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## TABLE OF CONTENTS

	<i>Page</i>
I. PRINCIPAL TRENDS IN THE 1971-72 and 1972-73 EDUCATIONAL MO- VEMENT ... ..	7
1. Demographic Evolution and Increase in the Active Population ... ..	7
2. Industrial Development and Economic Expansion ... ..	8
3. Increase in the Income per Family and per Capita ... ..	8
4. The Challenge to Education ... ..	10
II. PRINCIPAL EDUCATIONAL PROBLEMS ... ..	13
A) Lack of Unity and Flexibility of the Educational System ... ..	13
B) Extent and Democratization of Schooling ... ..	15
C) Improvement in the Quality of Teaching ... ..	15
III. NEW OBJECTIVES ... ..	
A) Purposes and Objectives ... ..	17
B) Structure of the New Educational System ... ..	18
C) Organization and Planning ... ..	24
D) Evaluation ... ..	33
E) Priorities ... ..	34
IV. TEACHING INNOVATIONS ... ..	41
V. PEDAGOGICAL RESEARCH ... ..	43
A) Lists of Subjects Dealt With in Pedagogical Research ... ..	45
B) Pilot and Experimental Centers ... ..	50
C) Financing Pedagogical Research ... ..	51





## I. PRINCIPAL TRENDS IN THE 1971-72 and 1972-73 EDUCATIONAL MOVEMENT

### PRESENT DAY SPANISH SOCIETY

#### 1. Demographic evolution and increase in the active population.

Spain is living through a period of evident and deep development. Our country has undergone a widespread and basic social transformation, especially in the last three decades, passing from an eminently agricultural nation, with barely a few isolated attempts at industrialization, to maintaining a growing active population today which is much more balanced in its working activities on the three levels — primary, secondary and tertiary — which are typical of any national economy.

According to the figures of the National Institute of Statistics, which appear in the publication "Third Plan of Economic and Social Development 1972-75", the Spanish population was almost 34 million people in December 1970. Its real growth since 1960 has been around 3.5 million which implies an average annual cumulative rate of 1.1 per 100. In this same period the active Spanish population has passed from 11.7 to 12.7 million people.

The distribution of this active population by sectors shows an evolution which is parallel to the economic development of these years: decrease in the active population in the agricultural sector (—2.3 per 100), increase in the industrial sector (+ 2.4 per 100) and in the sector of services, (+ 3.2 per 100).

In the following table, supplied by the National Institute of Statistics, the evolution of the active Spanish population in the 1960-1972 period is shown.

EVOLUTION OF THE ACTIVE POPULATION (1960-1972)

Years	Total active population (% of the total population)	Distribution of the active population by sectors (in % of the total active population)		
		Agricultural	Industrial	Services
1960	38.58	41.66	31.79	26.55
1961	38.49	40.00	32.56	27.44
1962	38.39	38.30	33.29	28.41
1963	38.30	36.59	34.03	29.38
1964	38.21	34.88	34.77	30.34
1965	38.11	33.18	35.51	31.31
1966	38.01	32.26	36.03	31.71

Years	Total active population (% of the total population)	Distribution of the active population by sectors (in % of the total active population)		
		Agricultural	Industrial	Services
1967 ... ..	37.11	31.73	36.14	32.13
1968 ... ..	37.85	31.17	36.33	32.50
1969 ... ..	37.71	30.18	36.95	32.87
1970 ... ..	37.64	29.11	37.28	33.61
1971 ... ..		28.06	37.51	34.43
1972 ... ..		27.06	37.75	35.19

Source: National Institute of Statistics, Madrid 1972.  
Data in process.

## 2. Industrial development and economic expansion.

The Spanish economy has shown an unprecedented process of development in the decade of the sixties. Production has increased at an annual average cumulative rate of growth greater than 7 per 100 in real terms.

The basic factors in this development have been the progressive advance of industrialization and the renewal of the production equipment. Investments have increased at a rate which has brought them to represent almost a quarter of the Gross National Product (G. N. P.) —23.5 per 100— coming very close to the average percentage of investment related to the G.N.P. in the European Common Market countries (24 per 100).

This investment process has generated more than two million jobs, which is enough not only to reduce unemployment but to absorb the concealed stoppage in agriculture and the strong rates of growth of the active population.

Another current factor to be taken into account is the diversifying of our exports. Spain, which traditionally exported agricultural and mineral products almost exclusively, now also exports consumer products, capital goods and an important group of industrial goods. Thus the exports of capital goods which in 1961 represented 3.2 per 100 of our exports, reach a 17.5 per 100 in 1970, and the consumer products which in 1961 were 10 per 100 of the total, become 19.6 per 100 in 1970.

Although in absolute figures the exports of agricultural products have more than doubled during the decade, the percentage of these with regard to total exports has decreased from 53.8 to 34.9.

## 3. Increase in the income per family and per capita.

In the last ten years income per capita has increased from 290 to 900 dollars.

The growth of income per capita has changed the consumer patterns of the population in a short time. In the food sector a transition from products of lower nutritional value to products of higher nutritional value can be observed. Thus the consumption of meat has passed from 19 kilogrammes per capita in 1960 to 44.7 in 1970.

The functional distribution of income is very important from the point of view of social integration. Its structure is shown in the following table.

### FUNCTIONAL DISTRIBUTION OF INCOME

	1960	1970
Employees' salaries ... ..	53.0	58.8
Self-employed earnings ... ..	25.5	22.5
Capital income ... ..	10.2	9.4
Corporate income ... ..	9.8	7.7
State, property and company income ... ..	1.5	1.6
	100.0	100.0

From the above it will be seen that the part played by the remuneration of the wage-earners in the national income has gradually improved during the decade. This trend is produced partly by the salary increase per person by the increase in the wage-earning population and by the changes in the composition of the active population.

If the earnings of the self-employed are added to the wages of the employees, the latter being practically work incomes, the participation of the working world reaches 81.3 per 100 in 1970.

The improvements in salaries have been caused both by the successive increases in the interprofessional minimum salary, and by the collective agreements and the changes in the Labour Statutes and Regulations.

In 1960, 168 collective agreements were improved, affecting 322,871 workers; in 1970 the total of agreements was 2,693 which benefited 5,751,151 workers.

As a result of the above the structure of Spanish society is changing at an accelerated rate and the indices of welfare and increase in the standard of living can be seen at all levels. Let us look at some of these:

- a) *Improvement in living conditions.*—It is not only a question of food, which has already been mentioned, but also of consumer durables. Let us look at three very indicative examples:

#### CONSUMER DURABLES PER 1,000 INHABITANTS

	1960	1970
Telephones ... ..	59	135
Automobiles ... ..	9	70
Television sets ... ..	5	70

- b) *Improvement in communications and transport.*—There has been constant demand for transport services for both people and goods. A progressive move of passengers and goods away from transport by rail and towards road and air transport can be observed. The Spaniard travels much more than before.

**PERCENTAGES OF INTERNAL PASSENGER TRAFFIC**

	1960	1970
Rail ... ..	46.8 per 100	36.1 per 100
Road ... ..	50.5 per 100	59.1 per 100
Air ... ..	2.7 per 100	4.8 per 100

The move of goods traffic from rail to road is even more noticeable.

**PERCENTAGES OF GOODS TRAFFIC**

	1960	1970
Rail ... ..	22.3 per 100	14.9 per 100
Road ... ..	28.0 per 100	40.1 per 100

All this requires a considerable effort to maintain an adequate upkeep of the road network, especially considering the varied nature of the terrain and the size of the country which, in Europe —if we exclude the Soviet Union— is only slightly surpassed by France.

- c) *Process of urbanization.*—This is another important aspect which must be taken into account. The internal migratory movements —apart from emigration— were of prime importance in the 1960-70 decade. Slightly more than three million people moved from the country and the small villages to the cities. On the other hand the emigration was almost half that of the previous decade, there being a growing rate of returns.

If we consider an urban settlement to have more than 20,000 inhabitants. the percentages of internal migration were as follows:

**DWELLERS IN URBAN SETTLEMENTS:**

1960 - 45.6 per 100 of the Spanish population  
 1970 - 55.3 per 100 of the Spanish population

**INCREASE IN THE URBAN POPULATION IN ABSOLUTE TERMS:**

1950 - 1960 decade - 2,700,00  
 1960 - 1970 decade - 4,800,000

That is, almost double that of the previous decade.

**4. The challenge to education.**

All this process of development has made important demands on the educational system.

The growth of the student population has been enormous at all levels. In 1960 it was approximately four million. In 1970 it was more than six million, which means an increase of close on 50 per 100. This growth has not only been in quantity but in quality because the proportion of students in secondary and higher education has increased greatly, while the level of illiteracy has decreased noticeably—in 1960 it was 12 per 100 of people between 15 and sixty years old and in 1970 it stood at only 3 per 100.

The old educational patterns in Spain could not stand this rising pressure without breaking. The innovation of education, its structure and planning to bring it up to the level of the economic and social development of present-day Spain, was an unavoidable task for the present generation. We know that the true spiritual and material development of a people does not depend solely on the human factor, but mainly on its formation at a preparatory level. Therefore education must be considered as an investment and not as an expense. Thus the increase in the cultural potential of Spanish society as a whole comes into the foreground with the aim of making people who, being better prepared and more capacitated, will later be more effective and useful to their country and the world.



## II. PRINCIPAL EDUCATIONAL PROBLEMS

We have considered three main problems which we will enlarge upon:

- A) Lack of unity and flexibility of the educational system.
- B) Extent and democratization of schooling.
- C) Improvements in the quality of teaching.

### A) LACK OF UNITY AND FLEXIBILITY OF THE EDUCATIONAL SYSTEM

Before the educational reform embarked upon by Spain as a result of the approval and publication of the General Bill of Education of 1970, the lack of unity in education and the disconnection between the different levels of education were apparent in many ways. This is not surprising because several partial reforms had come into effect—especially in secondary education—to adjust the education to the most pressing needs as they arose, but a basic Bill was lacking which would give a sense of unity to all this process.

Thus the educational system prior to the reform consisted of a series of isolated compartments which caused many difficulties of which we would mention the following:

- a separation between the teachers of the different levels;
- the change from Primary to Secondary Education was particularly abrupt;
- very often the programmes of studies did not take into account, or not sufficiently, the content of the programme of the previous educational level;
- lastly the passage from one specialization to another, both in the secondary studies (Baccalaureate in Science and Baccalaureate in Arts, Secondary Level Technical Degree in different specializations), and in higher education, was very difficult, often impossible to do without repeating the entire course. This made it very hard to correct the errors in choice of studies which are so common in the early years.



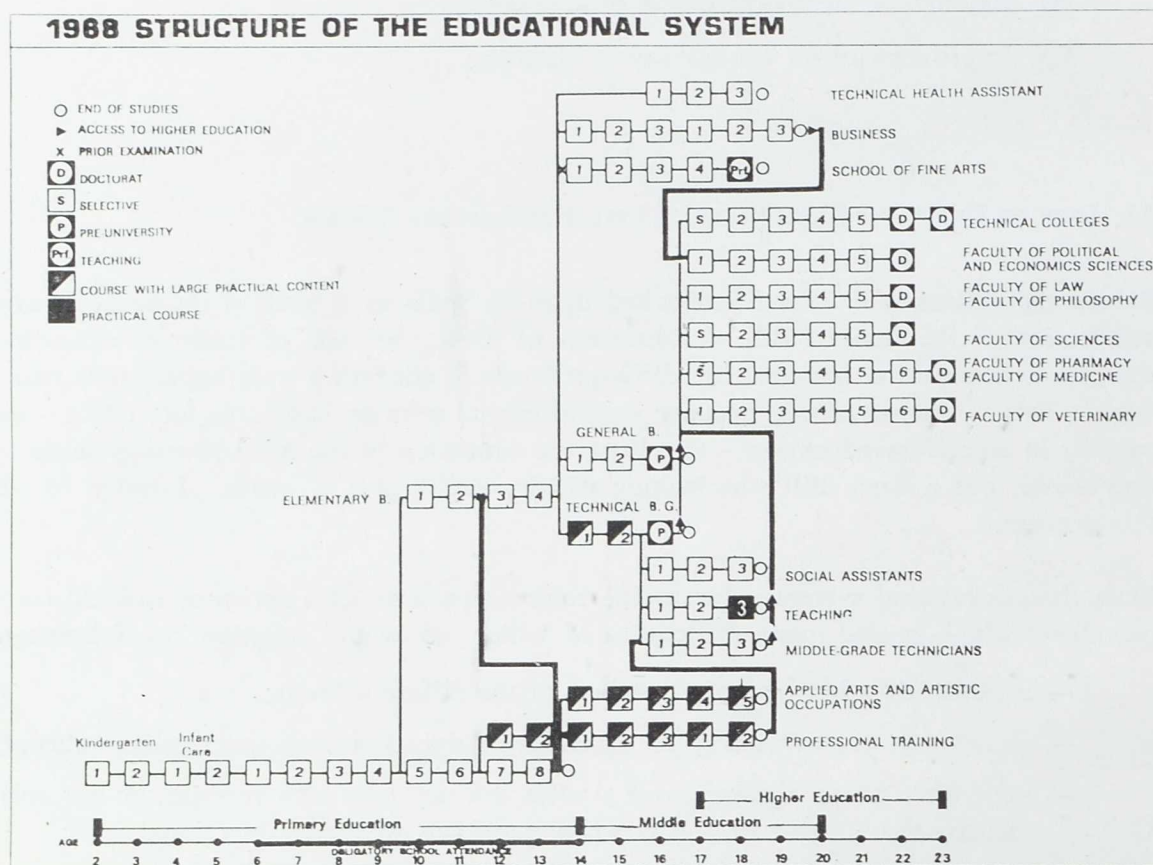
All this and what follows will be better understood after paying careful attention to graph No. 1.

As an important exponent of this *lack of unity and flexibility* which the educational system suffered prior to the 1970 reform, we point out —as can be seen from graph No. 1— that there were two different levels of primary education:

- one for children who were to go on to Secondary School and which lasted only till they were 10 years old;
- the other for those who remained in Primary School, till they were 14.

This caused a «de facto» discrimination because the children who stayed at Primary School till they were 14 seldom took up secondary studies as to do so they had to pass an entrance exam which allowed them to begin the third year of the Elementary Baccalaureate which they would finish at the age of 16 while their classmates, who had begun that same Elementary Baccalaureate at the age of 10, finished at 14.

GRAPH 1



The Professional Courses were very disconnected from the rest of the educational system. Their syllabii were not synchronized with the general Secondary Education and the connections with other educational levels were scarce. This greatly restricted the opportunities for promotion of these students within the system.



The lack of flexibility in the structure of the system also affected the secondary and higher education.

In the secondary level and most specially in the technical specializations (the Technical Schools of secondary level which appear in the graph), the passage from one specialization to another implied a long and arduous process due to the lack of a flexible system of interaction which is very necessary in this phase of student life in which the abilities and inclinations of the student are not yet clearly defined.

In Higher Education too, the continued existence of the long traditional careers with rigid and very different syllabi did not permit any easy change from one field to another. In this way any doubts as to choice of career could have serious consequences for the individual and, in the long run, for society.

Nor was it at all easy to get back into the educational system once one had left it to work.

Lastly there was no prevision at all within the educational system for the updating of knowledge and techniques.

#### B) EXTENT AND DEMOCRATIZATION OF SCHOOLING

The possibilities of access to secondary education, and even more so, to higher education, were conditioned by the social and economic position of each family. We have already stated that there were two different levels of primary education existing side by side:

- one for children who were to go on to the Baccalaureate, and who therefore left Primary School at the age of ten,
- and another for those who stayed at Primary school till the age of 14, thus gaining a Certificate of Primary Studies. They could take the third year of the Baccalaureate if they passed an entrance examination. However this meant that they were two years behind their former classmates and few gained access to secondary education by this means.

From the point of view of social integration it was unfortunate that this differentiation between children of the same country should have existed at the very foundation of the educational system. What happened was that parents of the middle and upper socio-economic levels sent their children to private Primary and Secondary schools, and from there to University; whereas children from more humble families went to the State schools, which were free, until they were 14, few of them going on to pursue Secondary or University studies. However it must be recognized that there was a wide and generous system of scholarships and grants which made it almost impossible for pupils of real intellectual worth to be wasted through lack of financial resources.

#### C) IMPROVEMENT IN THE QUALITY OF TEACHING

Of the three problems of education which we have mentioned, this will be the hardest to resolve, but it is also the most important because it would be useless to unify, adapt

and democratize the educational system if this were not done with the firm intention of improving the return from and the quality of teaching itself, adapting it to the needs of the modern world and the increasing development of Spanish society.

Under this heading the training and continual improvement of the teaching establishment, as well as the raising of their social and economic position are fundamentally important. Upon the teaching establishment at all levels will fall the most praiseworthy and arduous responsibilities of the reform.

### III. NEW OBJECTIVES

The new objectives of Spanish Educational policy are laid down in the General Bill of Education and Finance of Educational Reform of August 4th, 1970, published in the State Gazette on the 6th of that month. In its first resolution the Bill foresaw a ten year period for their complete fulfillment.

In the two and a half years, approximately, in which this law has been in force, there have followed, as a result of it a series of decrees, ministerial orders and norm-establishing dispositions of a lesser degree calculated to initiate and carry through these reforms. They are being established with determination, but also with care, taking into account not only technical and financial criteria, but considering also the situation of pupils studying under previous systems and the updating of the teaching establishment.

We will enlarge upon the new objectives of the Spanish Educational Reform under the following headings:

- A) Purposes and objectives.
- B) Structure of the new educational system.
- C) Organization and Planning.
- D) Evaluation.
- E) Priorities.

#### A) PURPOSES AND OBJECTIVES

Amongst the objectives set down in the General Bill of Education we would point out the following:

- to involve the entire population of Spain in education;
- to complete general education with the fruitful preparation of the individual for working life;
- to offer equal educational opportunity to all, limited only by their capacity for learning;
- to establish an educational system characterized by its unity, flexibility and interaction;
- to offer a wide choice for permanent education.
- to establish a close connection with the needs created by the thriving economic and social evolution of the country;
- to improve the yield and quality of the educational system.

## B) STRUCTURE OF THE NEW EDUCATIONAL SYSTEM

See graph 2, page 19 and graph 3, page 21.

The new educational system covers the levels of:

- Pre-school Education.*
- General Basic Education.*
- Unified and Multi-purpose Baccalaureate.*
- University Education.*
- Professional Training.*
- Permanent Education for Adults.*

Also included in the new educational system are the levels which are required for the needs of certain kinds of pupils —Special Education— or by the particularities of certain subjects —Specialized Teaching—.

### **Pre-school Education.**

The Pre-school Education period lasts for four years, from the ages of two to six.

Its main aim is to ensure the harmonious development of the child's personality and his mental spiritual and social evolution. It consists of games, language exercises, rhythmic expression, the observation of nature, exercises in logic and prenumerical exercises and the development of community spirit.

Pre-school education divides into two phases: the first (Kindergarten) for two and three year olds, during which education, although systematically organized, will be similar to home life; the second (Infant School) for children of four and five, during which education will be more systematic, tending towards the development of the child's personality and encouraging him to develop his abilities.

Pre-school education will be voluntary, and free in the case of the State-run schools, as well as at certain agreed non-state centres.

### **General Basic Education.**

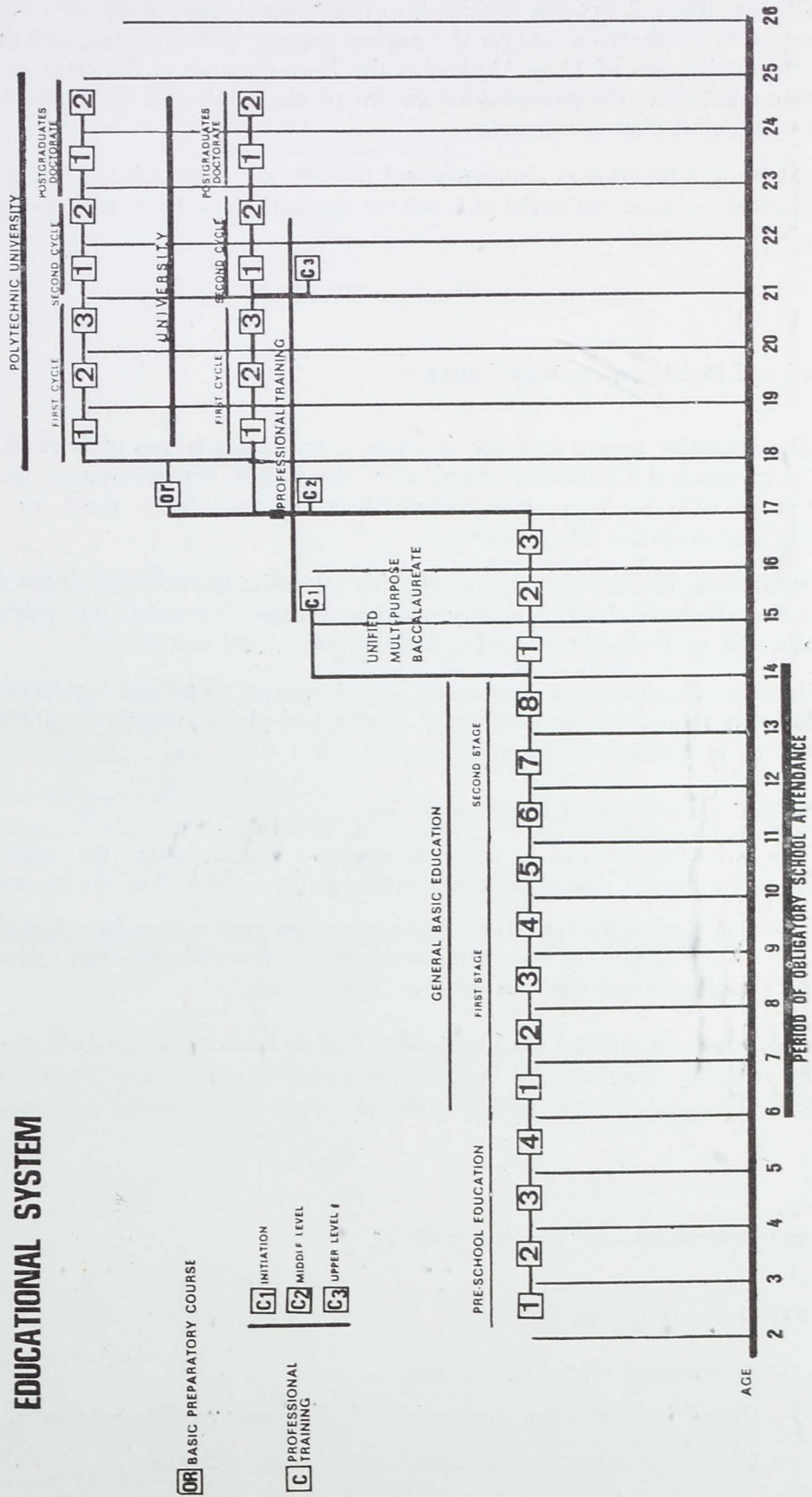
The General Basic Education covers a period of eight years, usually between the ages on six and thirteen. Its purpose is directed towards providing a complete, basic, un-specialized education, fundamentally the same for all pupils, and adapted to the needs and capabilities of each.

It covers the following aspects of learning:

- Knowledge of language (national language, study of one foreign language, the fostering of the vernacular in bilingual regions).
- Introduction to the study of the physical, mechanical and mathematical worlds.
- Development of the capacity for aesthetic appreciation and self expression.
- Religious instruction, introduction to Social Sciences and Civil Education.
- Pre-technological education.
- Physical Education.

GRAPH 2

# STRUCTURE OF THE EDUCATIONAL SYSTEM



The General Basic Education divides into two stages. During the first (from the ages of six to ten) emphasis is laid on the general aspects of knowledge, and during the second (from the ages of 11 to 13) begins the diversification of the areas of learning, thus adapting teaching to the mental development of the pupil and to the evolution of his understanding of abstract thought.

General Basic Education is obligatory and free in all State schools. Negotiations are taking place between the State and private institutions with a view to making them free also.

### **Unified and Multi-purpose Baccalaureate.**

The Baccalaureate covers a period of three years from the ages of 14 to 16. Its purpose is to continue the all-round education of the pupils, intensifying at the same time their preparation for entry into higher education and from there to Professional Training and an active life in society.

It is unified in that it leads to a single title (avoiding the previous distinction between «Arts» and «Sciences») and it is multi-purpose because it consists not only of the usual subjects and options, but also of a techno-professional activity.

The Baccalaureate covers common subjects (language, social and anthropological areas, nature sciences, esthetic development, religion and physics) optional subjects and development of a professional activity.

The student's assimilation is evaluated in:

- State centers and in non-state centers, which follow the same norms, by means of a combined examination performed by all of the student's teachers.
- Qualified non-state centers by means of an examination by a mixed panel made up of teachers of the center and teachers from state centers with the students' output during the course taken into account.

Self-study students will be evaluated by means of course end tests which will be given in state centers. The degree of Baccalaureate qualifies the student for access to second-degree professional training and to study the preparatory school curriculum.

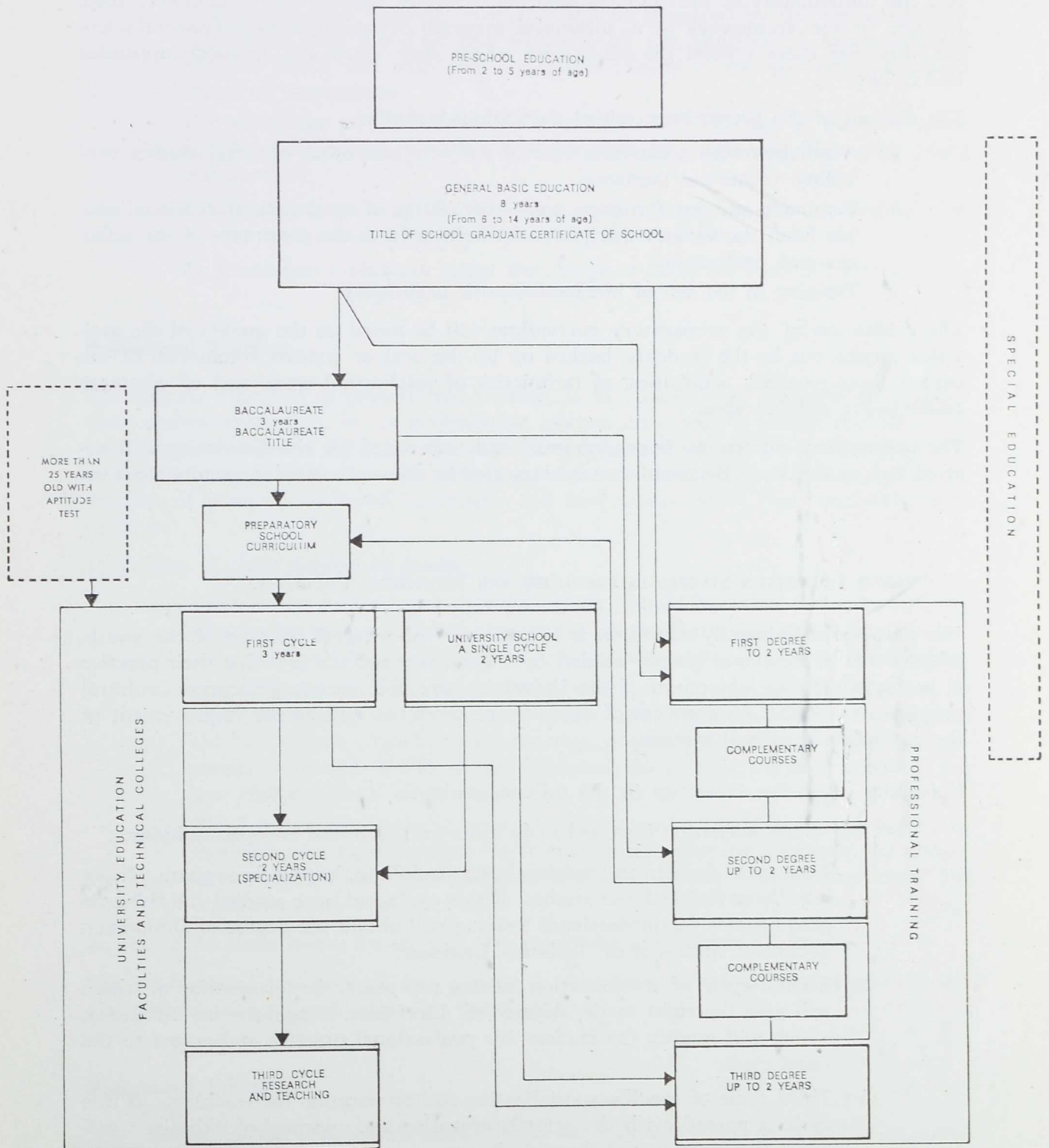
**University education.** - See graph 3 page 21.

This covers the following divisions:

- Preparatory school curriculum.
- University education studied in faculties and technical colleges.
- University education obtained in university schools.

# THE STRUCTURE OF THE NEW SPANISH EDUCATIONAL SYSTEM

GRAPH 3



## PREPARATORY SCHOOL CURRICULUM

University education is preceded by a preparatory curriculum which lasts a year, to which the students having obtained the Baccalaureate degree or passed second-degree professional training will have access. The contents of this curriculum tends to perfect the individuality of the students aspiring to higher studies and to complete their training in the framework of a meaningful program of basic, human and natural sciences, directing them toward the careers for which they show the greatest aptitudes and calling.

The content of the preparatory school curriculum includes:

- a) A syllabus with a common core of subjects and other optional studies providing vocational guidance.
- b) Seminars and brief courses under the charge of specialists professional people from the various disciplines for setting forth the panorama of the sciences and professions.
- c) Training in the use of intellectual-work techniques.

The evaluation of the preparatory curriculum will be based on the quality of the activities carried out by the students, backed up by the oral or written summaries of the explanations received, acquisition of techniques of intellectual work and of whatever tasks as are decided upon.

The preparatory curriculum is programmed and supervised by the University and carried out in the state Baccalaureate centers and in the authorized non-state centers.

## UNIVERSITY EDUCATION STUDIED IN FACULTIES AND TECHNICAL COLLEGES

The purpose of university education is to complete the integral training of the youth, prepare the professional people needed by the country and see to it that their practice is perfected. Other objectives of the University are the encouragement of cultural progress and of the development of scientific research, as well as the improvement of the nation's educational system.

University education is set up in the following way:.

— University education obtained in faculties and technical colleges includes:

1. First cycle devoted to studying basic disciplines, lasting three years. Those who have finished the studies of this cycle and have studied the third-degree courses for professional training will obtain the degree of Diplome, Technical Architect or Technical Engineer.
2. Second cycle of specialization, lasting two years, the termination of which will give the right to the degree of Licentiate, Engineer or Architect, which will qualify the student for professional practice and access to the third cycle.
3. Third cycle of specific specialization and preparation for teaching. If this cycle is passed, with the prior preparation and approval of a thesis, it will grant the right to the Doctor's degree.



- *University Education Obtained in University Schools* will consist of only one cycle normal lasting three years. The termination of these studies will grant the right to the degree of Diplome, Technical Architect or Technical Engineer.
- The syllabi of the university centers will include a common core of obligatory studies and other optional ones and will be prepared by the Universities in accordance with the directives set forth by the Ministry of Education and Science, which will authorize the syllabi subject to the opinion of National Board of Universities.
- The evaluation of the output of the students will be done in the way specified by the Statutes of each University with the following directives taken into account:
  - 1) Priority is given to the evaluation made throughout the studies so that the final exams will only have a supplemental nature.
  - 2) Combined evaluation under the charge of all of the student's teachers.

### **Professional Training.**

The specific objective of professional training is to qualify the students to practice their chosen profession; in its organization and output it will be closely related to the structure and needs of the job. The professional training will be directed toward preparing the student in the specific techniques of the profession chosen by him and in the matters of a social, economic, company and trade-union nature that commonly come up in it.

It consists of three degrees or levels:

- 1) First-degree professional training, which should be taken advantage of by those who have completed the studies of the Basic General Education and are not continuing with those of the Baccalaureate. This level will be free.
- 2) Second-degree professional training, which can be taken advantage of by those possessing a Baccalaureate degree and those who, having completed the first degree of professional training, continue with the necessary complementary courses. If this degree is passed, the student will have access to the preparatory school curriculum.
- 3) Third-degree professional training, which can be taken advantage of by the students who have finished the first cycle of university education, all university graduates and those who have had professional training and study the complementary courses.

In any of the three levels, the student may rejoin the other academic levels.

The professional training will last as long as necessary to master the respective specializations, with no more than two years per grade.

### **Permanent Education.**

The planning of the activities of adult *Permanent Education* will be based on research on the needs and aspirations of the various social groups and the various districts, on

the content of the programs of professional improvement, on the methods required by this action with regard to the varied nature of the professions and specific conditions of the techniques of communication, adult psychology, and the basic cultural values of the community.

The Bill provides for two systems of action in matters of adult permanent education:

- a) *On-the-Job Professional Updating and Retraining*, which will be carried out through curricula organized by the Ministry of Education and Science and other ministerial departments and by the Trade-Union Organization, the organizations, companies or sectors concerned.
- b) *Recuperation or Improvement or Professional Retraining Studies*, which can be undertaken in centers specially created for this purpose or through specific groups or sectors in the ordinary centers. In this way, persons can study courses of General Basic Education, Baccalaureate and Professional Training, who, for any reason, were unable to study them at the opportune time. Within this facet of permanent education, studies for improvement, promotion, updating, professional retraining, as well as the setting up of cultural-expansion activities at different levels, are established.

### **Specialized Courses.**

Within the educational system, *Specialized Courses* are also provided which, because of their peculiarities or features, are not integrated into the levels, cycles and degrees that make up the common system.

Thus, the possibility is left opened of including in the educational system courses that could arise with the development of new professions or new technological advances.

### **Special Education.**

It is conceived with two basic objectives: to give suitable educational treatment to the deficient and non-adapted, thus contributing to their incorporation in the life of the society and rendering special attention to the super-gifted students.

## **C) ORGANIZATION AND PLANNING**

In compliance with the provisions of the General Bill of Education and following the Calendar for applying the Educational Reform approved by Decree 2459 of August 22, 1970, numerous legal regulations have been issued one after the other, so many that it would take too long to enumerate them here; however, we can consider them in groups according to the matters they organize and regulate, under the following headings:

- 1) Academic Organization.
- 2) Organization of Teaching Centers.
- 3) Organization of the Teaching Body.
- 4) Organization of Student Protection.
- 5) Organization of the Educational Administration.

1) Regulations on *Academic Organization* among which the following stand out:

- Decrees 2,480/1970 of August 22 and 1,485/1971 of July 1, which organize, respectively, the 1970-71 and 1971-72 academic curricula;
- The Order of December 2, 1970, approving the «*Teaching Guidelines for General Basic Education*» which were later extended for the 1971-72 and following curricula. At this teaching level, its first six years are already generally established in the entire country and its seventh is functioning experimentally;
- Decree 1380/1972 of May 25 on «*Organization of the GBE and the Baccalaureate in the 1972-73 Academic Year*» deferred the widespread implantation of the new Unified and Multi-purposed Baccalaureate (UMB) to the 1975-76 academic year, at which time the implanting of the GBE at all its levels will have finished. However, the UMB will be started at an earlier date experimentally.
- The Order of September 30, 1970 which introduced the *Preparatory School Curriculum as an experiment*. Later on, it was introduced generally and regulated by the Order of July 13, 1971;
- Special concern has been shown to *night classes* for the purpose of offering the opportunity to continue studies to those who are unable to do it during regular hours (Resolution of August 9, 1971, which authorizes and regulates the Preparatory School Curriculum (PSC) during the 1971-1972 academic year, and Order of September 8, 1971) and the procedural plan for Baccalaureate night classes for workers during the 1971-1972 academic year was arranged.
- Also, attention has been given to the so-called *remote education* which is designed to provide studies to those who cannot regularly attend the ordinary teaching centers. At the middle level, the Order of October 9, 1971 set forth standards on the operation of the National Institute of Remote Education for the 1971-72 school year. By Decree 2,310 of August 18, 1972, the National Remote-Education University was founded.
- In *special education* (handicapped, retarded children, etc.), the Order of March 3, 1972 granted aid for the special education of the deficient and non-adapted covered by the National Fund for the Principle of Equal Opportunities. The concern of the Ministry of Education and Science for these deficient and non-adapted is expressed in a progressive increase in the credits allotted for this aid—165 million pesetas for the 1972-73 academic year— which means an increase of approximately 50 percent with regard to the amounts allotted during the previous year.
- *Permanent Education*. In response to the purpose of the General Education Bill to open up channels so that all Spaniards may be included in education, the Order of May 28, 1971 was published according to which *the access of those more than 25 years old to university studies* is regulated, even if they do not hold a Baccalaureate degree, provided they pass an entrance examination given by the University.

## 2) *Organization of Teaching Centers.*

- The aspect of *experimentation*, so important for a coherent application of the new educational system, has been regulated by Decree 2,481/1970 of August 22, in which experimental centers are referred to along with the experimentation carried out in ordinary centers; three lines of experimentation are defined: on the one hand, the pilot centers placed under the immediate dependency of the Education Sciences Institutes, which will be state centers.

Under the guidance of the Education Sciences Institutes will be the experimental centers, which will also be institutes (either public or private) oriented toward experimentation in education, although not of a permanent nature, since they have the possibility open at any time of returning to the ordinary teaching systems.

The possibility is also provided of performing limited experimental tests in the ordinary centers in accordance with the definite programs approved by the Education Sciences Institutes.

- With regard to the *fee schedules* of the teaching centers and the introduction of *free education*, in the first phase two norms were published: the Order of October 19, 1970, which establishes the administrative regulation of the non-state centers' fees during the 1970-71 academic year by submitting these fees to the approval of the Ministry of Education and Science, and the Resolution of December 5, 1970, through which instructions are given for providing free education in the first grades of General Basic Education.
- The application of the General Bill of Education requires the *teaching buildings* to be designed and planned so that they can adequately serve the new teaching techniques and methods. For this purpose, the Order of February 10, 1971, approved the program of teaching needs for drawing up plans for Centers for General Basic Education and the Baccalaureate. This program considers the determination of the necessary educational areas, the composition of each one of them and the respective surfaces that are considered adequate. (See graph 4 page 27.)

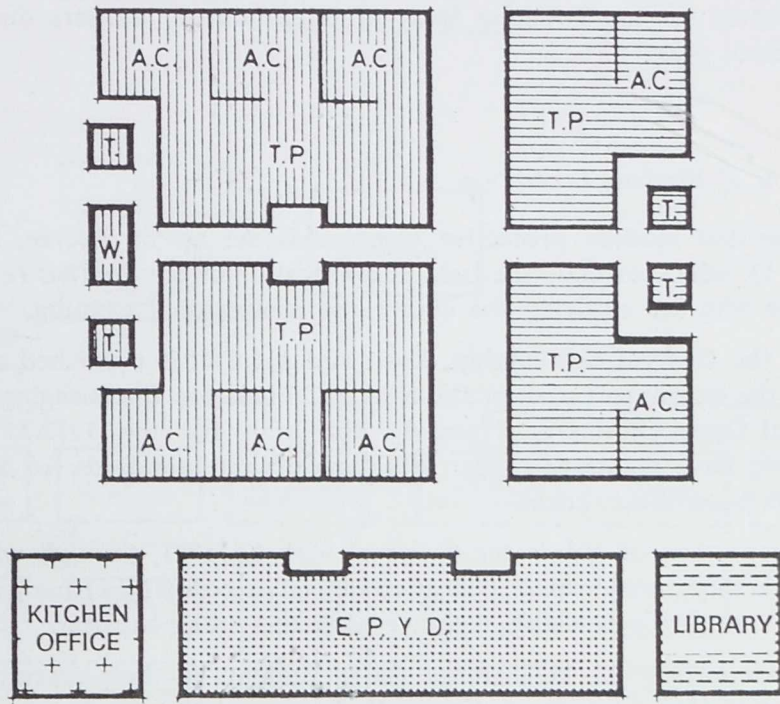
According to the 2nd Transitory Regulation, of the General Bill of Education, the current state teaching centers will be included in the corresponding category or level unless the educational planning needs make it necessary to change them.

In application of this precept, the Order of June 19, 1971 regulates the *classification and transformation of the current teaching centers*.



## 3) *Organization of the Teaching Body:*

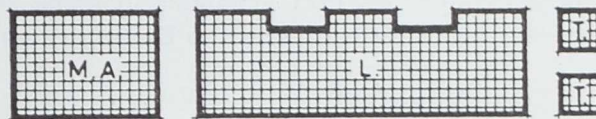
Decree 3,459/1970, of November 19, and Decree-Bill 16/1970, of December 11, respectively assign to the Special Bodies of *University Associate Professors* and *General Basic Education Teachers* the coefficients of 4.5 and 3.6 for determining

ORGANIC SCHEME OF SCHOOLS AREAS FROM A GENERAL BASIC EDUCATIONAL CENTRE WITH 16 UNITIES - 640 STUDENTS




1st STAGE

-  1st, 2nd, and 3rd Courses
-  4n and 5n Courses






2nd STAGE

-  6n, 7n and 8n Courses



COMMON ZONE

-  Plastic and Dinamical Expression
-  Library
-  Kitchen Office

- A.C.: Colloquial activities
- T.P.: Personalized (individualized) Work
- T.: Tutelage
- M.A.: Audio-Visuals Methods
- L.: Laboratory
- R.: Resources
- W.: Children Toilet

the base salary. For its part, Bill 19/1971 of June 19 sets the roster of the University Associate Professors.

With regard to *wages*, Bill 3/1971, of February 17, is worthy of note, which establishes the system of wages for the Teaching Body for the Formation of the National Spirit, Civics, Physical Education and Home Economics. This system is temporary until the pay scale of this teaching body is set in accord with that for the teachers of the different educational levels.

With regard to the *work system*, the Order of September 28, 1971, establishes the schedule for the Teaching Body of Baccalaureate Centers during the 1971-1972 school year.

#### 4) *Organization of Student Protection.*

An important student protective measure is set up by Decree, 2,078/1971, of August 13, which extends the field of application of the *Student Insurance* to the students who are studying the courses of professional training.

Yearly, the General Scholarship, Loan and Aid Call is published and the execution of the investment plan of the National Fund for Encouraging the Principle of Equal Opportunities is arranged. The plan for the 1972-73 school year, which we have mentioned when dealing with the standards for Special Education, has been the twelfth.

In the same line of aid, is the Order of May 12, 1971, through which the Salary-Scholarships are created and granted which consist of financial aid joined with the student's working together with the Administration.

The Order of July 22, 1971 grants aid to students in their years for the degree of Licentiate for advance studies in foreign countries.

And the Order of September 24, 1971, regulates financial aid on behalf of workers over 25 years old for their access to the University and Technical Colleges.

#### 5) *Organization of the Educational Administration.*

The Educational Administration, in accordance with the mandate of the General Bill of Education, has also been broadly reorganized. The basic norms of the *new structuring* carried out are contained for the Department Central Services in Decree 147/1971, of January 28. (See graph 5, page 29).

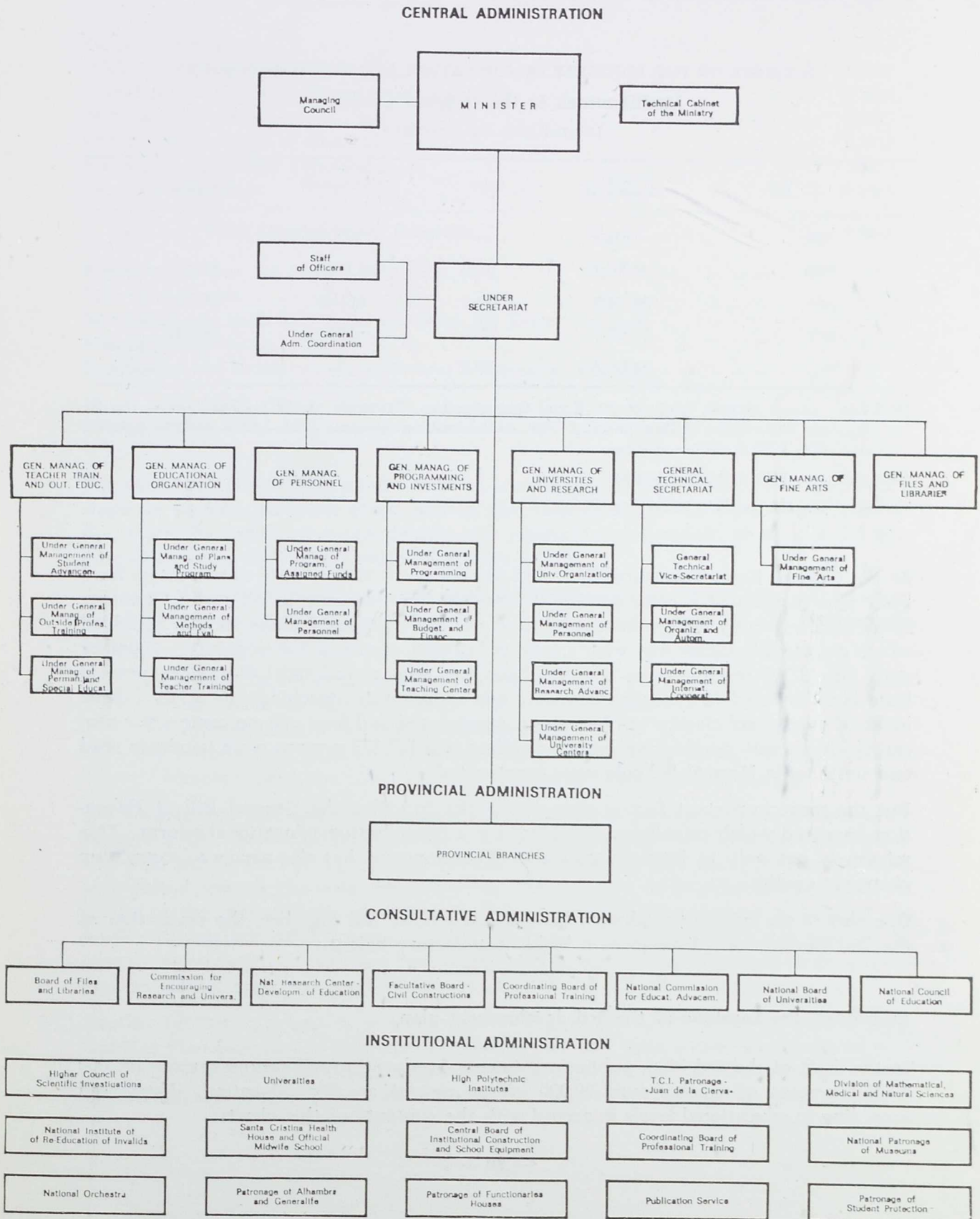
With regard to *PLANNING education in Spain*, it is integrated, as is the entire socio-economic complex of the country, in the Economic-Social Development Plans which in four-year periods have been operating since 1964:

1st Economic-Social Development Plan 1964-67.

2nd Economic-Social Development Plan 1968-71.

3rd Economic-Social Development Plan 1972-75.

**FLOW CHART OF THE CENTRAL SERVICES OF THE  
MINISTRY OF EDUCATION AND SCIENCE**



The 2nd Development Plan assigned top priority to the sector of Education and Professional Development. The Plan allotted 60,821.1 million pesetas to the Education sector which represented 11 % of the total public investments. The clearly upward swing of the budget allocations of the Ministry of Education and Science is observed:

**BUDGETS OF THE MINISTRY OF EDUCATION AND SCIENCE (1968-1970)**

**Modifications in the Original Credits**

(In millions of pesetas)

Year	Original Budgets (1)	Index	Modifications	Final Budgets
1960 ... ..	5,618.7	—	..	..
1968 ... ..	24,705.7	100.0	4,148.5	39,258.6
1969 ... ..	34,738.8	140.6	4,519.8	39,258.6
1970 ... ..	42,447.1	171.8	6,484.1	48,931.2
1971 ... ..	58,131.6	235.3	..	..

(1) They do not include funds of the Equal Opportunities Principle (EOP). These were the following: 1968, 2,325.3 million pesetas; 1969, 2,461.3 million pesetas; 1970, 2,887.2 million pesetas; and 1971, 3,787.2 million pesetas.

**Note.**—(. .) = information unknown.

Source: Ministry of Education and Science.

At the General Basic Education level and for the years 1969 to 1971 only, centers have been constructed which come to 580,440 openings for students in all, while another 359,560 are currently being constructed to which the emergency plans should be added which are already under way with a total of 120,000 openings for students. Together with this, 7,710 dwellings for teachers have been constructed and 1,436 million pesetas have been invested in renewing furniture and purchasing teaching materials. Nine hundred twenty-six classrooms have been constructed and four private centers for educating subnormal pupils have been subsidized and 173,373 persons were taught to read and write. Six Normal Schools were constructed.

But the most important fact is that during the 2nd Plan the General Bill of Education appeared which established the bases for a top-to-bottom educational reform. This reform is not only to intensify educational development, but also means a far-reaching change in quality.

One part of the reform has already been effected now. All together, the realization of the 2nd Development Plan gives a highly satisfactory balance.

**Education, the keystone of the 3rd development plan.**

In the draft of the 3rd Plan, public investments in education and culture surpass 100,000 million pesetas, of which around 90,000 million pesetas are for education, distributed according to educational levels in accord with the contents of this chart:



## DISTRIBUTION IN THE INVESTMENTS IN EDUCATION

SUBSECTORS	Millions of ptas.
<b>Total for education as such</b> ... ..	<b>84,091.5</b>
Pre-School Education ... ..	3,221.4
General Basic Education ... ..	48,931.2
Unified and Multi-purpose Baccalaureate and PSC ... ..	7,100.0
Professional Training ... ..	5,550.7
Professional Promotion of Adults ... ..	1,165.5
Permanent and Specific Education ... ..	1,003.7
University Education ... ..	17,119.0
<b>Total Complementary Education</b> ... ..	<b>5,584.3</b>
Residential Centers for Student Promotion ... ..	765.3
Files and Libraries ... ..	1,290.5
Restoration and Protection of the Historical and Artistic Patrimony ... ..	1,050.0
Museum Modernization ... ..	1,050.0
Investigation and Evaluation of the National Archaeological Treasure ... ..	478.5
<b>General total</b> ... ..	<b>89,675.8</b>

The enormous possibilities of this level of investment, as well as its great limitations, since the sector's needs are much greater, are translated into the need to put into action from the beginning a coordinated and responsible investment policy for the purpose of reaching the highest output from the sector.

As far as the general basic education goes, 1,000,000 openings for students will be created while at the same time a qualitative improvement in the output of the system is to be obtained by means of:

- Concentration or integration of centers which could handle the eight years that make up this level under the best conditions.
- Improvement in the pupil-to-teacher ratio.
- Introduction of a profound teaching transformation based on personalized teaching and the most modern systems of continuous evaluation.

*The Unified and Multi-purpose Baccalaureate and the Preparatory School Curriculum* present a specific set of problems derived, on the one hand, from the new reorganization entailed by the introduction of considerable changes throughout the coming four-year period and, on the other hand, the fact, normal in a developing country, that the spread of the general basic education is going to bring strong pressures to bear on this level. All together 200,000 new openings will have to be made available in view of the growth in students in the next few years; and, in view of the balance of existing openings in official and associated education, 311,000 and 119,000, respectively.

Another fundamental level is *professional training* which (as the draft of the 3rd Development Plan indicates in reference to the first degree), since it has been declared obligatory and free for those students who do not go on to Baccalaureate studies, possesses, within the educational policy, top priority, together with the general basic education,

in order to make the principle of obligatory and free education fully effective as set forth by law.

In short, to reach this objective, the 3rd Plan proposes to create 125,000 new openings; it could be estimated that in the 1972-73 school year about 270,000 students should receive instruction in professional-training centers.

*University Education.* There is no need to mention the importance of university education. Along with the problems resulting from any system of expansion, those of restructuring carried out by the General Bill of Education have also been presented. Below, although brief, the high number of objectives specified are given:

1. Create six new universities in Cordova, Málaga, Santander, Hispano-American University of Extremadura, New University of Madrid and National University of Remote Free Education and prepare the number of openings necessary to cover the dual objective of extending the system and relieving the congestion of the centers.
2. Creation of university faculties in Alicante, Cádiz and Palma de Mallorca and Architectural Schools in Corunna and Las Palmas.
3. Increase the teaching-body figure in relation to an improvement in the teacher/pupil ratio.
4. Provide teaching materials and whatever instrumental means as may be considered most suitable for the various higher education centers.

To the foregoing, the action in the remaining aspects of education must be added: residential centers for student promotion, files and libraries, museums, cultural promotion, etc. All of these make up important points in the reform and occupy their place within the objectives of the 3rd Plan.

In summary, the draft of the 3rd Development Plan gathers together the following objectives:

- Creation of the six aforementioned universities and two university colleges.
- Creation of one million openings for general basic education.
- Creation of 200,000 student openings for the unified and multi-purpose baccalaureate and preparatory school curriculum.
- Creation of 125,000 new openings for professional training.
- Concentration of 200,000 student openings in rural areas.
- Expansion and reform of the currently standing buildings, equipped with teaching materials, and creation of dining rooms within the national schools to take care of the population as far as their school attendance makes it necessary.
- Creation of 50 centers of permanent education.

But, together with the listing of these objectives, it should be pointed out how the 3rd Development Plan coincides with the most important moment of the educational reform, chronologically. In accord with the calendar set forth, the new Education Bill is going into effect in both actual and legal terms in the decade ending in 1980.

The success of this calendar will basically depend on what is done in the first half, i. e., during the 3rd Development Plan.

## D) EVALUATION

It would be fitting to define the breadth given in the survey to the evaluation concept with regard to its object. In effect, it could be directed to evaluate:

- a) the scholastic output of the pupils;
- b) the educational action of the teaching body, as well as the organization of the teaching centers;
- c) the planning of the teaching task;
- d) the methods used;
- e) the educational system in its entirety.

Although all of these factors are closely related, we are going to refer mainly to the scholastic output of the pupils; not because less value is conceded to the remaining aspects, but because, when the educational reform is fully developed, it will be necessary to measure its progressive advance with the introduction of the mechanisms referred to contrast programs, methods, etc., that today, have not been introduced, or are in an experimental stage. In this latter case, the appropriate system of evaluation has been devised, although it only affects those centers where the experimenting is done.

### **The Evaluation of the Student Body.**

Decree 2,618/1970 of August 22 set forth norms on the establishment of the system of continuous evaluation of the educational output of the pupils. Later legal regulations developed its set of norms, thus making possible the application of the system to the overall student body belonging to a level lower than the university level. Nevertheless, the General Bill of Education points out in its Article 38 that standards are to be set forth for the rating of the pupils of University Education. It seems that the detailed development of the operation of the evaluation system alluded to does not come within the limits of this document. Its steps follow the general route of this rating process just as it has been applied in other countries, that is:

- An initial exploration of the personality of the student holding to a wide range of factors (aptitudes, social and family environment, psychosomatic traits, characteristic peculiarities, etc.)
- On these premises, the teaching body observes both the behavior and the motivations of the student and, after doing so, examines the possible causes that determine his scholastic output.
- These observations, as well as the results of the checks on his assimilation of knowledge, are submitted to the teaching team who will issue a combined rating at the end of the teaching period.

Over the course of the academic year, this teaching team meets together on five occasions in sessions presided over by the Teacher-Tutor, who will watch to see that the levels set out when the curriculum was programmed are being reached and, if not, he will apply the mechanisms suitable for correcting this. In these sessions, the remedial work that should be done by the backward students is also pointed out.

At the end of the cycle, the team of teachers, taking into account the data supplied by the medical, psychopedagogical and scholastic and vocational guidance services of the

center, issues «counsel» on the later training that seems most suitable for each student. These guidance services have still not reached full effectiveness due to the high cost involved and the demanding specialization of the personnel that must staff them.

### **Self-Evaluation of the Teaching Body.**

The renovation of education, both in methods and in the evaluation of the educational output, requires improvement and updating in the teaching body. Therefore, the General Administration of Educational Organization, through the competent departments (General Under Administration of Teacher Training and Education Sciences Institute), has been giving maximum attention to the organization of Symposiums and other broader courses, directed both to practicing teachers and future teachers. This task suffers from the limitations imposed by the need to carry it out on a part-time basis, in order not to upset the normal progress of the teaching work.

One of the key ideas that govern these courses is that of a necessary and constant personal self-evaluation and the factors pointed out in items c), d) and e) of page 33.

It is still too early to talk about results in this direction inasmuch as few teachers have been able to benefit from these courses and insufficient time has gone by to allow a judgement on their effectiveness.

### **E) PRIORITIES (1)**

#### **General Basic Education Sector.**

The introduction, spread and all kinds of consequences carried with them will have *top priority* during the period the 3rd Plan will be in effect.

In the programs for spreading scholastic education, the enrollment of the population having six years of age starting in 1972-73 has priority. With this move, late enrollment will be done away with, which was one of the barriers and sufferings of the traditional school system.

An order of priorities is set forth for the development of the plan formulated which is composed of two phases in which the objectives to be achieved are separated and which are included in the report from the Under Commission General Basic Education.

The first phase of the priorities, explained now, must be fulfilled without fail without the possibility existing of reducing its set limits.

The second phase, recorded with priority, can be postponed but not eliminated.

#### **A) New objectives (1st phase of priorities):**

General Basic Education (student openings) ... ..	1,000,000
Dwellings for teachers ... ..	9,000
Home-schools (openings) ... ..	15,000

(1) Our source of information for this part of the document, as well as for various of the previous answers, has been the studies made by the Commission of Education of the Commissariat of the Economic and Social Development Plan (3rd plan for the 1972-75 fouryear period) drawn up in Madrid by the Commissariat of the Economic and Social Development Plan (Presidency of the Government). 1972.

Special education:

a) Student openings ... ..	90,000
b) Home-school openings ... ..	18,000

B) New objectives (2nd phase of priorities):

General Basic Education (student openings) ... ..	417,000
Dwellings for teachers ... ..	14,000
Home-schools (student openings) ... ..	25,000
Special Education (student openings) ... ..	30,000

The immediate objective of the 3rd Development Plan in General Basic Education will be:

- a) Provide all Spanish children, and especially the rural population, with the same opportunities for basic education.
- b) Enroll the children who live in areas with a scattered population where schools do not exist.
- c) Make possible the school concentration and graduation in the teaching with the consequent improvement in its quality and effectiveness.
- d) Progressively reduce the number of single-teacher schools.
- e) Take maximum advantage of the personal, functional and material elements of the institutions of general basic education.

The 48,931.2 million pesetas that the 3rd Development Plan devotes to General Basic Education will be invested in the following way:

	Millions of ptas.
Investment in General Basic Education ... ..	36,657.6
Dwellings for teachers ... ..	3,177.4
Repairs, improvements and conditioning ... ..	1,500.0
Home-schools ... ..	2,629.5
Special education:	
a) Student openings ... ..	3,866.4
b) Residence openings ... ..	1,100.3
<b>Total ... ..</b>	<b>48,931.2</b>

**Professional Training Sector.**

1. The pattern and contents of this teaching has experienced a radically different realization in the General Bill of Education (GBE). Now, Professional Training (PT) is understood in its three degrees to be terminal and specialized studies for preparing for professional practice. In short, all educational levels, except for the university degree of licentiate, are to lead to one of the three degrees of Professional Training.
2. Its connection and short-term influence on the economic system, especially the first-degree training, will impose continuous revision on this form of teaching so that its structure and contents will not be passed up by the endless technological and social-and-economic change undergone by society. As

the GBE points out, Professional Training, "in its organization and output, must maintain a close relationship with the structure and needs of the job."

3. The fact that Professional Training of first degree has been *declared obligatory and free* for those students who do not continue on to Baccalaureate studies *gives it priority*, together with General Basic Education, within the educational policy and the program of public investments.
4. Now then, not only the students who finish General Basic Education and are not going on to the Baccalaureate will take first-degree Professional Training, but also a goodly number of students who currently have reached the age of fourteen and are, either out of the educational system, or in some grade lower than the one corresponding to their age.

For this type of student, as a transitory measure, official regulations are being given and channels are being open for them to be integrated into the educational system and obtain the minimum titles of a professional qualification.

While setting up the new openings for students of Professional Training, the already-existing centers of General Basic Education and Unified and Multi-purpose Baccalaureate (or that are going to be used for these levels) must be kept in mind, since an effort is made to impart professional training in very close connection with the GBE and the UMB, in view of its nature as a pre-professional apprenticeship in its first degree and as a middle professional qualification in its second, which makes this connection, also physical, convenient at its respective centers. Therefore, the centers to be constructed will be located in those population nucleus that already have—or are going to have, as foreseen— centers of GBE, for the first degree, or of UMB, for the second. Professional Training of the first degree has entered into effect in a generalized way in the 1972-1973 academic year. In fact, it has been functioning since 1971-72 in an experimental way. In 1975 it will have to function fully because this will be the year in which the first graduation of students who have studied the entire new GBE will take place. Of these, those not obtaining the title of School Graduate will be issued a School Certificate and will be able to study first-degree Professional Training.

The investment costs of the PT in the 3rd Development Plan will be:

#### MILLIONS OF PESETAS

Year	First-degree professional training	Second-degree professional training	Total
1972 ... ..	1,312.5	—	1,312.5
1973 ... ..	1,814.8	—	1,814.8
1974 ... ..	940.9	546.6	1,505.5
1975 ... ..	487.9	430.0	917.9
<b>Total ... ..</b>	<b>4,556.1</b>	<b>994.6</b>	<b>5,550.7</b>

According to the statistics, the school population of 14 years of age is already nearing 600,000 pupils. It is estimated that 50 % of this figure will go on to the Baccalaureate and, as a consequence, about 300,000 should become enrolled in first-degree Professional Training.

The following chart gives an idea of the current situation in this type of education and the prospects for the near future.

**TOTAL OF STUDENT OPENINGS FOR PROFESSIONAL TRAINING EXISTING IN  
1971-72 AND FORESEEN UNTIL 1974-75**

Centers	Number of Centers and Student Openings of First-Degree Professional Training in 1971-72			Forecast of Centers and Student Openings of First-Degree Professional Training Until 1974-75			
	No. of Centers	Total No. of Student Openings	Average of Openings per Center	Forecast of Total No. of Centers in 1974-75	No. of Centers Creation	Openings of New Creation	Total of Student Openings in 1974-75
Official ... ..	135	64,500	477.78	177	42	20,066	84,566
Trade Union ... ..	85	26,728	314.45	163	78	24,527	51,255
Church ... ..	197	47,702	242.14	536	339	82,085	129,787
Private Inst. Others	266	67,268	252.89	737	471	119,111	186,379
	<b>683</b>	<b>206,198</b>		<b>1,613</b>	<b>930</b>	<b>245,789</b>	<b>485,987</b>

It is forecast that by 1974-75 there will be about 540,000 students studying First-Degree Professional Training. By that time there will be 451,987 student openings available. But since the output development of double-shift school activity, the 540,000 students forecast can be enrolled without any difficulty.

**Adult Professional Training**

This is a very interesting and urgent facet of Permanent Education. In this project are programmed the activities necessary for professional retraining, for medium and long terms, of the population occupied in the various economic sectors.

This retraining corresponds to immediate work forecasts made by the Ministries of Labor and Agricultural, as well as the Trade-Union Organization.

In accordance with the studies made by the respective Under Commission, the population which would be able to receive adult professional training during the years of the 3rd Plan (1972-1975) would be the following:

Adult population potentially qualifiable ... ..	3,680,000
Population to be retrained ... ..	1,200,000
Population available to receive professional training ...	4,880,000

In its strict sense this will be one of the most novel projects of the 3rd Plan. In order to fulfill its very up-to-date function, it becomes necessary to distinguish among:

- Permanent Education Centers: In each Spanish province there should exist one new-creation one (with a minimum of eight classrooms with a capacity of 40 per classroom, also having a multiple-use room and sports areas). Each

one of the years the 3rd Plan is in effect must assure the operation of 250 of this type, only 50 will be of new creation.

- Aside from centers for regular studies for full-time students, the operation of the same centers is provided for on a part-time basis for the type of student who must work while he is studying.
- In addition, the use is foreseen of centers that are not specifically devoted to this kind of teaching, whose classrooms could be used by this type of student during hours in which they are not being normally used. (Centers of GBE or Baccalaureate, for example.)
- Also, as has already been done in programs of Accelerated Professional Training, installations not devoted to teaching can be used, granted by provincial departments for this end, or else by the companies themselves.

In all of these cases, the programming, methodology and teaching body are subject to the supervision of the Ministry of Education and Science.

The credit granted during the years 1972-75 for professional advancement of adults will be fundamentally allotted to the following items:

- Professional training of workers.
- Accelerated professional training.
- Formative activities for the higher qualified.
- Abbreviated curricula of adaptation, re-education, etc.

In other words, worker professional training will be especially held to that qualifies and specializes the workers. *The National Plan for Adult Workers' Professional Training*, under the charge of the Ministry of Labor, will attend to, in coordination, the introduction of these courses. Thus, constant retraining of adults at all levels will be possible. The personal and social advancement of the workers by means of professional training has had a first-class instrument in the action carried out by the National Plan for Professional Advancement of Working Adults. Through the WPAP and its cooperating centers, almost 400,000 workers have been qualified in the three-year period in 519 specialties, thus increasing in 1972 by almost 100 percent the students trained in 1969. (See the next chart, page 39).

On it, it is observed that, within the National Plan, the Workers' Professional Advancement Program (WPAP) has directly trained 124,183 workers in the 1969-1972 three-year period. The Army has collaborated (APA) by training 44,468 young men of draft age. And other Cooperating Centers qualified 231,993. The cooperating centers are institutions and companies of all kinds that have an agreement established with the Ministry of Labor for these curricula.

For 1973-75, 12 new fixed centers are scheduled, which are already being designed or built. This, together with the actions working together, will give an average of 200,000 workers qualified per year.

For ends similar to those of the Workers' Professional Advancement, the Spanish *Trade-Union Organization* has, since 1957, the *Accelerated Professional Training Curricula* organized, the purpose of which is to specialize unskilled personnel by means of intensive courses lasting six months, which come to 1,000 hours of training. These pro-



## NATIONAL PLAN OF PROFESSIONAL ADVANCEMENT OF ADULT WORKERS

	1969		1970		1971		1972		Total 1970-72	
	Courses	Workers	Courses	Workers	Courses	Workers	Courses	Workers	Courses	Workers
WPA (2) ... ..	1,865	34,470	2,201	36,175	2,450	36,490	3,463	51,518	8,114	124,183
APW (3) ... ..	1,204	15,215	1,262	14,489	1,259	13,792	1,307	16,187	3,828	44,468
Other Cooperat- ing Center ...	2,528	43,208	3,032	48,528	4,582	74,793	7,214	108,672 (1)	14,828 (1)	231,993 (1)
<b>Totals ... ..</b>	<b>5,597</b>	<b>92,893</b>	<b>6,495</b>	<b>99,192</b>	<b>8,291</b>	<b>125,075</b>	<b>11,984</b>	<b>176,377</b> (1)	<b>26,770</b> (1)	<b>400,644</b> (1)

- (1) Estimate number.  
(2) Professional Promotion of Workers.  
(3) Professional Promotion in the Army.

grams are held regularly twice a year and are financed, in part, with scholarships from the National Funds for the Protection of Labor and for the Development of the Equal Opportunities Principle in Education.

During the course and aside from the specific training, the student enjoys, free of charge, the following extra-curricular help:

- Lunch and work clothing.
- Accident insurance and medical and pharmaceutical assistance.
- Payment of the Company's share of Workmen's Compensation and Disability for workers holding the corresponding certificate.
- Cash assistance for transportation and residence.
- Special aid in cash to married scholarship holders not covered by unemployment insurance.

In the eleven Centers of Accelerated Professional Training —with 206 shops— that the Spanish Trade-Union Organization has in operation up to 1972, 39,582 workers have been trained.

For 1974 and 1975, the operation of two new Centers of this type is foreseen—one in Seville and one in Santander. Currently, 5,954 openings a year are available in the Centers of Accelerated Professional Training.

The line of close cooperation that the Ministry of Labor and the Spanish Trade-Union Organization are following with the Ministry of Education and Science is included in the recent Decree of February 15, 1973 which grants the status of First-Degree Professional Training to certain courses of the Workers' Professional Advancement Program (WPAP).

Already approved by the Government and on the way to being published in the Official State Gazette is another similar Decree which grants the same status of First-Degree Professional Training to the Courses of Accelerated Professional Training given in the schools prepared for this purpose by Spanish Trade-Union Organization.

Therefore, summing up in figures the *total results* achieved in Spain up to 1972 in the field of *First-Degree Professional Training*, we have:

**PERSONS WHO STUDIED THE COURSES OF FIRST-DEGREE PROFESSIONAL TRAINING OR SIMILAR DURING THE YEAR 1972**

Students enrolled in regular Professional Training Schools ... ..	206,198
Workers qualified professionally by the National Plan for Adult Workers' Professional Advancement ... ..	176,377
Annual average of workers qualified professionally in the Accelerated Professional Training Courses of the Trade-Union Organization ... ..	5,954
<b>Total ... ..</b>	<b>388,529</b>

**Unified and Multi-purpose Bacallaureate.**

In a second level of priority, right after General Basic Education and the First-Degree Professional Training, will be the Bacallaureate studies. The General Bill of Education in its preliminary title —Article 2.2— says textually: “Once the objectives are achieved referred to in the preceding paragraph, the Government shall include the Bacallaureate in free education.”

With this free education and the spread of the Bacallaureate Centers to districts of national territory that today do not have them or have an insufficient number of them, a great step will have been taken on the road to democratizing education. Let it be taken into account that in order take advantage of the new Bacallaureate, it will not be necessary to pass a selection test; possession of the Title of School Graduate which is normally issued when finishing General Basic Education will be sufficient.

And the foregoing is so because the new Bacallaureate is conceived of as a unified and multi-purpose cycle in order for it to respond to the interests of all, both to those who are going to take up studies in the University and those who are going to enter the working world through second-degree professional training, which will equip them for middle-grade technical professions.

The day on which, once the sectors of basic education with top priority are taken care of —General Basic Education and first-grade Professional Training— free education is extended to the Bacallaureate, it may be assumed that, in fact, the goal of school enrollment up to the age of 16 years will be reached.

Finally, both at the Bacallaureate level and the higher-learning level, programs for remote studies are already being realized for those who cannot study them regularly. There exists a Remote Education Bacallaureate Institute and recently the University with the same name has been created, which attend to these objectives.

#### IV. TEACHING INNOVATIONS.

Starting with the publication of the General Bill of Education (GBE) of August 1970, clearly renovating aspects from the pedagogical viewpoint have been introduced, which could be synthesized in the following points:

- a) General Basic Education (GBE), obligatory and free for the entire school-age population between the ages of 6 and 14, has been the domain in which the greatest reforms have been introduced, while the other levels of education are undergoing renovation.
- b) The aforementioned reforms affect both the order of the methodology and the classroom use of *audiovisual techniques*.
- c) From the viewpoint of the methodological renovation, the predominating use of active methods and individualized teaching could be pointed out.
- d) Within this system is included the continual evaluation of the students' output as an integral part of the educational process and not as a mere checking system to review the knowledge acquired by the student body.
- e) School work is done in groups of students reduced in number; the teaching is totalized and the various subject matters are distributed among areas of knowledge. (1)
- f) Although the Baccalaureate and the Professional Training are awaiting the publication of the legal texts to regulate the innovations that are to be introduced in their courses, the GBE clearly indicates that the methods that should be used must be active to lead to personalized education (Art. 27, GBE).
- g) Likewise, the system of continual evaluation of the student body has been extended to these levels.
- h) If the foregoing consists of realizations that affect the teaching centers of the entire country, a strong methodological renovation that is in an experimental stage in a large number of centers should not be silenced.

This experimentation is done under the control of the Education Sciences Institutes (ESI), which are entities in charge of encouraging pedagogical renovation in centers of different levels at the regional plane.

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(1) See the pedagogical orientations for the GBE published by the CEDODEP. Madrid, 1970.

- i) The activities of the ESI are coordinated by the National Center of Investigations for the Development of Education (NCIDE), in which studies are developed for introducing the most advanced methods (teaching by computer, microfilm teaching, programmed teaching, etc.).

Although these studies have not been crystalized in any immediate applications, it must be expected that, in the near future and as the nation's resources permit it, their utilization can be extended.

## V. PEDAGOGICAL RESEARCH.

Since the educational reform was undertaken in Spain, pedagogical was principally entrusted to the *Education Sciences Institutes (ESI)* and the *National Center of Investigations for the Development of Education. (NCIDE)*. The ESI are departments set up in each one of the Spanish Universities, which are entrusted with educational research at the regional level, the training and improvement of the teaching body and experimentation, which, indispensable with regard to carrying out investigations, new methods, new plans, etc., is done in the so-called Pilot Centers, Experimental Centers and through ordinary centers with which definite experiments are agreed upon.

It also seemed necessary to create a National Center, in the midst of which, to coordinate and intercommunicate the various institutes and which, in turn, would serve to support them and supply them with several services. Thus, the National Center for the Development of Education (NCIDE) was formed.

By means of setting up the 15 ESI in each one of the university districts, with the mission of analyzing the regional educational reality and investigating its problems, an endeavor is made to set off a movement of upward reform and, by starting from the reality itself, to keep the educational policy closely united to it, its needs and changes. At the same time, the ESI-NCIDE network is a suitable system for spreading to all of the Institutes the results obtained by each one and, definitely, for spreading the innovations and the introduction of the changes.

The idea of participation has inspired the planning and realization of the Spanish Educational Reform. The ESI are built on this basic ingredient.

They are centers open to teachers of all levels, all specialties, of the public and private sectors, and not only to the teachers but to the students also and, in general, to all those who in any way may be interested in or concerned about the subject of education, regardless of levels, titles or professions.

The coordination and interrelationship among the ESI, through the NCIDE, is achieved with a peculiar formula.

Each ESI is autonomous and the NCIDE is nothing more than the federation of the institutes which, in this way, can carry out a work full of initiative and creativity.

The NCIDE, in addition to the coordination of the ESI, is entrusted with several other functions leading to the introduction of innovations in the educational system.

For effectively fulfilling the functions assigned to the ESI, they have been equipped with the corresponding supporting institutions. The aforementioned founding decree sets forth that the teaching centers deemed necessary, some as pilot centers, will be created or annexed to the ESI, thus forming part of the organic structure itself of the ESI, others as associated centers.

The following are functions of the ESI:

- a) Pedagogical training of university students, both in the prior or initial stage with regard to their incorporation in the teaching body and in the later improvement and retraining of the practicing teaching body.
- b) Active research in the field of the Education Sciences.
- c) Technical counseling service in educational problems either in a strictly pedagogical framework or in social, or economic subject-matter or that generically located in the field of the education sciences.

The NCIDE answers to the purpose of assuring a concerted research action of the Education Sciences Institutes at all levels of the educational system and of guaranteeing that its results are spread to constantly encourage pedagogical renovation.

From the administrative point of view, the NCIDE is a department of the Central Administration for giving technical advice to the Ministry of Education and Science.

The following are functions of the NCIDE:

- Coordinate the scientific activity of the ESI, spread its results and perform certain investigations by itself which, due to their range or uniqueness, are not entrusted to the ESI.
- Organize the preparation and improvement of the teaching body of the ESI.
- Introduce constant encouragement into the educational system for pedagogical renovation and innovation at its various levels.

The nature of new experience posed as the first great problem which suppositions should be used on which to base the investigations into education at first.

First of all, with a practical criterion, the basic idea used in the first National Plan of Research was that the problems should be studied that in a more urgent way would actually arise as consequence of putting the new General Bill of Education into operation.

In the second place, a technical and scientific criterion was adopted. While admitting that the investigations should approach a series of definite problems presented by the educational reality, those investigations labeled basic, fundamental or long range should not be abandoned for this.

Finally, an overall criterion was established. Whether a matter of basic investigations or applied investigations, it was resolved that in either case educational research should start out from a broad and interdisciplinary conception.

On these three criteria, a general listing of subjects was established which, in principle, could make up the general program of the first National Plan of Research.

In view of this general list of provisional projects, the Education Sciences Institutes chose the ones that, according to their possibilities, they considered most ideal to be effected, while at the same time making the corrections they considered proper.

In this way, by taking into account, on the one hand, the corrections made by the Education Sciences Institutes and, on the other hand, the relevancy of the investigations required with top priority given to putting the reform into operation, the Commission drew up the definite list of projects and assigned to each Educational Sciences Institute those, with their preferences noted, that they should perform.

Below, we are inserting the list of educational-research projects that appear in the 1st National Plan of Investigations for the Development of Education. 1970-71.

## A) LISTING OF SUBJECTS DEALT WITH IN PEDAGOGICAL RESEARCH

*Its National plan of Investigations for the Development of Education 1970-71.*

### 1. Education and Society.

- 1.1. Prospect of education: glossary, commented bibliography, methodology, prospect of the professions; new professions and transformation of the current ones.  
(Barcelona Autonomous).
- 1.2. Output of scholastic education (all levels) for professional activity.
  - 1.2.1. (subproject) Agriculture.
  - 1.2.2. (subproject) Industry.
  - 1.2.3. (subproject) Service.  
(Santiago).
- 1.3. Knowledge, skills, attitudes and mentality needed for each type of occupation and family of occupations. Current situation and future tendencies.  
(Barcelona Autonomous).
  - 1.3.1. (subproject) Agriculture.
  - 1.3.2. (subproject) Industry.
  - 1.3.3. (subproject) Services.  
(Oviedo).
- 1.4. Evaluation of school life and attitudes and knowledge acquired in Primary School.  
(Madrid Autonomous).
  - 1.4.3. Evaluation of the current system of school promotions.  
(Oviedo).
- 1.5. Social conditions of Education.  
(Barcelona).
- 1.6. Enrollment of pre-school children in Galicia.  
(Santiago).

### 2. Content, methods and means.

- 2.1. Relation between the different fields of culture: scientific, technological, humanities and artistic: Creativity and expression.  
(Bilbao).

- 2.2. Structure and connection of the scientific fields; genetic epistemology.  
(Madrid Autonomous).
- 2.2.1. (subproject) Logic, mathematics and linguistics.  
(Madrid Autonomous).
- 2.2.2. (subproject) Social sciences.  
(Madrid Autonomous).
- 2.4. The problems of the relationship between normals and subnormals; possibilities of coeducation.  
(Valladolid).
- 2.5. The psychopedagogical problems posed by bilingualism.  
(Barcelona).
- 2.6. Critical study of the possible applications of tutorages and study and effectiveness of the tutelary system with regard to attitudes and output.  
(Madrid).

### 3. Teaching body.

- 3.1. Origin, orientation, selection, training (socio-psychocultural aspects), social situation, stereotypes, mobility within and without the profession of the teaching body.  
(Barcelona).
- 3.1.1. (subproject) Primary education.
- 3.1.2. (subproject) Middle education.
- 3.1.3. (subproject) Upper education.  
(Barcelona).
- 3.2. Evaluation of the different types of training of the teaching body. The new training centers for General Basic Education teachers.  
(Saragossa).
- 3.2.1. Self-criticism of techniques and contents in training teachers.  
(Madrid).
- 3.4. and 3.5. Methodology of observation through closed-circuit T. V.; phenomenology and analysis of the class. Microfilm teaching.  
(Barcelona Autonomous).
- 3.6. Use of the computer for training teachers.  
(Madrid Autonomous).
- 3.7. Individualized education.  
(Barcelona).
- 3.7.1. Material study for the individualized apprenticeship in first-year Basic Education.  
(Madrid).
- 3.8. Surveys made on teachers of Religion of the General Upper Baccalaureate in Spain.  
(Barcelona Autonomous).



#### **4. General Basic Education.**

4.1.1. Trial of institutional pedagogy.  
(Barcelona).

4.2.1. Preparation of questionnaires and programmed texts for the GBE curriculum (6th year).  
(Barcelona Autonomous).

4.3. Causes of student failures.  
(Valencia).

#### **5. Unified and Multi-purpose Baccalaureate, 1st = and 2nd-degree Professional Training.**

5.3. Preparation of questionnaires and programmed texts for the first year of first-degree Professional Training.  
(Bilbao).

#### **6. Preparatory School Curriculum (PSC) and University Curriculum.**

6.1. Evaluation of various PSC experiences; an experiment in a small rural school with self-government and mutual education.  
(Santiago).

6.2. Cooperative techniques and studies in the University.  
(Madrid).

6.3. The university-society problem seen by the student.  
(Seville).

6.4. The appraisal of the professions by the student; motivations of the choice of profession.  
(La Laguna) Postponed.

6.4.1. (subproject) «Output Level of the Canarian Student in the Three Degrees of Education».  
(La Laguna) Postponed.

6.6. Objective study of the academic problems of the university students.  
(Madrid).

#### **7. Permanent Education.**

7.1. Possibilities of accelerated training (level of entrance to higher education for young people 18 to 24 years old who have left school at the primary level).  
(Barcelona Autonomous).

7.2. Evaluation of the school-age (and pre-school-age) youngster learns outside the school.  
(Santiago).

7.3. Evaluation of the formative value of the mass-communication media (TV, radio, cinema, newspapers, books, environment) for the adult; possible equivalence to general scholastic culture.  
(Madrid Autonomous).

## 8. Administration and Planning of Education.

- 8.2. Forecast of the distribution of the active population according to types of occupations and training.  
(Barcelona Autonomous).
- 8.2.1. Sociological study of the University of Granada.  
(Granada).
- 8.3. Management of the University.  
(Madrid).
- 8.4. Educational statistics.  
(Barcelona).
- 8.5. The cost of education for the family.  
(Barcelona).
- 8.6. School planning of the province of Valencia  
(Valencia).

### Unnumbered Projects.

- w/o no. 1. Investigations into audiovisual means in teaching French.  
(Murcia).
- w/o no. 2. Teaching medicine in Coordinated Hospitals.  
(Madrid Autonomous).

*2nd National plan of Investigation for the Development of Education, 1971-72.*

### Prospect:

- Espos 2000.

### Educational Planning:

- Location and planning of education in the University District of Salamanca.
- Rural education in Galicia: Bases for a realistic and planned policy.
- Possible distribution of funds between the UMB and 2nd-degree Professional Training. Evolution of the social demand for UMB and Professional Training studies and its occurrence in Higher Learning.
- Calculation of unit costs for Spanish educational planning. (General Basic Education and Unified Multi-purpose Baccalaureate).
- Family, socialization and education in Eastern Andalusia.
- Population dynamics applied to Educational Planning.
- New professions and new curricula.
- Quantitative needs for teachers at the different levels of education, especially.
  - a) General Basic Education.
  - b) Unified Multi-purpose Baccalaureate.
  - c) First-Degree Professional Training.
  - d) Second-Degree Professional Training.

- Forecast of the job structure.
- Calculation of unit costs for Spanish educational planning. (Professional Training).
- Calculation of unit costs for Spanish educational planning. (Non - Technological University Centers.)

#### **Economy and Financing of Education.**

- Project of detailed activities (PAD) and System of Planning and Programming and Budgeting (SPPB) of an Education Sciences Institute.

#### **Technology and Innovations in the Service of Education.**

- Evaluation of self-observation as a means for training teachers.
- CC TV; applied to teaching.
- Application of the information theory to the texts of General Basic Education.

#### **New Teaching Methods and the Updating of the Traditional Methods:**

- Logical and evolutionary continuity of the programs of each subject-matter through the three Spanish levels. Identification of the knowledge and mental skills necessary at the end of each stage and at the beginning of each new stage.
  - Mathematics.
  - Natural Sciences and Chemistry.
  - Natural Sciences.
- Procedures for the development of active General Basic Education methods.
- Creativity in General Basic Education.
- Objective evaluation systems in the UMB.
- Student psychology in General Basic Education. Instruments and organization of a service.
- The language of mentally deficient children, its characteristics and its incorporation in society and labor.
- Study of the development of the language of children from 3 to 12 years old, with reference to previous and later stages and its relation to the development of intelligence and social situation.
- Appraisal of teaching effectiveness at the GBE level and possible indicators of effectiveness.
- Setting up a system of evaluation with regard to the educational guidance of the student.
- Group dynamics in vocational orientation.
- Critical investigation of vocational orientation.

#### **Problems Relative to the Contents of Study Programs:**

- Pedagogical appraisal of programmed-teaching texts published in Spain.
- New models of curricula and methodology in training GBE teachers. Comparative study and evaluation.
- Establishment of an Experimental Center permitting a direct check to be maintained from the University on the widespread introduction of the Preparatory School Curriculum.
- Content-totalizing techniques in the 2nd Cycle of GBE.
- Knowledge and aptitudes necessary for gaining access to the University.
- Organization of a GBE Experimental Center.

**Problems Relative to the Educational-System Expansion of the Students' Access to the Various Educational Centers:**

- The possibilities of organizing, equipping and using the spaces in relation to the Educational Reform. Educational specifications.

**Research for All of the ESI:**

- Permanent Seminar on Research Methodology.

**Projects of the 1st Plan Already Concluded and Lasting More than One Year:**

- Sociological study of the University of Granada. 3rd phase.
- Evaluation of the different types of training of the teaching body. The new training centers for General Basic Education teachers.
- Coeducation of normals and subnormals. 3rd phase.
- Trial of institutional pedagogy.

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Through the lists of the educational-research projects which are found in this report, the question is answered on what were the subjects on which the most recent pedagogical investigations were based.

We have already said, and we are repeating it now, that this field of research is beginning in Spain. For the first time, an important effort has been made in a subject that has been untouched up till now and that alone is already positive.

The importance of the educational system itself's becoming the subject of research has been taken note of at the national level. Only in this way can its defects be corrected and the operation of its mechanisms be improved.

**B) PILOT AND EXPERIMENTAL CENTERS**

For this purpose, by Decree 2481 of August 22, 1970, the creation of experimental teaching centers under the dependence and supervision of the ESI was regulated. In them, the courses specified in the General Bill of Education have been tested before their general introduction and also new pedagogical methods handled in educational investigations, as well as the pedagogical preparation of the teaching body. These pilot centers may be state-owned or not state-owned. The latter, for as long as the experiment lasts, will be under the tutelage of the ESI, although not under their immediate dependency, and will have the permanent possibility of abandoning the concrete program of experimentation to return to the ordinary teaching systems. However, they will have to request the suspension of the pedagogical experiment at least six months prior to the start of the new academic year. Also, in the aforementioned decree, the experimentation of concrete pedagogical programs in ordinary teaching centers has been provided and regulated.

The centers listed below, among others, operate or have operated under this system of school experimentation:

### General Basic Education.

1. Pilot Center «Font d'en Fargas» dependent on the ESI of the University of *Barcelona*.
2. Experimental Pilot Center «Ribot y Serra» in the city of *Sabadell*. (Barcelona, Autonomous University).
3. Experimental Center. National School «18 de Julio» *La Paterna, Las Palmas de Gran Canaria* dependent on the ESI of the University of *La Laguna*.
4. Experimental Center in the City of *Elche*. Polygon *El Palmeral* (Alicante) dependent on the ESI of the University of *Valencia*.
5. Experimental Pilot Center, National School «*Santo Cáliz de Valencia*» dependent on the ESI of the Polytechnic University of *Valencia*.

### Baccalaureate Pilot and Experimental Centers.

1. Experimental Pilot Institute «*Joanot Martorell*» dependent on the ESI of the Autonomous University of *Barcelona*.
2. *Experimental Pilot Institute «Apolo V»* dependent on the ESI of the Central University of *Barcelona*.
3. Experimental Pilot Institute «*Padre Manjón*» dependent on the ESI of the University of *Granada*.
4. Experimental Pilot Institute of «*Tafira*» (Las Palmas de Gran Canary) dependent on the ESI of the University of *La Laguna*.

### Professional Training Experimental Pilot Centers.

1. Experimental Pilot Center «*Camino de Cabañal*» in *Valencia*. Its construction as such is being transacted and is dependent on the ESI of the Polytechnic University of *Valencia*.

Quite a bit of attention has been devoted to training teachers. Aside from the research subjects of the 1st Plan that directly involve the teaching body, the NCIDE was entrusted with the formation of a work team to undertake directly a plan for training and improving the teaching body. As far as the General Basic Education teaching body is concerned, this study is entirely finished and is in the process of being realized. With regard to other subjects of educational research, although it cannot be spoken of as being put into operation as experimentation, the ESI teacher instructors have been given an advance in investigations and their partial results through the «Seminars on Application of Educational Research to the Reform» organized by the NCIDE.

### C) FINANCING THE PEDAGOGICAL RESEARCH

The last question formulated by the International Office of Education on this 5th point «Pedagogical Investigations» refers to whether progress was achieved in organizing and financing pedagogical research. The part in reference to organizing has been answered in the foregoing section when the work of the ESI and the NCIDE was spoken of.

With regard to progress in financing educational research, it is expressed in the following data tables:

**FUNDS RECEIVED BY THE ESI DURING THE 1970-71 PERIOD UNDER VARIOUS  
HEALINGS**

ICE	Research funds		Installations funds		Liquidation T.T.S. 1971*	TOTALS
	1970	1971	1970	1971		
Barcelona (Classic) ...	672,500	4,358,100	1,500,000	1,500,000	1,000,000	9,030,800
Barcelona (Autonom.) .	2,911,000	6,279,200	1,500,000	1,500,000	1,000,000	13,190,200
Bilbao ... ..	2,021,000	2,614,000	1,500,000	1,500,000	1,000,000	8,625,000
Granada ... ..	293,000	985,000	1,500,000	1,500,000	1,000,000	5,278,000
La Laguna ... ..	340,000	926,000	1,500,000	1,500,000	1,000,000	5,266,000
Madrid (Classic) ... ..	1,768,000	3,199,000	1,500,000	1,500,000	1,000,000	8,967,000
Madrid (Autonomous) .	3,179,500	7,183,500	1,500,000	1,500,000	1,000,000	14,363,000
Murcia ... ..	429,000	748,000	1,500,000	1,500,000	1,000,000	5,177,000
Oviedo ... ..	805,000	1,247,000	1,500,000	1,500,000	1,000,000	6,079,000
Salamanca ... ..	465,000	925,000	1,500,000	1,500,000	1,000,000	5,390,000
Santiago ... ..	2,709,000	2,744,000	1,500,000	1,500,000	1,000,000	9,453,000
Seville ... ..	388,000	1,518,000	1,500,000	1,500,000	1,000,000	5,906,000
Valencia ... ..	1,507,000	2,188,000	1,500,000	1,500,000	1,000,000	7,695,000
Valladolid ... ..	1,665,000	4,262,000	1,500,000	1,500,000	1,000,000	9,027,000
Saragossa ... ..	848,000	378,000	1,500,000	1,500,000	1,000,000	5,226,000
<b>Total ... ..</b>	<b>20,001,000</b>	<b>39,581,800</b>	<b>22,500,000</b>	<b>22,500,000</b>	<b>15,000,000</b>	<b>119,582,800</b>

\* Liquidation of the Teacher Training School.  
Source: NCIDE.

**RELATION OF SUBVENTIONS CONCEDED TO THE E.S.I. IN THE YEAR 1972**

University	Necessity	Urgens Necessity	Investigations of Expenses	Total
Barcelona ... ..	2,500,000	2,661,200	—	5,161,200
Barcelona - Autonomous ... ..	2,500,000	3,887,200	900,000	7,287,200
Barcelona - Polytechnic ... ..	2,500,000	2,423,199	1,400,000	6,323,199
Bilbao ... ..	2,500,000	3,505,000	700,000	6,705,000
Granada ... ..	2,500,000	—	—	2,500,000
La Laguna ... ..	2,500,000	3,337,200	1,300,000	7,137,200
Madrid - Complutense ... ..	2,500,000	941,500	—	3,441,500
Madrid - Autonomous ... ..	2,500,000	1,285,600	1,900,000	5,685,600
Madrid - Polytechnic ... ..	2,500,000	820,000	—	3,320,000
Murcia ... ..	2,500,000	624,000	—	3,124,000
Oviedo ... ..	2,500,000	200,000	—	2,700,000
Salamanca ... ..	2,500,000	1,611,052	2,500,000	6,611,052
Santiago ... ..	2,500,000	1,025,000	—	3,525,000
Seville ... ..	2,500,000	570,600	3,700,000	6,770,600
Valencia ... ..	2,500,000	553,400	—	3,053,400
Valencia - Polytechnic ... ..	2,500,000	—	—	2,500,000
Valladolid ... ..	2,500,000	1,507,200	2,600,000	6,607,200
Saragossa ... ..	2,500,000	1,106,000	—	3,606,000
	<b>45,000,000</b>	<b>26,058,151</b>	<b>15,000,000</b>	<b>86,058,151</b>





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