Latin and Greek. Very soon, however, the *collège* had patterned itself after the *lycée* and in fact came to be known as the *collège classique*.

In recent times the *lycées* and the *collèges classiques* have broadened their offerings by having a modern section which substitutes one or

¹³ Wykes, Olive. "Attendance at Secondary Schools in the French Fourth Republic." *School Review*, vol. 69. No. 1, 1961. p. 93.

¹⁴ *Ibid.*

¹⁵ Organisation for European Economic Cooperation, Office for Scientific and Technical Personnel. *France: Annual Review of Progress in the Field of Highly Qualified Scientific and Technical Personnel, 1958-1959*. Paris: 1959. p. 4.

¹⁶ Poignant, Raymond. *The Planning of Educational Expansion in Relation to Economic Growth: I—France*. Paris: Organisation for European Economic Cooperation, 1961. p. 27.

more modern foreign languages for Latin and Greek. After World War II some of the *lycées* even added sections offering technical education. In addition, in 1941, the old higher primary schools, which had offered grades 7, 8, and 9 on a slightly higher level than that of the elementary school, were converted into secondary schools (*collèges*) offering a modern program of study—hence their name *collège moderne*. The *collège moderne* is supervised by the same inspectors who visit the *lycées* and *collèges classiques*. Of the 659 public *collèges* in 1958, 365 were *collèges modernes* and 294 were *collèges classiques*. Not all of the *collèges modernes* offer the full 7 years of secondary education; some only offer 4 years of study—i.e. grades 6 through 9. Often the graduates of this short course enter a teacher-training school (*école normale primaire*) to finish their secondary schooling and to prepare for elementary-school teaching, as do many who graduate from the *cours complémentaires*. An increasing number of *collèges modernes* have begun to add a classical section alongside the modern.

If there are differences in prestige, in the quality of the work offered, and in the training of teachers between the *lycée* and *collège classique*—and most French educators indicate that there are—then the differences are heightened when the *collège moderne* is considered. In spite of efforts to put it on an equal footing with other academic secondary schools, the *collège moderne* is attended primarily by children of the lower social and economic classes. The *lycée*, on the other hand, has long been described as an institution catering to the upper and upper middle classes. No one in France describes the *lycée* as a school of the people. Their schools have been the elementary school, the higher elementary school for a few, and the *cours complémentaire* for a few more.

The *lycées* have existed as a system apart, and aloofness and exclusiveness, until recently, were fostered by such devices as charging fees and drawing pupils from attached elementary schools to which selected children were admitted. Moreover, the classical program of study (Latin and Greek) did not strike a responsive chord in the masses, though the prestige attached to such studies was apparent to all. In addition, until recently, rigid entrance examinations constituted a formidable hurdle to many.

Public opinion in France has favored the selection of leaders through a system of objective examinations theoretically open to all who have intellectual ability. Yet, as early as 1934 a French commission of inquiry noted¹⁷ that as wealth and “prestige of blood and family”

¹⁷ Kandel, I. L., editor. “The Educational System of France.” *Educational Yearbook, 1934*. New York: Bureau of Publications of Teachers College, Columbia University, 1934. p. 272.

were retreating as factors of special privilege, a new danger was arising, namely an elite of diploma holders who had passed the requisite examinations. Moreover, this elite was being formed "under conditions of choice and selection which are still imperfect." Thus, the French commission anticipated by 25 years the provocative book by Michael Young entitled, "*The Rise of Meritocracy, 1870-2033*." (New York: Random House, 1959) in which he forecasts the stratification of English society in terms of who went to the right schools and passed the all-important examinations.

With regard to entrance into the French academic secondary school, it was reported in 1961 that "selection has been based much more on social and economic factors than on intellectual merit."¹⁸ Social distinctions continue to affect educational opportunity—now a more crucial issue as the nature of modern life in France increasingly suggests that the culture previously reserved for a few is now a necessity for the masses.¹⁹

Some from the lower classes have always been able to enter the *lycée*, and for them it was and still is an agency of social mobility. With the huge increases in enrollments in the academic secondary schools in the last 10 years, it is not surprising that larger numbers of children from the lower classes are included. A recent study by the French Center for Sociological Studies (*Centre d'Etudes Sociologiques*) reports that 31 percent of those entering the first year (6th grade) of the academic secondary schools are children of workers, artisans, and farmers; this compares with 9 percent in 1936.²⁰ The same report indicates that most of these children enroll in the modern section where Latin and Greek are not required and that such children figure prominently in the heavy dropout rate. A later study reported in 1962 that the classical sections continue to draw their students predominantly from the upper social groups in contrast to the *cours complémentaires*, which take in sizeable numbers of children of city and farm workers. The great bulk of workers' children, however, remain in the 8-year elementary school.²¹

Until 1956, to enter the academic secondary school, and the *cours complémentaire* as well, applicants had to pass an entrance examination, held in June, and be not less than 11 or more than 12 years of age by December 31 of the same year. The written examination covered the following:

¹⁸ Gal, Roger. "The Development of Education in France—1945 to 1961." *Phi Delta Kappan*, November 1961. p. 61.

¹⁹ Cros, Louis. *L'Explosion Scolaire*. Paris: Comité Universitaire d'Information Pédagogique, 1961. p. 42.

²⁰ *L'Actualité Pédagogique à l'Étranger*, No. 5. Septembre 1959. p. 6.

²¹ "L'Entrée dans le Cycle d'Observation." *L'Éducation Nationale*, No. 16, 3 mai, 1962. p. 1.

1. Dictation by the teacher to be copied by the student, approximately 10 lines.
2. Three questions on this dictation—one to test comprehension, a second to test vocabulary, and the third to test understanding of the organization and function of words.
3. One or two pages of a narrative passage read to the pupils who then wrote a précis of about 10 lines.
4. Arithmetic—two problems: one to test arithmetical operations and the other to test powers of reasoning.

A marking system of from 0 to 10 was used and a successful candidate had to secure 50 percent of the possible points. Apparently the examination varied in difficulty from year to year, depending on the number of applicants as compared to the number of vacancies available in existing academic secondary schools.²²

The use of an examination to control admission to the secondary school has been criticized in France for restricting unduly the number of enrollees. The test itself has been criticized for being too literary and thereby giving an advantage to children from middle class homes where a literary, cultural atmosphere prevails. Moreover, the age of 11 is thought by some to be too young for this crucial choice of schools. The choice has been crucial because the rigidity of the French system has made it difficult to transfer, particularly from one type of school to another. Also the difference in prestige among the various fields of study causes the brightest students to enroll chiefly in the classical section, the next level in the modern section, and those of lower ability in the technical and vocational programs. Thus, the educational system reflects and at the same time reinforces certain stratifications within French society; in this way whole lines of human endeavor and large groups of people become stigmatized.²³

Reliance on an entrance examination, which students were free to take or not take, had the effect of limiting educational opportunity for many bright children. In 1955, when the entrance examination was still in operation, only one-third of the eligible children in elementary schools elected to try the examination; whereas their teachers in that year were of the opinion that 55 percent of the children could have profited from secondary education.²⁴ Others have estimated that until recently close to half of the better students in the elementary school did not progress beyond it, most of these being children of farmers or workers.²⁵

²² Gal, Roger. "The French Lycée." *The Yearbook of Education 1957*. Yonkers-on-Hudson, New York: World Book Co., n.d. p. 238-239.

²³ French educators frequently make this point in writing about French education. A clear statement of this point of view is to be found in the *Yearbook of Education 1950*, *op. cit.*, p. 412-417.

²⁴ Wykes, *op. cit.*, p. 89.

²⁵ Cros, Louis. *L'Explosion Scolaire*, *op. cit.*, p. 34.

The entrance examination was abolished in 1956. A further directive of March 6, 1956, from the Ministry of National Education, specifies that pupils doing well at the end of the fifth grade of the elementary school, and who make application, are to be admitted without examination into the first year of the secondary school—i.e., the 6th grade (6e) of either the *cours complémentaires*, the *lycées*, or the *collèges*.

Under a marking system of from 0 to 20, those with an average of 12 or better in French and arithmetic, and a similar overall average in all the other subjects, are admitted into the secondary school without examination. Those with an average of 10 and 11 in French and arithmetic and a similar average in the other subjects have their school records examined individually by a special commission which may admit some of these students to the secondary school. Those with an average of less than 10 in French and arithmetic, and all students from private schools, must take an entrance examination (*l'examen probatoire*) if they wish to enter a public secondary school. In the fall of 1961, 82.5 percent of those who applied were admitted to a public secondary school or *cours complémentaire*; of those accepted 84.4 percent did not have to take a written examination.²⁶

A certain amount of initiative from the parents, however, is necessary if a child is to get into a public secondary school. Specifically, the parent must make a written application to the school inspector before January 31, and by May 1 must submit the school record of the child who hopes to enter in the fall. Entrance into the private secondary schools reportedly has been easier and the level of study has been considered somewhat lower. Sometimes, students who failed the entrance examination were allowed to take it again for humanitarian reasons.²⁷

Teachers and Their Training

Secondary school teachers in France represent all walks of life, but relatively few come from rural or working families. This is not surprising since university study is part of the required teacher training, and only about 8 percent of university students come from families where the father is a farmer or a factory worker. Some secondary school teachers come from families where one of the parents is an elementary school teacher.

The teachers in the public secondary schools of the academic type (*lycée* and *collège*) can be assigned to a school anywhere in France by the Ministry of National Education. In practice, the beginning teachers are assigned to smaller schools in less populated areas. Those

²⁶ *Information Statistiques*, No. 32-33, octobre-novembre 1961. p. 253.

²⁷ King, Edmund J. *Other Schools and Ours*, Revised edition. New York: Holt, Rinehart and Winston Inc., 1963. p. 43.

who prove successful often seek transfers to the larger cities, particularly to the Paris area.

Though the requirements do not differ, the *lycées* tend to employ teachers with a longer period of university study than those in the *collèges*. Everyone teaching in a public secondary school must have a teacher's certificate, the basic requirement being that they have attended a university for 3 or 4 years and received the degree of *licence*. Prospective teachers must secure the *licence* for teaching (*licence d'enseignement*) which differs from the other type of *licence* (*licence libre*) in that certain combinations of subjects are required for the teaching *licence*.

After obtaining a university degree (*licence*) a person can be appointed to a post in a secondary school with the rank of assistant teacher. Those who wish a permanent teaching post must spend an additional year in teacher training taking such courses in education (pedagogy) as methods and practice teaching. At the end of the year they must pass a practical test of teaching ability in order to receive the certificate called *Certificat d'Aptitude au Professorat de l'Enseignement Secondaire* (C.A.P.E.S.) which authorizes them to teach on a permanent basis.

Those who entered the teaching profession before 1948 would not have the C.A.P.E.S. Moreover, many with qualifications lower than the C.A.P.E.S. take teaching positions in secondary schools every year. On the other hand, one group of secondary school teachers (slightly less than 25 percent of the total) have training beyond the level of the C.A.P.E.S. These are the ones who pass the examination known as the *agrégation*, and are then called *agrégés*.

Preparation for the *agrégation* examination usually involves at least 1 year of study beyond the C.A.P.E.S. The syllabus for the *agrégation* examination is published 1 year in advance. The failure rate on this examination is high because the theory is that only as many shall pass as there are available teaching posts. The teacher with the *agrégation* is only required to teach 12-15 periods per week compared to 18 for the person with a C.A.P.E.S. Most of the *agrégés* are found teaching in the *lycées*, though in recent years some have taken jobs in *collèges*. In the school year 1956-57, there were 5,874 *agrégé* teachers out of a total of 23,123 on the staff of the public academic secondary schools.²⁸

The increased enrollments have resulted in a teacher shortage and the use of people with lower qualifications; some do not have a university degree (*licence*), while others are being hired who have the *licence libre* rather than the teaching *licence* (*licence d'enseignement*). For example, the French secondary schools have long utilized assistants

²⁸ Ministère de l'Éducation Nationale, Institut Pédagogique National. *L'Organisation de l'Enseignement en France*. Paris: 1957, p. 12.

who supervise study, record absences, make out reports and compute grades. Some of these, in time, would secure the required training and become regular secondary school teachers. With the recent shortages, some of these assistants are being allowed to teach with less than the full requirements.

The teacher shortage in secondary schools was discussed in a series of articles in the French newspaper *Figaro* in the issues of September 16, 17, 18, 1960. The author, Raymond Aron, said: ²⁹

* * * provisionally it has been necessary to recruit teachers with such haste that the level of instruction is no longer guaranteed, either because the instructors to whom we had recourse do not have the necessary qualifications or because the overcrowding of classes crushes and paralyzes the best teachers.

It was also pointed out that the shortage of professors for the universities has become so grave that those with the *agrégation* are likely to be used in the universities rather than in secondary school teaching. Hence, the percentage of secondary school teachers who are *agrégés* is likely to decrease even further. Aron hints, however, that the loss should not be overestimated:

The *lycées* need good teachers, the faculties [of the universities] need scholars: the *agrégés* are sometimes good teachers and they often become scholars. But the *agrégation* as such neither guarantees nor facilitates the acquisition of pedagogical or scientific mastery.³⁰

Table 17.—Number of teachers in academic secondary schools (*lycées, collèges*), public and private: 1956-57¹

Public schools	Teachers, 1956-57		
	Men	Women	Total
Mathematics.....	1,772	1,340	3,112
Physics and chemistry.....	1,008	825	1,833
Laboratory assistants.....	60	63	123
Natural sciences.....	576	885	1,461
Philosophy.....	530	309	839
History, geography.....	1,530	1,411	2,941
French.....	3,080	3,177	6,257
English.....	1,291	1,782	3,073
German.....	904	649	1,453
Spanish, Portuguese.....	275	399	674
Italian.....	109	208	317
Russian.....	25	16	41
Arabic.....	5	2	7
Art and other specialized fields.....	633	1,143	1,776
Others.....	117	99	216
Total, public schools.....	11,915	12,205	24,120
Total, private schools.....			18,639

¹ *Annuaire Statistique de la France 1958*. Paris: Presses Universitaires de France, 1958. p. 46.

²⁹ Reprinted in *Education in France*, No. 12, December 1960. p. 30.

³⁰ *Ibid.*, p. 31.

Of the teachers in public academic secondary schools in France, the majority have completed the rough equivalent of the master's degree (*licence* plus C.A.P.E.S.); a sizeable number have completed 4 years or less of higher education. Even shorter training is customary for teachers in other types of secondary schools. The majority of French elementary school teachers have a maximum of 2 years of higher education.

In the United States in the school year 1959-60, nearly 100 percent of all secondary school teachers held a bachelor's degree representing 4 years of higher education; 44 percent held a master's degree representing 5 years; and some had more than 5 years. At the elementary school level 75 percent of all teachers had completed at least 4 years of higher education.

Of the 24,000 teachers in French public academic secondary schools in the school year 1956-57, the largest single group comprised the teachers of French (who may teach Greek and Latin as well. All of the language teachers in 1957 totalled 11,822 or 49 percent of all the teachers in the public academic secondary schools. This is some indication of the relative emphasis given to the various areas of knowledge in the academic secondary school. The teachers of the social sciences (history and geography) represented 12.2 percent of the total.

The teacher in the academic secondary school of France theoretically teaches only his specialty; thus, the mathematics teacher teaches only mathematics, the natural science teacher, natural science, and so on. In practice, this rule is followed less closely in the *collèges*,³¹ particularly in the *collèges modernes* which operated for a long time as higher elementary schools. It is followed less closely, also, in those *lycées* and *collèges* with experimental classes, called "new classes" for a long time, and now, "pilot classes." In the pilot classes there is a deliberate attempt to secure more integration of fields of knowledge, partially, by having one teacher handle more than one subject area.

Curriculum Sections

The academic secondary schools have had two basic divisions, the classical and the modern. Beginning in the 1950's a few schools have added a technical section. The classical and modern divisions offer a total of six different sections, and there are two technical sections. In the last year of the academic secondary school (12th grade or terminal class³² as the French call it) there are five sections; until recently the number was only three. These sections are desig-

³¹ France. *Annuaire de l'Éducation Nationale 1960, op. cit.*, p. 54.

³² American terminology for grades has been used in this book to avoid confusion. The French actually number their grades backwards starting with 11. The first year of the secondary school is grade 6 and the next to the last year is called grade 1; the last year of the secondary school is called the terminal year.

nated by the name of the principal subject studied (usually for 9 hours per week), namely, philosophy, experimental science, mathematics, mathematics and technical studies, and finally, a section combining technical studies with the economic sciences.

All students in the modern division take the same subjects in grades 6 through 9, except that at the end of the 7th grade the weaker students often are grouped separately. These latter are not expected to continue beyond the end of the ninth grade and take only one foreign language but devote some additional time to science. In the classical division, all take the same subjects for the first 2 years. In grade 8 those who wish to study Greek are sent to section A and those who do not are put in section B. Everyone in the classical division studies Latin from grade 6 (age 11) onward whereas no one in the modern division studies Latin or Greek. Aside from Latin and Greek, the two divisions have the same subjects through grade 11. The amount of time spent on each subject is the same through grade 9, except that the modern division spends more time on French and on the first modern foreign language, presumably to compensate partially for the time spent on Latin by the classical division. Those in the classical division who do not start Greek in grade 8 begin a second foreign language at this point, as do those in the modern division.

The real splitting up into sections occurs at the beginning of the 10th grade, when some schools offer as many as seven sections. These include section A for those taking Greek; section A' for the brighter students in Greek who carry a heavier load (approximately 29 hours per week in place of the usual 26); section B, which has Latin plus two modern foreign languages; section C, with one modern foreign language (and Latin), and more emphasis on mathematics and the physical sciences; section C and sections M and M' in the modern division have 4 hours per week of mathematics from the 10th grade on, compared to 1½ hours for sections A and B. Until recently, students through grade 9 in both the modern and classical divisions carried only 2½ hours per week of mathematics. This was raised to 3 hours in 1957. In the modern division, section M has two modern foreign languages and about the same amount of science as Section C. Sections A and B are relatively weak on science. The creation in 1953 of section M', which requires only one foreign language, opened the way for the better graduates of the *cours complémentaire* to enter the academic secondary school and try for the coveted *baccalauréat*.³³ Not all of the academic secondary schools have a section M'.

³³ *Encyclopédie Pratique de l'Éducation en France, op. cit.* p. 127.

The relative popularity of the various sections is shown by enrollments at the 10th grade level (2^e in French terminology) in public academic secondary schools in the school year 1960-61:³⁴

Section:	Enrollment
M	35,160
M'	28,079
C	12,313
B	11,818
Technical sections	8,059
A	2,135
A'	1,871
Total	99,435

Obviously, language study differentiates the various groups within the academic secondary school, and also separates them from those not in academic secondary schools; for example, the large mass of Frenchmen who get their schooling in the 8-year elementary school

Table 18a.—Class hours per week for curriculum of secondary schools (*lycées and collèges*) by subjects and sections: grades 6-9¹

French terminology	Sixième 6		Cinquième 7		Quatrième 8		Troisième 9			
Grade level	11		12		13		14			
Age	11		12		13		14			
SUBJECTS	Sections									
	Classical		Modern		Classical		Modern			
Hours per week										
					A	B		A	B	
French	4	6	3½	5½	3½	3½	5½	3½	3½	5½
Latin	4		4½		3½	3½		3½	3½	
Greek					3			3		
First modern foreign language	3	5	3	5	3	3	3	3	3	3
Second modern foreign language						3	4		3	4
Civic and moral education	½	½	½	½	½	½	½	½	½	½
History	2½	2½	2½	2½	2½	2½	2½	3	3	3
Geography										
Mathematics	3	3	3	3	3	3	3	3	3	3
Science observation (natural science)	1½	1½	1½	1½	1½	1½	1½	1	1	1½
Physical education	2	2	2	2	2	2	2	2	2	2
Art	1½	1½	1	1	1	1	1	1	1	1
Music	1	1	1	1	1	1	1	1	1	1
Manual training	1	1	1	1	1	1	1	1	1	1
Total hours	24	24	23½	23	25½	25½	25	25½	25½	25½

¹ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale, 1960*. Paris: 1960. P. 67-69.

³⁴ *Informations Statistiques*, No. 40-41, mai-juin 1962. p. 202-203.

Table 18b.—Class hours per week for curriculum of secondary schools, (*lycées* and *collèges*) by subjects and sections: grades 10–11¹

French terminology..... Grade level..... Age.....	Seconde 10 15							Première 11 16						
	Sections													
	A	A'	B	C	M	M'	Eco. Sci.	A	A'	B	C	M	M'	Tech. B.
SUBJECTS	Class hours per week													
French.....	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Latin.....	3	3	3	3				3	3	3	3			
Greek.....	4	3						4	3					
First modern foreign language.....	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Second modern foreign language.....			4	(2)	4	(2)	3½			4	(2)	4	(2)	3
History.....	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Geography.....	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2
Mathematics.....	1½	4	1½	4	4	4	4	1½	4	1½	4	4	4	4
Physical sciences.....	2½	3½	2½	4½	4½	4½	2½	2½	3½	2½	4½	4½	4½	2½
Natural sciences.....						3							3	1
Introduction to Economics.....							1							1½
Marketing Products.....							1							1
Physical education.....	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Drawing.....	1	1	1	1	1	1	1	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Music (elective).....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Manual training (elective).....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Stenography (elective).....							(1)							(1)
Typing (elective).....							(1)							(1)
Total hours ²	26½	28½	27½	29	28	29	31½	27½	30½	27½	30½	29½	30½	33½

¹ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale*, 1960. Paris: 1960. p. 67–69.

² 2–5 hours of electives are included in the above totals; () = elective subjects.

would not study a foreign language, nor would they do so if they continued in an apprenticeship program.

The study of Latin and Greek is a matter of prestige in France. An inspector-general in the French Ministry of National Education states that the choice of sections is more likely determined by the opinion of the family than by the student's preferences or ability.³⁵ A slightly larger number of students enroll in the classical division in preference to the modern division (no Latin or Greek) when they enter the *lycée* or *collège* at the age of 11. The entering ratio between classical and modern has remained about the same, even with the very sizeable increases in enrollment in the last 10 years. This could be interpreted as indicating very little adjustment to the pressures and demands of modern science and technology, although, as will be pointed out later, the amount of time allocated to mathematics and to science was increased very slightly in 1957 and the time devoted to Latin reduced accordingly.

³⁵ Gal, Roger, *Yearbook of Education 1957*. op. cit., p. 238–239.

Table 18c.—Class hours per week for curriculum of secondary schools (*lycées and collèges*) by subjects and main sections: grade 12¹

SUBJECTS	Classes Terminales (12th year of elementary-secondary schooling, age 17)		
	Main sections		
	Philosophy	Experimental science	Mathematics
	Hours per week		
Philosophy.....	9	5	3
Literature.....	1	(1)	.....
French.....	.....	.....	.....
Latin.....	.....	.....	.....
Greek.....	.....	.....	.....
First foreign language.....	1½	1½	1½
Second foreign language.....	(1½)	(1½)	(1½)
History.....	2	2	2
Geography.....	2	2	2
Mathematics.....	1½	4	9
Physical sciences.....	2	5	6
Natural sciences.....	2	4	2
Physical education.....	2	2	2
Art.....	(2)	(2)	(2)
Music.....	(1)	(1)	(1)
Manual training.....	(1)	(1)	(1)
Hours required.....	23	25½	27½

¹ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale, 1960*. Paris: 1960. p. 67-69.

NOTE.—()=elective.

Table 19.—Percent of total time (7 years) devoted to each subject in academic secondary school, by sections: grades 6-12¹

SUBJECTS	Section A (philosophy section in grade 12)	Section M (mathematics section in grade 12)
French.....	13.9	17.3
Latin.....	12.7	.....
Greek.....	8.3	.....
1st modern foreign language.....	11.5	13.3
2d modern foreign language.....	.....	9.1
History and geography.....	13.0	12.5
Mathematics.....	9.7	16.4
Natural sciences.....	4.4	4.5
Physical sciences.....	3.8	8.5
Philosophy.....	5.3	1.7
Physical education.....	8.3	7.9
Drawing.....	3.2	3.1
Music.....	2.4	2.3
Handicrafts.....	2.4	2.3
Civic and moral education.....	1.2	1.1
Total percent.....	100.1	100

¹ Adapted from UNESCO/International Bureau of Education. *Preparation of General Secondary School Curricula*. Paris/Geneva: 1960. Index (Publication No. 216).

If one looks at all of secondary education, including the lower secondary schools and vocational schools, the balance tips away from classical education. Thus, of those entering some kind of secondary school at the age of 11 in September 1961, only 22.6 percent chose a classical program of study.³⁶

The proportion enrolled in the modern division increases in the upper years of the secondary school, reportedly because many in the classical division find Latin too difficult and switch to the modern division. Of the 126,576 students in the 11th grade of academic secondary schools in 1961, 34.7 percent were in the classical division.³⁷ It should be remembered that less than 20 percent of the age group in France enter an academic secondary school and of those who do, approximately half (10 percent of the age group) start Latin. Less than 6 percent of those in the 11th grade of an academic secondary school, in 1961, took Greek.³⁸

The numbers of students now studying Latin are far more than was the case 20 years ago; this is so, chiefly, because of the growth of enrollments in the academic secondary school. Moreover, as an inspector general of the French Ministry of National Education points out, "It is still the thing to learn Latin."³⁹ At the same time he notes that the number of years and classroom hours devoted to the study of Latin have steadily been reduced. At the beginning of the 19th century a boy started Latin at the age of 9; by the middle of the century the starting age was 10 and, by 1900, 11. Reformers would now like to delay the study of Latin until age 12. The inspector general goes on to compare 1957 with 1920, and notes that one-third less time is now spent on the study of Latin; and that similarly, the time devoted to the study of classical history has been reduced from 4 hours in 1900 to 1½ hours in 1957. He advocates that Latin be made an elective and thereby be limited to a smaller but more select group, enabling the study of Latin to begin later and progress more rapidly. He says, "We should be frank enough to admit that for the great majority of pupils Latin is never anything more than an awkward and in fact cumbersome tool."⁴⁰

In conclusion, the inspector-general says that the defenders of classical education are retreating as slowly as possible and the battle still rages. The battle referred to is sometimes called modernism vs. classicism and its modern phase dates back at least to the beginning of the 19th century.

³⁶ *Education in France*, No. 15, October 1961. p. 35.

³⁷ *Informations Statistiques*, No. 32-33, octobre-novembre 1961. p. 238.

³⁸ *Ibid.*

³⁹ François, Louis. "The Future of Classical Education." *Higher Education Journal*, Supplement to Spring 1958. p. 27-32. [London, Published for National Union of Teachers of England.]

⁴⁰ *Ibid.*, p. 31.

In England, the fight centered on science and the question of whether it was to be admitted to the inner sanctum of respectability alongside Latin, Greek, and the literary studies. The claims made for science were pursued vigorously by such men as Thomas Huxley and Herbert Spencer, and in time the actual achievements of science were so striking as to demand attention.

In France, Napoleon reintroduced a secondary school curriculum which ignored the newly developing fields of study, such as the sciences, and which allowed for almost no deviation from a prescribed program of study.⁴¹ Latin remained strong in this program of study which had much in common with secondary schools of earlier times run by such religious orders as the Jesuits.

After 1852, under Louis Napoleon, the program of the *lycées* was divided into a humanities section and a mathematics science section, reportedly not only for pedagogical reasons but also to give less emphasis to humanistic study, which was feared as a source of liberal and socialistic ideas.⁴²

As the second half of the 19th century proceeded, the impact of Darwin and others brought science into the public eye and gave support to those who advocated a broadening and modernization of the secondary school program. Industrialization proceeded at a steady pace after 1850, also, and gradually men came to see some relationship between the progress of technology and the study of science, and later on, of vocational and technical studies. In some respects, this realization came slowly in France and it is now being said that the nation's strength has been impaired by this long neglect. If there has been neglect the reasons for it are undoubtedly complicated, but among them must be included the strength of the classical tradition.

This tradition was strong in France in the 1880's and 1890's, when attempts were made to broaden the curriculum of the *lycée* and *collège* by increasing the study of modern foreign languages and the sciences. The classical educators pointed to the poorly defined nature of science at this time, and to the courses in science which were loosely organized and taught, compared to the exactness which prevailed in such well-established disciplines as Latin and Greek.

The forces at work in the world, however, were not to be denied, in spite of the increasing bitterness of the opposition from the classical educators, or defenders of the tradition of humanism as they called themselves. A beginning was made in 1889 when a commission was appointed to study the proper relationship of classical and modern subjects in the secondary school curriculum of France. A somewhat

⁴¹ Gal, Roger. *The Yearbook of Education 1957*. *Op. cit.*, p. 236.

⁴² Ulch, Robert. *The Education of Nations: A Comparison in Historical Perspective*. Cambridge, Massachusetts: Harvard University Press, 1961. p. 166.

similar inquiry was initiated in the United States in 1892 by a group which was known as the Committee of 10.

A significant break in the classical tradition in France came in 1902 when Louis Liard was able to establish for secondary education a parallel course of study emphasizing modern languages and science and not requiring Latin. This was the forerunner of the present system with its classical and modern divisions within the *lycées* and *collèges*.

The new course of study was not fully accepted for many years and the arguments against such innovations continued. In fact, for a brief period the trend was reversed after World War I under the leadership of Léon Bérard, a humanist who was Minister of National Education in several cabinets. His changes were countered by decrees from succeeding Ministers of Education who were modernists, for example, André Francois-Albert.

Thus, Bérard decreed in 1923 that 4 years of Latin and 2 of Greek be required of all students in *lycées* and *collèges*. Two years later, in 1925, the choice between modern foreign languages and Latin was restored, and in the last year of the secondary school a choice was available between two programs, one emphasizing philosophy and the other, mathematics.

Actually the trend from Napoleon's time on has been to add new subjects gradually to the secondary school curriculum. Such a development was probably inevitable as new fields of knowledge, or new specializations within old fields of knowledge, came into being in the 19th and 20th centuries. Thus, the academic secondary schools added to their curriculum such subjects as history, sciences, physical education and the vocational and practical arts.

Such additions were made grudgingly and without any real willingness to give up any of the time devoted to the classical studies, and as a result, little time (one or two periods per week) was given to the new subjects. One source has described this typically European pattern as the serious study of a few subjects plus an attempt to keep several other subjects barely alive in order to be able to produce the necessary answers for the examinations given at the end of the secondary school.⁴³

The net result in France was to produce an overloaded and unwieldy curriculum and, as Miles⁴⁴ and others have pointed out, proposed reforms in French education from the 1860's on have sought to solve this problem and the related ones of mistaking fact-gathering and ex-

⁴³ Hollinshead, Byron S. "Some Differences Between American and European Education." *Third Workshop of Educational Organizations. (Condensed Report.) April 28-30, 1959*, Washington, D.C.: U.S. Office of Education, 1959. p. 2.

⁴⁴ Miles, Donald C. *Recent Reforms in French Secondary Education*. New York: Bureau of Publications of Teachers College, 1953. p. 20.

amination-passing for the real business of education. One English observer, writing in 1957, spoke of the French academic secondary schools as "culture-cramming establishments" which provided "the almost intolerable burden of wordy abstract thought that every ambitious French child must carry"; he goes on to quote from John Locke:⁴⁵

Studies should not overburden the mind nor impair health so that we are incapable of serving ourselves and others He who sinks his vessel by overburdening it, though it be with gold and silver and precious stones, will give his owner but an ill account of his voyage.

Diversification of offerings has continued and several different pathways of study have been created alongside the old classical program. Some require no Greek, some neither Greek nor Latin, and some have an emphasis on science; there are even some with a technical or applied science emphasis. It is true that the technical programs are not yet popular, in the *lycées* particularly, but instead are found mostly in the separate technical secondary schools (*collèges techniques*). Moreover, the social sciences (history, geography) are given only a small amount of time, although some time is devoted to them in every grade of the secondary school. The time devoted to mathematics and to science has been increased recently to meet the new demands of modern technological society, and theoretically the *lycées* could even offer agricultural sections by means of an agreement between the ministers of agriculture and national education.⁴⁶

Language Study

Language study is easily the dominant subject in the French academic secondary school. During the first 2 years (grades 6 and 7), those in the classical division spend approximately 46 percent of their total school time on language study (French, Latin, first foreign language). In the eighth grade the percentage rises to approximately 50 percent as a second modern foreign language is added (some sections add Greek instead). In the modern division the total time spent on language study is almost identical with that of the classical division.

In contrast, in grades 6 through 9 approximately 11 percent of the school time is devoted to history and geography, 6½ percent to science, and 12½ percent to mathematics. In grades 10 and 11 time spent on history and geography increases to approximately 14 percent of the school time. In the case of science, two of the sections devote approximately 16 percent of the school time to it, three sections give less time, and section M' gives the most, 26 percent.

⁴⁵ Dobinson, Charles H. "France and Technical Education Today." *Educational Forum*, January 1957. p. 159, 163-164.

⁴⁶ *Encyclopédie Pratique de l'Éducation en France*, op. cit., p. 132.

Of the modern foreign languages, English is in a preeminent position, being studied by most students for 7 years as the first modern foreign language, or for 4 years as the second foreign language.

Table 20.—Enrollments in foreign languages in academic secondary schools: 1960-61¹

SUBJECTS	1st language	2d language	Total: 1960-61
	Number of students		
English.....	556,421	65,808	622,229
German.....	141,912	98,924	240,836
Spanish.....	28,781	93,162	121,943
Italian.....	7,618	37,680	45,298
Russian.....	341	8,570	8,911
Arabic.....	209	194	403
Others.....	222	486	708
Totals.....	736,504	304,824	

¹ *Informations Statistiques*, No. 36, janvier 1962. p. 33.

Of the total 736,504 students in academic secondary education in the 1960-61 school year, almost 85 percent were studying English: 75.6 percent, as their first modern foreign language, and 9 percent as the second. To this should be added 439,955 students studying English in the *cours complémentaires* and 112,748 in vocational schools. In the year 1960-61, 80.5 percent of the students in the public *cours complémentaires* were taking a course in English.⁴⁷

The study of foreign languages can be summarized as follows: About 70 percent of all French children, namely those who receive their schooling in an 8-year elementary school, study no foreign language. The remaining 30 percent devote some time to at least one foreign language, usually English. Those in the *cours complémentaires* have 4 years of one foreign language (grades 6 through 9). About 10 percent of French children (i.e. roughly half of those in the *lycées* and *collèges*) start Latin in the classical division but many drop it after a year or more of study and transfer to the modern division of the secondary school. Approximately 7 percent of all French children complete 5 years of Latin; less than 2 percent take Greek. The study of Russian has increased by 300 percent in the last 4 years but still reaches less than 10,000 students.

An analysis made by an American university professor of English⁴⁸ on the teaching of English in French *lycées* and *collèges* reflected

⁴⁷ *Informations Statistiques*, No. 36, janvier 1962. p. 34; and No. 40-41, mai-juin 1962. p. 210.

⁴⁸ Aggler, William F. "The Teaching of English in France." *PMLA*, September 1958. p. 7-14.

favorably on the extent to which literary appreciation was developed, and on the final product as regards conversational ability. Reportedly, much of the skill developed in conversation is lost during the latter part of the 7-year program when most of the time is devoted to study of literary works. The analysis of literature consists of slow and minute study, not of the entire book, but rather of 2 or 3 pages from a well-known work written in English. In keeping with French teaching methods in general, much time is spent on analyzing the structure and organization of words on a single page. About 200 pages of English and American literature reportedly are covered during the 7-year period.

This critical analysis of foreign language teaching undoubtedly was based on an ideal standard toward which teachers of foreign languages strive. The results obtained in the United States in the relatively short periods of time devoted to foreign language teaching have been a cause of concern to teachers.⁴⁹ One recent book by an American, however, claims that the first 2 years of foreign language study in American high schools covers almost as much ground as the first 4 years of foreign language study in French secondary schools.⁵⁰

Science and Mathematics

In France, students planning to become scientists are encouraged to study mathematics, and in the 12th grade usually enroll in mathematics rather than in the experimental science section. On the other hand, students from the modern division of the *lycées* or *collèges* tend to enroll in the experimental science section in the 12th grade.

Physics and chemistry are taught only in the last 3 years of the secondary school; approximately 10-15 percent of French children have an opportunity to begin study of physics and chemistry because at the 10th grade level only slightly more than half of those who entered the academic secondary school still remain. Physics is considered more important than chemistry and more time is devoted to it. The physics studied tends to have a mathematical emphasis and starts with statics, kinetics and dynamics and moves on to geometric optics. There is little laboratory work in any of the sciences. "Experimental results have to be taken on faith."⁵¹ As a result, physics and especially chemistry have suffered.⁵²

Physics and chemistry usually are taught by the same teacher, and an attempt is made to show the interrelationship of the two subjects.

⁴⁹ For example, see: Huebener, Theodore. *Why Johnny Should Learn Foreign Languages*. Philadelphia: Chilton Co., 1961. p. 23.

⁵⁰ Mayer, Martin. *The Schools*. New York: Harper and Brothers, 1961. p. 314.

⁵¹ Jean Mayer, "Science" p. 273 in *The Culture of France in Our Time*, edited by Julian Park. Ithaca, New York: Cornell University Press, 1954.

⁵² *Education in France*. Paris: Editions France Actuelle, 1956. p. 12.

In the 10th and 11th grades, chemistry frequently consists of 1 hour per week of class work and 1½ hours of practical work every second week.⁵³

Students receive an introduction to natural science in grades 6 through 9 in a course which meets once or twice a week. Considerable attention is given to learning names of the parts of plants and animals; students usually are required to make a careful drawing and label the parts of the item under study. In some of the experimental schools the teachers stimulate interest by bringing in real flowers and plants which the students examine before making their drawing. Some students continue with natural science in grades 10 and 11 where they have an opportunity to dissect animals; the making of careful drawings, with parts labeled, continues to be stressed. Reportedly, very little real science is taught to those between the ages 11 and 15; a remedy suggested by some French educators is more laboratory experiments.⁵⁴

In 1962, publicity was given to a study of French education made by a group of leaders from industry and the universities. There was agreement that "the method of teaching mathematics and the physical sciences must be revised," and for the natural sciences, especially biology, "descriptive detail should be eliminated and broader concepts adopted. . . ." ⁵⁵

The 7 years of arithmetic and mathematics include algebra and plane geometry and in grade 12, trigonometry and solid geometry.⁵⁶ Grade 6 basically consists of a review and sharpening of concepts learned in the elementary grades. Mathematics begins in the 7th grade with an introduction to geometry, along with more arithmetic. Arithmetic and some geometry continue in grade 8 and algebra is started. Algebra is "limited to a modest use of letters in the study of the properties of arithmetic and in the solution of simple problems."⁵⁷ In the 9th grade the study of arithmetic is concluded by consideration of proportions and square root. Geometry and algebra continue.

Thus, in grades 6 through 9, the three periods per week are devoted to arithmetic, plus some time for geometry beginning with grade 7 and for algebra beginning with grade 8. Algebra develops in earnest in grade 9 with the study of such topics as polynomials.

⁵³ Organisation for European Economic Co-operation, Office for Scientific and Technical Personnel. *New Thinking in School Chemistry*. Paris: 1961. p. 94-95.

⁵⁴ Gullin, Maurice. "Presentation of Science Programs for the 12-15 Age Group." *Television for School Science*. Paris: Organisation for European Economic Co-operation, Office for Scientific and Technical Personnel, 1960. p. 29.

⁵⁵ "For the New Era French Industry Urges Education Changes." *France Actuelle*. April 15, 1962. p. 2-3.

⁵⁶ Mayer, Jean, *op. cit.*, p. 272.

⁵⁷ "Mathematics Education in France." *School Mathematics in OEEC Countries: Summaries*. Paris: Organisation for European Economic Co-operation, Office for Scientific and Technical Personnel, 1961. p. 17.

In grade 10 there are several different sections, some of which have mathematics for only $1\frac{1}{2}$ periods per week while others offer 4 per week. The tenth grade is not so much concerned with new facts as with reexamination, for greater clarity, of facts already known. The study of algebra continue in grades 10 and 11.

In grade 12, the philosophy section devotes only $1\frac{1}{2}$ periods per week to mathematics. The course is built around such general concepts as the scientific method. At the other extreme is the section specializing in mathematics by devoting 9 periods per week to the subject. In this latter section the mathematics of the previous grades is reviewed and new topics added, as for example in geometry the study of conics.⁵⁸

In France attention is being given to the problem of modernizing the teaching of secondary school mathematics. It is anticipated that the 12th grade section specializing in mathematics will move in the direction of including such topics as analytic geometry and vector analysis.⁵⁹

History is treated chronologically with Ancient Greece and the Orient studied in the 6th grade, Rome in the 7th, the Middle Ages in the 8th, and so on up through "contemporary history" (1874-1914) in the 11th grade. The 12th year covers the period 1914 to the present and includes study of the civilizations of the West, the Far East, Africa and the Muslim World. The last third of the year is devoted to present-day world problems, such as modern technology and international cooperation. History courses frequently consist of a lecture for most of the class hour.

According to law, religion is not to be taught in the public schools in France. Instead, schools are dismissed on Thursday and some students attend churches for services or religious instruction. In the case of public secondary schools with boarding students (*internes*), religious instruction can be given on school property at a specified time, with the cost paid by the parents. In such cases Catholic, Protestant, and Jewish religious exercises are to be held at the same time.

Until recently, technology was for the most part left out of the *lycées* and *collèges classiques* and looked down upon. Technical sections have been added to some of the academic secondary schools, though in less than 20 percent of them. There are a number of separate technical secondary schools (*collèges techniques*).

In some of the smaller communities a new technical secondary school is combined with a *collège moderne* to form something resembling a comprehensive school. Technical education is provided along with academic secondary education of the type offered in the modern division.

⁵⁸ *Ibid.*, p. 19.

⁵⁹ *Ibid.*, p. 19-20.

There seems to be a general assumption in France that intellectual training takes care of character formation, and only recently has attention been given in the schools to what might be called social education by means of community activity, group projects and teamwork. Much of this new effort has been centered on the experimental classes (new classes or pilot classes). Serious questions have been raised as to the value of the course in civics, now called civics and ethics, for which no adequate syllabus has yet been produced.⁶⁰

What role the school should play in character formation is a question which has been widely debated in many countries. In France, where instilling of proper behavior has been a major obligation of the home, expansion of the school system and changes in the pattern of home life have posed special problems. One English observer analyzes the situation this way:

French educational arrangements were worked out many years ago and assumed a strong home life; more particularly, that the mother stayed at home and the father returned for lunch, which is no longer true in many industrial areas; and that children spent much or most of their spare time with their parents, which is no longer true of older children.⁶¹

Examinations

The end of the academic secondary schooling is marked by an examination called the *baccalauréat*, which consists of two parts—Part I, given at the end of the 11th grade, which must be passed in order to enter the 12th grade; and Part II, given at the end of the 12th grade.

In addition, there is an examination at the end of the ninth grade, or the first cycle of secondary education, as the French call grades 6 through 9. This examination, *Brevet d'Etudes du Premier Cycle* (B.E.P.C.) is not mandatory and in fact, when instituted in 1947, was intended for those who drop out of the academic secondary school at the end of the ninth grade. Many French parents, however, urged their children to take the examination as a means of preparation for the *baccalauréat* examinations. In 1959, 200,000 took the examination. The failure rate is about 25 percent.

The B.E.P.C. is regarded as a substitute for the old *brevet élémentaire* which was formerly given at the end of the old higher primary school and long was a requirement for entrance into the training school for elementary teachers (*école normale primaire*). The examination for the *brevet élémentaire* is still given, but to a relatively few stu-

⁶⁰ Hignette, Marcel F. "The Primacy of the Rational in French Secondary Education." *Yearbook of Education 1958*. Yonkers-on-Hudson, New York: World Book Co., 1958. p. 236.

⁶¹ Kerr, Anthony. *Schools of Europe*. Westminster, Maryland: The Canterbury Press, 1961. p. 154.

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Table 21.—Total candidates in public and private schools, number and percent passing examinations at end of ninth grade: 1959-60¹

	Public schools			Private schools			Total: 1959-60
	Boys	Girls	Total	Boys	Girls	Total	
<i>Brevet Élémentaire:</i>							
Candidates.....	3,325	5,534	8,859	1,632	5,869	7,501	16,360
Passed examination.....	737	1,581	2,318	393	2,257	2,650	4,968
Percent passing.....	22.2	28.6	26.2	24.1	38.5	35.3	30.4
<i>Brevet d'Etudes du 1^{er} Cycle (B.E.P.C.):</i>							
Candidates.....			136,766			41,635	178,331
Passed examination.....			106,264			28,415	134,679
Percent passing.....			77.7			68.4	75.5

¹ Informations Statistiques, No. 38, mars 1962. p. 110.

dents: 8,859 public school and 7,501 private school children took the examination in 1960.⁶²

Under the new system instituted in 1959 the B.E.P.C. is taken only by those who will not complete a full academic secondary education. The examination has been lightened by reducing the number of written parts to four, plus an oral in one modern foreign language. Those planning to complete all 7 years of secondary education will receive a certificate at the end of the ninth grade on the basis of the average marks received on regular examinations of the eighth and ninth grades.

The *baccalauréat* examinations remain as a major hurdle and a selective device whereby large numbers of students are eliminated from the academic secondary schools. Students entering the academic secondary schools are supposed to represent the top 15 to 20 percent of their age group. Yet, less than half of them complete their secondary schooling. The figures for 1960-61 reflect the sizeable dropout of students.

*Enrollments in Public Lycées, 1960-61*⁶³

6th grade	7th grade	8th grade	9th grade	10th grade	11th grade	12th grade
147,868	131,234	114,980	93,539	91,376	75,435	64,958

⁶³ Informations Statistiques, No. 40-41, mai-juin 1962. p. 201.

Of those who finished the 11th grade in June 1958, slightly more than 40 percent failed Part I of the *baccalauréat* examination. These students either drop out of school or repeat the 11th grade and take the examination a second time in an effort to gain admission to the 12th grade. On the examination given at the end of the 12th grade,

⁶² Informations Statistiques, No. 38, mars 1962. p. 110.

34 percent failed in 1958. On Part I, only 40 percent of the candidates passed at the first session given in June 1958, and only 44.4 percent, Part II. Some of those who failed in June passed the make-up examination in September, a regular feature of the system in use before 1959.⁶⁴

The number of students receiving the *baccalauréat* increases each year; for example, Part II of the *baccalauréat* was passed by 40,146 students in 1956 and by 61,458 in 1961. The percentage of the applicants who pass, however, remains about the same, taking France as a whole. There is considerable variation in the different parts (academies) of France as to the percentage which passes. In 1961, the percentage of the applicants for Part II of the *baccalauréat* who passed the examination ranged from a high of 73.9 percent in one academy to a low of 53.6 percent in another academy. Similarly on Part I the range was from a high of 68.9 percent to a low of 50.95 percent.⁶⁵

Out of a total of 228,220 students taking the examination in 1961, 52,262 of the 11th graders and 40,146 of the 12th graders, or a total of 92,408, either had to drop out of school or repeat the grade. As

Table 22.—Total candidates, number and percent passing *baccalauréat* examination, Part I and Part II, 1960-61¹

PART I (end of 11th grade)		Candidates	Number passed	Percent passed
Sections:				
A.....		5,772	3,894	67.5
A'.....		1,431	1,225	85.6
B.....		20,000	13,651	68.3
C.....		16,020	10,606	66.2
M.....		39,838	20,020	50.3
M'.....		34,362	19,958	58.1
Technical A.....		7,613	4,471	58.5
Technical B.....		796	489	61.4
Total.....		126,576	74,314	58.9
PART II (end of 12th grade)		Candidates	Number passed	Percent passed
Sections:				
Philosophy.....		41,651	26,280	63.04
Experimental science.....		24,907	15,127	60.7
Mathematics.....		29,846	18,810	63.0
Mathematics and technology.....		4,770	2,947	61.7
Technology and economics.....		470	354	75.3
Total.....		101,644	61,498	60.5

¹ *Informations Statistiques*, No. 32-33, octobre-novembre 1961. p. 238.

⁶⁴ France. Ministère de l'Éducation Nationale. *Les Débouchés du Baccalauréat*. Paris: 1959. p. 233.

⁶⁵ *Informations Statistiques*, No. 32-33, octobre-novembre 1961. p. 239-246.

indicated earlier, the initial enrollments in the academic secondary school represent only a small portion of the total age group and many of these drop out before reaching the 11th grade.

In France, the examination system seems to be operating on a theory that only a few can be leaders, and hence only a few should finish the academic secondary school, which for all practical purposes is the only route leading to higher education and a university degree. The idea of having well-educated individuals more widely spread throughout French society has not yet gained a position of ascendancy in French thinking. There is, however, criticism of the system within France, particularly in the present era when national strength depends on full utilization of all human resources.

The *baccalauréat* is deeply rooted in the French educational system and as a diploma, indicating completion of secondary school studies, dates back to the Imperial Decree of May 17, 1808, which came into force in 1810. In 1890 it was given its present name, *baccalauréat de l'enseignement secondaire*; the student who passes both parts of the examination is then called *bachelier de l'enseignement du second degré*.

There is a different examination for each of the different sections found in the 11th and 12th grades of a *lycée* or *collège*. In 1946, a *baccalauréat* examination was created for the field of technical studies which can be taken by students in vocational and technical secondary schools (*écoles nationales professionnelles* and *collèges techniques*) and those enrolled in technical sections of a *lycée*; in 1961, approximately 4,800 students out of a total of almost 102,000 took Part II of their *baccalauréat* in the technical field. Those who pass this *baccalauréat* are thus enabled to enter higher education, usually engineering and technical institutes. A small number of students (470 in 1961) in the *lycées* and *collèges* take Part II of the *baccalauréat* in a newly created section which gives more emphasis to economic and commercial studies.

The *baccalauréat* examinations have traditionally been given on the same day everywhere in France, late in June or early in July. The written examination questions are the same for everyone following the same line of study. They are made up and graded by selected secondary school teachers under the supervision of the Ministry of National Education and the rectors of each of the universities who represent the Ministry in their capacity as heads of the 16 regions of France.

In practice, the examinations are under the general supervision of a professor from the university or an inspector of schools from the Ministry of National Education. Until 1959, there were also oral examinations given in several centrally located places in France;

where the students were questioned by secondary school teachers who had not taught them. The oral examinations used to follow a few days after the written, and lasted 2 or 3 hours during which time several subjects were examined. Those who failed the oral had a chance to take it again in September. A failure in September meant that the work of the 11th or 12th grade, whichever was being tested, had to be taken again.

The written examinations usually cover five subjects and are 3 hours in length for each of the major subjects, such as French or Latin, and 2 hours long for a minor subject, such as history. In those sections stressing languages, for example, sections A and B, mathematics is a minor subject and has a 2-hour examination. In sections M and M', however, the mathematics examination is 3 hours long.

The questions are of the essay type and each paper is graded without the name of the student. In totaling up the points a weighting system is used whereby higher coefficients are assigned to the major subjects of a section. A student must get at least half of the total points to pass. On a marking scale of 0 to 10 the student must not get less than 4 on the French language examination. Those who get an overall average of 6 for all subjects receive the grade of *assez bien* (fairly good), those with 7 *bien* (good) and those with 8 or better *très bien* (very good). It is possible also for the student to pick up a few points by passing tests on such elective subjects as music, drawing, typing, shorthand, and home economics.

For at least a month before the *baccalauréat* examinations, students and parents can think of little else, and teachers complain that the latter part of the school year is completely disorganized and sacrificed to feverish preparation for the examinations. Criticism of the whole examination system regularly comes to the fore at this time of the year, and is reflected in the newspapers. Some critics go so far as to urge the abolition of the whole system of *baccalauréat* examinations while others defend it, though usually suggesting some modifications of the system.

Much of the criticism centers on the excessive strain placed on the students⁶⁶ and on the substitution of "examination passing" for the legitimate goals of learning. Thus, the Paris correspondent of the *London Times* described the French schoolboy's life as a "steeplechase from one examination to the next, and there is a constant temptation to resort to techniques for 'scraping through' which, though effective, may bear little resemblance to serious study."⁶⁷ The methods

⁶⁶ "France: Education at Mid-Century." *Current History*, August 1958. p. 90.

⁶⁷ *London Times*, February 11, 1954; cited in Valenti, Jasper P. "Proposed Reforms in French Secondary Education," *Harvard Educational Review*, Spring 1959. p. 120. Valenti notes that observations of this kind are not uncommon.

of studying for the *baccalauréat* examinations are called *bachotage*, a slang term which "implies learning without applying intelligence or judgment but only memory—very similar in meaning to the English word 'cramming'."⁶⁸

Defenders of memory work and of an enlightened kind of *bachotage* were still speaking up, in 1961, in an attempt to stem the tide of reaction against the *baccalauréat* examinations:

Reviewing has its merits: it not only consolidates learning, it also makes comparisons possible and reveals the interest of a question. Such strengthening of knowledge should always be encouraged. Any future reform of the *baccalauréat* should be concerned less with reducing *bachotage* than with proposing more concise programs of study and making sure that the subjects are better learned.⁶⁹

Abolition of the *baccalauréat* examination had been recommended in April 1955 in the report of a committee set up by the Ministry of Education to study French education. The rector of the University of Paris was chairman of the committee.⁷⁰

In May 1955, a plan to reform French education, proposed by Minister of National Education Berthoin, decried the growth of examinations and other hurdles which prevented students from entering schools or from being able to transfer readily from one part of the educational system to another. The plan which was given some consideration called for the issuance of the *baccalauréat* to those who successfully completed the 11th and 12th grades in a public *lycée* or *collège*; it was pointed out that government supervision of public schools would adequately safeguard the quality of work leading up to a *baccalauréat* but that the government did not supervise private schools.⁷¹

At a conference on the European secondary school curriculum held in April 1958 at Sèvres, France, an inspector-general of French education asserted that the examinations given at the end of the secondary school should be abolished. He said that in France they produced chaos in June: "Subjects are examined and then forgotten 3 weeks later. What we need is an examination system that takes into account the aptitudes and abilities of the student to solve problems, not the testing of encyclopedic knowledge."⁷²

In 1961 continued concern was shown for the problem as indicated in the following characterization of French secondary education.

⁶⁸ *Education in France*, No. 17, March 1962. p. 9.

⁶⁹ *Ibid.*, p. 10. Reprint from *l'Éducation Nationale*, 22 septembre 1961. p. 11.

⁷⁰ UNESCO/International Bureau of Education. *International Yearbook of Education 1955*. Paris/Geneva: 1956. p. 160. (Publication No. 169.)

⁷¹ *Education in France*. Paris: Editions France Actuelle, 1956. p. 21-24.

⁷² Reported in "European Secondary School Revolution." *School and Society*, December 20, 1958. p. 460.

The students learn, or rather hastily stash away a great deal of knowledge, especially before quizzes and for the so-called memorization subjects. How much remains a few months later?⁷³

Revision of Examinations

A modification of the *baccalauréat* examinations was adopted in January 1959. At this time acknowledgement was made of the presence of one body of opinion which advocated abolition of the examinations. The system was retained, however, and defended on the ground that it placed all students on equal footing, regardless of the type of school from which they came.

The French reform, announced in January 1959, took note of the increasingly difficult problem of examining 200,000 students within a period of a week, with the possibility of errors in judgment. The revisions made included the elimination of the oral examinations, except for foreign languages, and the session in September for make-up examinations. Moreover, wherever possible two people were to mark each written examination.

It was also planned to have a written examination in February covering the work of the first half of the year. The marks on the February test, if they were above average, were to be used to balance off any deficiencies on the June test. A storm of protest developed, however, at the suggestion of further disrupting the school year by an examination in February. Subsequently, the February examination was dropped from the plan.

A revision of the *baccalauréat* in 1960 called for a written examination in June. Those with a score of at least 10 points, out of a possible 20, pass. Those with 7-9 points have an opportunity to take an oral examination (*oral de contrôle et d'appel*) covering the same general area as the written examination. Neither the oral examiners nor the students know which questions were passed or failed on the written examinations. For a particular subject the higher score, whether from the oral or the written examination, is used, and if the candidate achieves a total of 10 points out of a possible 20, he passes.

Some parents criticized the short interval (2 weeks) between the written and oral tests, and argued that the psychological effect of having failed the written examination would not have worn off by the end of 2 weeks. In addition, they argued that an examination held later, in September, would give the student all summer to study and to master his deficiencies.

Others continued to plead that the *baccalauréat* examination be abolished. An article in *l'Éducation Nationale*, in May 1959, asked whether it would not be more appropriate to try to give each indi-

⁷³ Mairieu, Philippe. "Overwork and Repetition." *Education in France*, No. 17, March 1962. p. 9. (Reprint from *l'Éducation Nationale*, 21 septembre 1961. p. 5-6.)

vidual the maximum amount of culture which he can absorb rather than train a small elite—"need we retain at the end of secondary education an examination which is principally based on literary aesthetics, and which often demands a maturity of judgement which the average pupil of 17 years does not possess?"⁷⁴

In July 1959 the French delegate to the International Conference on Public Education at Geneva stated in answer to questions, that it would be difficult to abolish the *baccalauréat* completely, though it conceivably could be issued on the basis of marks received in public school work.⁷⁵

Articles in 1960 continued to treat the suggestion that the *baccalauréat* be abolished. Some admitted the increasing difficulty of organizing and holding the *baccalauréat* examinations but pointed to them as an integral part of French educational tradition: furthermore, for some families success by their children on these examinations represented a social movement upward and for others a confirmation of their prestige and position.⁷⁶ Yet, it was being said, frequently, that the *Baccalauréat* examinations had become machine like and presumed to replace the judgment of teachers who had known the pupils well. The rector of the University of Paris at the opening ceremony of the University in the fall of 1960 said the *baccalauréat* should be buried.⁷⁷

By the fall of 1960 there were signs that further revisions of the *baccalauréat* system were planned and that the examination itself was to play a lesser role, as greater emphasis was to be given to the school record (*dossier scolaire*) maintained over the 7 years of the academic secondary school. This development was hailed by one observer in *l'Education Nationale* who maintained that increasingly the *baccalauréat* examinations had stressed memory work—things memorized in the preceding months or even days, at the expense of developing intelligence and culture.⁷⁸

Teaching Methods

Any examination which is given as much importance as the *baccalauréat* will necessarily influence what is taught and how it is taught. Yet, there are still other factors which are important in determining

⁷⁴ *Education in France*, No. 7, 1959. p. 5; this is a summary of the article in *L'Education Nationale*, 14 mai 1959. p. 3.

⁷⁵ *XXXIIIrd International Conference on Public Education 1959*. Paris/Geneva: UNESCO/International Bureau of Education, 1959. p. 59. (Publication No. 209).

⁷⁶ See Marchais, J. "Faut-il Supprimer le Baccalauréat?" *l'Education Nationale*, septembre 29, 1960. p. 12-14; and *Reform* (Paris) February 20, 1960. Reported in *L'Actualité Pédagogique à l'Etranger*, mai 1960. p. 4.

⁷⁷ "La Rentrée Solennelle de l'Université de Paris." *L'Education Nationale*, 10 novembre 1960. p. 13.

⁷⁸ Pierre-Bernard Marquet. "Le Baccalauréat Bouge!" *l'Education Nationale*, 29 septembre, 1960. p. 5-7.

the general atmosphere in a French academic secondary school, an atmosphere which has come in for considerable criticism and which is one of the principal targets of French educational reform.

Official publications describing French secondary education stress that it does not try to give encyclopedic knowledge or practical training; instead, it seeks to develop thought through study of academic disciplines which form the mental faculties. The teacher is not to give the students easy formulas or answers but rather is to animate them to search for themselves.⁷⁹ Culture is a term used frequently in connection with the academic secondary school, and the point is made that human problems remain important, even in the training of technicians.

The French themselves have subjected their educational system to critical analysis. Reportedly, each teacher treats his subject as a world in itself and not particularly related to the world of today. Apparently, only a minimum amount of correlation occurs between academic subjects.⁸⁰

To an English observer the French *lycée* is a grammar school in the narrow sense of the word because half of the school time is devoted to Latin, French and one or two other languages. He maintains that the stress is on grammar and in a very formal and stilted fashion rather than on the literature and culture of a country. Even French literature, he says, is neglected for the study of grammar and the dissecting of texts.⁸¹

One American observer ventures the opinion that the European secondary school often is used to buttress the existing social class structure. In the case of France he notes an emphasis on the heritage of the past and goes on to state that one can admire the high standards and hard work which prevail in these schools and still not approve of rote learning and the heavy emphasis on study of past civilizations "as the best preparation for solving modern problems."⁸²

The road to knowledge is a narrow and well-charted one. Secondary school teachers have more freedom than do elementary school teachers, but the Ministry of National Education is quite active in preparing and distributing syllabuses for the secondary schools, which teachers are expected to follow closely. An added incentive for them to do so derives from the fact that the ministry prepares the all-important examinations at the end of the secondary school. Moreover,

⁷⁹ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale*, 1960., *op. cit.*, p. 51-52.

⁸⁰ Gal, Roger. "The French Lycée." *Yearbook of Education 1957*. Yonkers-on-Hudson, New York: World Book Co., 1957. p. 238-240.

⁸¹ "France at School—II." *The Economist*, January 9, 1960. p. 116.

⁸² Hollinshead, Byron. "Is European Education Better?" *The Educational Record*, April 1958. p. 91.

the inspector from the Ministry of National Education visits the classrooms, not only to judge the teacher for the purpose of performance ratings and possible promotions, but also to insure that the directives of the ministry are being followed.⁸³

In France, the teacher in the academic secondary school sees his task as that of developing the intellect of the few who get into these schools. Prompted both by the government circulars and by tradition he encourages the students to memorize large portions of assigned materials. Comparatively few textbooks are used, and reference books and other materials are scarce since school library facilities are very limited. Consequently, copying of material dictated by the teacher is a central feature of the classroom. Each day's dictation and other school work are to be recorded neatly in a notebook which periodically is inspected by the teacher.

The dictated materials are chosen in terms of the examinations which lie ahead. There is little incentive or opportunity to use supplementary materials or to look up original sources.⁸⁴ Stress is laid not on the formation of individual judgments but rather on acquiring certain basic knowledge, notably the opinions of great men of the past.

The emphasis on the past is now being criticized vigorously as is indicated by the following:

The older subjects have become atrophied. "Our teaching is still organized on bases which have practically not changed for a century," writes Albert Ducrocq, science editor of the weekly *Express*. Old textbooks are brought up to date, he remarks, by adding a few paragraphs here and there to cover recent developments.

"Everything which concerns the 20th century," he writes, "represents only 10 percent of their contents, and you will find a proportion very much inferior to 1 per cent if you hunt for events since 1950. But the volume of human knowledge more than tripled between 1900 and 1950. It tripled again between 1950 and 1962. That means that today's students give 90 per cent of their time to exploring a narrow slice of 10 per cent of the expanse of human knowledge."⁸⁵

The methods used in French schools are consistent with an outlook on life natural in a stratified order—an outlook which calls on people to fit into the social framework, to accept the rules. This contrasts with a viewpoint common in the United States, namely that people should strike out on their own and discover the rules for themselves. As one American authority on French culture puts it, "The French generally believe that it is right for people to be forced to accept the

⁸³ Brombert, Victor. "Secondary Education." *French Education*. New Haven, Connecticut: Yale French Studies, 1959. p. 59.

⁸⁴ Cramer, John F. and Browne, George S. *Contemporary Education: A Comparative Study of National Systems*. New York: Harcourt, Brace and Co., 1956. p. 293.

⁸⁵ Root, Waverley. "Class Education Worries France." *Washington Post*, October 21, 1962. p. E4.

sharply defined framework which man has projected onto the chaos into which he is born."⁸⁶ For the French school child this outlook has the following implications:

When he goes to school he continues to learn in the same compartmentalizing manner. He learns by rote, for example, the categories of history and geography and grammar that have been established by someone else—the authors of the textbooks or his teachers—and he then studies examples of these categories until he can recognize them by himself. Learning is essentially a matter of acquiring a clear awareness of the compartments of existence, of their distinctiveness, of their interrelationships.⁸⁷

The materials which are studied, whether dictated or contained in books, are analyzed minutely, particularly from the point of grammar, sentence structure, and style. For this purpose a small portion of reading material studied in great detail is considered satisfactory.

A French student provides insight into the process as he describes his school days from his recollections. At a signal from the teacher he stood on his feet and explained one page from a work of Voltaire. First he read the passage aloud and was criticized in front of the class for his pronunciation. Then, he took the passage sentence by sentence and dissected it for grammar. At various points he added details of the author's life. He then gave the exact meaning of each paragraph and concluded by analyzing the style of the author.⁸⁸

It is often said that to understand the French academic secondary school one must know the tradition associated with the *lycée* since in organization, in curriculum, its boarding school atmosphere, in its uniformity and in its isolation and cultural superiority, it remains faithful to tradition.

French education during the Renaissance moved to free itself of ecclesiastical influence but in the 1600's the Church regained its position of influence, through the activities of the Jesuit order. The present-day stress on use of analytical and logical processes and on the humanities is traced, in part, to the earlier Jesuit influence, and the teaching methods of the secondary schools are characterized as outgrowths of the Middle Ages and scholasticism.⁸⁹

On the other hand, an authority on France, who was reared there, suggests that the uniformity aspect of French education has not been excessively harmful in the French setting.

⁸⁶ Wylie, Laurence. "Youth in France and the United States." *Daedalus: Journal of the American Academy of Arts and Sciences*, Winter, 1962. p. 198.

⁸⁷ *Ibid.*, p. 199.

⁸⁸ "Rene's French Schooling." *Students Speak Around the World*, edited by Robert H. Belding. Privately printed, n.d. (approximately 1959). p. 30.

⁸⁹ Miles, Donald W. *Recent Reforms in French Secondary Education*. New York: Bureau of Publications of Teachers College, Columbia University, 1953. p. 1-21.

This rigidity and this uniformity, however, proved no great evil in a country geographically small as compared to the United States and has never hampered the survival of French individualism—as sturdy if not as “rugged” as the American brand.⁹⁰

With the passage of time other influences have been brought to bear on French secondary education. For example, the great interest of the French middle class in having their children study Latin is attributed to intellectual snobbery, i.e., a desire to be associated with classical education and the prestige it bears, along with a certain amount of faith that this kind of study shapes the mind.⁹¹

The underlying purpose of the French academic secondary school is to take the relatively small number of students admitted and to make them into intellectuals. For the French this appears to mean persons who can answer quickly, clearly and logically a series of theoretical questions, and who are familiar with the work of the great authors. The culture which is to be absorbed is above all literary and is acquired through the detailed analysis of texts. Ideally, this analysis would also wake a feeling for the beauty and spirit of writing.⁹²

When carried to the extreme the French report that this kind of education is selfdefeating in that it produces a disdain for knowledge; and particularly when the faculty of analyzing and criticizing is overdeveloped without recourse to the realities and intricacies of real problems of the world, it may produce the cynical individual. At the same time, extreme individualism at the verbal level may result because each individual has a well thought-out theory, irrespective of the practical realities.⁹³

A number of experimental classes were set up in *lycées* and *collèges*, after World War II. For some time they were called the new classes (*classes nouvelles*), and more recently pilot classes (*classes pilotes*). Among the many objectives of these classes was that of securing more unity between fields of knowledge. For this purpose teachers thought less along the lines of distinct subjects, whose boundaries and special place in the curriculum had to be preserved, and more in terms of important problems which young people should study and which involved several subject matter areas. Moreover, for the purpose of learning more about the aptitudes and capacities of secondary school youth, students were exposed to many fields of study, including practical activities, vocational subjects and the fine arts. Thus, in one of the 6 experimental secondary schools which remained in 1961 one

⁹⁰ Feyre, Henri. *Observations on Life, Literature, and Learning in America*. Carbondale, Illinois: Southern Illinois University Press, 1961. p. 72.

⁹¹ Hignette, *op. cit.*, p. 233-234.

⁹² *Ibid.*

⁹³ *Ibid.* p. 237.

could observe courses, or units of work, on ceramics, wood work, iron work, cooking, laundry and ironing, and basket weaving. The experimental classes, however, were a small part of academic secondary education and are now found in a minority of the schools, though the number is on the increase.

The teaching methods and classroom atmosphere of the academic secondary school in France have been influenced by the progressive methods utilized in the experimental schools and classes. Thus, a 1960 publication of the French government calls on the teacher to secure active participation of the students.⁹⁴ Moreover, the austere atmosphere for those who board at the schools and are confined to the school grounds has been lessened by opening up halls in the school where students can assemble to listen to music, to write letters, read newspapers, and the like. There is still a notable lack of machinery for selfgovernment or for clubs and organizations but recently there has been a growth of activities on Thursday, which is a day off from school. While some engage in church activities on this day, others participate in games, singing, sports, and even courses in arts and crafts and the like.

Though many students board at the school and others remain for 2 hours after school in a supervised study hall, there is a noticeable lack of contact between pupil and teacher. This is a consequence of both the formality of classroom work and of the system of turning students over to assistants who supervise the study halls and the dormitories. For the teacher it means an increased amount of free time.

Reform of 1959 and Other Changes

During the 1950's in France continued criticism of secondary education reflected certain basic dissatisfactions which have been mentioned in most of the previous proposals put forth to reform French education.

The French contribution to the 1950 *Yearbook of Education* sounded a hopeful note in the comment that, alongside such traditional influences as family and social group origin, had recently been placed school and vocational guidance services as determinants of the kind of education a particular child was to receive. Yet, the author went on to acknowledge the continued influence of family background, and asserted that unless there was a major improvement in the standard of living of the masses of the people, the selection process in French education would only accentuate differences detrimental to the individual's sense of worth and dignity.⁹⁵

⁹⁴ France. *Annuaire de l'Éducation Nationale 1960*, op. cit., p. 55.

⁹⁵ Gal, Roger. "France." *Yearbook of Education 1950*, op. cit. p. 415.

In 1953, a foreign analyst of French educational reform characterized French secondary education as caught in the grip of centralized control and clinging to outmoded classical education, with an overloaded curriculum and teaching methods which were under attack.⁹⁶

A major proposal for reform in French secondary education, the so-called Berthoin Plan⁹⁷ of 1955, sought to eliminate some of the rigidity and compartmentation of secondary education, an aim which the *classes nouvelles* also had. Thus, examinations and hurdles preventing entrance into schools or transferring from one part of the school system to another were decried. Similarly, the plan called on teachers to turn more strongly to child psychology in order to better understand the problems of their students. In addition, it sought to raise the dignity of vocational and technical education, a matter of longstanding concern which was to come up again in the reforms of 1959.

The Berthoin Plan also maintained that secondary education had been reserved largely for upper and middle classes and that it should be democratized and extended to the masses. More specifically, compulsory education age was to be raised to 16, a feature incorporated into the reforms instituted in 1959.

The Berthoin Plan was not passed by the French parliament. An official publication of 1956,⁹⁸ which included a summary of the plan, stated that the French educational system was being criticized for showing too little concern for the needs of modern society; the new French education being advocated would call for a wider range of study, and would turn the emphasis from the past and its classical origins to center on a better knowledge of the modern world. In addition, French educators were asking for more encouragement of creative talent in the social sciences and in vocational and technical fields.⁹⁹

It has long been contended¹⁰⁰ in France that too few are receiving training to enter industrial, scientific and commercial careers. Moreover, high level training for agriculture, at both the secondary school and higher education level, is almost nonexistent, and vocational and technical education receive too little emphasis.

The student's choice of field of study is closely related to the social status and background of his father. Thus, fathers of middle class families, professional men and the like, who have had a classical secondary education themselves, insist on the same for their children.

⁹⁶ Miles, Donald W. *Recent Reforms in French Secondary Education*, op. cit. p. 20-21.

⁹⁷ For a summary of the Berthoin Plan, see *Education in France*. Paris: Editions France Actuelle, 1956. p. 21-24.

⁹⁸ *Ibid.*

⁹⁹ *Ibid.*, p. 11.

¹⁰⁰ See: Gal, Roger. *Yearbook of Education, 1950*, op. cit., p. 416-422.

Lower middle class parents, clerks, artisans, small farmers, etc., usually prefer that their children take up "modern" studies. In 1960, an official in the Ministry of National Education characterized the problem as follows:¹⁰¹

Unfortunately this ideal of the distribution of pupils according to each child's own abilities has not yet been put into practice. Far from it. Up to now, the measures taken within the rebuilding of our educational structures have had little effect on prevalent habits.

Attempts are being made to modernize the academic secondary schools by the introduction of new subjects and programs of study and by adding a touch of realism to the teaching methods. More children of the lower classes are being attracted to these schools, but the old traditions remain strong.

Traditionally, the teachers have been independent of each other and of the parents. Since World War II, some *lycées* have set up internal councils as a device to involve the teachers more in the workings of the school and to unify them into a team. The principal or director who may be the instigator of such innovations often has his difficulties in working with the teachers, who feel they are his equals; the chief concern of the teachers, as far as supervisors go, is with the authorities from the Ministry of National Education. In practice, few meetings of the teachers' councils have been held.¹⁰²

On the other hand, the emphasis which the 1959 reform gives to determination of pupil aptitude is accompanied by new procedures whereby teachers will meet together frequently to discuss the pupils. Thus, teachers of each grade level (6e, 5e, etc.) are to form a council (*conseil de classe*) which is to meet at least four times per year; in a *lycée* with seven grades this would entail a minimum of 28 meetings. Moreover, in the same school there are to be four councils of teachers based on subject matter fields: one for mathematics and science, one for history and geography, one for Latin, Greek and French, one for modern foreign languages; these councils are each to meet at least 2 times per year.¹⁰³ French authorities also are encouraging teachers to meet at the end of the year to decide in the case of each student whether promotion to the next grade is advisable or whether he should take an examination to determine his academic fitness.¹⁰⁴

The reform of 1959 was instituted by the executive branch of the French government on January 6, 1959, by the issuance of two decrees and one ordinance. In addition to changes made in the *baccalauréat*,

¹⁰¹ Leherpeux, Marcel. *The Reform of Education in France: Notes for Foreign Educationists*. Paris: Institut Pédagogique National, 1960. p. 8.

¹⁰² Gal, Roger. "The French Lycée." *Yearbook of Education*, 1957. *op. cit.*, p. 238.

¹⁰³ These councils are described in: *Encyclopédie Pratique de l'Éducation en France*, *op. cit.*, p. 154-155.

¹⁰⁴ France. *Annuaire de l'Éducation Nationale*, 1960, *op. cit.* p. 61-66.

the reform raised compulsory education to the age of 16 and instituted a 2-year period of observation of aptitudes (*cycle d'observation*) for 11- and 12-year olds (grades 6 and 7), a central feature of several previous reform proposals and of the *classes nouvelles*.

The traditional procedure is retained whereby at the end of the fifth year of the elementary school, certain children voluntarily seek and obtain admittance to a separate academic secondary school or to a lower secondary school course (*cours complémentaire*). During grades 6 and 7, those in both types of schools are to be observed closely by the teachers to determine their specific aptitudes; such information is communicated by an advisory council to the parents in the form of a recommendation as to the program of study the child should follow.

Those pupils who wish to enter a program of study other than the one proposed by the advisory council have to pass an entrance examination. On the other hand, the official publication, *Education in France*, states that it is not likely that children already enrolled in the classical section of the academic secondary school will leave it, even when the findings of the advisory council suggest just that.¹⁰⁵

Little is said about the bulk of the children who remain in the 8-year elementary school, except that provision is made for a special ninth grade to accept certain of those who complete the eighth grade of the elementary school. In this ninth grade, provision will be made for such makeup work as is necessary to eventually fit some students into the regular classes of the academic secondary school.

The Ministry of National Education has indicated, however, that the heart of the 1959 reform is determination of pupil aptitude and then provision of an appropriate program of study:¹⁰⁶

. . . But all this would be of no avail if—within the new educational framework—pupils were still to be guided according to the criteria of old which, as stated above, were mainly those of birth and rank. . . the end to be achieved is “to direct towards the academic education all the children who are able to profit by it: to do away with haphazard or prejudiced orientations which only lead our pupils towards blind alleys or to studies they must later abandon, and to replace them by a system based on full investigation into our young people’s abilities and aptitudes.” And this is, indeed, the corner-stone of educational structures claiming to be democratic but which can only be really so if they actually give all French young people that equality of opportunity that has too often been so far a matter of principle, not of practice.

To facilitate the determination of aptitudes the academic secondary school now has a common base of studies for the first trimester; Latin does not begin for those in the classical division until the end of the first 3 months.

¹⁰⁵ *Education in France*, No. 12, December 1960. p. 43.

¹⁰⁶ Leherpeux, *op. cit.*, p. 14.

In June 1961, a 3-day conference was held at Sevres to evaluate the *cycle d'observation*.¹⁰⁷ Among school officials there was some difference of opinion on whether to disrupt classes at the end of the first trimester of the sixth grade, and reassign students, or to allow them to finish the whole year in the section which they entered at the beginning. The latter practice is prevailing.

At the conference it was reported that advice given to parents, suggesting a change for their child, was followed when no change of school was involved; but was disregarded if the child would have to be sent to a distant institution. The conference noted that if the *cycle d'observation* was to function properly, i.e., place each student in a program of study suited to his aptitudes and needs, there would have to be an increase in school transportation facilities, school cafeterias and vocational schools. Moreover, the complexity of the task of properly ascertaining aptitudes suggested a sizeable increase in personnel of all sorts, including teachers, secretaries to keep records, psychologists, doctors, and perhaps, in larger schools, an administrative person to be in charge of nothing but the *cycle d'observation*. It was also suggested that for the sizeable number of students who failed the first year of the *cycle d'observation* there be established a make-up sixth grade so as to avoid sending these students back to the elementary school until an attempt was made to salvage some of them.

The conference members also noted that not all elementary school teachers are encouraging their better students to enter a secondary school and participate in a *cycle d'observation*. Moreover, many parents indicate a hesitancy about enrolling their children in secondary schools. A striking example was given of one area of France which took the initiative and mailed 500 letters to families of children judged by the teachers as capable of entering the *cycle d'observation*. Only 250 families replied, 175 agreeing to enroll their child in a secondary school, and 75 refusing. It was concluded that the aims of the *cycle d'observation* should be more widely publicized. This has been followed up by a Ministry of National Education circular of March 24, 1962, calling for a campaign to persuade parents of capable students to enroll them in secondary schools.¹⁰⁸

The reforms of 1959 also instituted changes in terminology for the purpose of raising the status of vocational education and of the *cours complémentaires*; the intent is to get away from the traditional outlook whereby secondary education has meant academic secondary education, with vocational education and the like given some kind of sub-secondary status. Under the new system the *cours complémentaires*

¹⁰⁷ A summary of the conference is given in *L'Actualité Pédagogique à l'Etranger*, décembre 1961. p. 26-30.

¹⁰⁸ "L'Entrée dans le Cycle d'Observation." *L'Education Nationale*, No. 16, 3 mai, 1962. p. 1.

and lower level vocational schools, including the apprenticeship centers, acquire the name of *collège* while the old *collège technique* (technical secondary school) is called a *lycée technique*.

The major distinction is in terms of the length of the program of study. The academic secondary school and those technical schools which offer a full secondary school program comprise "long" secondary education and the other schools, "short" secondary education. The old *cours complémentaires* is renamed *collège d'enseignement général* and will now have a 5-year program (grades 6 through 10).

The other major change instituted by the reform of 1959 provides that beginning in 1967 children must remain in school until they reach the age of 16, in contrast to the present requirement of age 14. The enrollment increases which will follow probably will be absorbed largely by vocational schools and by the *cours complémentaires*. Enrollment increases in the *cours complémentaires* have been striking, and in 1959 and 1960 were greater percentage-wise than in any of the other types of schools.

The French are trying to keep pace with rising enrollments by opening new schools. The part of the budget assigned for new school buildings in 1960 was reported as an increase of 31 percent over 1959.¹⁰⁹ In 1962, it was reported that the educational reform had encountered material problems, chiefly lack of room for more students in vocational education, and insufficient places in the eighth grade for students seeking to transfer from the *cours complémentaire* to the *lycées*.¹¹⁰

Within the French national government a planning commission (*Commissariat du Plan*) has given high priority to education as part of an overall plan for future development of France:

No effort must be spared to fit the facilities to the demand for education rather than restricting access to the limited means available. This social policy, is, moreover, certainly the one best calculated to promote long-term economic growth.¹¹¹ The expansion of education has now become the most important driving force in social and political development. Self-fulfillment, true democracy and economic progress all depend on the same essential requirement, i.e. that the abilities of every individual should be developed to the full by making secondary and higher education widely available to all sections of the community.¹¹²

The planning commission assumes that by 1970, 40 percent of the 17-year-olds of France will be in a program of study leading to a complete secondary education: the expected proportions are 23 per-

¹⁰⁹ *Education in France*, No. 7, September 1959, p. 30.

¹¹⁰ *Education in France*, No. 16, January 1962, p. 15.

¹¹¹ Poignant, Raymond. *The Planning of Educational Expansion in Relation to Economic Growth: I—France*. Paris: Organisation for European Economic Co-operation, 1961. p. 14.

¹¹² *Ibid.*, p. 29.

Table 23.—Predicted enrollments in public secondary schools: 1961-62 to 1970-71¹

Types of schools	Enrollments			
	1961-62	1963-64	1967-68	1970-71
Academic schools.....	822,000	944,000	1,099,000	1,154,000
Lower secondary schools (<i>cours complémentaires</i>).....	630,000	729,000	839,000	866,000
Vocational schools.....	233,000	311,000	451,000	516,000
Apprenticeship centers (Fulltime).....	225,000	268,000	363,000	406,000
Total.....	1,910,000	2,262,000	2,762,000	2,942,000

¹ *Education in France*, No. 16, January 1962, p. 1.

cent in academic secondary education and 17 percent in vocational education. For the latter, this proportion will represent more than twice the percentage of the 17-year-olds currently enrolled.¹¹³

In addition to material problems, there is concern about the quality of French education, most recently from the business community.¹¹⁴

French business leaders are calling for a hard look at the nation's general education system. Despite its world-reputed high scholastic standards and the rigorous demands it makes on students, they suggest that curriculum and organizational changes may well be in order if Frenchmen are to hold their own and excel in this nuclear-space era of automated production, rising living standards, and more complex international economic and political communities. Their emphasis is on modernization and flexibility in the curriculum, on the introduction of practical science teaching early in the educational cycle. They favor a less theoretical education than has been traditional in France and would place greater stress on the practical application of knowledge to the realities of today.

A group of leaders from industry and from the universities met together recently to study French education, which their report characterizes as follows:¹¹⁵

The French educational system is not sufficiently in step with modern industry and the modern age. Its approach to many of the basic subjects is obsolete, while the teaching of modern subjects often includes an enormous amount of detail, much of it useless and tiring to the student and poorly absorbed by him.

The curriculum should be revised to retain only those subjects and methods which help the student to form good judgment and which establish a framework of permanent reference.

The same group indicated that French education should strive to develop in young people the following qualities:¹¹⁶

An acute sense of observation.

Ability to analyze and synthesize.

¹¹³ *Ibid.*, p. 21.

¹¹⁴ "For the New Era French Industry Urges Education Changes," *op. cit.*, p. 1.

¹¹⁵ *Ibid.*, p. 1.

¹¹⁶ *Ibid.*, p. 3.

Correct reasoning.
Objective thinking.
Creative imagination.
Dynamism.
Willpower and moral principles.
Responsibility and honesty.
Ability to communicate.
Team spirit.
Adaptability and flexibility.

From many different groups a new outlook is being proposed for French secondary education. The following is typical of the many statements and articles which have appeared:¹¹⁷

It is no longer, at the point of entry to secondary education, a matter of selection, i.e. of elimination, but on the contrary of urging all children to continue their education as far as possible. It is no longer a matter of forming an elite of those destined for the liberal professions but of preparing each person to find his place in the world of work and to assume his responsibilities as a citizen. In accord with a spirit of justice, democratization of education has become for the modern state an ineluctable necessity commanded by the economic revolution. But it appears more and more clear that neither the structure of our education nor the geographic location of institutions, nor the content of the programs, are apt to tap and exploit all the intellectual resources of the younger generations.

New Reform of 1962

In 1962, French educational reform took a new turn. Through a series of circulars, including those of April 26, 1962, and May 21, 1962, the Ministry of National Education declared that the eighth and ninth grades (13- and 14-year olds) in various kinds of schools would be fused, that is, given a common program of study. To an American observer this looks like the comprehensive school concept at the junior high level except that the different types of schools, at least for the time being, will continue to exist as separate institutions. The French call this common program of study the *tronc commun*.

The only exception to the common program will be the classical division of the academic secondary school which remains apart with its two sections, one offering Latin and the other, Latin and Greek. The modern section of the academic secondary school joins with the *cours complémentaires* and the vocational schools in having a common program in grades 8 and 9 (4e and 3e in French terminology).

In adopting the common program of study the vocational schools will be giving up most of their vocational emphasis in grades 8 and 9. In fact, the vocational sections are considered to be abolished;

¹¹⁷ "Physionomie du Cycle d'Observation." *L'Actualité Pédagogique à l'Étranger*, décembre 1961. p. 23.

henceforth, vocational education will begin at the 10th grade level (age 15).

On the other hand, the new program will introduce a slight vocational emphasis into the modern sections of the academic secondary school and into the *cours complémentaires* by the addition of a course entitled "introduction to technology" (4 hours per week), and a course in industrial drawing (1 hour per week). The other new feature is that the natural science traditionally offered in grade 9 will be replaced by "an introduction to the simple elements of physics" (3 hours per week), since the latter is considered more closely linked to technology. Until now, students in the modern sections of an academic secondary school began their study of physics at the 10th grade level. Originally it was proposed that the modern section of the academic secondary school drop the second foreign language, which traditionally began in the eighth grade. Mounting criticism, however, caused this part of the proposal to be dropped.

The new program goes into effect at the eighth grade level in the fall of 1962 and for the ninth grade, a year later. The Ministry of Education has indicated, however, that only selected academic schools will introduce the new program in the fall of 1962, namely, those located close to a vocational school, presumably to secure the services of instructors for the new courses in technology and industrial drawing.

The new reform has been denounced publicly in the newspaper *Figaro* (February 20, 1962) by the president of the association of *agrégé* teachers (*Société des Agrégés*) and also by the association of parents having children in academic secondary schools (*Fédération des associations de parents d'élèves des lycées et collèges*). The critics charge that the program of the modern section of the academic secondary school has been downgraded to the level of the *cours complémentaires* and that the orientation program, introduced in 1959 for grades 6 and 7, is now being extended to grades 8 and 9, thereby interfering with the achievement of traditional levels of subject matter competency. It is also claimed that the introduction of the new courses in technology and industrial drawing are not feasible in the light of an already existing shortage of vocational teachers.¹¹⁸ One newspaper claimed that the changes were introduced for reasons of economy, namely to allow grades 8 and 9 to be taught by teachers from the *cours complémentaires* who work longer hours per week and get less pay than the teachers in academic secondary schools.¹¹⁹

¹¹⁸ The criticisms were widely circulated. See for example: *L'Actualité Pédagogique à l'Etranger*, avril 1962, p. 10-13; *L'Education Nationale*, No. 16, 3 mai, 1962, p. 3-4.

¹¹⁹ *Tribune Socialiste* (Paris), 23 décembre, 1961, quoted in *L'Actualité Pédagogique à l'Etranger*, mars 1962, p. 27-28.

Support for the new reform has come from the association of parents with children in vocational schools and from professional journals representing teachers other than those in academic secondary schools. Moreover, the idea of a comprehensive school, at least for grades 6 through 9, has been mentioned in various reform proposals of the 1940's and 1950's and still has its supporters.¹²⁰ The Ministry of Education has indicated that after 1967 two-thirds of the 14- and 15-year old pupils remaining in school by law will be brought together and taught in the *cours complémentaires*; the remaining one-third will be in separate academic or vocational schools.¹²¹

French and American Comparisons

Even with the variety of sections there are certain basic features common to all academic secondary education in France. For example, all sections require classes in (1) social sciences (history, geography); (2) the native language (French); (3) mathematics; (4) science, and (5) at least one modern foreign language. These are the five basic fields of academic study found in most countries, and the relatively small numbers enrolled in French academic secondary schools seek to maintain touch with all five fields for all 7 years of the secondary school (except that French is not studied in the last year).

The French maintain at least a minimum amount of contact with all five fields by devoting only a limited amount of time to three of the fields, namely the social sciences, science, and mathematics. In contrast, students in the United States of similar high academic ability take a heavy concentration of work in four of the fields. Very often in the United States the foreign language field is left out entirely or only studied for 2 years. In some cases, girl students of high academic ability in an American high school take a full program of study in foreign language and a reduced program in either science or mathematics.

Beginning in the sixth grade the American boy student, as in the case of his French counterpart, would have 7 years' study of native language, social sciences, and mathematics, with possibly 6 years of science. The American student (particularly a boy) would spend considerably more time during these 7 years on the social sciences, mathematics and science than the French student. In only one section (section M') does the amount of time the French student spends on science equal that of the American student. The total amount of school time over the 7-year period is very similar in the two countries. In the case of foreign language, the French spread its study over 7

¹²⁰ See Cros, *L'Explosion Scolaire*, *op. cit.*, p. 65-66, 70-72.

¹²¹ *Education in France*, No. 18, May 1962. p. 17-18.

years and devote much more total time to it. In fact, usually at least two foreign languages are studied.

It should be reiterated that in both France and the United States the heavy program of academic study just described is taken only by a relatively few students, namely the small percentage of the age group in a French academic secondary school, and a similar percentage of the better American students enrolled in a college preparatory section in an American high school. The following tables provide a comparison between two programs of study (one with Latin and one without) in French academic secondary schools and a program of study in college preparatory sections of high schools in the United States. There are many combinations of study possible in the United States, but for students of high academic ability who apply themselves and thus rank well up in their class, the program outlined is a representative one. In both countries, art and music are elective after the 10th grade and little time is devoted to them. Such subjects are not included in the following tables.

The program for the 9th, 10th, and 11th grades of the academic secondary school of France, omitting foreign language study (table

Table 24.—Academic study programs in France (classical section) and the United States, by subjects and class hours per week: grades 6–12

Subjects	France: Classical section (A) ¹								United States	
	Grades								Grades 6–12	
	6	7	8	9	10	11	12 (Philosophy)	Total hours	Total hours ²	
	Hours per week									
French.....	4	3½	3½	3½	4	4	1	23½	35 (7 yrs. × 5) English	
Latin.....	4	4½	3½	3½	3	3	0	21½		0
Greek.....			3	3	4	4	0	14		0
Modern foreign language.....	3	3	3	3	3	3	1½	19½	10 (2 yrs. × 5)	
Social sciences (history, geography).....	2½	2½	2½	3	3½	4	4	22	35 (7 yrs. × 5)	
Science observation.....	1½	1½	1½	1				14	30 (6 yrs. × 5)	
Natural science.....							2			
Physics and chemistry.....					2½	2½	2			
Mathematics.....	3	3	3	3	1½	1½	1½	16½	35 (7 yrs. × 5)	
Philosophy.....							9	9	0	
Total hours.....	18	18	20	20	21½	21½	10	140	145	

¹ France: Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale, 1960*. Paris: 1960. p. 67-69.

² With 5 class hours per week as the usual pattern, the number of years devoted to a subject is multiplied by 5.

Table 25.—Academic study programs in France (modern section) and the United States by subjects and class hours per week: grades 5–12

France: Modern section (M) ¹									United States ²	
Subjects	Grades								Grades 6–12	
	6	7	8	9	10	11	12 (science)	Total hours	Total hours	
	Hours per week									
French.....	6	5½	5½	5½	4	4	0	30	35 (7 yrs. × 5) English.	
Modern foreign language:										
1st.....	5	5	3	3	3	3	1½	23½	10 (2 yrs. × 5)	
2nd.....			4	4	4	4	0	16		
Social sciences (history, ge- ography).....	2½	2½	2½	3	3½	4	4	22	35 (7 yrs. × 5)	
Science observation.....	1½	1½	1½	1½					30 (6 yrs. × 5)	
Natural science.....							4	24		
Chemistry, physics.....					4½	4½	5	5		
Mathematics.....	3	3	3	3	4	4	4	24	35 (7 yrs. × 5)	
Philosophy.....							5	5	0	
Total hours.....	18	17½	19½	20	23	23½	23½	144½	145	

¹ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale, 1960*. Paris: 1960. p. 67–69.

² With 5 class hours per week as the usual pattern, the number of years devoted to the subject is multiplied by 5.

26), very much resembles a program of study in a college preparatory section of an American high school. The similarity breaks down in the 12th grade when the French students drop the native language, and devote what amounts to double time to their major subject, which for most of them is a choice of mathematics, science, or philosophy.

Table 26 shows high figures for time devoted to mathematics and science. The figures for these courses in the last year tend to compensate for low figures in the earlier grades, particularly in grades

Table 26.—Class hours per week (omitting foreign language study) for section M in French academic secondary school (*lycée, collège*): grades 9–12

Grade level.....	9	10	11	12
Subjects	Hours per week			
Mathematics.....	3	4	4	Either: 1½ or 4 or 9
Science.....	1½	4½	4½	4 or 9 or 7½
Social Science.....	3	3½	4	4
Native language.....	5½	4	4	0
Philosophy.....				9 or 5 or 3

6 through 9. Those sections stressing foreign language would have lower figures.

By taking the number of class hours per week and the number of school weeks in a year, one can calculate the total amount of time devoted to each subject by French and American students over the 7-year period of grades 6 through 12. In the table which follows, music, art, physical education and the like are omitted.

Table 27.—Total class hours for academic subjects, classical and modern, in France and the United States: grades 6–12

France: <i>lycée, collège</i> ¹		United States ²	
Grades 6–12		Grades 6–12	
Subjects	Total hours		Total hours
	Classical	Modern	
French.....	799	1,037	1,260 (35×36)—English
Latin.....	782	0	0
Greek.....	476	0	0
Modern foreign language:			
First.....	603	1,304	360 (10×36)
Second.....	0		
History and geography.....	748	748	1,260 (35×36)
Sciences (physics, chemistry, natural sciences).....	476	782	1,080 (30×36)
Mathematics.....	561	980	1,260 (35×36)
Philosophy.....	306	102	0
Grand total class hours.....	4,811	5,049	5,220

¹ Data for France found in: "France." *Note on the Organization and Development of Education in the U.S.S.R.* Paris: European Study Committee for the Development of Education and Research, September 1961. Annex I. The modern curriculum gives more emphasis to science.

² 36 weeks (180 days) of school is taken as typical for the United States; there is a trend underway to extend the school year beyond 180 days in some communities. The program outlined is a typical one taken by a boy, enrolled in a college preparatory program, who is interested in mathematics and science.

The American student spends more time on study of the native language, science, social science, and mathematics than the French student, who concentrates most heavily on foreign languages, ancient, modern, or both. However, rigorous examinations at the end of the 11th and 12th grades are given in all subjects.

Whether the high percentage of failure in the French *baccalauréat* is simply evidence that high standards have been set, or whether it indicates serious weaknesses in French secondary education has been vigorously debated, especially in recent years. The fact that those examined represent the top 20 percent of their age group in academic ability would seem to justify the educational reformers who have been advocating revision or even abolition of the *baccalauréat* along with modification of secondary school programs and methods.

The French themselves say that much last minute "cramming" is involved in passing these final examinations, and they raise the question of how much of this type of learning is really permanent learning.¹²² Equally pertinent is the question of whether the passing of examinations interferes with the development of modes of thought peculiar to science and to the social sciences. The large amount of time devoted to language study suggests that the modes of thought which are developed are primarily literary and linguistic. This emphasis is criticized by French educational reformers.

The point of the foregoing comparisons is not that the American high school graduate has reached a higher level of subject matter achievement than the graduate of the French secondary school (*lycée, collège*). In fact, after many years of dealing with millions of American college students and several hundred students from France, the Council on Evaluation of Foreign Student Credentials¹²³ decided, in 1961, that French students who pass part II of the *baccalauréat*, at the end of the French secondary school, have completed roughly the equivalent of 1 year of college in the United States. This represents an overall average for all subjects, since on some subjects, such as history, science and mathematics, the council recommended no college credit, or very little, for part II of the *baccalauréat*, whereas considerable college credit was suggested for the work done by the French student in foreign languages. There are some people in the United States who would not agree with the views of the Council on Evaluation of Foreign Student Credentials, and would prefer to grant 2 years of college credit for completion of part II of the *baccalauréat*. This suggestion appears routinely in American high school textbooks for the learning of French, though usually 2 years of *junior* college are specified.

A third viewpoint is held by a minority of Americans and Europeans who start by noting the difference between "covering ground" in textbooks and developing various facets of the thinking process. The Americans in this group would then go on to assert that completion of part II of the *baccalauréat* equals, but does not exceed, the work done by a select few in American high schools—approximately 5 percent of an American high school graduating class, i.e. those students of high intellectual aptitude who apply themselves and become valedictorians, salutatorians, and the top members of the

¹²² "European Secondary School Revolution." *School and Society*, December 20, 1958, p. 460. This article quotes the statements made by the Secretary General of the French National Commission for UNESCO at a conference on the European secondary school curriculum held at Sevres, France, in April 1958.

¹²³ The Council on Evaluation of Foreign Student Credentials consists of representatives from the Association of Graduate Schools, Association of American Colleges, American Association of Collegiate Registrars and Admission Officers, Institute of International Education, and the National Association of Foreign Student Advisers.

high school honor society. In fact, these American students may well have escaped some of the harmful side effects of a national examination system about which French educational reformers are now so concerned.

Until recently the American system has been that the bright student, no matter how high his level of achievement, has not received any college credit in his high school work, though some have been, without question, working at a college level. Recently, through the system of Advanced Placement tests, some of these high school students have been granted credit for part of the first year of college. Moreover, the Advanced Placement tests have encouraged high schools to offer a higher quality of work to a somewhat larger, though still small, segment of the high school population, the same level of work which a select few in American high schools have always achieved, largely on their own.

The Council on Evaluation of Foreign Student Credentials has suggested (in 1961) also that the first university degree in France, the *licence*, is equivalent to an American B.A. or B.S. This statement may need some qualification in the light of the wide range of quality among American institutions of higher education. This range, incidentally, is not without its good side, namely that it enables the United States to provide for a broader range of intellectual ability, perhaps the top 20 percent rather than just the top 5 percent in intellectual aptitude and achievement.

In making its pronouncement the council undoubtedly had in mind, though not stating so specifically, the top 100 or so universities and liberal arts colleges in the United States (which incidentally would include a majority of all students in higher education), institutions such as the University of California, the University of Chicago, Columbia University, Harvard, University of Michigan, Oberlin, Swarthmore, Yale, and the like. Even among these 100 institutions it might be well to specify the top 20 percent of their students when equating an American B.A. with the *licence* of France, which, after all, is obtained by less than 5 percent of the youth of France.

Post-Secondary Classes

A few of the academic secondary schools in France offer 1 or 2 years of post-secondary study for a certain few of those who have finished grade 12 and received their *baccalauréat*. These are considered to be among the most able students graduating from the academic secondary schools. They spend 1 or 2 years preparing for the entrance examinations to the *grandes écoles*, which are small, specialized institutions of higher education operating independently of the universities. In many cases these *grandes écoles* have more prestige than the universities.

Usually the post-secondary courses are taught by teachers possessing the *agrégation*. In fact, most of the teachers in an academic secondary school who have the *agrégation* will be teaching primarily, if not exclusively, in the post-secondary classes. Unless these post-secondary classes are considered as a separate entity, one gets a distorted picture of the level of work in the French secondary school, as well as of the level of training of the teacher. On the other hand, the few *lycées* with post-secondary classes undoubtedly receive an intellectual stimulus from the presence of these classes in the same building.

The post-secondary classes are found usually in the larger *lycées*. The size of academic secondary schools in France varies; some have an enrollment of 200 or 300 students and others have several thousand. The *collèges* often have under 400 students while the *lycées* frequently have over 1,000. In 1960, the *lycée Janson de Sailly* in Paris had 3,827 students, including students of elementary school age 8 to 11. In 1960, it was reported that the first year of post-secondary work in the sciences was offered in 12 of the *lycées* of Paris and in 32 *lycées* in other parts of France; the second year of work was given in 11 of the *lycées* of Paris and in 25 *lycées* in the rest of France. Similarly, the first year of post-secondary classes in the humanities was offered in a total of 40 *lycées* and the second year in 28 *lycées*.¹²⁴

The post-secondary classes have two sections, one for those specializing in mathematics and science and the other for those in the humanities. Classes for mathematics cover differential and integral calculus, analytic geometry, series, vector analysis, determinants and imaginary

Table 28.—Curriculum (humanities) in post-secondary classes in *lycées* by class hours per week¹

Subjects	Class hours	
	1st year	2d year
Philosophy.....	6	4
History.....	5	5
French.....	4	5
Latin.....	4	5
Greek.....	4	4
1st modern foreign language.....	2	2
2d modern foreign language.....	2	.....
Physical education.....	2	.....
Total class hours.....	20	25

¹ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale 1960*. Paris: 1960. p. 72.

¹²⁴ France. *Annuaire de l'Éducation Nationale 1960*, op. cit., p. 73.

variables.¹²⁵ In the humanities section, slightly more than half of the total time of the first year is devoted to language study, and about 62 percent in the second year.

Total enrollments in these post-secondary classes in 1959-60 were 16,497 in public schools and 2,859 in private schools.¹²⁶ Tuition is free and the students usually qualify for national government scholarship grants for subsistence.

¹²⁵ Ministère de l'Éducation Nationale, *Classe Préparatoires aux Grandes Ecoles Scientifiques, Programmes A et B et Commentaires*. Paris: 1958. p. 5-16; and Park, *op. cit.*, p. 272.

¹²⁶ *Informations Statistiques*, No. 34-35, décembre 1961. p. 345.

Chapter VII

VOCATIONAL EDUCATION

ANY DESCRIPTION of vocational education in France and the related question of the technical manpower of the country must take note of the large number of young people who leave school, at the age of 14 or 15, after 8 or 9 years of education. Not only have they stopped far short of a complete secondary education, but also they have received virtually no training in occupational skills. About half of the youth of France are in this category.

It is true that the trend is for young people to remain in school longer, and as mentioned previously, starting in 1967 the compulsory school age for French youth will extend to the age of 16. Undoubtedly many will then make use of the additional schooling to learn useful occupational skills. As of now (1962), however, children need not continue their schooling after they reach the age of 14. The government does encourage young people in rural areas to continue their schooling on a part-time basis, until the age of 17, by attending short courses in agriculture which may be offered in off-seasons, at night, or on weekends. Attendance is voluntary, however. About 100,000 actually participate in these courses for varying lengths of time during a year.

The majority of those still enrolled in school at the age of 15 are in academic education, and a much smaller group in vocational education. The relatively low vocational enrollments are understandable in the light of the following considerations:

- (a) The large number of students not in school at the secondary school level, many of whom would be likely candidates for vocational education.
- (b) French tradition which has given high prestige to academic education and which has until recently characterized vocational training as not true secondary education.
- (c) The long association of certain types of schools with certain social and economic classes in France. Under this arrangement the academic secondary schools were considered the

- schools of the middle and upper classes while vocational education was left to the lower classes, the very groups least likely to attend school beyond the compulsory school age.
- (d) The stage of economic development. France has industrialized relatively slowly and even today a sizeable portion of the country is agricultural. Moreover, the effects of industrialization have not been widespread, both because industry tends to be centered around a few urban areas and because the prevailing pattern has been one of small industry and family operated business. The expansion of the French economy in the last 10 years is changing the situation.
- (e) French reluctance to turn to schooling as a means of improving agriculture. Enrollments in full-time agriculture schools on the secondary level are extremely small, in the vicinity of 6,000 students. Traditional methods in agriculture are still respected and are passed on by the family.

Historical Background

Vocational education as compared to academic education is regarded in France as a relative newcomer. One can refer, of course, to the Middle Ages when a somewhat formalized system existed for inducting young people into occupations by the route of apprenticeship.¹ Then, there were the Christian schools, established in the 17th century by Jean Baptiste de la Salle, which included some manual work. As part of the background development in the 18th century, there was growing interest in science and its applications among some of the thinkers of France, for example, Diderot. Sometimes cited is La Chalotais' statement in 1761 that education should give young people the scientific knowledge to perform their tasks well.² In the opinion of one observer of French education the advice was not heeded; he contends that from 1750 on there has been a struggle between intellectual culture and technical education as proponents of the latter have pleaded, with relatively little success, for more scientific training, more application of knowledge and the like.³

During the French Revolution, vocational training was given a boost when central schools were planned with a program of study which included drawing and scientific subjects with a technical emphasis. Under Napoleon these schools were replaced by the classical *lycée*, and it has been suggested that France thus lost its chance to

¹ For a brief summary of the early signs of vocational training see *Education in France*, No. 12, December 1960. p. 1-3.

² Quoted in Dobinson, Charles H. "France and Technical Education Today." *Educational Forum*, January 1957. p. 160-161.

³ *Ibid.*, p. 160.

lead Europe in technical education at the secondary school level.⁴ Reportedly, in 1914 France had only 6 schools of arts and crafts, 6 intermediate vocational schools and 86 lower vocational schools, together educating a total of 15,000 boys and girls.⁵ Another source suggests that enrollments may have been as high as 20,000.⁶

At the higher education level a handful of technical institutions were in operation during the first half of the 19th century and two of them trace their beginnings to the 1790's. At the secondary school level very little was done until the 1880's. Among the earlier developments were the establishment of 3 schools of arts and crafts by 1850 and the Duruy Law of 1865, which authorized the establishment of special education programs but "manual training played too small a role in it."⁷

After 1870, vocational education received more attention, particularly apprenticeship training. Reportedly this was partly a repercussion from the defeat by the Prussians in 1871,⁸ and was spurred by the International Exhibition of 1878 which revealed the weakness of French industrial production.⁹

The law of December 11, 1880, followed, and established four apprenticeship schools under the joint authority of the Minister of Commerce and the Minister of Education. The role played by the Ministry of Commerce was related to the growing fear of industrial firms that their future in world markets was in jeopardy unless worker productivity was increased.¹⁰

Under a law of 1892 higher primary schools with a vocational emphasis were placed under the Ministry of Commerce. This has come to be regarded as a serious mistake in that it split vocational education from the regular public school system.¹¹

Although enrollments in the new vocational schools increased steadily, the real growth of vocational education in France dates from the law of 1919 (*Loi Astier*) in much the same way that vocational education in the United States is linked to the Smith-Hughes Act of 1917.

Under the Astier Law of July 25, 1919, young workers in certain industries in France were required to attend part-time schooling dur-

⁴Hans, Nicholas A. *Comparative Education: A Study of Educational Factors and Traditions*. London: Routledge and Kegan Paul Ltd., 1949. p. 303.

⁵*Ibid.*

⁶Thabault, Roger. "Professional Studies in the University and in Special Professional Schools—France." *Yearbook of Education 1959*. Yonkers-on-Hudson, New York: World Book Company, 1959. p. 203.

⁷*Education in France*, No. 12, December 1960. p. 2.

⁸Dobinson, *op. cit.*, p. 161.

⁹Thabault, Roger. *Yearbook of Education, 1959, op. cit.*, p. 203.

¹⁰Mallinson, Vernon. *An Introduction to the Study of Comparative Education*. Second edition. New York: The MacMillan Company, 1960. p. 225.

¹¹Thabault, Roger. "Fiscal Management in France." *Yearbook of Education, 1956*. London: Evans Bros. Ltd., 1956, p. 373.

ing working hours until they reached the age of 18. The money to finance such schooling was provided by an apprenticeship tax on industries and wholesale business, and amounted to .4 percent of the salaries paid by an establishment. The money could go directly to the government which would provide the necessary schooling, or the industries could use the money to set up their own apprenticeship programs or give the funds to some educational establishment which would provide the training.¹² In 1920 the various kinds of vocational education were brought under the direction of a new section of technical education in the Ministry of National Education.

Vocational education in various forms became more available after 1920, but it did not attain a status equal to academic secondary education; nor were close ties established between the two kinds of schooling. Since World War II, educational reformers have stepped up their efforts to secure a status of respectability for vocational education, which some see as a healthy antidote to the verbalism and theoretical abstraction of academic secondary education.

Yet in 1950, a French authority asserted that a bias in favor of classical education still caused many people to consider technical and vocational education as inferior. Moreover, he claimed that a prejudice in favor of Latin and contempt for technical education were the chief factors determining selection of a program of study in secondary schools. All this, he claims, has acted as a roadblock in the development of kinds of training which correspond to the aptitudes of many children and has condemned modern, scientific, technical, artistic, and manual training to inferior positions.¹³ A foreign observer of French education a decade later similarly noted the problem of acceptance of vocational education:¹⁴

In spite of the fact that the *écoles nationales professionnelles* and the *centres d'apprentissage* are classed as *du niveau du second degré* [secondary level], most French educationists will not admit for a moment, in conversation, that these schools provide a secondary education. They offer very few courses leading to the *baccalauréat*, their subjects are vocational as opposed to cultural (such opposition is assumed by many French educationists), and they come under the control of the Technical Education Division of the Ministry of Education.

In the last decade vocational education has grown, as have other forms of secondary education, and many different programs of study preparing for a great variety of occupations are available to second-

¹² *Ibid.*

¹³ Gal, Roger. "France." *Yearbook of Education, 1950*. London: Evans Bros., 1950. p. 412, 417.

¹⁴ Wykes, Olive. "Attendance at Secondary Schools in the French Fourth Republic." *The School Review*, Vol. 69, No. 1, 1961. p. 84.

ary school youth. The many occupations for which youth in the age range 13-18 are trained include:¹⁵

Mechanic	Mason
Baker	Painter
Carpenter	Photographer
Hairdresser	Plumber
Cook	Typist
Hotel employee	Leather worker
Dressmaker	Sales clerk
Watch repairer	Shoemaker

Enrollments

On the secondary school level there are four main types of vocational and technical schools, namely (1) apprenticeship centers, (2) technical secondary schools (*collèges techniques*), (3) national vocational schools, (4) trade schools (*écoles de métiers*). In addition, there are technical sections in the academic secondary schools and vocational sections in the lower secondary schools. Largest in enrollments are the apprenticeship centers, with the *collège technique* ranking second and the vocational sections of the *cours complémentaires* ranking third. The other forms of vocational and technical training have enrollments of 30,000 or less.

Listed below in order of size enrollment are the various types of vocational and technical schools on the secondary school level, along with the names by which they have long been known, and the new terminology, as of 1960. For purposes of clarity the old names of the schools will be used in the remainder of the chapter.

1. Apprenticeship center:
(*centre d'apprentissage*)—old name
(*collège d'enseignement technique*)—new name
2. Technical secondary school:
(*collège technique*)—old name
(*lycée technique*)—new name
3. Part-time courses established by municipalities and private agencies.
4. Vocational sections in the lower secondary school:
(*cours complémentaire*)—old name
(*collège d'enseignement général*)—new name
5. Technical sections in the academic secondary schools:
(*lycées, collège*)—old name
(*lycée*)—new name

¹⁵ For a much longer list see: France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale, 1960*. Paris: 1960. p. 157-159.

6. (a) National vocational schools (E.N.P.):
 (*école nationale professionnelle*)—old name
 (*lycée technique*)—new name
- (b) National schools for study of technical education
 (E.N.E.T)
 (*école nationale d'étude technique*)—old name
 (*lycée technique*)—new name
7. Trade schools:
 (*école de métier*)—old name
 (*lycée technique*)—new name

Among the public vocational schools in the year 1960-61 there were 906 apprenticeship centers; 306 vocational sections in lower secondary schools; 210 *collèges techniques*; 162 technical sections in academic secondary schools; 39 national vocational schools; and 25 trade schools.¹⁶ For that year there were 14,103 teachers for the public apprenticeship centers, and 11,244 teachers for all those public vocational schools now to be called *lycée technique*.¹⁷

Vocational education for many students begins at age 13 after 7 years of elementary education when they enter the *collège technique* or one of the national vocational schools. Some make their choice 1 or 2 years earlier by entering a preparatory section of one of the vocational schools where they complete grades 6 and 7 before starting the real vocational program in the eighth grade. Similarly, those enrolled in the vocational sections of the lower secondary school have made their choice at the age of 11 after completion of 5 years of

Table 29.—Enrollments in vocational secondary schools, by types of schools, public and private: 1961-62¹

Types of schools	1961-62		
	Public	Private	Total
Apprenticeship centers (full-time).....	225,000	130,000	355,000
National vocational schools, technical secondary schools (<i>collèges techniques</i>).....	170,000	45,000	215,000
Vocational sections in lower secondary schools (<i>cours complémentaires</i>).....	54,607	7,790	62,397
Technical sections of academic secondary schools.....	35,000	14,000	49,000
Apprenticeship centers (part-time).....	23,000	.....	23,000
Study by correspondence.....	18,000	.....	18,000
Total enrollments.....	525,607	196,790	722,397

¹ *Education in France*, No. 16, January 1962, p. 6. Data for public *cours complémentaires* are for 1960-61 and are taken from *Informations Statistiques*, décembre 1960, p. 472; septembre-octobre 1960, p. 352; and mai 1960, p. 257. The figure for *cours complémentaires* in private schools is for the year 1959-60 and is taken from *Informations Statistiques*, No. 34-35, décembre 1961, p. 311.

¹⁶ *Informations Statistiques*, septembre 1961, p. 192.

¹⁷ France. Ministère de l'Éducation Nationale. *The Education Movement in France During the Academic Year 1960-61*. Paris: 1961, p. 10.

schooling. Students have entered the apprenticeship centers typically at the age of 14 after completion of the 8 years of the elementary school. Many of the students in vocational schools are overage indicating previous school failure; for the school year 1959-60, 18 percent of those in the eighth grade were 15 years old and 24 percent in the ninth grade were 16 years old.¹⁸

Students have a choice between public and private vocational education; many of the private facilities are operated by business and industrial concerns. In the latter part of the 1950's the growth of public vocational education far outstripped that of private vocational education. As indicated in the data for 1961-1962, public vocational education has more than doubled the enrollment of private vocational education.

Between 1952-53 and 1958-59 public vocational education increased by 29 percent. A big increase (57 percent) came in the national vocational schools, while other schools increased as follows:¹⁹

41.7 percent—technical secondary schools.

23.5 percent—technical sections of academic secondary schools.

18 percent—apprenticeship centers.

The vocational sections in the lower secondary school almost doubled between 1952 and 1960.

The increase in vocational education has been more than matched by the increase in academic secondary education, so that the balance has not shifted. As of October 5, 1960, vocational education had 27.3

Table 32.—Enrollments in vocational secondary education by types of schools and selected years: 1952-1960¹

Types of schools	School year				
	1952-53	1954-55	1957-58	1958-59	1960-61
National vocational school (E.N.P. and E.N.E.T.)...	13,038	14,501	16,575	20,477	149,791
Technical secondary schools (<i>collèges techniques</i>).....	69,397	79,498	95,608	98,309	
Trade schools (<i>écoles de métiers</i>).....			5,417	6,282	
Technical sections in academic secondary schools (<i>lycées, collèges</i>).....	22,554	23,533	24,987	27,430	32,352
Vocational sections in lower secondary schools (<i>cours complémentaires</i>).....	28,080	28,053	28,883	33,867	54,607
Apprenticeship centers (full-time).....	145,141	151,883	158,890	170,708	202,318
Apprenticeship centers (part-time).....	8,118	11,894	19,764	19,467	21,719
Improvement schools.....	11,290	8,313	2,925	2,777	
Municipal vocational courses.....			60,789	61,775	
Totals.....	297,618	317,705	413,836	441,087	460,787

¹ *Education in France*, No. 12, December 1960. p. 8. Data for October 5, 1960, are given in *Informations Statistiques*, décembre 1960. p. 472.

¹⁸ *Informations Statistiques*, septembre 1961. p. 188.

¹⁹ *Informations Statistiques*, juin-juillet, 1960. p. 279.

percent of the total public secondary school enrollment. In this calculation the vocational sections of the lower secondary school were counted as part of vocational education. Not counted at all were the approximately 170,000 enrolled in part-time studies in agriculture. If this figure is added, vocational education then represents 33.3 percent, or one-third, of all public secondary school enrollments.

On the basis of the increases in 1961 over 1960 for public education, the 64,000 pupil-increase in academic secondary schools compares to an increase of 39,000 in vocational education. Percentage-wise, however, the vocational schools increased more than the academic secondary schools. The balance is tipped back toward academic education when the lower secondary schools (*cours complémentaires*) are included. The 77,000 increase in these lower secondary schools was the largest of all, and proportionately the academic sections of the lower secondary schools increased more than the vocational sections.²⁰

Cours Complémentaire—Vocational Sections

In 1959-60, in the public lower secondary schools, there were 48,489 students in the vocational and 361,784 in the academic sections. Of those in the vocational sections the largest number, 26,219, were in the commercial program, compared to 12,413 in the industrial sections. Far behind were the small enrollments in home economics and agriculture. Moreover, while the industrial sections had an enrollment increase of 7.8 percent over the previous year and the commercial sections 4 percent, the enrollments in agriculture went down 20 percent.²¹

In the 1930's, however, the chief reasons for adding vocational sections to the *cours complémentaire*, a procedure authorized by a law of 1926, were summarized as (a) cost of providing separate vocational schools in rural areas; (b) desire not to draw rural youth away from the farm areas.²² In practice, however, most of the vocational sections were established in urban areas, particularly in the region of Paris.

For the year 1958-59 the Paris region (*académie* of Paris) had 62.7 percent of the total French enrollment in vocational sections in public *cours complémentaires*, and the immediate Paris area (*Département* of the Seine) had 49.9 percent of the total. On the other hand, the Paris region had only 25.9 percent of the enrollment in academic sections of the public *cours complémentaires*.²³ Girls predominate in both the vocational and academic sections of the *cours complémentaires*.

²⁰ *Informations Statistiques*, mai 1960, p. 247 and décembre 1960, p. 448.

²¹ *Ibid.*, mai 1960, p. 247.

²² Ministère de l'Éducation Nationale. *Encyclopédie Pratique de l'Éducation en France*. Paris: 1960. p. 172.

²³ *Informations Statistiques*, mai 1960. p. 248.

The vocational sections accept students at the age of 11 after completion of the first 5 years of elementary schooling. A 4-year program is then offered (grades 6, 7, 8, 9) of which the first 2 years are largely academic education, with some vocational orientation. The third and fourth year of the program (grades 8, 9) are vocational and are similar to the work offered in the same grades of the technical secondary school (*collège technique*). Those who complete the 4-year program of the *cours complémentaire* are supposed to be eligible to enter the 10th grade level (2e in French terminology) of the *collège technique*.

Apprenticeship Centers

In France, many workers in industry and in the various trades and crafts receive their training through the apprenticeship system. This training may be the old-fashioned system of a young person (age 14-17) working in factories or commercial establishments under an artisan and attending a minimum of 150 hours per year of course work, for which the employer must release him during the work day.²⁴ Training may also be taken in one of the many apprenticeship centers which came into being shortly before World War II as an emergency measure for rapid training of young workers as a part of the stepped-up rearmament of the late 1930's. The number of such centers has more than doubled since World War II.

The apprenticeship center has been characterized as a cross between a factory and a school, because the students tend to spend about half of a 40-hour week in formal classroom study and the other half in practical work—in a factory or in a shop maintained by the apprenticeship center. In 1959, 34.2 percent of the apprentice students boarded at the center, and 38 percent of all the students enrolled in that year were girls.²⁵

Some of the apprenticeship centers are public, operated by a municipal government or the national government, while others are privately operated by business and industrial concerns in order to prepare workers for a particular industry. The apprenticeship tax on industrial and business concerns provides the money for apprenticeship centers.

An English authority on French education calls the apprenticeship center the greatest achievement in French postwar education, because it fulfills the ideal of a worker-citizen, stated as long ago as the 1790's by Condorcet but so long neglected; and because it represents a new approach in educational method.²⁶ Since the apprenticeship centers

²⁴ *Encyclopédie Pratique de l'Éducation en France*, 1960, op. cit. p. 162.

²⁵ *Informations Statistiques*, septembre 1961. p. 204.

²⁶ Dobinson, Charles H. "The French Centre d'Apprentissage." *Yearbook of Education*, 1958. Yonkers-on-Hudson, New York: World Book Co., 1958. p. 184-190.

were designed for young people not doing well in school, a fresh approach was needed in order to reach them. Hence, the old incentives of academic study were replaced by an appeal to practicality, to vocational interest, to the concrete. The great stress is on ability to think and to use materials, and not on the "cramming" of facts.²⁷

According to the original plan, all 14-year olds who applied, except those obviously unfit, were to be accepted by the apprenticeship centers. Actually, because of lack of sufficient facilities, some students are turned down.²⁸ Each region has its own way of handling this problem, usually by arranging an examination when the number of applicants exceeds the available places.

The apprenticeship centers charge no tuition. Typically a student enters after finishing the eighth year of the elementary school; it is not necessary to have the elementary school certificate, although 71.7 percent of those entering in 1959 did possess this certificate. Of the 1959 enrollment, 83.9 percent came from the 8-year elementary school and 8.1 percent from the *cours complémentaires*; in addition, 4.2 percent transferred from academic secondary schools and 3.8 percent from technical secondary schools.²⁹

A variety of programs in the apprenticeship centers prepare for many different occupations,³⁰ often grouped into 4 or 5 categories, such as automobile repair, woodworking, metal work and electrical work. Many of the apprenticeship centers for girls offer sewing, dressmaking and home economics. In large urban areas, particularly Paris, there are specialized programs, such as zinc work, roofing and tiling, radio, and refrigeration.³¹

Local apprenticeship centers tend to train youth for local industries, and even for a specific industrial concern when the center is operated by that concern, whereas national centers train for jobs in more than one locality. Contact with the needs of industry is maintained through a system of local advisory committees which include representatives of employers and trade unions, along with others nominated by the technical division of the Ministry of National Education.

The general theory behind all vocational education in France is that utilitarian and cultural ends are merged in the interest of forming a technical, yet humane man, keeping in mind the realities of the modern world where technology and culture are inseparable.³² For the ap-

²⁷ Dobinson, Charles H. "France and Technical Education Today." *Educational Forum*, January, 1957. p. 163.

²⁸ *Education in France*, No. 12, December 1960. p. 10.

²⁹ *Informations Statistiques*, septembre 1961. p. 205.

³⁰ For a long list of these occupations see: *Encyclopédie Pratique de l'Éducation en France, 1960, op. cit.*, p. 164-165.

³¹ Dobinson, *op. cit.*, p. 162.

³² *Annuaire de l'Éducation Nationale, 1960, op. cit.*, p. 82.

prenticeship centers specifically, a code to guide teachers characterizes the program as follows: ³³

It is necessary not to forget that the majority of them [the students] are young people . . . who, for various reasons, have not been able to contemplate taking up purely intellectual studies. The limited time available for general education, the aptitudes of these young people, and the practical work which they will perform in life, all these prevent us from envisaging, save in exceptional cases, studies which are too abstract or theoretical, too heavy or complicated. Indeed, these would only prove to be futile, and possibly turn away the pupils forever from intellectual activities. It is vital, therefore, in the time which is available for general studies, to go straight to the essential point, and to strive above all to be useful, simple, concrete, living and interesting.

An effort is made to relate the academic studies to the practical orientation of the students; thus, history, for example, becomes a history of labor starting with slavery in ancient Egypt. Similarly, the study of civics includes an analysis of the rights of workers.³⁴ The 40-hour week apparently makes homework out of the question, and written work in a class, such as history, is kept to a minimum.³⁵ The

Table 31.—Curriculum in apprenticeship centers (industrial): by subject, year, and class hours per week¹

Subjects	Hours per week					
	1st year		2d year		3d year	
	Boys	Girls	Boys	Girls	Boys	Girls
ACADEMIC						
Ethical, civic and social education.....	1	1			1	1
French.....	3	3	3	2	2	2
History.....	1	1	1	1	1	1
Geography.....	1	1	1	1	1	1
Arithmetic, geometry.....	3	3	3	3	3	2
Hygiene.....	2	2	2	2	2	2
Total hours.....	11	11	10	9	10	9
NONACADEMIC						
Home economics.....		3		3		3
Vocational drawing.....	2	3	2	2	3	3
Art.....	2		1	1	1	(1) elective
Technology.....		1		1		1
Workshop.....	20	17	22	19	22	19
Physical education.....	4	4	4	4	4	4
Grand total hours.....	39	39	39	39	40	40

¹ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale 1960*. Paris: 1960. p. 85.

³³ Quoted in Dobinson, *Educational Forum*, January 1957, op. cit., p. 163.

³⁴ Dobinson, *Yearbook of Education, 1958*, op. cit., p. 184-185.

³⁵ Dobinson, *Educational Forum*, January 1957, op. cit., p. 163.

teachers seek to use the available time to awaken the students to reflection on matters relating to their work and their life as citizens. All girl students, regardless of their specialized trade, are given some home economics training "to prepare them for their future role as homemakers."³⁶

At the end of the 3-year program in an apprenticeship center the students must pass an examination in order to receive a certificate of vocational aptitude (*certificat d'aptitude professionnelle*—C.A.P.). The C.A.P. has been described by French authorities as certifying "merely that the holder is competent to start work in a trade for which he has completed the elementary apprenticeship but which he can learn thoroughly only through practice."³⁷ Some of those with a C.A.P. get a higher certificate, *brevet professionnel*, after working in an occupation for 2 or 3 years and taking a part-time improvement course. A written examination must be passed to obtain the *brevet professionnel*.

The apprenticeship centers vary considerably in quality. Many have well-equipped shops, several mechanical drawing rooms and suitable facilities, while some of the small centers away from urban areas have only a few sewing machines and a few stoves and washing machines to demonstrate the household arts. Some of the centers benefit by being connected with a technical secondary school and sharing some of its facilities. The young boys and girls in a typical center, however, are cut off from others of their age who will grow up to be the doctors, lawyers, teachers, and businessmen of French society. Some parents are suggesting that children enter the apprenticeship centers at a later age, namely 15.³⁸

A foreign observer of French education, in noting that apprenticeship training is still popular in France, asserted that methods of work do not change or improve much under such a system; hence, such trades as woodworking, masonry, and plumbing do not change much from one generation to the next. On the other hand, he suggested that a French youth working under a craftsman receives an excellent training in such hand skills as ceramics, wood carving, jewelry making, and cabinet work.³⁹ The limitations ascribed to apprenticeship training would apply less to those programs which devote a sizeable portion of time to theoretical classroom instruction.

³⁶ *Education in France*, No. 12, December 1960. p. 11.

³⁷ "France." *World Survey of Education, III: Secondary Education*. Paris: UNESCO, 1961. p. 487. Text prepared by French National Commission for UNESCO.

³⁸ Mallinson. *An Introduction to the Study of Comparative Education*. Second edition, *op. cit.*, p. 226.

³⁹ Hollinshead, Byron S. "Some Differences Between American and European Education." *Third Workshop of Educational Organizations (Condensed Report) April 28-30, 1959*. Washington, D.C.: U.S. Office of Education, 1959. p. 4.

Trade Schools (Ecoles de Métiers)

The trade schools are often established by a chamber of commerce or some occupational group in order to provide specialized training for one type of industry or area of work. The most important part of the curriculum is given over to practical work.⁴⁰ Students are accepted at age 13 for a 3-year program to prepare for such occupations as plumbing, masonry, carpentry, painting and photography.

National Vocational Schools

In 1960 there were 33 national vocational schools and 14 in the process of being established. While some admit students at the age of 11 after 5 years of elementary education, the usual procedure is to accept students at the age of 13 after completion of 7 years of schooling. Admission is by a national competitive examination held at several different centers in France. The examination covers the work of the sixth and seventh grades.

Students enroll in one of three sections, either industrial, commercial or hotel work. Some students in the industrial and commercial

Table 32.—Curriculum, industrial section, national vocational secondary schools (écoles nationales professionnelles), by subjects and class hours per week: grades 8–12¹

	Grades				
	4e 8	3e 9	2e 10	1re 11	Terminale 12
French terminology.....					
	Hours per week				
Mathematics.....	5	4	5	3	2
Science.....	4	4	2	1	2
Mechanics.....			1	3	2
Electricity.....			1	2	2
French.....	6	4	3	2	1
History, geography.....	3	2	2		
Civics.....	1				
Foreign language.....	4	3	2	2	1
Drawing, art.....	2	2	1		
Legislation and economic problems.....					1
Technology, construction.....		1	1	1	1
Drawing and descriptive geography.....	3	3	4	5	5
Technology, general occupation.....		1	1	2	2
Industrial organization.....					
Technology, speciality.....	1	1	1	1	1
Shop.....	4	10	12	14	16
Physical education.....	4	4	4	4	4
Total hours.....	37	39	40	40	40

¹ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale 1960*. Paris: 1960. p. 101.

⁴⁰ *Annuaire de l'Éducation Nationale, 1960, op. cit., p. 97.*

Table 33.—Curriculum, commercial section, national vocational secondary schools, by subjects and class hours per week: grades 8–12¹

French terminology.....	Grades				
	4e 8	3e 9	2e 10	1re 11	Terminale 12
	Hours per week				
Literary.....	8	8	7	7	5
Modern foreign language.....	5	7	7	7	2
Scientific.....	6	6	6	7	6
Vocational.....	6	8	10	13	23
Home economics.....	3	3	3	3	
Physical education.....	4	4	4	4	2
Total hours.....	32	36	37	41	38

¹ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale 1960*. Paris: 1960. p. 102.

Table 34.—Curriculum, theoretical section, national vocational secondary schools, by subjects and class hours per week: grades 10–12¹

French terminology.....	Grades		
	2e 10	1re 11	Terminale 12
	Hours per week		
Literary.....	9	11	10
Scientific.....	9	16	17
Vocational.....	18	13	13
Art.....	2		
Physical education.....	4	4	4
Total hours.....	42	44	44

¹ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale 1960*. Paris: 1960. p. 102.

sections stay to complete a 5-year program and receive the diploma called *diplôme d'élève breveté*. Others, after sufficient work experience, may become foremen. The hotel course is 4 years in length.

In all the sections vocational specialization becomes pronounced from the third year on. In the third year (10th grade) two additional sections are offered, the academic for those who hope to go on to the technical *baccalauréat*, and a social work section as a subdivision of the commercial section.

Technical Secondary School (Collège Technique)

This school has been characterized as one offering training for "highly skilled manual and non-manual workers who, with age and

Table 35.—Curriculum, vocational secondary schools (commercial), collèges techniques, by subjects, sections, and class hours per week: grades 8–10, ages 13–16¹

Subjects	Grade 8	Grade 9 sections			Grade 10 sections		
		Book-keeping	Stenography	Commerce	Book-keeping	Stenography	Commerce
Hours per week							
Literary:							
French.....	6	5	5	5	4	4	4
History.....	1	1	1	1	1	1	1
Geography.....	1	1	1	1	1	1	1
General economics.....					1	1	1
Scientific:							
Mathematics.....	4	3	3	3	4	3	3
Science.....	3	2	2	2	1	1	1
Foreign language:							
Modern foreign language.....	3	3	3	3	3	3	3
Vocational:							
Commerce and bookkeeping.....	2	3	2	2	3	2	2
Commercial office work.....		3	1	2	3	1	2
Correspondence.....					2	2	2
Civil law.....		2	2	2			
Commercial law.....					2	2	2
Selling.....					1	1	1
Stenography.....	3		3	2		3	2
Typing.....		3	3	3	2	3	3
Writing, drawing.....	2	2	2	2	1	1	1
Other:							
Practical work.....	3	3	3	3	3	3	3
Physical education.....	2	2	2	2	2	2	2
Total hours.....	30	33	33	33	34	34	34

¹ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale 1960*. Paris: 1960. p. 83.

experience, will be capable of becoming foremen and supervisors.”⁴¹ In 1960 it was reported that the number of technical secondary schools was insufficient to meet the needs of France; at that time there were 225 of these schools, located mostly in industrial regions.⁴²

A technical secondary school can be established by a commune or a department. There is a trend toward local governments withdrawing from the field of vocational and technical education, with the result that special occupational and business groups tend to establish narrow vocational schools where economic motives mix with educational criteria.⁴³ The technical secondary schools operated by local governments can be taken over by the national government upon request from the local authorities.

Normally, students enter the *collège technique* at the age of 13 after completion of 7 years of academic schooling. As in the case of other

⁴¹ “France.” *World Survey of Education III*, op. cit., p. 487.

⁴² *Annuaire de l'Éducation Nationale, 1960*, op. cit., p. 89.

⁴³ Thabault, *Yearbook of Education, 1956*, op. cit., p. 373–374.

Table 36.—Curriculum, vocational secondary schools (Industrial), by subjects, and class hours per week: grades 8–11, ages 15–17¹

Subjects	Grades			
	8	9	10	11
	Hours per week			
French.....	5	4	2	1
Foreign language.....	4	3		
		(elective)		
Civics.....	1			
History and geography.....	3	2	2	
Mathematics.....	5	4	2	2
Sciences.....	4	4		
Mechanics.....			2	2
Electricity.....			2	2
Occupational technology.....	1	1	1	2
Drawing and art.....	6	6	5	4
Technology of construction.....		1	2	1
Industrial organization.....				1
Legislation and economic problems.....				1
Technology of a specialty.....	1	1	1	1
Shop work.....	5	12	17	19
Physical education.....	4	4	4	4
Total hours.....	39	39+3 electives.	40	40

¹ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale, 1960*. Paris: 1960. p. 94.

types of vocational schools, some enter 1 or 2 years earlier and are placed in a preparatory division until they have completed the 7th grade. At the time of entering the technical secondary school a student takes an aptitude examination, and in instances where the number of candidates exceeds the available places this examination is used to reject some applicants.

Vocational education in the *collège technique* is less narrowly specialized than the apprenticeship centers. The basic program is 3 years in length and includes grades 8, 9, and 10. Some of the students, particularly boys, stay on for a fourth year. In a limited number of the technical secondary schools, an academic section offers 5 years of work leading to the secondary school diploma in the technical line (technical *baccalauréat*). Some of the schools offer a fifth and sixth year of study along vocational and technical lines.

Students usually enroll in one of three programs of study, namely, (a) industrial, (b) commercial, and (c) hotel work. Recently a section preparing people to be aides or secretaries in social work has been added. At the end of the third year the students receive the first certificate of vocational education (*brevet d'enseignement com-*

mercial, industriel, hôtelier, social). The second certificate is given to those who finish the fourth year. For those students in the hotel sections, it is recommended that the fourth year include 6 months' work in a hotel in a foreign country. The nine hotel sections, or hotel schools as they are called, allow students in the third year of the program to specialize in either administrative skills, such as hotel accounting, or in practical skills, such as cooking and waiting on tables. Nearby hotels are used for the practical work.

The industrial sections for girls prepare them for sewing and dress-making and related industrial jobs. The boys' sections train for a variety of jobs, including plumber, automobile mechanic, mason, electrician, cabinet maker, coppersmith, and chemist's assistant. The commercial sections offer work in typing, stenography and book-keeping.

Technical Sections in Academic Secondary Schools

After World War II an attempt was made to raise the status of technical training by creating the technical *baccalauréat*. Thus, a student could secure the prized secondary school diploma by following a program of technical studies rather than the language-oriented programs of the *lycée* and *collège*.

Technical sections were subsequently added in some of the academic secondary schools, particularly in the *collèges*. Reportedly, however, general acceptance of the technical *baccalauréat* was gained only by making the program of study so heavily weighted with mathematics and theory, and so light on technology, as to make it difficult to be recognized as a technical program.⁴⁴

New Certificates

Under a change instituted in 1959 new terminology was introduced into vocational education. Those who complete 11 years of schooling (7 of elementary plus 4 of vocational) receive a certificate called *agent technicien breveté*. Completion of 12 years of schooling (7 of elementary plus 5 of vocational) leads to a certificate called *technicien breveté*, considered the equivalent of completion of the 11th grade of an academic secondary school, i.e., part I of the *baccalauréat*. Some students will go on for a 13th year and receive the *technicien supérieur breveté*, the equivalent of part II of the *baccalauréat*.⁴⁵

Agriculture and Home Economics

Most of the agriculture and home economics courses in France are taken on a part-time basis by boys and girls between the ages of

⁴⁴ Dobinson, *The Educational Forum*, January 1957, *op. cit.*, p. 165.

⁴⁵ *Annuaire de l'Éducation Nationale*, 1960, *op. cit.*, p. 32.

14 and 17 who have finished 8 years of elementary schooling and left school at the age of 14 to work on a farm. In the seventh and eighth grades of the rural elementary school these young people had a course in applied science, which for the boys concentrated on agriculture and for the girls on home economics. A very small number of students complete grades 6 through 9 in a vocational section of a lower secondary school (*cours complémentaire*) where they specialize in agriculture or home economics; in the school year 1958-59, 2,820 were enrolled in agriculture sections and 5,182 in home economics sections of public *cours complémentaires*.⁴⁶

Only a few of the agriculture schools are classified by the French as secondary education. Of the approximately 170,000 students enrolled in agriculture and home economics courses only about 6,000 are in full-time schools on the secondary level. The part-time agriculture courses and schools are classified as post-elementary and include the following:

1. *Cours postsecondaires agricoles* which consist of 100 hours of instruction per year in agriculture and home economics
2. *Seasonal schools*, both fixed and moving, which meet 1 or 2 days per week for 4 months in the winter season over a 2-year period. The courses are offered in 88 fixed schools which are annexed to elementary schools, lower secondary schools or academic secondary schools. Some of the schools move from one community to the next giving a series of lessons in each.
3. *Apprenticeship centers* in agriculture offering a 2- or 3-year course, some operating only in the winter months.
4. *Rural home economics schools for girls*.

There are 104 schools, both fixed and moving, which accept girls at the age of 14, and offer either a 4-month or a 9-month course. Enrollments usually are less than 50 girls per school.

Most of the agricultural students are in the *cours postsecondaires agricoles* which may be taken over a 3-year period in centers which often serve several communities. Students begin the program at the age of 14 and take the courses on Thursday evenings or on Sunday, while working full-time on farms. The teachers often work full-time in an elementary school during the day and handle the agricultural courses for extra pay. To enable students to get in 100 hours it has been necessary to have the courses available for at least 120 hours per year. These courses are considered to be the lowest level in agricultural education and they enrolled the largest number of students, about 90,000 in the year 1958-59. This total represents only about one third of the rural youth, ages 14 to 17,

⁴⁶ *Informations Statistiques*, mai 1960, p. 257.

who are eligible to take these courses. Among the reasons given for the less than full enrollment are the lack of proper equipment and facilities for the courses, which represent a heavy financial burden on local communities, and a certain amount of doubt among some people as to the value of the courses.⁴⁷ The majority of students enrolled in these courses do not finish the 3-year program required to receive a certificate. In 1960 only 7,695 boys and 3,211 girls, or a total of 10,906, took the examination at the end of the 3-year course; of these 8,172 passed the examination and received the certificate (*certificat d'études postsecondaires agricoles*).⁴⁸

On the full-time secondary school level there are the following:

1. *18 practical schools of agriculture.* Students must have completed 8 years of elementary school and hold the elementary school certificate. The course is 2 years in length and includes agriculture and academic subjects. Most of the schools have workshops for manual training in iron and wood.

2. *18 regional schools of agriculture.* These are at a higher level than the practical schools of agriculture. Students are accepted at the age of 15 after completion of the equivalent of the ninth grade. The course lasts 3 years and is considered the equivalent of completion of the eleventh grade (Part I of the *baccalauréat*) in the academic secondary school.⁴⁹

3. *A few specialized schools of agriculture* somewhat similar to the regional schools, but offering such specialities as horticulture.

The small enrollments in these schools are indicated in the figures for 1957-58.⁵⁰

	<i>Number of students</i>
Regional schools (public)-----	1,400
Private schools-----	350
Practical schools (public)-----	1,000
Private schools-----	500
Rural home economics schools for girls (public)-----	3,700
Seasonal schools (public) :	
fixed -----	2,800
moving -----	1,000
Apprenticeship centers (public)-----	3,955
Private schools-----	3,000

⁴⁷ *Encyclopédie Pratique de l'Éducation en France, op. cit.*, p. 188.

⁴⁸ *Informations Statistiques*, No. 38, mars 1962, p. 110.

⁴⁹ Ministère de l'Éducation Nationale, Institut Pédagogique National. *L'Organisation de l'Enseignement en France*. Paris: 1957. p. 72.

⁵⁰ *Encyclopédie Pratique de l'Éducation en France, op. cit.*, p. 190-193.

It is now being said in France that the country must improve its agricultural education if it is to keep up with other countries.⁵¹ Specific suggestions include the following:⁵²

1. More control over attendance and actual completion of the course work. Some of the private agricultural courses are cited as being lax in this regard.
2. Raising the quality of the courses, which in some cases has been lowered by misuse of correspondence programs.
3. Bringing some unity out of the present situation, namely, the great variety of courses of different levels and duration.
4. Continued cooperation of the Ministry of Agriculture and the Ministry of National Education, since both offer courses in agriculture.

Also noted are the very small numbers enrolled in the top schools of agriculture on the secondary school level, namely the regional schools and the practical schools. This situation is attributed in part to the fact that these schools are not a clear link between elementary education and higher education; for example, the graduates of these schools are not considered as having reached the level of completion of Part II of the *baccalauréat*, which is the usual requirement for entrance into higher education.⁵³ Some students take additional study, and then are able to enter higher schools of agriculture.

Vocational Guidance

Since 1937 France has had a system of vocational guidance centers outside the school system, but under the general supervision of the Ministry of National Education. They are primarily for children leaving school at the age of 14, and seek to help them to "choose a trade with reference to their tastes, aptitudes and family situation and the needs of the labor market."⁵⁴

A law of March 10, 1937, made vocational guidance tests compulsory in apprenticeship programs in certain occupations. This was followed by a decree of May 24, 1938, which authorized the establishment of vocational guidance centers. These events were closely related to the problem of economic recovery and to a report issued at the time which cited the need for more highly skilled workers.⁵⁵ The goals of vocational guidance as stated in the law included the increasing of national production and the raising of the qualifications of workers.⁵⁶

⁵¹ *Encyclopédie Pratique de l'Éducation en France, op. cit.*, p. 196.

⁵² *Ibid.*, p. 188-189, 192, 196.

⁵³ *Ibid.*, p. 192.

⁵⁴ *L'Organisation de l'Enseignement en France, op. cit.*, p. 9.

⁵⁵ *Vocational Guidance in France*. Geneva, Switzerland: International Labor Office, 1954. p. 8.

⁵⁶ *Annuaire de l'Éducation Nationale, 1960, op. cit.*, p. 172.

The growth of the vocational guidance centers was slow for a long time after 1938 and picked up momentum only after 1951. At the end of 1952 a total of 702 persons were employed in vocational guidance centers. At that time the staff of a center usually included a director, one or more counselors, and two clerks. Few of the centers in 1954 were able to afford a full-time welfare worker or a full-time physician.⁵⁷

The importance of guidance has become more obvious as a result of such factors as: ⁵⁸ (1) industrialization of France and the need to train workers to handle different and improved equipment; (2) war and the need to train workers quickly and efficiently for the right jobs. The quality of the guidance offered has improved with the progress of psychology, including research on adaptability of workers to their jobs.⁵⁹

It was reported in 1960 that most of the *départements* of France had a vocational guidance center, and the number of children seen each year had risen to over 200,000.⁶⁰ A report 6 years earlier had noted that because of limited staff the centers were not able to examine all children leaving school at the age of 14. Elementary schools closest to the centers tended to be serviced, urban schools being given preference because their students were the ones most likely to enter the factories. In contrast, rural children rarely were examined.⁶¹

The usual procedure is for a number of elementary schools to be assigned to a center. On a specified day children from a particular school will arrive at the center for a series of tests and interviews. To save time, the schools are supposed to send the school records of each child to the center beforehand. Moreover, schools are urged to supply medical records to the centers so that only the doubtful cases will have to be given physical examinations.

The whole operation is considered a 1-day affair, during which the school record and medical record are consulted, aptitude tests are taken, inquiries made into the social background of the child, and literature is distributed on work opportunities. Ideally, visits to factories and vocational training schools are included when possible.

Each child who visits the center receives a certificate providing information on vocational aptitudes, and specifying any trades likely to be beyond his or her physical capacity. Some occupations will only accept those who have a certificate indicating they were examined by a vocational guidance center.

⁵⁷ *Vocational Guidance in France, op. cit.*, p. 14.

⁵⁸ *Ibid.*, p. 1.

⁵⁹ *Ibid.*

⁶⁰ *Education in France, No. 12, December 1960*, p. 9.

⁶¹ *Vocational Guidance in France, op. cit.*, p. 29.

Job placement is an essential aim of the guidance process, though the centers do not secure jobs for young people except indirectly through their contacts. In some parts of France experiments in coordinating job placement agencies and the vocational guidance centers have been undertaken.⁶²

In the last decade, the services of the centers have expanded and upon request they give examinations to the mentally deficient, the blind, and to other types of children brought to the centers on the initiative of the parents. Some vocational schools have requested help from the centers in the matter of selecting applicants for admission, and some factories have obtained similar help in selecting people for their apprenticeship programs.

Lack of sufficient funds held back the development of vocational guidance centers in France until 1951 when the national government assumed responsibility for paying the salaries of the staff of the centers. Previously, the centers had to appeal for funds to local governments, to occupational groups, and to private associations.

The national government had displayed an interest in vocational guidance as early as 1922, when an official decree specified that vocational guidance was to be administered under the vocational education section of the Ministry of National Education. In 1928, a group of people interested in vocational psychology founded an institute to do research and to train personnel to do counselling. In 1941, it became a public agency and now offers a 2-year course to prepare people for counselor jobs with the vocational guidance centers. Applicants for the training course must be 21 years old and have the equivalent of a diploma from the academic secondary school. About half of those accepted are elementary school teachers.⁶³

Vocational Teachers and Their Training

The training institutions which prepare teachers for vocational schools offer programs for both those who plan to teach academic subjects (i.e. French, mathematics, science) and those who will teach vocational and trade subjects. The highest level of training is offered in the Higher Normal School for Vocational Education, located at Cachan near Paris. Those who plan to teach in *collèges techniques* and in national vocational schools enter the Higher Normal School, the entrance requirement being completion of the *baccalauréat*, or its equivalent, from a secondary school.

The course at Cachan lasts 3 years. Through a concentrated program in the first 2 years, students prepare for certificates in their fields of specialization—i.e. history, mathematics, applied science, and the

⁶² *Ibid.*, p. 31.

⁶³ *Ibid.*, p. 24.

like—which are the equivalent of completion of a first university degree (*licence*). The third year at Cachan is devoted to teacher training, including practice teaching. At the end of the year students are awarded the C.A.P.E.T. (*Certificat d'Aptitude au Professorat de l'Enseignement Technique*), which is similar to the C.A.P.E.S. granted to academic secondary school teachers.

Prospective teachers for the apprenticeship centers are trained in one of the five normal schools for apprenticeship, the three for boys being located in Paris, Lyons and Nantes while the two for girls are at Paris and Toulouse. A 1-year course is offered to those who are graduates of an academic or vocational secondary school. Teachers of vocational subjects in apprenticeship centers are required to have had 5 years work experience in the trade which they are teaching.

Changes Since World War II

A committee, known as the Armand-Rueff Committee, was appointed in 1960 by the French Government to study the obstacles in the way of expansion of the French economy. Among the problems mentioned in the report of this committee was "the existence of certain flaws in the present structure of the French system of education."⁶⁴ The committee suggested, among other things, that vocational and agricultural education be combined in a new type vocational secondary school. In addition, the academic secondary schools would add industrial, commercial, and agricultural sections, with all sections having certain courses in common.⁶⁵

The Armand-Rueff Committee also proposed that vocational training centers for adults be developed which would provide courses both to advance them in their work, and to raise the cultural level of the public. Moreover, the committee suggested more encouragement of people seeking to complete their secondary education by part-time vocational courses (*promotion du travail*) while working on a job, with the eventual hope of securing admittance to institutions of higher education.⁶⁶

For the purposes of revitalizing French education, vocational education has a special advantage in that it is relatively new and less tied to tradition. Other advantages of vocational education have been listed as follows:⁶⁷

1. It can absorb some of the numerous pupils who failed academic programs.
2. It has sound appeal to the working people.

⁶⁴ *Education in France*, No. 12, December 1960. p. 5.

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*

⁶⁷ King, Edmund J. *Other Schools and Ours*. New York: Rinehart and Company, 1958. p. 57.

3. It enables boys and girls of different faiths to mingle since even the private vocational schools are not usually affiliated with a church.

In summarizing the changes already introduced in France in vocational education since World War II one would include:

1. Creation of a technical *baccalauréat* equivalent to the diploma from the classical and modern sections of the academic secondary school.
2. An attempt to provide a kind of education which would reach and stimulate those not inclined toward academic education. The apprenticeship center is an outstanding example in this regard.
3. A general attempt to raise the status of vocational education. Included here is the reform of 1959 which gives the vocational schools new names of higher status, namely *lycée* and *collège*.

Problems still to be solved in the field of vocational education in France include the need of more general vocational education and less of the narrow, single trade preparation; and the need of more liaison with the world of work, including actual production.⁶⁸ Greater effort is being called for, also, to provide enough schools and facilities so that large numbers of applicants for vocational education will no longer be turned away.⁶⁹ It has been pointed out that those turned away by vocational schools are not likely to be accepted by other types of schools.⁷⁰ Another complicating factor is the teacher shortage; in 1960 it was reported that one-third of the teaching posts in vocational schools were held by people not fully qualified.⁷¹ Finally, there is the slowly dying tradition that vocational education is not true secondary education. All of the reform proposals have tried to remedy this particular problem.

The reform of 1959 includes a declaration of the equality of vocational education with classical education, and thus seeks to give a new prestige to practical activities in accordance with the nature of modern civilization.⁷²

Under what is entitled the Third Plan (1958-61) for economic development of France, the requests for such services as roads and schools exceeded the available funds. Consequently, in the budget cuts, education received only 80 percent of its total request. Under the Sec-

⁶⁸ Dobinson, *Educational Forum*, January 1957, *op. cit.*, p. 166.

⁶⁹ *Encyclopédie Pratique de l'Éducation en France*, *op. cit.*, p. 130; *Education in France*, No. 7, September 1958, p. 30.

⁷⁰ Wykes, *op. cit.*, p. 90.

⁷¹ *Education in France*, No. 12, December 1960, p. 29.

⁷² Ministère de l'Éducation Nationale. *La Vie Scolaire en France*. Paris: 1961. p. 91-92.

ond Plan (1953-57) education received 65 percent of what had been requested.⁷³ As a result, the expansion of education was slowed down, particularly vocational education. This came at a time when there was a shortage of skilled workers and technicians in France.⁷⁴

Under the Fourth Plan (1962-65) education is to be given priority. While academic secondary education is to have a steady growth, there is to be an acceleration in the expansion of secondary vocational and technical education.

The planning commission of the national government is assembling data on occupation and manpower needs for the next 10-15 years so as "to determine the desirable distribution of the estimated total numbers as between: general, technical and vocational education at secondary level [and] arts, science, law, medicine, engineering and so on at university level."⁷⁵ The commission stresses, however, that there will be no coercing of students into particular fields and no forgetting that "education serves humanistic and democratic ends which are largely distinct from strictly economic needs and which must be the primary consideration."⁷⁶

⁷³ Poignant, Raymond. *The Planning of Educational Expansion in Relation to Economic Growth: I—France*. Paris: Organisation for European Economic Co-operation, 1961. p. 24.

⁷⁴ *Ibid.*, p. 25.

⁷⁵ *Ibid.*, p. 15.

⁷⁶ *Ibid.*, p. 17.

Chapter VIII

HIGHER EDUCATION IN FRANCE

IN 1950, 2 percent of the youth of France of university age succeeded in securing the first university degree (*licence*) or an equivalent diploma; by 1960, the figure had increased to 3.3 percent. It is predicted that by 1970, 7.2 percent of the eligible age group annually will receive a university degree, or an equivalent diploma.¹

Higher education in France is offered chiefly in the 16 public universities, which are supported and supervised by the national government. A relatively small number of students receive their higher education in small specialized schools, called *grandes écoles*, often attached to departments of the government, which train executives and specialists primarily for those departments. In addition, a very small portion of higher education enrollment is found in private institutions, including those affiliated with religious groups. Enrollments in higher education, public and private, for the academic year 1961-62, equalled 268,500, of which 31,500 were in the national *grandes écoles* and 11,000 in private *grandes écoles* and university faculties.

Most of the 16 public universities have the traditional faculties (similar to colleges within a university in the United States) of law, medicine, humanities (letters), and sciences. One does not get a true picture, however, of the vast array of courses and programs of study available, including many in applied fields, unless account is taken of the numerous institutes attached to the universities. These institutes sponsor both research and course work in specialized and applied fields for which the traditional faculties have not provided. The majority of the students take their work in the universities, and many enrolled in the *grandes écoles*, through a cooperative arrangement, take much of their course work in a faculty of a university.

Most French universities date back to the Renaissance. Two trace their origins to the 13th century; six were established in the 1400's and three more in the 1500's. The last to be established was the University of Lyon, in 1888.

¹ L'Education Nationale, 15 février, 1962. p. 12.

The French universities from the 15th century on, however, did not thrive and sank into mediocrity.² During the period immediately preceding the French Revolution the universities had decayed to the point that much of the intellectual progress of the country was developing outside of, and at times even in opposition to, the universities.³ Because of this, and for other reasons of a political nature, the universities were suppressed during the Revolution. During the Revolution two institutions were established which have grown into famous *grandes écoles*, namely the *Ecole Polytechnique* and the *Ecole Normale Supérieure*.

Napoleon reorganized higher education by a decree of May 1, 1808. The various university faculties were restored but all were placed under direct control of the national government; even student fees were paid directly to the national government. The various faculties (law, humanities, medicine, etc.) in a given geographic area often did not work closely together and did not think of themselves as constituting a university. The French universities were reconstituted by a law of July 10, 1896, which grouped together the faculties in a given geographic area to constitute the University of Nancy, the University of Bordeaux, and so on.

Although operating under the Ministry of National Education, the universities by the law of 1896 were given a certain amount of autonomy, including the right to handle their own finances. The newly created university councils had disciplinary powers over students and teachers. Professors were appointed by the Ministry of National Education, but on the recommendation of committees and councils of the university. Professors' salaries were paid by the national government.

Each university was authorized to receive gifts and grants, and student fees were paid directly to the university. With this new autonomy it was possible to propose and finance new courses and programs of study and to expand the scope of the universities.

French higher education had been slow to respond to changes brought about by such forces as the industrial revolution. The law of 1896 was intended to revitalize the cultural life of France, particularly in the provinces through the 15 provincial universities. It was hoped that each university would reflect and encourage the cultural interests of its region, and to some extent this is true today. The course work centered around the clock-making industry, offered at the

² Thabault, Roger. "Professional Studies in the University and in Special Professional Schools—France." *Yearbook of Education*, 1959. New York: World Book Co., 1959. p. 197.

³ Kandel, I. L., editor. "The Educational System of France." *Educational Yearbook 1934*. New York: Bureau of Publications of Teachers College, Columbia University, 1934. p. 39.

University of Besançon, is frequently cited as an example. Nevertheless the provincial universities have not been able to operate on a par with the University of Paris, and a decentralization drive is under way again as the nation seeks to avoid concentrating most of its intellectual resources in the Paris area.

Greater flexibility was given to French higher education by a decree of 1920 which authorized the creation of institutes alongside the traditional faculties. By 1961 there were over 150 of these institutes connected with the 16 universities. Each institute offers work in a specific field, such as physical education, sociology, engineering, economics and education. Each is headed by a professor from one of the faculties of the university. He represents the institute on the council of the faculty or on one of the university councils. Some members of the institute devote full time to their work while others may teach part time in one of the faculties of the university.

The connection between an institute and the university may be a very tenuous one, particularly for fields of study which are new or are not fully accepted by traditionalists within the university. As a result, the institutes have been free to offer all kinds of courses and even to offer many of the same courses available in the regular faculties of the university. Thus, some phase of economics may be offered by several different institutes within the same university; moreover, more than one faculty of a university may be offering work in the same field. Along with this system goes a vast array of small libraries and laboratories often serving roughly the same area of knowledge. The reform plan of 1946 (Langevin Plan) proposed better coordination of institutes and faculties in French higher education, but the plan was not adopted.

In addition to the 16 cities which have universities, several other cities have public facilities offering one or more years of higher education, and the trend is to increase the number of cities with such facilities. For example, in the late 1950's certain cities were authorized to offer the first year of higher education in science or in the humanities; such courses are now available in 15 different cities of France. The 1-year programs in science were the first to be offered because of the shortage of university facilities in science. All of the 1-year programs are now seen as a means of meeting the problem of rising enrollments and as a device to effect greater decentralization and democratization in higher education.

The first 3 years of the program in pharmacy can be taken at a national preparatory school of medicine and pharmacy at Amiens and at Rouen. Similarly, the entire program in pharmacy and in medicine is offered at Limoges, at Tours, and at Rouen. Part or all of the course work for a degree in law is available at law institutes

or schools of law at Pau, Nice, Rouen, Le Mans, Tours, Limoges, and Nantes.

Autonomy of the University

Control over all these facilities of higher education, whether it be an institute, a university, or a course offered in connection with a university degree program, is held rather firmly by the national government through the Ministry of National Education.

Official publications stress the autonomy of higher education in France, and there is not the close government supervision which characterizes lower levels of French education. An English observer of French higher education reports that the weight of the Ministry of National Education is felt, though in talking to French professors he found little serious disapproval of the way the Ministry handled higher education. They tended to tell him about the traditional liberty of the universities, frequently giving the example of the freedom allowed to choose a textbook to go with the prescribed syllabus.⁴

A recent report on freedom in French higher education asserts that the government is driven by necessity, because of its concern to meet the country's need for trained personnel, to organize and regulate examinations and courses of study and "to meddle in the affairs of the university."⁵ The report further notes that government intervention is encouraged by the fact that the French universities depend on the national government for most of their money (professors' salaries are paid by the national government) and the government is not inclined to give money without adequate control. Thus, for example, university budgets are submitted in advance to the national government.⁶ Figures for 1954 indicate that of the 17,861 million francs spent on public higher education, only 1,576 million, or approximately 9 percent, was raised by the universities.⁷ While stressing that the Ministry of National Education does not act without prior consultation with the interested faculty or group within the university, a new official publication says that the national government is of necessity becoming more active as higher education expands; increasingly the national government is having to play the role of arbiter in reconciling higher education programs with priorities for the nation determined at the national level.⁸

⁴Jones, P. Mansell. "The National System of Education in France." *Universities Quarterly*, May 1953. p. 279.

⁵Bulletin of the Committee on Science and Freedom. *Science and Freedom*, No. 19. June 1961. p. 17.

⁶*Ibid.*, p. 18.

⁷Thabault, Roger. "Fiscal Management in France." *Yearbook of Education*, 1956. London: Evans Bros. Ltd., n.d. p. 375.

⁸France. Ministère de l'Éducation Nationale. *Encyclopédie Pratique de l'Éducation en France*. Paris: 1960. p. 348.

The Ministry of National Education also appoints the professors to the universities, but it handles these and similar matters, such as promotions of university teachers, largely through two consultative committees which are composed of professors elected by their university and other individuals selected by the Ministry of National Education.

The first of these two committees, the Council on Higher Education (*Conseil de l'Enseignement Supérieur*), has 35 members selected by the teaching staff of the universities, 14 appointed by the Minister of National Education, and 4 members *ex officio*. The second committee, the Committee for Consultation of the Universities (*Comité Consultatif des Universités*), has three-fourths of its members elected by the staffs of the universities and one-fourth appointed by the Minister of National Education. The degree of centralization is indicated by the fact that the Committee for Consultation of the Universities meets in Paris and draws up a list of nominations for the different posts in all the universities of France. Formal appointment to a university post is made by the Minister of National Education.

The head of a university, called the rector, is appointed by the Minister of National Education. The rector is assisted by two university councils; the first of these, the faculty council, is made up only of the professors, and it deals with various administrative matters, including staff problems. The second council, the assembly of the faculty, includes all the regular teaching staff and deals with pedagogical matters, such as revision of curriculums.

The specialized schools of higher education, *grandes écoles*, are under the control of the various government agencies for which they prepare personnel. The system is so tightly knit that there is considerable criticism of inbreeding, and it is claimed that largely because of the priority accorded to persons trained in the *grandes écoles* graduates of universities often have difficulty in securing top level jobs in government. While the *grandes écoles* offer a higher education rather specifically oriented toward preparation for work, their graduates are said to dominate intellectual life in France. In considerable measure they do so by controlling appointments to key jobs in the national government,⁹ an important consideration in a country dedicated to strong central control.

Enrollments

Enrollments in the *grandes écoles* are small relative to total enrollments in higher education. Only 16,500 enrolled in the *grandes écoles* for the school year 1956-57 compared to 165,200 in the public uni-

⁹ Park, Julian. "Education." *The Culture of France in Our Time*. Ithaca, New York: Cornell University Press, 1954. p. 285.

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versities. During the same year, 4,500 students enrolled in Catholic seminaries and 8,146 in Catholic institutions of higher education. These Catholic institutions are called faculties rather than universities. There were five such faculties in 1959-60 with the following enrollment:¹⁰

Paris.....	7,320
Lille.....	2,719
Angers.....	1,531
Lyon.....	1,931
Toulouse.....	577
Total.....	14,078

Although the Roman Catholic religion prevails in France, the country in the late 19th and early 20th centuries came to be dedicated to the twin principles of public education and separation of Church and state. Moreover, only the degrees and diplomas issued by the national government have any legal status; hence, students in Catholic faculties find it necessary to take examinations conducted by the state. The Catholic faculties of higher education were founded in 1875 by the Church in anticipation of the drive toward public education which came in the 1880's. The Catholic faculties have continued to serve a very small portion of those enrolled in higher education.

Table 37.—University Enrollments in France: selected years, 1949 to 1961¹

Universities	1949-50	1952-53	1955-56	1958-57	1958-59	1960-61
	Enrollments					
Paris.....	56,829	61,166	64,151	67,806	70,638	77,796
Aix.....	7,186	8,050	9,679	10,724	13,903	15,486
Besancon.....	963	1,037	1,157	1,841	2,165	2,217
Bordeaux.....	7,951	8,802	9,511	9,853	11,281	12,267
Caen.....	3,301	3,371	3,826	4,338	5,319	6,357
Clermont.....	2,043	2,288	2,768	3,106	3,688	4,731
Dijon.....	1,729	2,038	2,426	2,681	3,107	3,708
Grenoble.....	4,244	4,262	4,685	5,446	7,083	10,007
Lille.....	6,162	6,635	7,406	8,483	10,585	11,503
Lyon.....	8,342	9,237	9,258	9,981	10,681	13,315
Montpellier.....	5,330	6,634	7,054	7,440	8,958	10,509
Nancy.....	4,441	4,910	5,231	5,690	6,789	8,294
Poitiers.....	4,017	4,489	4,546	4,892	5,877	6,843
Rennes.....	5,982	6,473	7,161	8,605	9,650	11,092
Strasbourg.....	5,327	5,420	5,343	5,712	6,379	8,479
Toulouse.....	7,722	7,554	8,054	8,571	10,108	12,070
Total enrollments.....	131,569	142,366	152,246	165,189	186,101	214,672

¹ *Informations Statistiques*, No. 42-43, septembre-octobre, 1962. p. 239.

¹⁰ Institut National de la Statistique et des Etudes Economiques pour la Métropole et la France d'Outre-Mer. *Annuaire Statistique de la France, 1958*. Paris: Presses Universitaires de France, 1958. p. 48; *Informations Statistiques*, No. 34-35, décembre 1961. p. 381-382.

Table 38.—Increase in enrollments in selected universities: 1939, 1955, 1959¹

Selected Universities	1939	1955	1959
Aix-Marseille.....	3,634	8,947	13,093
Casn.....	1,563	3,786	5,319
Clermont-Ferrand.....	970	2,631	3,688
Dijon.....	927	2,323	3,107
Lille.....	3,282	7,229	10,585
Montpellier.....	3,016	7,481	8,858
Rennes.....	3,000	7,077	9,950

¹ France. *Documents pour la Classe: Moyens Audiovisuels*, No. 76, 2 juin, 1960, p. 18.

Higher education enrollments in France doubled between 1919 and 1940 and tripled in the 20-year period since 1940. The growth has been particularly rapid in the 1950's and in the 1960's.

Since 1939 there has been a noticeable change in the size of French universities which undoubtedly has affected their character. Some, like the universities of Clermont-Ferrand and Dijon, had less than 1,000 students in 1939 and were hardly different from a small American liberal arts college. In 1959, both Dijon and Clermont-Ferrand had more than 3,000 students. As late as 1956, however, five of the French universities had less than 5,000 students and only two (Paris and Aix) exceeded 10,000 students. As enrollments continue to increase, a number of the French universities have become large institutions, i.e., enrollments exceeding 10,000. The University of Paris continues to have more than one-third of the total university enrollment in France.

Interestingly enough, the rapid growth of French higher education has occurred without the establishment of a single new university; this is in contrast to England where the growth of higher education has been slower, and yet seven new universities have been established since World War II. On the other hand, as was indicated earlier in this chapter, France has a number of cities which, though lacking a university, have one or more university faculties, and there are a number of other cities with "university colleges" offering the first year of university study. In the light of rapidly growing enrollments in higher education, it seems likely that the facilities in some of these cities will expand into full-scale universities. In fact, it was announced at the end of 1961 that a university is being established at Nantes, using as a foundation the faculties of medicine and science already there.

Because students in French higher education tend to specialize rather heavily in one field, even at the undergraduate level (*licence*), it is important to see which fields have absorbed the rising enrollments. Comparing 1949 with 1961 for instance (table 39), it is clear

that the field of law, which had a relatively large enrollment in 1949, has not increased at all. On the other hand, enrollments in science have tripled, while those in the humanities increased considerably, but not to the point of doubling. By 1959 enrollments in science exceeded those of any other faculty.

As late as 1956 almost half of the students in France were receiving their entire higher education in a faculty offering specific preparation for a profession, namely law, medicine, or pharmacy; the exact percentage enrolled in these three faculties was 44.7.

In 1960, 82.5 percent of those who finished the academic secondary school went on to higher education.¹¹ Continued enrollment increases

Table 39.—Higher education enrollments by faculty: selected years, 1937-62¹

Year	Faculty enrollments					Total
	Law	Science	Letters	Medicine	Pharmacy	
1937-38.....	20,400	10,173	16,750	17,930	6,022	71,275
1949-50.....	39,056	25,396	35,279	29,491	7,256	136,388
1957-58.....	35,171	54,337	51,372	31,156	8,309	180,346
1960-61.....	33,930	77,250	59,550	40,305	-----	211,085
1961-62.....	35,870	84,500	67,810	48,465	-----	236,645

¹ *Education in France*, No. 8, December 1959, p. 3, and No. 16, January 1962, p. 8. The data for medicine in the 1960-62 period include pharmacy.

Table 40.—Enrollment in universities by fields of concentration: 1960-61¹

Universities	Total students 1961-61	Fields of concentration					
		Law	Sciences	Letters	Medicine	Pharmacy	Theology
Paris.....	72,449	14,358	19,319	22,825	13,159	2,778	-----
Aix.....	18,247	2,109	5,482	4,802	2,133	721	-----
Besancon.....	2,217	-----	1,031	955	143	88	-----
Bordeaux.....	12,072	2,159	3,628	3,564	2,269	452	-----
Caen.....	6,149	945	2,295	2,298	452	159	-----
Clermont.....	4,731	490	2,034	1,505	359	343	-----
Dijon.....	3,706	838	1,211	1,435	152	70	-----
Grenoble.....	9,175	1,407	4,191	3,122	295	160	-----
Lille.....	11,137	1,845	3,227	3,023	1,877	685	-----
Lyon.....	12,144	1,723	4,528	3,253	2,183	457	-----
Montpellier.....	10,451	1,474	3,509	2,932	1,743	793	-----
Nancy.....	7,428	1,027	2,697	2,165	1,138	401	-----
Poitiers.....	6,731	1,142	2,207	2,484	622	276	-----
Rennes.....	10,736	1,292	4,092	3,211	1,652	480	-----
Strasbourg.....	8,443	1,453	2,735	2,328	1,183	378	366
Toulouse.....	11,693	1,372	5,196	3,261	1,417	447	-----
Total enrollments.....	204,409	33,634	68,062	63,163	30,587	8,697	366

¹ *Association Internationale des Universités Bulletin*, mai 1962, p. 134. The data were supplied by the Bureau Universitaire de Statistique de France.

¹¹ *L'Éducation Nationale*, 29 septembre 1960, p. 3.

are expected for French higher education, particularly with the rapid increases in enrollment in the academic secondary schools. Enrollments in higher education proportionate to the total population are higher in France than in any other Western European country except Austria. The figures are 5 students in higher education per 1,000 population for France, and for Austria, as compared to 4 for Sweden, 3 for Germany, 2 for England, and 17 for the United States.¹²

Democratization of Higher Education

The rapid increase in enrollments in higher education in France portends a subtle though important change in the social structure of the country as sizeable numbers of children from the families of farmers and factory workers for the first time begin to enter higher education. The student body for higher education was long drawn from the middle class and a university degree insured one of a place of importance in the social structure.¹³ Reports on French higher education in the 1950's continued to stress the fact that less than 9 percent of the students came from families associated with farming or factory work even though at least half of the French population was engaged in such occupations.

A recent study (published in 1960) of the social origins of students in French universities indicates a very slow trend over the preceding 20 years in the direction of what is called democratization of higher education.¹⁴ The study shows that in 1959, 3 percent of the university students came from families where the father was a factory worker, 1 percent from farm worker families, and 5 percent from farm-proprietor families, or 9 percent in all. During the 1950's other changes were taking place as indicated in the following data on percentage of students whose fathers were in selected occupations:

	Percent	
	1950	1959
Members of liberal professions.....	19	13
Heads of enterprises.....	15	6
Civil or military officials.....	25	28
White-collar employee groups.....	13	17

The influx of new groups of people into higher education is related to several factors operating on the French scene. First of all, it is a reflection of higher level of aspiration among young people, though, of course, the number involved is still only a very small percentage

¹² Elvin, Lionel. "Reform in West Europe's Post-Primary Education." *Phi Delta Kappan*, November 1961. p. 53. The enrollment data were taken from: UNESCO. *Current School Enrollment Statistics*. Paris: 1960. Population data from U.N. compilations.

¹³ Thabault, *Yearbook of Education, 1959*, op. cit., p. 202.

¹⁴ *Informations Statistiques*, No. 22, Juin-Juillet 1960. p. 299.

(less than 8 percent) of the group reaching university age. Then too, the growing complexity of the French economy, and of occupations in France, places a premium on educated manpower.

Moreover, there has been a deliberate attempt on the part of educational reformers to remove the barriers which have prevented talented children of the lower income classes from having the opportunity to develop their talents. For example, a new door to higher education was opened by the decree of 1956 which enables certain people without the *baccalauréat* to enter higher education by passing a special examination. The new door has been called the narrow door (*porte étroite*) because so few gain access to higher education this way. In 1960, 727 people took the examination and 279, or 39 percent, passed. The average age was 26 for the men and 28 for the women. Most of the men had taken vocational or technical programs on the secondary school level, and they came from the lower social groups.¹⁵

The financial barrier to higher education is also under attack. Tuition and fees at a French university would amount to less than \$100 per year, and room and board can often be found at reasonable rates in dormitories and cafeterias subsidized by the national government. Yet, in terms of the standard of living prevailing among the lower classes, the cost of higher education, when coupled with the loss of income which occurs when an 18-year-old goes to a university rather than to work, seems prohibitive to many persons in France. For this reason a system of scholarships from the national government has been developed and extended. The number of scholarship holders increased from 36,000 in 1957-58 to 49,000 in 1960; higher education enrollments during the same period increased from 171,000 to 229,000. An editorial in an official French journal noted this increase in scholarships but went on to comment:

If the social origin of students is considered, the evolution of the last 20 years shows a *slight progress toward democratization*, and as the number of students increases the number of scholarship holders also increases.¹⁶

The democratization of higher education is due primarily to the increased numbers of students from the lower middle class rather than to any sizeable influx of children of workers or farmers. It was reported in 1962 that "the son of a doctor or lawyer today has a 200 times greater chance of entering higher education than the son of a laborer," and "the current democratization of the University, although very real, remains very limited."¹⁷

¹⁵ *La Dépêche du Midi* (Toulouse), 10 mai, 1961. Quoted in *L'Actualité Pédagogique à l'Étranger*, July 1961. p. 7.

¹⁶ *Education in France*, No. 12, December 1960. p. 30.

¹⁷ *Education in France*, No. 18, May 1962. p. 28.

It is natural in France that scholarships would come from the national government since all levels of education are under its centralized control and are largely financed and supported by national funds.

Changes in the scholarship system instituted in 1959 provided that those receiving a scholarship grant in a secondary school would have the grant automatically renewed as they entered higher education. The scholarship money for higher education is paid in three installments during the year, in amounts according to three different categories: the first year of university study, the remainder of undergraduate study (the *licence*), or study beyond the *licence*. The amount paid also varies, depending on whether the student lives at home. In 1961 the scholarships ranged in value from \$126 to \$528 per year for undergraduates, and from \$252 to \$720 for graduate level study.

The scholarships are granted by the rectors of the universities after consultation with regional commissions. Each student must indicate the financial condition of his family. The scholarships are to be used only at the university nearest to the student's home, but exemption from this regulation may be arranged in certain cases.¹⁷

Methods and Content

The huge enrollment increases have presented material problems which threaten the quality of French higher education. In the 1950's Professor P. Mansell Jones from England analyzed this problem and reported his findings in a series of articles in the *Universities Quarterly*, an English publication. He quoted from the French review, *Esprit*, March-April 1949, which said that the Sorbonne (University of Paris) faculty of letters (humanities) had seen its student enrollment double in a short period while it had the same premises and same number of professors as in 1914. The faculty of letters in 1949 at the Sorbonne had seven teachers of English for 1,500 students; there were 200 to 300 students in a class. Professor Jones further quoted from articles appearing in *Le Figaro Littéraire*, May 3 and May 4, 1951. Here the notorious story was repeated of the chemistry laboratory with one thermometer for 800 students. In the same vein, the library of the Sorbonne was reported as having 360 seats in 1951, or exactly the same as in 1893, though there were 10 times as many students in 1951.¹⁸

Jones attributed the lack of facilities and staff to insufficient funds. At the same time he took note of the staffing system which traditionally relied on a small number of eminent professors to teach huge numbers

¹⁷ France. Ministère de l'Éducation Nationale. *Annuaire de l'Éducation Nationale*, 1960. Paris: 1960. p. 169-170.

¹⁸ Jones, P. Mansell. *Universities Quarterly*, May 1953, *op. cit.*, p. 278-280.

of students. He did cite the existence of some seminars taught by graduate students. Professors in a French university are required to have a doctorate whereas the rest of the teaching staff in higher education usually consists of people working toward a doctorate.

In reporting efforts to increase facilities and staff in 1959 an official French publication noted that the faculty of science of the University of Paris, in 1958, had one teacher for every 53 students.²⁰ In 1960 the universities of France were reported as having 9,870 teachers; of these 4,420 were assistants and 1,600 were monitors.²¹ A decree of September 27, 1960, created a new teaching post (*maître-assistant*) below the level of assistant professor (*maître de conférence*) but above that of an assistant. People filling these new posts will help teach first-year courses under the supervision of professors and *maîtres de conférences*, and will direct exercises and practical work.²²

As reported in 1961 the staffing problem in higher education remained critical:²³

It is well-known fact that the average number of students in the French faculties in proportion to teaching staff has been for a long time far higher than in many other important countries. There is no doubt that it still remains so.

In 1961, an increase of more than 1,500 teaching posts in higher education was announced; of these, 341 were for full professors and 1,058 for the newly created post of *maître-assistant*.²⁴ At the same time, there was much construction of new facilities of higher education and enlargement of old facilities. In the 1962 budget of the Ministry of National Education, over one quarter of the funds for school construction were reserved for higher education, with first priority going to the science faculties.²⁵

Professor Jones, in his analysis, asserted that the crisis in French higher education was not so much a material one as a matter of the "spirit, content and methods of academic education."²⁶ He quoted from a study published in the April 1952 issue of the Paris review, *Esprit*, which found students very critical of French higher education.²⁷ Professor Jones prefaced his remarks with a comment that much of this seems like the usual tug of war between student and professor, with the students criticizing the dull teaching and the professors speaking of the unprepared students. The study was

²⁰ *Education in France*, No. 8, December 1959. p. 4.

²¹ *Education in France*, No. 12, December 1960. p. 29-30.

²² *Ibid.*, p. 37.

²³ Prenant, M. "The Educational Aspect of the Problem." *Informations Universitaires et Professionnelles Internationales*, septembre 1961. p. 20.

²⁴ *Education in France*, No. 16, January 1962. p. 8.

²⁵ *Ibid.*, p. 17.

²⁶ Jones, P. Mansell. "The National System of Education in France." *Universities Quarterly*, August 1953. p. 387.

²⁷ *Ibid.*, p. 387-393.

based on questionnaires given to students and professors; from these it would seem that few students were satisfied with the courses they had taken. The professors were criticized for pouring out a stream of knowledge without appearing generally to care whether it was assimilated or not. Furthermore, a lack of connection or coordination between subjects was common, and the individual professor seemed little concerned about what was offered by other professors. Most of the subjects were criticized for lacking a "sense of actuality," i.e., for not being related to important concerns of the present-day world.

The students characterized the professors as aloof, and reportedly, contacts between professors and students were poor, though somewhat better in the provinces. The professors, on the other hand, blamed the students: they were accused of using methods learned in the academic secondary school: "servilely copying the lectures dictated" in order to reproduce them on examinations. In the opinion of the professors the average level of the entering student was low, and blame for this was attributed to encyclopedic syllabuses and defective methods.²⁸

A later report (1961) from a professor at the University of Paris is in the same vein:²⁹

Our fellow teachers of mathematics, and physics, much as we naturalists, are of the opinion that the young men who come up to [the] university nowadays are mostly inadequately adapted, mentally and intellectually. Of course, we are speaking of the majority, because now as always, there exists a core of excellent students.

French newspapers and journals in the 1960's continue to reflect criticism of higher education, including the students' claim that the certificates in higher education demand bookish knowledge "where memory plays the chief role rather than intellectual competence"; and the counterclaim of the university professors that students no longer know how to express themselves orally or in writing, thanks to secondary school methods which encourage cramming to the detriment of intellectual work.³⁰

A native-born Frenchman, looking back on his days as a student in French higher education, from the perspective of teaching in American higher education, describes the French professor as wanting the student to regurgitate his lectures on the examinations. Moreover, preparation for these examinations from sources other than the professor's lectures is reportedly not particularly useful. In short, the French

²⁸ *Ibid.*, p. 391.

²⁹ Prenant, M. "The Educational Aspects of the Problem," *op. cit.*, p. 21.

³⁰ For example see: "La Sclérose de l'Enseignement Supérieur." *L'Actualité Pédagogique à l'Étranger*, janvier-février 1962. p. 58-67. (Reprint from *France-Observateur*, Paris, 16 novembre, 1961.)

university student is not encouraged to think so much as to collect a body of facts.³¹

Official publications indicate that a French professor is free to dig deep into an area of his choice and lecture on it, holding students responsible for using course outlines and syllabuses in the library to work on their own to prepare for the examinations.³²

Until recently, attendance at courses in a French university was usually optional. In the last few years, however, there has been an increasing tendency to require attendance for certain courses, particularly for first-year students and for the laboratory or practical classes associated with science courses.

Those who take their first year of higher education in a *classe préparatoire*, offered in a secondary school, take such work not only in a secondary school building but also in a secondary school atmosphere; some of the girl students, for example, continue to wear the smocks and aprons associated with secondary schools. These schools have very small libraries, and the teachers of these classes, while often holders of the *agrégation*, typically do not have a state doctorate.

On the other hand, classes are much smaller in the *classes préparatoires* than in the universities and the system seems to work, perhaps because of the high caliber of the students who enter the *classes préparatoires* and because the French system seems to concentrate on learning the materials from a relatively few books for the purposes of passing examinations.

The wastage of intellectual talent was examined in an editorial of the official French publication, *Education in France*, No. 8, December 1959. Reasons given for the high failure rate were:

1. Traditional severity of French examinations.
2. The increase in students may not mean a proportionate increase in students with ability.
3. Lack of efficiency in teaching methods and outdated teaching procedures.
4. Insufficient number of professors and assistants.

The editorial concludes an enumeration of the large numbers who fail the examinations with the following statement:

Such are the reasons why the problem of the results of university instruction is being raised officially as one of the most serious and urgent problems in French education.

Failure Rate; Examinations, Certificates

Though enrollments in French higher education institutions have increased, a surprisingly small number of students finish their studies

³¹ Yale French Studies. *French Education*. New Haven, Connecticut: Yale University, 1959. p. 101.

³² *Annuaire de l'Éducation Nationale*, 1960. *op. cit.*, p. 118.

and receive degrees. In 1957-58, for example, only 5,675 undergraduate degrees were granted, plus 2,168 degrees in law, which is undergraduate study, though highly specialized. Since 1958, enrollments and the number of degrees granted have risen sharply. In 1960-61, 10,039 undergraduate degrees plus 1,894 degrees in law were awarded, but even that figure is relatively small. One report published in 1961 stated that 65 percent of those who enter French higher education institutions fail to complete their programs. This is in contrast to the record in English universities where the failure rate is relatively low, presumably because only the most fit are selected for higher education. In France, the failure rate remains high despite the rigorous selection exercised at the end of the secondary school.

There is one agency to provide some guidance to French students, namely the University Bureau of Statistics and School and Professional Orientation, or B.U.S. Established as a private body in 1932, it became an autonomous public agency in 1954 under both the Ministry of National Education and the Ministry of Labor and Social

Table 41.—Diplomas granted by university faculties in France by selected years: 1949-1961¹

Faculties and diplomas	Number of diplomas granted			
	1949-50	1956-57	1957-58	1960-61
Law:				
Capacity.....	804	1,072	822	502
Licence.....	2,771	2,952	1,346	1,894
Doctorate (<i>d'Etat</i>).....	340	224	267	
Law.....				172
Economics.....				60
Sciences:				
Licence (free).....	1,351	1,057	1,185	3,341
Licence (teaching).....		1,395	1,505	2,660
Doctorate of Third Cycle.....				358
Engineering diploma.....				146
Doctorate (<i>d'Etat</i>).....	129	238	322	237
Letters:				
Licence (teaching).....	1,719	2,486	2,570	3,448
Licence (free).....	636	470	415	427
Licence in psychology, sociology, art.....				163
Doctorate of Third Cycle.....				64
Doctorate (<i>d'Etat</i>).....	58	78	72	42
Medicine:				
Doctorate (<i>d'Etat</i>).....	1,939	2,279	2,276	2,280
University Diploma.....				1,895
Dentistry.....				580
Veterinary Medicine.....				237
Pharmacy:				
University diploma.....				104
State diploma.....	1,124	953	1,002	906
Doctorate (<i>d'Etat</i>).....				27
Total diplomas granted.....	10,871	13,204	11,784	19,543

¹ Institut National de la Statistique et des Etudes Economiques pour la Metropole et la France d'Outre-Mer. *Annuaire Statistique de la France, 1958*. Paris, Presses Universitaires de France, 1958. p. 51. Data for 1958 and 1961 taken from *Informations Statistiques, Supplément au Bulletin Officiel de l'Education Nationale*, juin 1959. p. 291, 294, 297, 361, 305, and mai-juin 1962. p. 229.

Security. The B.U.S. seeks to provide statistics on higher education enrollments, on the rate of failure on examinations and on the personnel needs of various professions. It also sponsors some studies on the relative effectiveness of certain programs in preparing for certain professions. The central purpose of the B.U.S. is to collect and make available information to help young people in choosing their studies and careers.

There are regional branches of the B.U.S. in different parts of France with small staffs to answer inquiries and supply materials. Few are staffed to provide counselling services, nor is the B.U.S. itself well equipped for aptitude testing.³³

French universities begin their academic year in mid-October; there are two semesters, each 12 or 13 weeks. A student enrolls in one of the faculties (science, humanities, law, medicine, pharmacy) and takes most of his course work in one of these fields of knowledge to the exclusion of the others. For example, a student enrolled in humanities (faculty of letters) typically will take no university work in science; similarly, a student concentrating on language study may take no work in the social sciences.

In a French university the work of the first year, which is called the preparatory year (*année propédeutique*), is somewhat similar in purpose to what is called general education in American higher education. In France, however, the range of courses is fairly narrow and centers around one general field of knowledge—for example, the sciences, in the case of those registered in the science faculty. There is a separate program for those registered in the humanities faculty and still another for those in the faculty of medicine. The latter program is made up entirely of science subjects—i.e. chemistry, physics and biology.

The idea of a preparatory year had been discussed in the 1920's and defended by the rector of the University of Paris as necessary on the ground that the secondary schools did not prepare students adequately for university study.³⁴ It was introduced in 1948 to meet the criticism that students entering higher education lacked general culture, were becoming so specialized as to be mere technicians, and were wandering through a maze of courses in the first year without knowing which to choose.³⁵ In addition, some of the professors had in mind the introduction of another hurdle which would limit the number of students.³⁶

An examination must be passed at the end of the first year before students are allowed to enter the second year of study; approximately

³³ International Labor Office. *Vocational Guidance in France*. Geneva, Switzerland: 1954. p. 60.

³⁴ Kandel, Isaac L. *The New Era in Education: A Comparative Study*. Boston: Houghton Mifflin Co., 1955. p. 290.

³⁵ Park, *The Culture of France*, *op. cit.*, p. 204-205.

³⁶ Jones, *Universities Quarterly*, May 1953, *op. cit.*, p. 281.

40 to 50 percent of students fail these examinations. A student can take and fail the examination four times before he must leave the university.

Those who successfully complete the first year of university study go on to take courses which will prepare them for the examinations which must be passed to secure the four or five certificates of higher studies (*certificat d'études supérieures*) needed to qualify for the *licence* degree. The examinations are given twice a year, usually in July and November. A student typically is allowed to take only two of these examinations in one year. The written examinations are graded by a board of examiners, usually three professors. Some oral questions must be answered also before this board.

The examinations for certificates are designed to cover a broad general area rather than specific courses; for example, among the certificates which one may use to secure the *licence* in history is one for ancient history, another for medieval history, and another one for modern and contemporary history. It is worth noting again, however, that students claim the examinations, or parts of the examinations, correspond very closely to courses taken, and in particular to lectures given by the professors who serve on the board of examiners. To the extent that this is true the system differs little from American higher education with its final examinations at the end of a course. The French system, however, does emphasize a unity among courses by having them bear on a single area, such as ancient history, as does the basic pattern of studies which causes a French student to take most of his work in one field of knowledge. There remains, however, the oft-repeated criticism that professors tend to lecture, and perhaps examine, over a rather narrow portion of a field of knowledge of particular interest to that professor.

The system rather effectively limits the French student to taking certain courses which correspond to the certificates he has to secure. It is true that the fourth certificate often is not specified, but rather can be selected from a number of possibilities. Thus, those seeking a *licence* in "living languages" can select their fourth certificate from among several possibilities, which include Scandinavian languages and literature, American literature and civilization, Dutch studies, Latin American literature and civilization, and Celtic grammar and philology.³⁷

Those who choose not to take the pattern of certificates required to qualify for secondary school teaching may take a free *licence* (*licence libre*) which has a larger choice of certificates. In the humanities only a minority of students take the *licence libre* in preference to the so-called teaching *licence* (*licence d'enseignement*).

³⁷ For a listing of the certificates required for each field of concentration see: France. *Annuaire de l'Éducation Nationale, 1960, op. cit.* p. 117-123.

Those who receive their *licence* can go on for graduate study and in one year receive a diploma of higher studies (*diplôme d'études supérieures*), which would be somewhat similar to an American master's degree. During this year of study a brief research paper (*mémoire*) must be prepared. A small number of students go beyond the level of the *diplôme d'études supérieures* to study for *agrégation* examination, the doctorate of the third cycle, or for a state doctorate (*doctorat d'état*). The *agrégation* examination and the doctorate of the third cycle can be passed with 1 year of study beyond the *diplôme d'études supérieures*, whereas the state doctorate takes at least 2 years. The *doctorat d'état* requires completion of a major dissertation and a minor one; the major dissertation, particularly, is to be original research. This state doctorate of France is comparable to a Ph. D. in the United States. In France a student enrolled for doctoral study often works part-time and thus takes several years to finish his doctorate. There is another doctorate in France, namely the Doctorate of the University, which is taken mostly by foreign students and usually represents a level comparable to the American master's degree, in some cases slightly higher than the American degree.

Widening Scope of Offerings

There are certain regional specialties for which certain universities have become known, for example Spanish, at Bordeaux and Toulouse; Provençal at Aix and Toulouse; hydraulics at Grenoble; and mining at Lille. Higher education in general, however, has been under attack in France for remaining aloof from the current social scene. For example, few of the theses in history or political science deal with current issues.³⁸ Only recently have advanced courses been added in the social sciences, physical education, technology, and educational psychology. Moreover, not all of the universities offer certificates in every field, and in fact, some lack certain faculties. The recent expansion of higher education, however, has been followed by a wider range of offerings at all the universities.

Changes are occurring as French educators are asking for more encouragement of creative talent in the social and technical fields. Under the heading of "new philosophy of education" a French publication of 1956³⁹ criticized the French educational system for developing too many literary and legal talents and too little scientific and economic competence, and for showing insufficient concern for the needs of modern society. The new French education being advocated would provide for a wider range of studies and would turn the emphasis from the past and center attention on a better knowledge of the modern world.⁴⁰

³⁸ Clark, *The Culture of France*, *op. cit.*, p. 212.

³⁹ *Education in France*. Paris: Editions France Actuelle, 1956.

⁴⁰ *Ibid.*, p. 11, 2^a.

In 1955, the Berthoin Plan to reform French education also asserted that too many students in the universities were studying law and the humanities, and too few the sciences and technology.⁴¹

A broadening of the offerings of higher education became evident in 1947 through a decree which created a *licence* in psychology. In 1955 it was announced that a doctorate in education (pedagogy) was now available at the universities of Paris and Montpellier and a doctorate in experimental, applied and social psychology at Rennes and Montpellier.⁴²

In 1958 a *licence* was created for the field of sociology and for the history of art and archeology. By a decree of July 23, 1958, the faculty of letters in French universities was henceforth to be called the faculty of letters and human sciences in order to indicate the greater emphasis to be given to such fields as sociology, ethnology, demography, human geography, and the historical study of civilizations.⁴³ Until 1958, a student registered in the faculty of letters majored in one of the following five fields: (a) philosophy, (b) classical languages, (c) history and geography, (d) modern languages, (e) modern literature. It is now possible in the faculty of letters to secure a degree (*licence*) by majoring in psychology or sociology or the study of overseas populations; at the present time (1962), however, there is no advanced degree offered in these three fields.

The aims of French higher education as stated in 1960, were:⁴⁴

1. To contribute to the progress of science, the formation of researchers, and the development of scientific, literary and technical research.
2. To dispense higher scientific, literary and artistic culture.
3. To prepare for occupations demanding an extended culture and profound knowledge and to prepare teachers (for secondary schools) by giving them scientific formation and pedagogical training.
4. To constantly adapt its programs to the demands of scientific progress and to the needs of the nation.

That the last of the four aims is to receive serious attention is now evident, as French higher education, like higher education in England, experiences a decided reorientation toward science and technology.

⁴¹ *Ibid.*, p. 22.

⁴² "France: Educational Progress in 1954-55." *International Yearbook of Education, 1955*. Paris/Geneva: UNESCO/International Bureau of Education, 1956. p. 121. (Publication No. 169).

⁴³ France. Ministère de l'Éducation Nationale. *Encyclopédie Pratique de l'Éducation en France, op. cit.*, p. 227.

⁴⁴ *Ibid.*, p. 211.

Science

In the early part of the 1950's science and technology received less emphasis in the French universities than did the study of language and literature. By mid-1950's France began to recognize the growing shortage of scientific and technical manpower, and various steps were taken to increase the supply, including the following:⁴⁵

1. Directing students into careers in science by giving the families full information on such careers by means of press, radio, movies, and personal talks.
2. Encouraging a larger percentage of those in the last year of the secondary school to enroll in the sections (mathematics, experimental science) which lead to careers in science rather than in the humanities section.
3. Increasing the capacity of educational establishments preparing scientists, engineers, and technicians—a 3 percent increase in the number of students admitted to the *grandes écoles* has occurred but these were small institutions to begin with and the actual increases are small—e.g. 15 more students admitted to the *Ecole Polytechnique*.
4. Reorganization of the National Council of Scientific Research (*Conseil Supérieur de la Recherche Scientifique*) and changing its name by adding *et du Progrès Technique* to indicate the greater attention which will be given to applied science.
5. Creation of a new degree called the doctorate of the third cycle which would be midway between a master's degree and the doctorate—i.e. between the *diplôme d'études supérieures* and the *doctorat d'état*. It was hoped that the new program would train the large number of research workers needed to staff the scientific laboratories of the nation. In 1961, 358 doctorates of the third cycle were awarded in science and 64 in the humanities.
6. New establishments, for example the National Institute of Nuclear Science and Technology at Saclay in 1956 and the National Institute of Applied Science at Lyon in 1957.
7. Considerable expansion of enrollments in science faculties of existing universities was undertaken, though no new universities were planned. By a decree of October 8, 1957, the overcrowding in science faculties in the universities was relieved by establishing "scientific university colleges" in several cities of France to offer the first year of university work in science, beginning in the fall of 1958.

⁴⁵ Organisation for European Economic Co-operation. *The Problem of Scientific and Technical Manpower in Western Europe, Canada and the United States*. Paris: 1958. p. 71; UNESCO/International Bureau of Education. *International Yearbook of Education 1955, op. cit.*, p. 157; UNESCO/International Bureau of Education. *Training of Technical and Scientific Staff*. Paris/Geneva, 1959. p. 112-113. (Publication No. 206).

8. More flexibility in accepting students for university level study. For example, the new National Institute of Applied Science at Lyon does not require an entrance examination.

9. Part-time evening study for older students, many of whom lack the normal requirements for entrance into a university, for example, the *promotion supérieure du travail* at Grenoble.

The following analysis of diplomas and degrees granted in scientific fields in France is for the years 1955 and 1961:⁴⁶

	<i>Number granted</i>	
	<i>1955</i>	<i>1961</i>
<i>University faculty of science:</i>		
<i>Licence (d'enseignement)</i> -----	-----	2, 660
Mathematics-----	252	
Physical sciences-----	328	
Natural sciences-----	282	
<i>Licence (libre)</i> -----	732	3, 341

Total-----	1, 594	

Doctor of engineering-----	80	146

<i>State doctorate:</i>		
Mathematics-----	22	
Physical sciences-----	132	
Natural sciences-----	88	

Total-----	242	237

<i>Specialized schools (Grandes Ecoles):</i>		
Applied sciences-----	4, 158	
Agricultural sciences-----	444	

Total-----	4, 602	-----

<i>Agrégation:</i>		
Mathematics-----	46	
Physical sciences-----	56	
Natural sciences-----	61	

	163	305

Grand totals-----	6, 681	6, 689

⁴⁶ Organisation for European Economic Co-operation. *The Problem of Scientific and Technical Manpower in Western Europe, Canada, and the United States*. Paris, 1958. p. 73; and *Informations Statistiques*, No. 40-41, mai-juin 1962. p. 229. Data for the specialized schools are not given for 1961 but would be higher than the 1955 figure. Hence the grand total for 1961 would be approximately twice that of 1955.

Table 42.—Scientific and technical manpower: number of personnel, 1955; diplomas and degrees granted, 1950, 1957¹

	Number	
	1950	1957
Personnel:		
Engineers.....		120,000
Technicians.....		340,000
Scientific research workers.....		22,000
Teachers of science (secondary school and higher education; about 4,000 are in higher education).....		25,800
Total.....		507,800
Diplomas and degrees granted:		
Science.....	4,634	6,115 (1956)
Engineering.....		4,530 (1956)
Technical diplomas.....		8,500
Medicine.....	3,215	2,997
Total.....		22,142

¹ UNESCO/International Bureau of Education. *Training of Technical and Scientific Staff*. Paris/Geneva, 1959. p. 117. (Publication No. 206).

In 1959 the number of *licences (d'enseignement)* awarded had increased to 508 for mathematics, 815 for the physical sciences, and 942 for the natural sciences. For the physical sciences this was an increase of 63 percent over the previous year; for the natural sciences, it was a 48 percent increase, and there was speculation that the supply might exceed the demand in this field.⁴⁷

The swing to science and technology was evident in 1958 as the announcement was made of intentions to create in the next 2 years 13 new science faculties, 7 new "scientific university colleges," i.e., institutions offering the first year of university study in the sciences, and 3 new faculties of medicine. On the secondary school level it was estimated that by 1962, facilities would be needed to house 100,000 more students in technical schools.⁴⁸

In spite of the various measures taken, France reported in 1959 that its scientific and technical personnel were insufficient to meet the needs of the nation. More young people needed to be directed into scientific and technical training at all levels, along with more teachers to provide such instruction. This same report noted the appointment of two commissions in 1959—one to study the problem of recruitment and training of scientific and research staff and one to examine, in collaboration with the Ministry of National Education, the problems arising out of the changing French economy. At the same time plans were announced for the opening of three science faculties by 1961 in Rennes, Nantes, and Nice.⁴⁹

In 1960 the government announced the creation of four more university science colleges to be located at Chambéry, Le Mans, Orléans, and St. Etienne. By 1962 a total of 14 university science colleges

⁴⁷ *Education in France*, No. 15, October 1961. p. 30

⁴⁸ *Ibid.*, No. 7. September 1959. p. 30.

⁴⁹ UNESCO/International Bureau of Education. *Training of Technical and Scientific Staff*, op. cit., p. 112, 116.

were offering the first year of university work, as did 6 other colleges in the humanities. Enrollments in the 12 scientific colleges in existence in the fall of 1960 totaled 2,700; some had less than 60 students while others had over 400.⁵⁰

It is still too early to raise questions about the quality of the new university scientific colleges and there may not be any serious deviation from the traditional French pattern of instruction in science, which is fairly easily transplanted in new locations because of its concentration on mathematics and on study of a relatively small number of textbooks for the purpose of passing examinations. There is some concern in France about upsetting the proper balance between science and the study of the humanities now that science enrolls more university students than any other faculty.⁵¹

An authority on French science in his analysis of the training of French scientists stresses the role played by mathematics in comparison to natural science, which is of secondary importance;⁵² moreover, physics, which has a heavy mathematical emphasis in France, is given more emphasis than chemistry. He notes also that experimental training is meager. The heavy emphasis on mathematics is attributed to the previous control over education by the Church and the dominance of the scholastic tradition—i.e. the study of Latin, Greek, logic and theology, and mathematics.

For centuries, outside of geometry and arithmetic, only astronomy and navigation were considered respectable sciences, and even these were studied by only a small group of men. In the 18th century, in France, the modern sciences began to develop. But with Napoleon came a reorganization of education and again the emphasis was placed on study of languages and mathematics. Even as late as 1954, of the literature and language studied by prospective scientists the authors were selected more for brilliance in style than for their keen observations of human behavior or of the natural world.⁵³

Science Research

Until recently, strong ties did not exist between the science taught in the universities and the applications of science in industrial enterprises. The rigidity of academic institutions dominated by mathematics and theoretical physics, along with the slowness of the state and private industry in supporting scientific research, was given, in 1954, as the reason why certain industries were not more fully developed.⁵⁴ The creation of the intermediate level of study (3rd cycle

⁵⁰ *Education in France*, No. 16, January 1962. p. 10.

⁵¹ *Education in France*, No. 11, September 1960. p. 6.

⁵² Mayer, Jean. "Science" p. 266-336 in *The Culture of France in our Times*, edited by Julian Park, *op. cit.*

⁵³ *Ibid.*, p. 274.

⁵⁴ *Ibid.*, p. 308.

doctorate) short of the state doctorate has been interpreted as an indication of a willingness to change methods and goals toward more practical application of science.⁵⁵

On the other hand, tradition is a strong force and accounts for the continuance of practices in industry and agriculture which are no longer economic or efficient. Moreover, the industries of France have not had a tradition of sponsoring long-range research unrelated to an immediate increase of profits.

There were some industrial laboratories carrying on scientific research but often they were poorly equipped and staffed by modern standards. Since 1958 French industrial production has risen rapidly. The growth has been attributed to several factors, including establishment of research centers in branches of industries where they did not exist previously.⁵⁶

French scientists by 1958 were complaining of lack of coordination of scientific research and suggested the creation of a high commissioner for this field attached to the Office of the President of the Republic; and also the creation of a general secretariat for higher studies and scientific research in the Ministry of National Education.

There was, of course, already in existence the National Center for Scientific Research, which was an autonomous part of the Ministry of National Education. It was, however, just one of an increasing number of bodies devoted to the sponsorship and encouragement of scientific research. The need for more coordination by the national government was increasingly voiced; so in 1958, an inter-ministerial committee was formed from the ministries of education, finance, army, industry and commerce, public health and population, and agriculture. The problems in which this committee has shown an interest include: (a) new means of production of energy; (b) space; (c) development of greater knowledge of genetics and "psycho-pharmacology"; (d) and development of a documentation center to provide up-to-date data to scientific personnel.⁵⁷

Since 1958 the portion of the French national government budget devoted to scientific research has increased dramatically, and now represents between 1 and 2 percent of the gross national product. A program introduced in the French National Assembly in 1960 called for expansion of government support of non-military, scientific research. The actual sum devoted to scientific research in France for 1961 was approximately \$690 million, or more than \$120 million over the figure for 1959. Of the 1961 total, \$104.6 million came from the national government, and a good deal more came indirectly from the

⁵⁵ Thabault, *Yearbook of Education, 1959, op. cit.*, p. 201.

⁵⁶ "French Industry and the Common Market." *Bulletin from the European Community*, No. 51, February 1962. p. 4-6.

⁵⁷ France. Ministère de l'Éducation Nationale, *Encyclopédie Pratique de l'Éducation en France, op. cit.*, p. 32.

same source through grants to universities, the army, and such institutions as the National Center for Scientific Research, which had a budget of \$50,108,938 for 1960 as compared to \$2,694,000 in 1949.⁵⁸ In spite of this effort, a French source declares that "French state research projects still lack hundreds of scientists and technicians, and government credits are still not high enough to offer salaries that attract enough of them."⁵⁹

Engineering

In 1955 France was reported as having 4,158 people graduating from its schools of engineering; proportionately this was one of the lowest outputs in Western Europe.⁶⁰ By 1958 the annual output of engineers was up to 4,729. The estimated need, however, was 12,000 new engineers per year.⁶¹ The shortage of engineers is expected to get worse. Among the reasons given for the shortage are: (a) that the engineering schools do not admit a sufficiently large number of applicants, and (b) that many engineers are actually doing the work of technicians because of a shortage of this latter type of worker.⁶²

The training of engineers occurs chiefly outside the universities in relatively small, specialized schools. There are two types of these schools, namely, those giving a general training in engineering with specialization in the last year of the program and those training for a specific branch of industry or government.

There are roughly three levels of training offered. The highest level of engineering education is given in a small number of *grandes écoles* and in 18 higher schools of engineering (*écoles nationales supérieures d'ingénieurs*); applicants to these schools spend one or two years after graduation from a secondary school preparing for the entrance examination. The second highest level of engineering training is given in the *écoles d'ingénieurs d'arts et métiers*. The lowest level of training is given in *écoles d'ingénieurs*, the majority of which train technicians rather than engineers.⁶³ The *écoles d'ingénieurs* often accept students who fail to secure admittance to the higher types of engineering schools.⁶⁴

⁵⁸ *France Actuelle*, April 15, 1961. p. 8.

⁵⁹ *Ibid.*

⁶⁰ McCrensky, Edward. *Scientific Manpower in Europe—A Comparative Study of Scientific Manpower in the Public Service of Great Britain and Selected European Countries*. New York: Pergamon Press, 1958. p. 117.

⁶¹ *Education in France*, No. 11, September 1960. p. 27-28.

⁶² *Education in France*, No. 15, October 1961. p. 13.

⁶³ The Conference of Engineering Societies of Western Europe and the United States of America (EUSEC). *Report on Education and Training of Professional Engineers*, vol. I. New York: 1961. p. 30.

⁶⁴ *Ibid.*

Those who complete an engineering program receive a diploma (*diplôme d'ingénieur*). In 1958, diplomas in engineering were awarded in the following fields:⁶⁵

General	1,223
Electrical	1,005
Chemical	517
Agricultural	404
Public works	309
Mining-geology	303
Motors	148
Aeronautical	113
Radio-communications	109
13 other specialties.....	598
Total	4,729

A small number of those who receive the engineering diploma go on to spend 2 years of research and study at a university and receive a degree called *ingénieur docteur*. Less than 200 of these degrees are awarded in a typical year. Some candidates for the degree of *ingénieur docteur* do not secure the ordinary engineering diploma first. Instead, they complete 2½ years of university study (*année propédeutique* plus 3 certificates), and then the 2-year program for the degree of *ingénieur docteur*. Hence the degree of *ingénieur docteur* represents roughly one or 1½ years of study beyond the *licence*, or the approximate equivalent of a master's degree in engineering in the United States.

Engineering training in a university is considered by some people in France as undesirable (a) because of the practice of lecturing to large groups rather than using small groups and first-hand contact with experimentation; (b) because the practical experience offered is insufficient.⁶⁶ A total of 540 engineers graduated from French universities in 1958; by 1965 the number is expected to increase to 1,830 engineers.⁶⁷

Many engineers receive their training in one of the six national schools of arts and crafts. It was reported in 1960 that total enrollments for all 6 schools equaled 1,800 students.⁶⁸ The program is 4 years in length, with the first 3 years taken in one of the five schools located in various parts of France; and all take the final year in the sixth school located in Paris. Previously, these schools drew their

⁶⁵ *Ibid.*, p. 31.

⁶⁶ Thabault. *Yearbook of Education, 1959, op. cit.*, p. 201.

⁶⁷ Organisation for European Economic Co-operation. *Producing Scientists and Engineers*. Paris: 1960. p. 9.

⁶⁸ *Encyclopédie Pratique de l'Éducation en France, op. cit.* p. 175.

pupils chiefly from the lower classes or lower middle class and the entrance examination was relatively easy. Now, the examination is more difficult and is about at the level of graduation from an academic secondary school.⁶⁹ A common entrance examination is offered by all six schools and covers French, industrial drawing, algebra, trigonometry, geometry, physics, chemistry, and a foreign language, plus vocational subjects.

From 1947 on, a number of technical institutes were transformed into engineering schools (*écoles nationales supérieures d'ingénieurs*). There are 18 of these schools, which are directed by university rank teachers. A 3-year program of undergraduate studies in engineering is offered. Some of these schools have a very high reputation, for example, the National School of Chemical Industries at Nancy, the Higher National School of Electro-technology and Hydraulics at Grenoble, and the Higher National School of Agronomy at Toulouse.⁷⁰

Entry into the engineering programs of the *grandes écoles* is much sought after. Facilities exist for only a small number of students and only one out of six applicants is accepted.⁷¹ The most widely known school of engineering, the *Ecole Polytechnique*, will be discussed in the section entitled "Specialized Schools—*Grandes Ecoles*." Almost equally well known are the *Ecole Centrale des Arts et Manufactures*, founded in 1828, and the *Conservatoire National des Arts et Métiers*. The latter offers higher education level courses in applied sciences on a part-time basis, with many courses scheduled in the evening. Not many students proceed far enough to secure the engineer's diploma.

Often the engineering programs include such non-technical courses as law, political economy, and the structure of industry. These courses are included because the aim of the program is to train engineers who will be able to handle administrative positions.

Part-time study for those wishing to become high level technicians, with the possibility of becoming engineers by completing the full program, is now available through technical institutes called *Promotion Supérieure du Travail* (P.S.T.), for example, the one at Grenoble. A preparatory year is offered which is open to those with less than full secondary education, for example, those who completed the program of an apprenticeship center. The students are full-time workers in industrial establishments. By offering part-time study in the evenings to those who may have ability but not the academic creden-

⁶⁹ Thabault, *op. cit.*, p. 204.

⁷⁰ *Ibid.*, p. 200.

⁷¹ The Conference of Engineering Societies of Western Europe and the United States of America (EUSEC). *Report on Education and Training of Professional Engineers*, vol. II. New York: 1961, p. 6.

tials to enter higher education, it is hoped that any lack of opportunity due to social class background will be rectified.

The preparatory year of the P.S.T. at Grenoble is offered with full knowledge that many will fail, either because of lack of ability, or lack of drive to carry on a program of studies after working a full day. In fact, by testing the students at the beginning of the year the potential failures are accurately spotted and warned. If these students insist on trying to complete the year, they are allowed to do so. This represents a significant innovation in French educational practice.

Those who complete the preparatory year are allowed to begin a 5-year program of higher education study; those who have a technical *baccalauréat* do not have to take the preparatory year. The first 3 years of the 5-year program of the P.S.T. are part-time evening studies taught by university rank teachers, including several professors from the nearby University of Grenoble. Those who complete the 3 years receive a diploma of technical studies (*diplôme d'études supérieures techniques*). Many drop out at this point. Those who remain, go on for a fourth and fifth year, at least one year of which is full-time day study. At the end of the 5 years they are qualified engineers with the title of *ingénieur diplômé*.

The vitality of these P.S.T. programs is shown by the enrollment of 20,000 in 1959. There are problems, however, such as the lack of P.S.T. programs in many parts of France; differences of opinion as to the proper balance of cultural and technical studies; and some opposition from the university authorities who say they are fully occupied trying to educate "true students" without trying to educate workers.⁷²

Interest in *Promotion Supérieure du Travail* was stimulated by an all-day conference on October 10, 1960, at the higher normal school for technical education at Cachan. Various speakers emphasized the need for "massive increases" in the number of engineers and technicians. It will be a long time, they said, before expansion of engineering schools will reach the point of meeting the need.⁷³

On the other hand, there is a huge potential of technical manpower in the workers of the factories. It was suggested that this supply might be tapped by greater use of correspondence courses combined with periods of practical work. Suggested also were new teaching methods since those of traditional education were under criticism within the regular educational system and were "even more poorly adapted to instruction of adults."⁷⁴

⁷² "La Promotion Supérieure du Travail" *l'Expansion de la Recherche Scientifique*, No. 8, décembre 1960. p. 2.

⁷³ *Education in France*, No. 15, October 1961. p. 18.

⁷⁴ *Ibid.*, p. 19.

Another experiment in introducing flexibility into French higher education while increasing the facilities to train engineers and technicians was initiated in 1957 with the establishment of the National Institute of Applied Sciences at Lyon. Originally two programs were offered, a 4-year program to train engineers and a 3-year program for technicians. The program to train technicians has been dropped because of the difficulty of maintaining two programs of different levels of difficulty. Morale was a factor, too, as invidious comparisons were made as failures from the engineering program began to enter the technicians program.

The Institute at Lyon, unlike a typical specialized institution of higher education in France, has no entrance examination. Anyone with a secondary school diploma (*baccalauréat*) is accepted and some have been accepted without such a diploma if they have had sufficient vocational training and work experience. As a result, this institution is recruiting from a broader segment of French life than a typical institution of higher education. The advantages of the entrance system at the National Institute of Applied Sciences have been listed as including (a) economy of time—i.e., 1 or 2 years are not wasted preparing for entrance into an institution of higher education; (b) the linking of secondary education and preparation for a career; and (c) examinations, and all of their side effects, are minimized.⁷⁵

The National Institute of Applied Science represents an attempt in France to link the training schools with industry. This is done both by including industrialists on the governing council of the institute and through the period of internship in industrial establishments (1 month at the end of the first year and 6 months during the second year of the program). It is expected that this will speed up French production by cutting down on the time which a new engineer spends in getting acquainted with his new position. The emphasis on practicality may be at the expense of the general culture offered to the prospective engineer. Such general education as they get at the Institute of Applied Sciences is heavily oriented toward their vocation. The hope is that in the future the general culture part of the program will be broadened.⁷⁶

The number of engineers graduating from various kinds of schools is expected to increase by 50 percent over the period 1958 to 1965; moreover, the number is expected to rise from 8,980 in 1965 to 14,450 in 1975.⁷⁷

⁷⁵ "L'Expérience de l'I.N.S.A." *Dossiers Documentaires*, janvier 1961. p. 3.

⁷⁶ *Ibid.*, p. 7.

⁷⁷ Organisation for European Economic Co-operation. *Producing Scientists and Engineers*, *op. cit.*, p. 5.

Specialized Schools—Grandes Ecoles

France is unique in the way in which a system of small, specialized schools has developed alongside the universities. Some of the engineering schools mentioned in the previous section, particularly the *Ecole Polytechnique*, are included in this group, commonly called the *grandes écoles*. Actually only a handful of the most important of these schools are officially designated by the government as *grandes écoles*. The other 100 or so institutions are called *grandes établissements*, but in practice, all of them are called *grandes écoles*.

The *grandes écoles* offer specialized training in a variety of fields, including agriculture, technology, public administration, and physical education. Most agencies of the government have their own *grande école* to train their personnel. One of the newer schools, the National School of Administration, trains administrators for high level government service. These special schools typically are small institutions, most of them taking less than 100 students each year. Their total enrollment represents only about 10 percent of the total enrollment in French higher education, but the schools enjoy high status, due not only to their high standards of work but also to the fact that their graduates have long been given preference in securing positions with the government. Moreover, the difficulty of getting into a *grande école* has enhanced its appeal. Admission is by competitive examination. The French University Bureau of Statistics estimates that 60 percent of the applicants fail to get in.⁷⁸ The rejection rate appears even higher because most candidates register to take examinations to get into several different *grandes écoles*.

Candidates spend 1 or 2 years preparing for the entrance examination, usually in one of the post-secondary classes (*classes préparatoires*) of a *lycée*. The *grandes écoles* do not issue degrees but rather certificates which are often regarded as equal to an undergraduate degree (*licence*) from a university.

Two of the oldest of the *grandes écoles* are the *Ecole Polytechnique*, which trains engineers and army officers, and the *Ecole Normale Supérieure* which offers work in the humanities and the sciences.

In 2 years at the *Ecole Normale Supérieure* a student may complete work for a university degree (*licence*); students follow courses both at the University of Paris and at the *Ecole Normale Supérieure* itself. Some will stay on and in 1 or 2 years will prepare for and pass the *agrégation* examination which will qualify them to secure one of the better teaching posts in a secondary school. A few will go further and by registering in the faculty of a university will secure their state doctorate and eventually a teaching position in a university.

⁷⁸ Organisation for European Economic Co-operation, *The Problem of Scientific and Technical Manpower in Western Europe*, op. cit., p. 76.

The *Ecole Polytechnique*, founded in 1794, trains engineers and artillerymen; military training is taken along with academic studies. Of those who finish the 2-year program about one half will join a government agency. Others will join the army; many of these will later enter industry as engineers.

Many of the *grandes écoles* are concentrated in the Paris area and for 10 years the government has struggled with the idea of dispersing them throughout France. Through such dispersal it is hoped to stimulate industry in various parts of France, since research and facilities for higher education are now seen as going hand in hand with industrial development. Moreover, youth in outlying parts of France are regarded as lacking educational opportunities to the extent that higher education facilities are concentrated in the Paris area. Finally, some of *grandes écoles*, reportedly, would secure a much needed vitality by starting over again in a new location.⁷⁹ In accordance with a report issued in 1957, there would be no new *grandes écoles* established in the Paris area and the existing ones in the Paris area would be relocated elsewhere. The only ones remaining in the Paris area would be the *Ecole Normale Supérieure*, the *Ecole Normale de Jeunes Filles*, the *Ecole Polytechnique*, the *Ecole Nationale d'Administration*, and the *Ecole National d'Outre-mer*. Alumni of the *grandes écoles*, reportedly, are opposed to such plans for dispersement.⁸⁰

Business Administration and Commerce

The French have recently come to realize that a modern economy needs not only scientific and technical personnel, but also leaders in the field of commerce and industry with executive skills in business administration. Until recently such skills were not taught as such in the universities.

Several studies⁸¹ have shown that leaders in the industrial firms of France, excluding the small family-run firms, tend to be graduates of one of the *grandes écoles*, particularly the following five: School of Mines, School of Higher Commercial Studies, the Centrale, the Institute of Political Science, and the *Ecole Polytechnique*. Leaders in industry tend to have engineering backgrounds, and the top positions are frequently held by graduates of the *Ecole Polytechnique*.

University training has less status among management people in industry, as one author comments:

In industry, the university degree—even the Doctor of Law—is treated with scorn. For a career, it is essential to have attended a *grande école*.⁸²

⁷⁹ *Le Monde*, April 8, 1960. Reprinted in *L'Actualité Pédagogique à l'Étranger*, No. 4, juin 1960. p. 1-2.

⁸⁰ *Le Monde*, April 10-11, 1960. *Ibid.*

⁸¹ These are analyzed in Granick, David. *The European Executive*, p. 38-45; 113-115. New York: Doubleday and Company, 1962.

⁸² *Ibid.*, p. 38.

In France, it very hard for a person without the right kind of higher education to become a leader of an industrial firm; and for one with no kind of higher education it would be almost impossible, except in small, family-owned firms.⁸³ A fairly rigid line exists between graduates of the *grandes écoles*, who at least get a chance at the top positions, and those from lesser engineering schools, who, says Granick, are condemned to the middle management level.⁸⁴

Granick analyzed the graduating classes of the *Ecole Polytechnique* and found that the best students went into government service, which has higher status than business, and then after 10 or 15 years entered business at a very high level position. The lowest in the graduating class from the *Ecole Polytechnique* tend to enter business immediately and generally do not rise to the top.⁸⁵

The School of Higher Commercial Studies (*Ecole des Hautes Etudes Commerciales*—H.E.C.) also supplies a number of graduates who enter industry. Though it is one of the *grandes écoles*, the H.E.C. is relatively easy to get into and its graduates usually rise only to the middle management levels. Outside the Paris area, some men “of good family” go to a regional branch of the H.E.C. as an alternative to getting a university degree in law; “neither program is too strenuous.”⁸⁶ More impressive, in Granick’s opinion, is the program of the Chamber of Commerce of Paris.

Started in the 1930’s, the Paris Chamber of Commerce program is for men “recently launched in management,” i.e. young men between the ages of 28 and 33 who have management positions with companies. About 75 persons take the course each year. The program, 1 year in length, was in the beginning “consciously based on the Harvard Business School case method.” For the first 6 months the participants attend classes five evenings a week and on Saturday afternoon. During the summer vacation a paper is written by each student concerning some aspect of his own company. During the last 2 months of the program classes are held only two or three evenings per week. The courses are taught by practicing business men, not by professors.⁸⁷

In 1952, a group of French businessmen gathered to discuss problems of business, and from their conference resulted a center to provide courses, lectures and information for top-level businessmen. Called the Research and Study Center for Chiefs of Enterprise, the center offers 4-week courses to businessmen with at least 10 years’ experience in management.⁸⁸ In 1958 the French government reported the crea-

⁸³ *Ibid.*, p. 28.

⁸⁴ *Ibid.*, p. 40.

⁸⁵ *Ibid.*, p. 73-76.

⁸⁶ *Ibid.*, p. 114.

⁸⁷ *Ibid.*

⁸⁸ *France Actuelle*, October 15, 1960.

tion of business training institutes in several parts of France to train the advisors to heads of businesses.⁸⁹

The need to link up research with management of business led, in 1960, to the creation of a new center for industrial research at Lyon. Under the support of industries of Lyon and the new National Institute of Applied Science the center will analyze problems of small and medium sized industry.⁹⁰

Concern has been expressed in France, also, about the need of bringing higher education and the business world closer together, and a step in this direction was announced in 1959 with the addition of a course in industrial economy and statistics at the National Conservatory of Arts and Crafts.⁹¹ Even earlier, in 1955, the universities began to offer a 1-year program in administration of enterprises to those who had completed 3 years of undergraduate study, usually in law. The 1-year program included (a) social psychology applied to business, (b) industrial relations, (c) general organization of business, (d) scientific organization of production and work, (e) legal problems, (f) financial management.⁹² After interviewing leaders in industry in France, Granick concluded that the 1-year course in the universities had less status than the 1-year program of the Paris Chamber of Commerce. He attributed this in part to the type of students who attend. Those in the Chamber of Commerce course are mostly engineers, plus a much smaller group having law degrees from a university, whereas the ratio was almost the reverse in the 1-year university programs.⁹³

In addition to the newly created institutions and programs of study there are 16 older schools of commerce (*écoles supérieures de commerce*), which offer a 3-year program to students who have completed a full secondary education.

Agriculture

Agriculture has not played a prominent role in higher education in France, even though a sizeable section of the population is engaged in agriculture. In fact, the *1960 Annuaire de l'Éducation Nationale* does not list agricultural schools under higher education but rather has a separate section for them. Higher education enrollments in agriculture for the year 1955-56 totalled 2,638.⁹⁴ The number of university degrees awarded in agriculture declined from 339 in 1954

⁸⁹ UNESCO/International Bureau of Education *International Yearbook of Education*, 1958. Paris/Geneva: 1959. p. 136. (Publication No. 202.)

⁹⁰ *Education in France*, No. 12, December 1960. p. 38.

⁹¹ UNESCO/International Bureau of Education. *International Yearbook of Education*, 1959. Paris/Geneva: 1960. p. 188 (Publication No. 212).

⁹² *Annuaire de l'Éducation Nationale*, 1960, *op. cit.*, p. 115.

⁹³ Granick, *op. cit.*, p. 115.

⁹⁴ *Education in France*, No. 1, October-December 1957. p. 11.

to 332 in 1957.⁹⁵ In 1955, the specialized schools (*grandes écoles*) awarded 444 diplomas in agricultural sciences.⁹⁶

Study of agriculture is offered in (a) four national schools of agriculture with 3-year programs leading to the diploma of agricultural engineer; (b) the National Institute of Agronomy and its four branches; (c) four other specialized schools offering instruction in horticulture, forestry, agricultural industries, and training of teachers for schools of home economics on the secondary school level.

In addition, some of the university faculties of science offer certificates in such fields as agricultural chemistry and biological agriculture. A decree of June 20, 1961, opens up a possibility of agricultural study at a more advanced level, namely the so-called third cycle.

Law

Law studies in France can be taken at both undergraduate and graduate levels. The *licence* in law represents 4 years of undergraduate studies and the student enters this program directly from a secondary school. With 1 additional year of study the diploma of higher studies can be earned, and 2 additional years beyond the *licence* lead to a doctorate in law.

Medicine

In medicine, also, students enter directly from a secondary school to begin work on a 6-year program of study, with a seventh year devoted to internship. The student of medicine does not take any university study in history, mathematics, economics, political science, French, or foreign languages. In other words, the program is devoted entirely to sciences and medicine. Prior to 1960 the student of medicine devoted his first year (*année propédeutique*) to the study of physics, chemistry and biology. A decree of 1960 introduced the new system whereby both medicine and sciences are studied in the first year of university study. Beginning with the middle of the second year the student spends his entire time at a hospital where he does his practical work and takes course work in medical subjects and biology. Reportedly in the past the basic sciences taught in the medical program in France have suffered because all the professors had to hold a degree in medicine; moreover, in the universities of France outside of Paris, the faculty of medicine was reported as doing relatively little research.⁹⁷

⁹⁵ Organisation for European Economic Co-operation. *Producing Scientists and Engineers*, op. cit., p. 9.

⁹⁶ Organisation for European Economic Co-operation. *The Problem of Scientific and Technical Manpower in Western Europe, Canada, and the United States*, op. cit., p. 73.

⁹⁷ Park, Julian. *The Culture of France in Our Time*, op. cit., p. 281.

Developments in Higher Education

The director-general of higher education in France stated at the end of 1958 that the aim of French higher education should be to develop creativity and that the university must keep in close touch with life. Moreover, where new forms of education were needed they must be established.⁹⁸ He noted that relations with industry were becoming closer as the universities were now turning out psychologists and sociologists for private enterprise.

Shortly afterwards, in January 1959, a decree of the French government stated official policy for higher education as follows:⁹⁹

The structure and curricula of higher education must be constantly adapted to the requirements of scientific progress and of the needs of the nation.

The Rueff-Armand Committee had something to say about higher education, namely, that "instruction should be more oriented toward the current needs of society, employing scientific disciplines and the practice of research."¹⁰⁰ Fewer lectures and more seminars were also suggested.

That higher education is responding is indicated in the growing diversity of offerings within its regular faculties and particularly in the various institutes attached to universities. Among the recent additions are: an institute of political science at Aix-en-Provence; an institute of advanced commercial studies at Strasbourg along with an international institute of journalism and an institute of applied economics; an institute of prehistoric art at Toulouse; an institute of industrial medicine at Bordeaux; and at the University of Paris, institutes for the study of population and social development.

Under a government decree of May 5, 1961, a committee is created within the universities to propose measures whereby the institutions will further develop their offerings of technical education. Another decree of the same date creates a *licence* in applied science and a doctorate in applied sciences. An increase in the next few years of the numbers trained for technical careers is seen.¹⁰¹

A huge increase in higher education enrollments is predicted during the next decade. The effects of a rising birth rate hit the secondary schools in 1957 and are expected to "burst upon higher education from 1964 onwards."¹⁰² The present higher education enrollment of slightly more than 200,000 is expected to reach 500,000 by 1970.¹⁰³

⁹⁸ *Education in France*, No. 4, December 1958. p. 6.

⁹⁹ *Ibid.*, No. 5, February 1959. p. 25.

¹⁰⁰ The Rueff-Armand Report is summarized in *France Actuelle*, January 15, 1961. p. 1-7.

¹⁰¹ *Education in France*, No. 15, October 1961. p. 20-23.

¹⁰² Poignant, Raymond. *The Planning of Educational Expansion in Relation to Economic Growth: I—France*. Paris: Organisation for European Economic Co-operation, 1961. p. 11.

¹⁰³ *Ibid.*, p. 34.

Table 43.—Percent of total university enrollment by faculty: 1949, 1969, predicted for 1970¹

Faculties	1949	1969	Predicted for 1970
	Percent		
Law and economics.....	30	18	16
Humanities.....	26	28	25½
Sciences and technology.....	18	34	43
Medicine and pharmacy.....	26	20	15½
	100	100	100

¹ *L'Education Nationale*, 15 février, 1962. p. 9.

By 1972, France hopes to have 15.6 percent of the 19-year olds in school.¹⁰⁴ most of whom presumably would be in higher education.

The planning commission of the French National government has made a provisional allocation of future students to different fields of knowledge based on presently known needs of various sectors of the economy. A long-range study of man-power needs is underway also. The allocation gives increased attention to science and technology.

A growth of technical and vocational education, similar to that in higher education, is expected at the secondary school level. Some doubt has been expressed however, that this expansion will occur as fast as desired, hence throwing off balance the higher education estimate for 1970.¹⁰⁵

The planning commission says that there is nothing compulsory about this distribution of students in secondary and higher education, but that experience has shown it can be accomplished by the

Table 44.—Total university enrollments by faculties: 1959-61, and predicted for 1963-64, 1970-71¹

Faculties	Enrollments		Prediction for—	
	1959-60	1960-61	1963-64	1970-71
Sciences and Technology.....	65,500	77,200	107,300	210,800
Humanities.....	57,100	59,500	78,000	130,300
Law, Economics, Political Science.....	32,500	34,000	45,000	83,000
Medicine.....	31,300	31,800	43,000	61,200
Pharmacy.....	8,100	8,500	11,300	20,600
Total enrollments.....	192,500	211,000	285,800	505,900

¹ *Education in France*, No. 10, January 1962. p. 3.

¹⁰⁴ *Targets for Education in Europe: A Study of Policy Considerations Related to Economic Growth*, by Ingvar Svennilson, Friedrich Edding and Lionel Elvin. Paris: Organization for European Economic Co-operation, 1961. p. 59.

¹⁰⁵ Poignant, *op. cit.*, p. 21.

establishment of new schools and by provision of adequate information to families. This channeling of people "in a direction consistent with trends in employment (as far as they can be ascertained)" is expected to be more successful at the secondary school level.¹⁰⁶

There still remains the problem of building up the provincial universities and nearby areas so as to spread culture more widely throughout France. As of now, there continues the over-concentration of intellectual and cultural resources in the Paris area. Some of the *grandes écoles* have been removed from Paris, and others still in the city logically need not be there: for example, schools for fishery and agriculture, including the school of tropical agriculture. According to the latest indications, enrollments in the provincial universities are increasing slightly faster than those of Paris.¹⁰⁷

¹⁰⁶ *Ibid.*, p. 28.

¹⁰⁷ Education in France, No. 16, January 1962. p. 10.

Chapter IX

OTHER FORMS OF EDUCATION

New Media of Instruction

In France, the available resources for teaching are being supplemented by the use of radio, television, and other audiovisual aids. Since elementary schools are equipped and maintained by local authorities, the amount and quality of audiovisual aids varies. Reportedly, a majority of French educators feel that such aids should play a minor role in the teaching process, but interest in them is growing. Also, many school administrators are becoming more favorably inclined toward such equipment, though there is still some opposition to its use.¹

Audiovisual equipment in French schools was estimated in 1960 as including 100,000 filmstrips and slide projectors, 50,000 record players, and 10,000 television sets; the amount of such equipment was deemed insufficient.²

Each year about 50 educational films are produced. Four educational television programs are presented weekly—two for the elementary schools, one for secondary, and one for vocational schools. There are nine educational programs each week on radio, six of these for the elementary schools. In 1960-61, more than 7,000 schools had television sets, and about 40 percent (over 30,000) of the elementary schools tuned in to the school radio broadcasts.³

The elementary schools tend to make greater use of audiovisual aids than do secondary schools, probably because such use is more feasible when a single teacher is with the same students all day, and also because the elementary school teachers are more sympathetic to the possible value of these aids.

¹ LeFranc, Robert. "The Organization and Use of New Media in French Education." *Yearbook of Education, 1960*. Tarrytown-on-Hudson, New York: World Book Company, 1960. p. 308.

² *Ibid.*, p. 307.

³ France. Ministère de l'Éducation Nationale. *The Educational Movement in France During the Academic Year 1960-61*. Paris: 1961. p. 25.

Some introduction to the use of visual aids is given prospective elementary school teachers in the normal schools but in many cases the training, reportedly, is superficial.⁴

Audiovisual aids actually have been available to French teachers for a long time. From 1910 on, the Ministry of National Education encouraged the production of educational films, and radio programs for schools appeared in the 1920's. Television programs for schools have been organized on a national scale for the last 10 years.

More recently the production and distribution of audiovisual aids has speeded up. In this regard the centralization of the French educational system is cited by the French as an asset since authorities can depend on all schools being at approximately the same place in a syllabus at a given time and thus can design an appropriate television or radio program. The French also say, however, that much depends on the initiative shown at the top of the administrative structure.⁵

Among the factors responsible for the increased use of audiovisual aids in France are: (a) the campaign waged by some educators; (b) experiments which have indicated good results from the use of such aids; (c) a tendency for younger teachers to be more willing to try new procedures; (d) the acute shortage of qualified teachers and the decline in quality of teaching, necessitating reliance on mechanical aids to strengthen teachers, and in some cases to replace them.⁶

There are two main agencies which coordinate the work being done with audiovisual aids, the National Institute of Pedagogy of the Ministry of National Education and the Audio-Visual Center of the Higher Normal School at St. Cloud, which conducts research on the use of audiovisual aids. Within the National Institute of Pedagogy there is the Department of Audio-Visual Teaching Aids and the Ministerial Commission on Means of Instruction. The former maintains a film library and a central record library whereas the latter has subsections for each school subject and advises on the production of films and other teaching aids. Private companies tend also to consult with this ministerial commission because nothing is used in French public schools which does not have the approval of the Ministry of National Education.

The distribution of films to schools is facilitated by 13 regional centers of educational documentation which act as branches of the Ministry of National Education for the purpose of distributing teaching materials. There are also 28 *département* centers with audiovisual sections to service schools.

⁴ LeFranc, *op. cit.*, p. 367-368.

⁵ *Ibid.*, p. 361.

⁶ *Ibid.*, p. 372-73.

In 1959 a new organization, the National Center for Teaching by Correspondence, Radio and Television, was created. It is part of the National Institute of Pedagogy for budgetary purposes.

Correspondence Courses

The regular program of the elementary school, lower secondary school, and the academic secondary school, along with some vocational programs, can be taken by means of correspondence courses, which in 1960 reportedly enrolled close to 11,000 children and adults.⁷ Some of these at the end of a course would take and pass examinations to receive such certificates as the elementary school certificate, the *baccalauréat*, and several different kinds of vocational certificates. An increasing number of adults, either through correspondence courses or by studying on their own, reach a level where they can pass the examination and receive the certificate indicating completion of the 8 years of elementary school; in 1960 a total of 23,856 adults took the examination and 14,147 passed and received the *certificat d'études primaires*.⁸

Instruction by correspondence is free except for a small fee to help cover the administrative costs of such courses. In addition, students must buy their own books and materials.

Adult Education

Adult education in France is carried on in conventional school buildings and through the use of the newer media of teaching. For example, in 1952, France volunteered to conduct a UNESCO sponsored experiment in the use of television for adult education. The experiment utilized "tele-clubs" which had developed in certain villages as a means whereby many people could share a television set and enjoy each other's company.

The experiment consisted of a program on country life broadcast one evening per week. Most of the club members were from the working classes and the program sought to fill a need for leisure and for self-improvement. The experiment has been evaluated as helpful in bringing the rural population of France into contact with modern civilization.⁹

The old view of adult education primarily was one of salvaging people who, for one reason or another, had failed to get a complete education from the regular educational system. While such a need still exists in France it will be less important after 1967 when the compulsory school age is raised to 16.

⁷ France. Ministère de l'Éducation Nationale. *Encyclopédie Pratique de l'Éducation en France*. Paris 1960. p. 182.

⁸ *Informations Statistiques*, No. 38, mars 1962. p. 110.

⁹ Dumazedfer, Joffre. "Television and Popular Education—A French Experiment." *Yearbook of Education, 1960*. Tarrytown-on-Hudson, New York: World Book Co., 1960. p. 540-546.

The new view of adult education in France sees it ideally as a necessity for everyone in order to keep up with new developments, which come along so rapidly in the modern world. That this view is not yet fully appreciated was shown by a recent study made of the cultural interests of adults in a certain community in France. The survey found that adults were largely indifferent to cultural matters; where interest was shown, it was directed largely toward practical and technical matters.¹⁰

Traditionally, adult education in France has been left largely to private and special interest groups. Now, however, adult education is being linked to the problem of technical manpower. It is pointed out, for example, that the need to adapt to new developments is particularly important for technicians and workers. Hence the suggestion that if economic development is to proceed, all enterprises should provide their employees with technical training. Also, since many factories may have to be reequipped and directed toward new endeavors, workers will have to be reeducated.¹¹

One proposal envisages mass reeducation through a system whereby a few outstanding workers are given an intensive course which prepares them to teach new skills to groups of their fellow workers. The existing system of courses to upgrade workers is considered insufficient in that only a relatively small number are able to reach a high level of training. Particularly needed is the development of a general intelligence which enables an individual to quickly learn new tasks and adapt to new situations.¹²

As was indicated in the chapter on higher education, a system of part-time schooling for high level technical competence (*promotion supérieure du travail*) is developing, and is being integrated into regular higher education by means of cooperative arrangements with universities. Close to 20,000 people are participating in such programs. In addition, there are a few other institutions dispensing a high level type of adult education but reaching only a small number of people. Particularly well known for such work is the National Conservatory of Arts and Crafts.

In France, as in the United States, the culture is being shaped not only by the traditional forms of schooling, but also by the new media of communication and by subtle changes in the social and economic structure of the country. Though hard to measure, the impact of television, urbanization, industrialization and the like are real and must be taken into account by all those who would understand modern-day France.

¹⁰ Duzanedler, J. and Hassenforder, J. "L'Instruction et les Masses." *International Review of Education*, vol. VII, No. 1, 1961. p. 37.

¹¹ *Education in France*, No. 15, October 1961. p. 13.

¹² *Ibid.*, p. 13-17.

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