

# **THE SPANISH UNIVERSITY REFORM**

## **An Assessment Report**

**International Council for Educational Development**

**CONSEJO DE UNIVERSIDADES**  
**SECRETARIA GENERAL**



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SECRETARIA GENERAL  
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## About the Mission

In early 1987 the Minister of Education and Science, Don José María Maravall, in his role as Chairman of the Council of Universities, invited the International Council for Educational Development (ICED), to undertake an assessment of the progress to date of Spain's far-reaching University Reform and to suggest possible future steps for promoting the basic objectives of the University Reform Law of 1983.\*

The ICED accepted this invitation with enthusiasm, and after an initial visit to Madrid by its Vice-Chairman to formulate detailed plans for the proposed mission, organized a team of eight experienced international experts, including six of its own Trustees. A list of the members will be found at the end of this Preface.

The members of this ICED group were already somewhat familiar with Spain's educational situation based on previous visits and consultations, in some cases dating back to consultations on the «Libro Blanco» (1969), the Organic Educational Reform Law of 1970, and the proposed University Reform Law of 1980 (not enacted). To bring them up-to-date, they were provided with a wealth of useful briefing materials. Of particular value were the report on *The Spanish Education System* (1985) prepared by the Centro Nacional de Investigación y Documentación Educativa (C.I.D.E.); the OECD examiners' report on Spain (1986); John McNair's book on *Education for a Changing Spain* (Manchester University Press, 1984); and a compilation of papers and statistical data assembled by the staff of the Council of Universities (1987) especially for the ICED group. The group was also provided with useful materials by various universities, Social Councils, and Autonomous Community educational authorities.

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\* The International Council for Educational Development, established in 1970, is a non-profit research and analytical organization that has conducted comparative studies in numerous countries in both the developed and developing world. ICED's trustees include experienced educational and development experts from all major regions of the world.

The ICED mission assembled in Madrid in late March 1987 and spent the next two weeks in an intensive series of discussions with numerous government officials in Madrid and with key personnel of universities, Social Councils, and Autonomous Community governments during visitations to Sevilla, Granada, Barcelona, Salamanca, Valencia, and the Madrid area. The discussions throughout were cordial, informal, candid and highly illuminating. As might be expected, the mission heard a variety of points of view concerning the University Reform, but each in its own way was constructive.

As «outsiders» we approach this report in a spirit of great humility, recognizing full well the many limitations of our knowledge on this complex subject. Despite these obvious limitations, however, we were strongly encouraged by our principal hosts to speak our minds freely and candidly in this report, even at the risk of seeming naive at times or of treading on locally sensitive territory, for perhaps the main virtue of a group of outside observers is their license to ask «dumb questions» and to say the unsayable in hopes of enriching the domestic discussion and debate on a highly important, complex and dynamically changing set of issues. Many of our comments, as will be seen, are based on a comparative perspective of Spanish universities relative to those of other OECD and European Community member states.

Throughout our mission we were deeply impressed by three things in particular. The first is the remarkably rapid and successful political transition that the people and institutions of Spain have made from a long era of repressive authoritarianism to an authentic and vibrant democratic society that attaches its highest priority to individual freedom and social equality. Second is the extraordinary expansion of educational opportunities that has been achieved at all levels within a single generation, and the great public confidence and support that education enjoys. Third is the high caliber, youthfulness and the unbounded energy and confidence of the educational leadership we encountered, both in the central government and in the several universities and Autonomous Communities we visited. These three features, we believe, augur well for the future of Spanish higher education, notwithstanding the many difficult problems that remain to be solved in this unusual period of educational transition.

For each of us on the ICED team it was a highly stimulating and rewarding experience. We take this opportunity to express our deep gratitude to our many different hosts, including those in various universities and communities, all of whom went out of their way to be helpful. In

particular we want to thank Don José María Maravall who made this unique mission possible; Don Emilio Lamo de Espinosa, Secretary General of the Council of Universities, whose insights, patient explanations and generous hospitality greatly enriched our mission; and Don Felix Haering, a staff member of the Council of Universities, who accompanied us throughout our program and efficiently ministered to our every need.

### **Members of the ICED Mission to Spain**

\* **Alain Bienayme** (France), Professor of Economics, University of Paris IX. ICED Trustee.

\* **Philip H. Coombs** (USA), Mission Chairman, Vice-Chairman of ICED.

\* **Ricardo Díez Hochleitner** (Spain), Vice-President of the Fundación Santillana.

\* **Dietrich Goldschmidt** (F.R. Germany), Director Emeritus of Max Planck Institute for Education, West Berlin.

\* **Torsten Husen** (Sweden), Director Emeritus, Institute for the Study of International Education, University of Stockholm.

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I

## REQUISITES FOR SUCCESS



## I. REQUISITES FOR SUCCESS

In the view of the ICED observers, the University Reform Law of 1983, combined with pertinent provisions of the new Constitution of 1978 and de earlier General Education Law of 1970, provides a bold and progressive blueprint for adapting Spanish universities to the new democracy and to the rapid and far-reaching changes taking place in their surrounding socio-economic, technological, cultural and political environment.

This blueprint, as we perceive it, sets the framework for a sweeping educational experiment that will require many years to unfold. No one can now forecast with certainty how its various innovations will eventually work out, and undoubtedly many mid-course corrections will be needed along the way. It will therefore be important, we suggest, to provide for continuous monitoring and assessment of the progress of the reform, preferably by independent analysts working closely with the Council of Universities, the universities themselves and their Social Councils, with government educational authorities at the center and in the autonomous communities, and with various interested parties in the private sector. Such assessments should focus on both the changes achieved and not achieved (including the reasons), and on significant side-effects and repercussions of these changes.

The experience of other nations demonstrates that the successful implementation of the Spanish reform will depend in no small measure on the willingness of central bureaucrats to relinquish important powers they have long been accustomed to exercising, and equally on the willingness of the universities to put their newly gained autonomy to creative and effective use.

In the present era of vastly accelerated changes of many kinds throughout the world, Universities can certainly make important contributions to the progress of their society, *provided* they are given the necessary resources and leeway and are sufficiently foresighted and flexible to adapt to the great changes constantly going on all around



them. But if, on the other hand, they are too tightly bound by a plethora of uniform rules and regulations, or if they cling blindly to their conventional attitudes, practices, and folklore and stoutly resist changes in their own internal affairs, then Universities will inevitably find themselves in the midst of a growing crisis of maladjustment with their changing society. This type of crisis, unfortunately, has become all too common a phenomenon in recent years in many countries.

It would be premature at this early stage of the Spanish University Reform to pass judgment on whether the above requisites for success will prevail and the potential obstacles overcome. We have the distinct impression, however, that despite many reservations expressed by students and teachers, the implementation of the blueprint is off to a promising start, given the complexities involved. We found encouraging evidence, albeit limited because of our time constraints, of a strong commitment on the part of key people at all levels of make this reform succeed. At the same time, we recognize that the university community itself is still divided on some aspects of the Reform, a fact that conditions our optimism.

Later in this report we will comment on certain specific aspects of the reform process, but first it is important to look briefly at the dynamic environmental context in which the Reform is taking place.

II

THE CHANGING ENVIRONMENT OF  
SPANISH UNIVERSITIES



## II. THE CHANGING ENVIRONMENT OF SPANISH UNIVERSITIES

Universities do not exist in a social vacuum, nor in a world of abstractions. The real world in which they exist is filled with dynamic forces that impinge, directly or indirectly, on the tasks and operations of Universities and ultimately determine their relevance, stature, and viability as social institutions.

In the past two decades the socioeconomic and political environment of Spanish Universities has undergone extraordinary changes of many kinds, and further sizeable changes surely lie ahead. Thus the central challenge facing Spanish Universities, if they are to maximize their contribution to their nation's progress, is to catch up and keep up with these basic changes going on all around them.

### **Political changes**

In a short 12 years, as we observed earlier, Spain has made a remarkable transition from a prolonged era of undemocratic dictatorship to a functioning democracy. Any outsider who knew Spain in its darker political days (as did most members of the ICED team) can only marvel at the constructive changes the new spirit of freedom has already wrought. They include, for example, a free and critical press; independent political parties and free elections; humane law enforcement and an impartial judiciary; freedom of thought, religion, and expression for all citizens; freedom of association including independent labor unions; the devolution of important political powers to regional governments; and not least important, constitutional affirmation of the autonomy of Universities and of every citizen's right to an education.

These and other political changes have profoundly altered the operational and ethical environment of the entire educational system. They have also confronted Universities with important new opportunities, challenges, and obligations. By the same token they have imposed a heavy



obligation on the central government to loosen the tight and suffocating leash on which Universities have been held for far too long.

## **Demographic changes**

Several types of demographic changes in recent decades have already had —and will continue to have— important repercussions on the Spanish educational system, and also on youth employment opportunities.

The first of these changes concerns the birth rate. Spain's «baby boom» (which lagged some 10 years behind the similar boom in most other European countries) contributed strongly to the great expansion of enrolments throughout the educational system during the 1960s and 1970s. This boom reached its peak in 1964, at a crude birth rate exceeding 21 per thousand of population, which subsequently declined to only 13 per thousand in 1985. The point to be stressed, however, is that the decline was slow from 1965 to 1976, then accelerated rapidly. Thus the bulk of the decline has been in the past 10 years, a decade later than in most OECD countries.

This demographic decline in births has recently brought a reduction in primary school enrolments, thus removing the earlier pressures to expand capacity at this level and permitting more attention to be focused on improving quality. Enrolments are still rising, however, in higher education, where the full impact of the demographic decline will not be felt until the late 1990s. And even then it may be at least partially offset by increased university participation by adults and rural young people.

Meanwhile, several years from now when today's smaller cohorts of primary school pupils reach working age and start entering the labor force in smaller numbers, this should bring a degree of relief to the present high rate of youth unemployment.

A second important demographic factor is the highly uneven geographic distribution of Spain's population, which over the years has been intensified by a strong internal migration from poorer regions to more prosperous ones; and from rural areas to urban centers. Spain is physically the second largest country in Europe, but its 39 million occupants are heavily concentrated in the coastal areas (except for Madrid), with the rest widely scattered among sparsely settled rural areas and small towns in the interior. Spain's urban population grew from 30 percent of the total in 1900 to 61 percent in 1965 and reached 77 percent by 1985.



Since the Universities are located in urban centers, this poses a difficult problem of providing convenient access to higher education for people living at a distance from such centers. To some extent the new Distance University (UNED), with its more than 50 Associated Centers spread throughout the country, is helping to relieve this problem, but it still remains sizeable.

A third significant (and encouraging) demographic and sociological change has been the recent sharp increase in female university enrolments, from 37 percent of total enrolments in 1975-76 in Faculties, General Colleges and University Schools to approximate parity with males at present. It should be noted, however, that female enrolments are still heavily concentrated in such traditional «female areas» as primary school teaching, nursing, and the humanities, indicating that the traditional male bastions have yet to be substantially penetrated. In this respect it is perhaps especially significant that female enrolments in Technical Universities jumped from only 3.4 percent in 1975-76 to 12.2 percent in 1983-84 and have since continued to rise.

A fourth notable demographic shift has been the reversal since 1973 of the sizeable earlier emigration of Spanish workers to other countries in search of employment. As the recession dried up job opportunities in host countries, the net emigration of more than 664,000 for the period 1961 to 1972 turned into a negative net emigration of nearly 280,000 between 1973 to 1979. (Data cited in the C.I.D.E. Report, p.9.) This meant for Spain a loss of valuable remittances and an increase in its own unemployment problem.

Finally it should be noted that, as a result of declining birth rates and increasing life expectancy, the Spanish population is in the process of aging. This has at least two long term implications for education. The first is that the demand for adult education, including university level training, can be expected to increase. The second is that with a steady increase in the «senior citizen» group, education budgets will encounter increasing competition with social welfare expenditures on the elderly.

## **Economic changes**

Like other OECD countries, though not yet to the same degree as most of them, Spain's economy has been undergoing basic structural changes in recent decades. Formerly a predominantly agrarian economy, it has since made the great transition to becoming a newly indus-

trialized and service economy. The percentage of the total labor force engaged in agriculture fell by half between 1965 and 1981, from 34 percent to 17 percent (which, however, is still about double the average for other OECD countries). In the same period, although industrial production rose very substantially, industrial workers only grew from 35 percent to 37 percent of the total labor force. Employees in the service sector, however, spurted up from 32 percent to 46 percent of the total. (World Bank, *World Development Report 1987*, p. 265).

It could thus be said that Spain has graduated in a relatively short period from the «developing country» category to the «developed country» category. But it would be more accurate to say that Spain today has a dual economy, one sector of which has all the earmarks of a highly developed modern economy, while the other sector still retains many characteristics of less developed countries, including extensive poverty and subsistence farming, and relatively low levels of educational attainment. The schools, and especially the Universities, however, are designed exclusively to prepare young people to live and work in the modern sector. We suggest, therefore, that consideration be given to how Universities might increase their contribution to the development of the relatively backward rural areas, and also to the preparation of the young people for self-employment.

Over the past ten years or so the Spanish economy has been plagued by three serious problems, similar to but more severe than those suffered by the more advanced OECD countries. The first problem has been a sharp slow-down in economic growth, from a lusty average annual GNP growth rate of 6.4 percent between 1965 and 1973 (C.I.D.E. Report, p. 14) to a greatly reduced level since 1973. The second problem has been a simultaneous sharp rise in the rate of inflation, averaging 12.6 percent between 1980 and 1985. (World Bank, *World Development Report 1987*, p. 203). The third problem, already alluded to, has been a persistent high rate of unemployment. The official estimate of overall unemployment has hovered around 20 percent in recent years, but youth unemployment is in the neighborhood of 50 percent. This shockingly high figure, relative to other EEC countries, reflects in part the impact of Spain's delayed baby-boom. Had the sharp drop in Spanish birth rates come 10 years earlier, the youth unemployment figure would be significantly lower today (though still sizeable).

Although university graduates generally do better in finding jobs than young people with less education, we were told that the average new

graduate (especially in the humanities and social sciences) spends two years or more searching for a first job.

These, of course, are the kind of conditions that breed social unrest in any nation and provoke deep and understandable anxieties among students who see only a bleak future for themselves. Yet the Spanish people, at least until recently, remained extraordinarily patient under these trying conditions. In the early months of 1987, however, during the visitation by ICED observers, this bottled-up social unrest broke to the surface in the first serious wave of labor strikes and student manifestations.

### **The challenge of EEC membership**

In the coming few years as Spain becomes increasingly integrated with the European Economic Community, her economy will experience further restructuring and her political leaders will face further tests. The medium term consequences of EEC membership are expected to be quite mixed. Tourism, fishing and the more productive and competitive sectors of agriculture (especially in the South) are expected to thrive, while weaker sectors of agriculture are likely to suffer a setback. Similarly, the dynamic social services sector and the more efficient, productive and competitive industries are expected to prosper, whereas the reduction of tariffs to EEC levels will expose previously protected inefficient industries to the chilling blast of international competition.

Leading economists are confident that EEC membership will ultimately bring greater strength to Spain's economy, and also to her new democratic institutions. But the road that leads to these greater strengths is likely to be a bumpy one for a number of economic groups.

Meanwhile, Spain's new membership in the EEC holds out three major challenges to her Universities. The first challenge is to add a strong international dimension to their relatively parochial curricula, as an integral part of every student's general education. The second challenge is to provide better career guidance and more appropriate types of knowledge, skills and practical experiences that will enable students to fit more easily into steadily changing employment markets. The third challenge to Universities is to seize the important opportunity afforded by EEC membership to strengthen their presently inadequate scientific and technical research activities by integrating them with those of their fellow EEC members.



One final point that warrants emphasis is the great sea change taking place in the national market for University graduates. Historically, government service (including education) had been the dominant market for University graduates, who were virtually assured of a public sector post upon graduation. But a growing divorce is now taking place (as in the rest of Europe) between University education and public employment. It can be expected that in the future, particularly with an increase in economic growth, a rapidly increasing proportion of graduates will be drawn into private sector employment. This has important implications for student expectations and academic choices, and hence for curriculum reform and the role of «national degrees».

### **Research and development**

Like other Western countries, the modern sector of the Spanish economy has been rapidly adopting new technologies, including the most advanced and sophisticated ones. By and large, however, most of these, with some notable exceptions, are the result of research and development efforts in other countries. The proportion of Spain's GNP invested in R & D has increased somewhat in recent years, due primarily to government initiatives, but it is still only a fraction of that being invested by most Western nations. Moreover, Spain's R & D investments are heavily skewed toward industrial research, leaving other important areas relatively unattended. This weakness in research capacity and heavy dependence on other countries for new technologies leaves Spain highly vulnerable in the realm of international competition and also with respect to the advancement of social well-being at home.

The most worrisome feature of the problem is the serious weakness of the Universities with respect to research and the training of competent research personnel for the whole nation. We will return to this matter in a later section.

### **Social and cultural changes**

Spain possesses three particularly valuable cultural and social assets that strengthen the environment of education. The first is a rich, centuries-old culture that adds unique color to all of Spanish life and that is currently experiencing a renaissance. The second asset is the traditional strength and closeness of the Spanish family and the bond of

mutual trust between young people and their elders, in contrast to the decline of the family and the «generation gaps» that most Western nations are currently experiencing. The third asset is the extraordinary friendliness, courtesy and helpfulness of the ordinary Spanish people, even to strangers in their midst. Added to this, to borrow the words of a British author of a recent article on Spain in *The Economist*, «Class consciousness is less apparent (in Spain) than almost anywhere else in Europe, though the gap between rich and poor is inexcusably wide».

The overall culture of Spain is a rich mosaic of differing cultures rooted historically in separate regions of the country. Some have their own unique languages, which were strongly suppressed under the Franco regime but are now back out of the closet and into the streets, the press, and the schools and universities. One in four Spaniards speaks another language of Spain in addition to the national tongue, Castilian. An estimated six and one-half million Spaniards, for example, speak Catalan, three million Galician, and 650,000 Basque.

These various languages are the proud heritage and symbols of the historic cultures of various localities. But they are also a special education burden. They add an extra burden for young people who, to do well in life, must master at least three languages, including Castilian, their local language, and either English or French.

They also add an extra burden to the schools of these linguistic regions, requiring them to have more language teachers, more textbooks in different languages, and more time devoted to language instruction at the expense of other subjects. We were told in Barcelona that it is not unusual for specialized subjects at the university, such as pharmacy, to be taught in Catalan, which we took to mean that separate sections must be provided for non-Catalan speaking students from other parts of the country, presumably at significant extra cost.

## **What kind of future?**

Given the foregoing environmental conditions and dynamic changes going on, the fundamental question is: What kind of society does Spain want to be a generation or two from now? Does it want to be a middle level industrial economy, supplying intermediate goods and services to post-industrial societies and developing countries, or does it aspire to becoming a post-industrial «information economy», in which the most

advanced communication technologies will play a central role? It is not, of course, a black or white choice.. Modern agriculture, fishing, and various types of manufacturing and services (including tourism) will no doubt be important elements in Spain's future economic picture. But the distinguishing feature of post-industrial societies is already being shaped by the current information and communication revolution. If Spain chooses to move in this direction (and there are growing signs that it will) then the implications for all levels of education, but especially Universities, are tremendous. It means that education itself must at long last have its own curriculum and technological revolution to keep pace with all the others. This is not a prospect to be frightened about; it is rather a prospect to be excited about.

# III

## GROWTH AND IMBALANCES





### III. GROWTH AND IMBALANCES

Over the past 15 years, in the context of the environmental changes described above, the Spanish university system has undergone spectacular growth. This growth constitutes an impressive achievement. It has benefitted many thousands of young people who would not have had a similar opportunity a generation earlier, and directly or indirectly it has also benefitted the nation as a whole. Inevitably, however, this rapid growth, as in other countries, has led to some serious problems of quality and imbalances that now pose difficult policy issues. This section of our report addresses these matters.

#### Growth of enrolments

As shown by Table 1, Spanish university enrolments doubled during the 1960s, nearly doubled again in the 1970s, and increased by another one-third in the first half of the 1980s. In other words, for every one university student in 1960 there were more than five in 1985.

Table I  
**Growth of University Enrolments**

	Number	Index
1960-61:	166,797	100
1970-71:	329,149	197
1980-81:	649,098	385
1985-86:	855,123	513

Source: Council of Universities and INE.

During much of this period higher education enrolments in other European countries also rose dramatically, but nowhere as much as in Spain. Moreover, enrolments leveled off in the mid-1970s and are now

declining in most of these other countries, whereas in Spain they are still increasing and will probably continue to until the late 1990s.

Several factors have contributed to this explosive growth of Spanish university enrolments, including:

— The constitutionally guaranteed right of every qualified citizen to a university education.

— Spain's prolonged «baby boom», which created strong pressures for expansion throughout the educational system.

— The large increase in enrolments in the secondary level academic stream and in the proportion of the age group seeking university admission.

— The sharp increase in female university enrolments, which have now reached an approximately parity with male enrolments.

— The introduction of new fields of study linked to new technologies and frontier sectors of Spain's modernizing economy.

— The prolonged economic recession since 1973 and the high youth unemployment that has prompted many young people to prolong their formal education in quest of higher credentials.

— The growing tendency of employers to insist on higher academic credentials in the initial screening of applicants for middle and higher level positions.

### **Growth of University capacity**

With the aim of democratizing the previous elitist system and achieving greater harmony between university studies and the practical world of work, the General Education Law of 1970 broadened the scope and diversity of university studies and mandated a three level/ three cycle structure, as follows:

The *First Cycle*, generally of 3 years duration, includes University Schools that provide a variety of terminal training courses for middle-grade professionals (e.g. primary teachers, nurses, architectural assistants, etc.), leading to the title of *Diplomado*.

The *Second Cycle*, generally of 5 or 6 years, provided by various university faculties and advanced technical Universities leading to the title of *Diplomado*. (The first 3 years may be taken at a General College or Technical College at the First Cycle level).

The *Third Cycle*, requiring an additional two or more years, is designed to prepare researchers and university professors and leads to the title of *Doctor*.

The 1970 Law also envisaged an increase in the number of universities and authorized the creation of various types of new university teaching and research «Centers», including first level University Colleges and Schools intended to absorb a sizeable proportion of an anticipated future increase in enrolments.

As of 1987 the number of public universities (not counting a newly authorized one in Navarra) had grown to 31. These included 25 «regular» universities, four advanced Technical Universities, an «open» or «distance university», and an international summer university, with a sum total of 758 Centers. These public universities accounted for over 96 percent of total enrolments in 1986-87, the rest being in four private (Catholic) universities.

## **Imbalances**

Under the Constitution and prevailing legislation, any academically qualified person is guaranteed admission to the public university system and, in principle, may enter the specific university and field of study of his or her own choosing. The pattern of student demand that has evolved from this freedom-of-choice principle has created some troublesome imbalances within the university system.

### **The first imbalance is between short-cycle and long-cycle courses**

The sponsors of the General Education Law of 1970 had evidently assumed (or at least hoped) that a majority of the expanding student body would opt for short-cycle courses in the University Schools, thus relieving pressure on the regular faculties and expanding the national supply of middle-level professionals and technicians.

In reality, however, student demand evolved in quite the opposite

direction. As Table 2 indicates, enrolments in long-cycle faculty courses skyrocketed, reaching two-thirds of total enrolments by 1985-86. Enrolments in University Schools increased much more slowly and by 1985-86 accounted for little more than one-quarter of the total university enrolments. Curiously, enrolments in the prestigious Technical Universities all but stagnated, declining from 13.5 percent of the total in 1970-71 to only 6.1 percent by 1985-86. The net effect of these trends was to put the greatest pressure for expansion on the old line university faculties.

Table 2  
**Growth of Enrolments by Types of Programs**

Year	Faculties		Technical Universities		University Schools		Total	
	No.	%	No.	%	No.	%	NO.	%
1971-72	195,237	51.2	44,547	13.5	115,990	35.2	329,149	100
1980-81	423,911	65.3	46,147	7.1	179,040	27.6	649,098	100
1985-86	577,578	67.5	52,513	6.1	225,032	26.3	855,123	100

Source: Calculated from INE University Statistics and estimates for 1985-86 by Council of Universities.

### **The second imbalance lies in the very uneven distribution of enrolments geographically and by size of institution**

Geographically, a disproportionate 41.5 percent of total enrolments in 1985-86 were concentrated in the Madrid and Barcelona areas. The lopsided enrolment distribution by size of Universities is shown in Table 3. At one extreme, the eight smallest Universities, each with fewer than 10,000 students, accounted for only 8 percent of total enrolments in 1985-86. At the other extreme, the seven largest institutions, with enrolments ranging from 40,000 to more than 100,000, accounted for 51 percent. The two «giants» —Madrid Complutense and Barcelona Central— together accounted for 24 percent of the total.

What this evidence tells us is that the so-called «massification» of the Spanish university system has in fact been largely confined (thus far) to about half of the Universities, those whose enrolments



had grown to more than 20,000 by 1985-86. These institutions, however, now account for 80 percent of total enrolments.

Table 3  
**Distribution of Enrolments by Size of Universities  
 1985/86**

Size of Enrolments	No. of Universities	% of Total Enrolments
Below 10,000	8	8%
10,000 to 20,000	6	12%
20,000 to 40,000	8	29%
40,000 to 70,000	5	27%
Above 70,000	2	24%
Total	29	100%

\* Calculated from enrolment data for 29 public Universities provided by Council of Universities

We will comment later on this matter of university size.

### **The third imbalance concerns the distribution of enrolments by fields of study**

Here the evidence reveals a very heavy weighting of enrolments in the Humanities and Social Sciences compared to the Basic Sciences and Technology. In 1983/84, for example, (the latest figures available to us) the combined enrolments in the Faculties of Philosophy and Letters, Law and Economics amounted to 59 percent of total «long cycle» enrolments, nearly five times the enrolments in Science and more than six times total enrolments in the Technical Universities.

There are similar striking imbalances among the different specialized fields within the Technical Universities. Two of the 10 major fields—Architecture and Industrial Engineering— together account for two-thirds of total enrolments in 1980-81 (the latest data available to us), whereas the *combined* enrolments in such important fields as Agriculture, Aeronautical, Chemical, Mining, Forestry, and Naval Engineering amounted to only 16 percent of the total.

Enrolment imbalances also show up in the University Schools. In 1985-86 primary teacher training (currently a surplus field) headed the list with 35 percent of total enrolments, followed by training of architectural assistants and technicians (28 percent) and business studies (20 percent). Nurses training, however, accounted for only 8 percent, which seems very low, since seven times as many medical doctors as nurses were being trained in 1985-86. Even allowing for the fact that the training period for doctors is at least twice as long, the ratio of nurses to doctors still seems seriously out of balance.

### **Efforts to rectify the imbalances**

The three imbalances discussed above have placed educational quality in serious jeopardy, not only in those Universities that have been overwhelmed by massification but also in other Universities wherever a concentration of enrolments in any particular field of study has reached or exceeded the available teaching capacity. In all such cases the highly valued principle of freedom of student choice has come into direct conflict with an equally valued objective of the University Reform, namely, to preserve and improve educational quality.

This conflict of values has confronted educational policy-makers (not only in Spain but in a number of other countries, such as West Germany) with a painful philosophical and political dilemma, for whatever solution they adopt is bound to be unpopular, especially with students and their families. If, on the one hand, they attempt to curb the out-of-control growth of overall enrolments by tightening admission standards, they will be accused of violating the constitutional guarantee of a university education for all qualified applicants. Or alternatively, if they impose an across-the-board *numerus clausus* (a highly unpopular term) on all over-subscribed fields of study, they will be in similar trouble.

Spanish authorities have adopted and recently put into effect a third (and hopefully less controversial) approach to the problem of imbalances and overcrowding, based on a provision of the University Reform Law. This approach is based on the principle that protection of quality must always prevail over complete freedom of student choice in any situation where an individual university finds that a further increase in enrolments in a particular field of study would exceed its available teaching capacity. On the basis of this principle, in keeping with the concept of autonomy, the Rector of any university may request authorization from the Council of Universities to establish a limitation on admissions to any

field where he has determined that a further increase of enrolments would exceed available capacity (measured by criteria established by the Council of Universities).

Under this approach a student wishing to enrol in a given center (field of study) at a particular university might be unable to gain admission because of an enrolment limitation in that field. But the student would still have the choice of either switching to some unrestricted field of study in the same university, or switching to another university that had not placed an enrolment restriction on his or her first choice field.

Theoretically, the net effect of this system of selective enrolment ceilings would be to redistribute the flow of incoming students away from «full capacity» situations to «under-used» capacity situations, thus avoiding—or at least reducing—the erosion of quality in all fields. The aim, in other words, is to manipulate the pattern of student demand to fit the pattern of the university system's available teaching capacity in various fields. This assumes, of course, that there still exists substantial under-utilized capacity in various fields somewhere in the overall university system.

The new system was put to its first test when universities were invited to request enrolment limitations applicable to the 1986-87 academic year. The following results are revealing:

— Out of 758 university teaching centers, 442 (58.3%) established enrolment limits.

— Four universities applied capacity limits to *all* their centers and studies, including the largest one (Madrid Complutense), the largest technical university (Madrid), and two of the smallest universities (Alcalá de Henares and León).

— Limits were imposed on the following long cycle courses in *all* universities that offer them: Political Science and Sociology, Computer Science, Dentistry, and Veterinary Medicine. All technical universities set limits on Aeronautical, Environmental, Naval, and Telecommunication Engineering.

— All University Colleges and Schools established limits on short cycle courses in Library Science and Documentation, Statistics, Computer Science, Translators and Interpreters, Aeronautical Technology, and Manufacturing Technology.



— Only four long cycle courses remained without limits in any university (Science, Ocean Science, Textile Technical Engineering, and Chemical Engineering).

## **Commentary**

As a result of the foregoing actions the Spanish university system, for the first time in recent decades (with the exception of Medicine) is now heavily covered by what amounts to *numerus clausus* restrictions, aimed at protecting quality by matching the pattern of student demand and enrolments to the available pattern of teaching and physical capacity in various fields and university centers.

Although it is too early to assess the practical consequences, two things seem clear. First, these new restrictions will greatly complicate the academic and institutional choices of future entering students and the whole admissions process. Second, this fact in turn compounds the already urgent need to strengthen academic guidance and counselling services and the wide dissemination of pertinent information for university-bound secondary students and first year university students. We suggest that this matter warrants an immediate high priority, for without adequate student (and parental) counselling the whole admissions process could become chaotic.

We further suggest that in the interest of future planning an immediate survey be undertaken to determine the types, amounts and location of remaining «spare capacity» in the university system, and its adequacy to absorb future increases in enrolments.

Our most basic comment, however, concerns the relationship between the present pattern of university capacity in various fields (which dominated the recent setting of admission restrictions), and the prospective pattern of the economy's human resource needs and employment opportunities. For understandable reasons, perhaps, this matter appears to have been consciously avoided in establishing the recent enrolment limitations.

One reason often cited by university planners in many countries is the demonstrable impossibility of making reliable long range or even middle range forecasts of manpower needs. But this, while true, is not a sufficient reason in our view for ignoring the important relationship between higher education and the society's needs. Even a superficial examina-



tion of the present pattern of university enrolments and of the new restrictions by fields of study raises serious doubts about the compatibility of the existing pattern of university capacity with the pattern of Spain's future manpower needs and directions of development.

Granted that detailed statistical manpower estimates can prove to be far from the mark, it is still possible (and desirable) to identify with reasonable assurance certain fields where major mismatches are likely. This is true, for example, with respect to future teacher demand at various levels for which even rough projections may reveal major disparities between supply and demand. The whole field of science and technology is another area that merits particular attention, with a view to avoiding future manpower bottlenecks that can hobble frontier developments in Spain's economy. In this connection we note with concern the possibly inadequate capacity in such fields as computer and information sciences, telecommunications, aeronautical engineering and environmental engineering where present capacity appears to be quite limited and where future demand may well exceed supply. On the other hand, the existing mammoth enrolments in such fields as Philosophy and Letters and Law (which apparently have not yet reached capacity limits) suggests that the current rate of supply in these areas is likely to be far in excess of any conceivable future demand.

These, of course, are merely illustrative speculations on our part: merely to emphasize the urgent need, as we see it, to undertake a more systematic review and assessment of existing university capacity relative to the possible future needs of society and future employment requirements. Such an assessment is essential to the planning of future university capacity. It would undoubtedly reveal that some fields require expansion, while others merit contraction. Such adjustments, of course, would require considerable time to accomplish, but this is the more reason for making an early start on such plans.



# IV

## THE NEW PATTERN OF UNIVERSITY GOVERNANCE



#### **IV. THE NEW PATTERN OF UNIVERSITY GOVERNANCE**

The Spanish University system is currently in transition from a highly centralized, uniform, tradition-bound system-patterned after the French «Napoleonic model» by the Education Act of 1857 (the Ley Moyano), toward a much more decentralized and diversified system, founded on a new doctrine of university autonomy embodied in the Constitution of 1978 and elaborated in the University Reform Law of 1983.

Under the old system the power of decision over all university affairs, both academic and managerial, was the monopoly of the central government, vested largely in the Ministry of Education in Madrid. The only significant exception was the subtler autocratic power wielded by a handful of senior professors (catedráticos) who ruled each university faculty like a duchy. In principle all universities were alike. Every teaching center followed the same curriculum, prescribed in detail by the Ministry. The universities all granted similar «national degrees» sanctioned and validated by the Government. These degrees served as passports to positions of command in the civil service, the old professions, the educational system, and politics. Faculty members were civil servants, selected and assigned and paid by the Ministry on the basis of a uniform salary structure. The Ministry provided the budget for each university and controlled the internal expenditure of funds in accordance with a common formula. At best only the scantiest of funds were provided for research, since the universities were viewed as basically teaching institutions in which research played little role. University rectors, chosen by their faculty colleagues for a limited period, were little more than figureheads for they lacked any substantial power of decision over either the academic or managerial side of their institution. The real rector was the Minister.

Over the years a number of legislative attempts were made to secure academic freedom for the professoriate by granting autonomy to universities, but they all failed. The one successful attempt was a provision for university autonomy included among the wide-ranging reforms sanctioned by the General Education Law of 1970. However, the implemen-

tation of this particular provision was soon blocked by a conservative counter-reform movement, spearheaded by senior professors who feared that autonomy would erode their own power position within the university. Thus, despite the good intentions of the General Education Law of 1970, the old «Napoleonic» system remained largely intact, save for a few modifications, up to the mid-1980s when implementation of the new University Reform Law began to get underway.

As envisaged by the Reform blueprint, the powers of university governance are to be shared between the central government, the newly empowered governments of Autonomous Communities (regions), and the universities themselves. Also in the picture are the newly established Council of Universities, and the Social Councils attached to each university.

### **Powers retained by the central government**

These include, based on the new Constitution of 1978: (1) Rules governing the rights of citizens to education, and thus conditions of admission to universities and their centers; (2) conditions for granting and receiving «national degrees», including curriculum guidelines presently being formulated by the Council of Universities (which are expected, on average, to cover only 40 percent of the total teaching load for each program); (3) basic norms of university teachers to achieve civil service status as «tenured professors» in three categories (funcionario, profesor titular, and catedrático).

These retained powers, when spelled out in follow-up decrees, prove to be more detailed and complex than appears at first glance. More important, however, are the complications that exist under the dual system of central controls that currently prevails during the transition period when only some of the Autonomous Communities have gained powers over their universities, while the Central Ministry still retains much more detailed control over universities in other regions.

### **Powers granted to Autonomous Communities**

The clear intention of the Reform is to transfer extensive powers and responsibilities for all levels of education, including universities from the Ministry of Education and Science to autonomous community governments. One of their most important new responsibilities, formerly handled by



the Ministry in Madrid, is to provide funds for each university's budget, based on the Rector's request and justification. The money will come primarily from a block grant from the central government to each Autonomous Community to be used for the support of its various public services. The government of each Autonomous Community must therefore decide how to allocate this block grant (plus any additional funds it may raise on its own) as between different levels of education, and between education and other public services. This «power of the purse» obviously gives the Autonomous Communities great leverage over their schools and universities. They may even decide to create a new university (with their own money), with the concurrence of the Council of Universities and the central Ministry.

It should be noted parenthetically that the transfer of political, educational and other powers to the Autonomous Communities is a complex and time-consuming process involving extensive negotiations, legislative actions and popular referendums. Hence only six of the 17 regions had completed the process by early 1987. (A seventh, Navarra, was close to this status). The present six (including the Basque Country, Catalonia, Galicia, Andalusia, Valencia and the Canary Islands) contain well over half of Spain's total population and total university enrolments.

For deeply rooted historical reasons, this whole process of devolving political and administrative powers to the regions was precipitated by the insistent demands of the Basque Country and Catalonia for greater autonomy in the wake of the Franco dictatorship, which had strongly suppressed all manifestations of their unique cultural features and «nationalistic» tendencies. It was a carefully balanced political compromise by the new democratic government, designed to preserve national unity and stability on the one hand, while at the same time recognizing the cultural and political realities of these distinctive historical regions on the other hand. Having thus started down this road to regional autonomy, it was deemed desirable by the Government to go all the way and include other regions. But how soon and whether the process will be completed is still an open question. Meanwhile the Ministry of Education and Science, as noted earlier, is in the awkward position of having to operate under two systems, the new system for already empowered Autonomous Communities, and the old system for those not yet empowered. This dual arrangement is both confusing and potentially hazardous because it prevents making a clean break from the traditional practices and attitudes on the part of Ministry bureaucrats and university personnel.

## **The new autonomy of Universities**

University autonomy is the nub of the matter. Such autonomy varies widely in kind and degree from country to country, according to each one's history, traditions and special circumstances, but nowhere is it ever complete and absolute. The new autonomy of Spanish Universities, as we saw above, is limited by various powers retained by the Central Government and by the new powers transferred to Autonomous Regions. In these respects the newly gained autonomy of Spanish universities is still substantially narrower than that enjoyed, for example, by American public and private universities and by publicly supported but independent British Universities (although in the latter case, autonomy has been significantly reduced over the past decade by the exertion of more power by successive Ministers of Education and Science). For all its limitations, however, the autonomy recently given to Spanish universities, including substantial freedom to manager their own finances and internal affairs, is far greater than they have had for well over a century. A fairer and more realistic comparison would be, not with America and Britain with their very different historical background, but with the current autonomy of Universities in such continental European countries as France and Germany.

As a first step under the Reform, the Spanish Universities were asked to formulate their own internal statutes including the various mechanisms and processes for taking initiatives and making decisions. They have all now done this, and with considerable variations. Some, for example, opted for a more «collegial» process of decision-making while others chose a more «presidential» mode.

In principle, universities now have the flexibility, within certain limits, to deploy their available funds as they wish to fit their own needs and priorities. They are also free to redeploy faculty members as the need arises, and to select their own new teachers (using the process prescribed by the Ministry). Although they are obliged to respect general curriculum guidelines laid down by the Council of Universities for programs leading to national degrees, they are now free to create other programs leading to their own degrees, and to arrange specilized courses for people outside their regular student body (for example, in cooperation with business firms, government agencies, and other organizations).

Considering the straight-jacket of externally imposed decrees, rules,

and regulations within which these Universities has been obliged to operate for more than a century, and considering also the kind of unhealthy attitudes, mentality and sense of dependency that such traditional restrictions breed, it is likely to take considerable time for university administrators and faculty members to get fully accustomed to these new freedoms.

The point that merits special emphasis, however, is that the successful use of these new freedoms will ultimately depend on the creation of constructive attitudes throughout the university community, and on the willingness of administrators and faculty members alike to accept the hard work and expanded responsibilities required to translate legally sanctioned autonomy into a living reality. In this respect we find it encouraging that some significant changes at the university level are already discernible, though more so in some institutions than in others.

### **The Council of Universities**

The new Council of Universities has a vital strategic role to play in the context of the new pattern of university governance. It has been given responsibility for planning, monitoring and coordinating the overall university system; for developing curriculum and other guidelines; and for advising and providing technical assistance to Universities, autonomous community authorities, and the Ministry of Education and Science. Its work will be crucial to maintaining a balance among the various autonomous units of the system (such as avoiding wasteful duplication of expensive capacity and seeing that important gaps are filled). It will also be crucial to avoiding excessive geographic parochialism by insuring that autonomous universities serve national needs and purposes as well as local ones.

The membership and organizational structure of the Council is unique. Its link with the Ministry of Education and Science is secured through the Minister as Chairman of the Council, and the Secretary of State for Universities and Research as one of the Vice-Chairmen. The Secretary General of the Council, heads the staff, develops the agenda for meetings and the Council's works program and priorities, and is general manager of the Council's affairs.

The Council is composed of all the rectors of the 31 public Universities, the responsible educational officials of the Autonomous Community



governments, five members each elected from the Cortes and the Senate, and five appointed by the Government. The rectors of the four Catholic Universities are invited to attend meetings when the agenda affects their interests. The main work of the Council is conducted through two committees (and their sub-committees), one for administrative planning and the other for educational planning. Regional educational authorities dominate the first, and rectors the second.

Without this new Council the functions listed above would necessarily remain with the Ministry of Education and Science, as in former times, thus perpetuating the traditional antagonisms and mistrust between the Universities and the ministry. In this respect the new Council of Universities, by virtue of its mixed composition (including both political and academic representatives) is in a much more favorable position than the former Council of Rectors. The old Council, made up exclusively of academics, had only advisory functions. Hence relations between political and academics authorities were based on a strategy of confrontation; the Council of Rectors was the «enemy» of the Ministry, and viceversa. It was a very unequal relationship, however, because the Ministry had power while the Rectors only had a voice.

The new Council of Universities is the one institution that regularly brings together all the major parties, both academic and political, involved in the revised system of university governance.\* It thus provides an open forum for thrashing out major issues and problems of common concern, thus replacing the old strategy of confrontation with a new strategy of dialogue and concensus-building. In effect, it has the potential—and indeed seems to have already made a strong start on exercising it— of being an institutional mechanism for channeling and mediating the time-honored conflict between Universities (always demanding more money) and political authorities (always demanding better management).

Precisely because there are political authorities within the Council

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\* It is interesting to note that in the Federal Republic of Germany control over education, including universities, is decentralized to the various Lande (States), each with its own Minister of Culture. In this respect the decentralization of authority to the autonomous communities in Spain is rather similar. However, in Germany there is no one national coordinating organization comparable to the Council of Universities. Instead, the regional political authorities belong to one group (the Conference of Ministers of Culture) and the university leaders belong to another (the West German Conference of Rectors). The comparative advantages and disadvantages of these two systems will be worth watching.

(unlike the old Council of Rectors), it was deemed practical to give it substantial powers, not simply an advisory voice but the authority to decide on a variety of general and particular matters. And significantly, university rectors constitute a majority of the Council's membership.

Under its present leadership the young Council has moved rapidly into action on a variety of important fronts and is building a constructive atmosphere of collaboration and mutual trust. It is too early, of course, to judge how well the Council will succeed in the longer run in handling its heavy and important duties and in maintaining effective working relationships with the universities and autonomous communities on the one hand and the Ministry and national politicians on the other. To build the Council's stature it will be essential for the Government to make clear the pivotal importance it attaches to the Council's work and its prerogatives. It will be equally essential for the universities and Autonomous Communities to regard the Council as their friend in court; as an effective forum for expressing their ideas and concerns and evolving practical solutions to their common problems; as a major source of useful information, insights, and technical assistance; and above all as an effective guarantor of their newly gained autonomy. It will also be essential, of course, for the Council to avoid the familiar trap of becoming in the long run just another bureaucracy.

## **Social Councils**

Each university now has its own Social Council composed of 15 to 20 members, of which only two-fifths are members of the University, the rest being drawn from different elements of the community. The chairman is appointed by regional Governor. These new Councils are intended to act as a link between the university and its surrounding society, to suggest ways by which the university might better serve the needs of the society, to encourage local support and funding for the university, and to monitor and encourage its efficient management. These Social Councils, also have certain powers, such as approving the proposed annual budget and any proposed additions to the faculty.

There is too little experience thus far to predict the eventual effectiveness of this unique university component. In one sample university it is still being happily ignored. In another, a top administrator wisely observed that, «This is a new experience and we both must learn how to work with each other». But at least in one case, a vigorous and sensitive Social Council Chairman is already exercising a constructive influence

on the university's financial management and on developing a cooperative program between the university and business firms in the area for providing specialized short courses for employees.

There is an interesting parallel between the functions of these Social Councils and the long-existing Boards of Trustees of American colleges and universities. Two important lessons of the American experience may have relevance for Spain. The first lesson is that in order to function effectively there must be mutual respect and trust between the trustees and the president and faculty. The president must be willing to discuss his problems candidly and where appropriate to seek the confidential advice of the trustees. The trustees, for their part, must be equally candid and must always back the president firmly except when they are convinced he is on the wrong track. Political or ideological conflicts within the Board or between the Board and the president can sour the atmosphere and destroy mutual trust.

The second important lesson is that the trustees must carefully confine themselves to their own prerogatives and not invade those of the president or the faculty. In other words, they should not try to take over the president's job or dictate academic policies to the faculty. They should, however, be concerned with strengthening the finances, management, efficiency, and public standing of the institution.

We believe that the Social Councils are potentially very useful instrumentalities for promoting closer relations and mutual support between the universities and their respective communities, and for improving the performance of universities on the financial and management side. We also believe that in the long run their utility will depend on the careful nurturing of mutual understanding and trust between the Social Councils and the rectors, on the creative leadership of the chairmen and the rectors, and on the extent to which the Universities decide to make use of the Councils to promote their own interests in the region and to attract support from the regional government and the private sector. Undoubtedly the experience will differ considerably from one university to another, but it would be useful to exchange experiences and to be able in the reasonably near future to point to a few successful models.

One precautionary note should perhaps be added. While it is obviously important for Social Councils to help forge useful linkages with the local society and its particular educational needs, they must also bear in mind the broader national role of the university and avoid



parochializing it. Indeed, one of their important contributions can be to counter the strong forces of corporateness and inbreeding that tend to exist in many Universities and that inhibit the kind of inter-university cooperation and competition so essential to building excellence.



V

STRENGTHENING UNIVERSITY  
MANAGEMENT



## V. STRENGTHENING UNIVERSITY MANAGEMENT

We shift our attention now from the broad subject of governance to the more specific matter of institutional management, which is closely linked to governance.

The ICED observers are fully agreed that strengthening university management is the most crucial single requirement of the success of the University Reform. This does not mean, of course, that management *per se* is more important than students, faculty, the curriculum, research, or the quality of education. It clearly is not. Rather, its importance lies in the fact that it is an essential means for serving these other ends.

Under a provision of the General Education Law of 1970, a number of selected people were sent abroad for special training as key university managers. Unfortunately this effort was not sustained and most of these trained people have since left the university community for other work. But a few still remain and they could play important roles in training a new crop of university managers.

Our candid impression is that the present management arrangements within Spanish universities are far too inadequate to cope effectively with the functions and responsibilities that have been thrust upon them by the combination of autonomy and their increased size. This is hardly surprising because, until very recently, universities have had little leeway to manage their own affairs.

### **Lack of essential facts**

As an example of this inadequacy, at each university the team members visited we asked if information was available on the comparative cost per student in different programs and levels of the institution. We asked this question because, in our experience, such cost data are absolutely essential to knowing where and how available resources are

being used, for gauging future financial requirements, for identifying potential economies, and for short and medium term institutional planning. At no university, however, were such cost data available. In a few instances we were given rough estimates of the overall average cost per student, arrived at by dividing the total annual budget by the total enrolment. This figure, however, is not very helpful because it conceals much more than it reveals. It also can be very misleading when used to compare the relative cost of different universities, due to their different patterns of enrolment.

To take another example, in one university (which may or may not be typical), the Social Council discovered that no detailed annual balance sheet of income and expenditures existed for any recent years. To remedy this surprising gap the Chairman of the Council arranged to lend a professional accountant to the University, who at the time of our visit had so far succeeded in piecing together the picture for only the first of the past three years (which suggests that the system of account records, if indeed any existed, was not designed to serve management needs). It was also discovered that the University had been depositing its temporary idle cash balances in a local bank at no interest. This unbusinesslike arrangement was quickly corrected and the university now has a new source of much needed income.

### **The Rector as top manager**

In more than one case we found able and energetic rectors and their immediate assistants overwhelmed by a steady flow of new management problems that they were ill-equipped to handle in terms of their training and experience, the availability of essential information, and an adequate professional management support staff. To compound the problem, one frustrated rector, who seemed to possess considerable management ability, complained that the decision-making process in his university had become so complex, and his own decision-making authority so restricted, that it required inordinate time to get even a small decision made, and just as long after that to get it implemented.

Under the new autonomy the rector of any sizeable university is inescapably the top manager of a big and complex enterprises, sometimes the largest enterprise in town in terms of its number of employees and customers, the size of its budget, the diversity of its operations, and the magnitude of its facilities and equipment. To handle these and other res-



possibilities the rector must ideally have a wider range of skills and talents than the chief executive officer of a sizeable private business. He must not only be a good manager; he must have sufficiently high academic standing to command the respect of his colleagues; he must understand the peculiar nature of universities as organizations; he must be competent at public relations and have a keen understanding of politics; and not least of all, he must be a creative, courageous, and persuasive innovative leader. Such paragons, of course, do not grow on bushes. But they can grow on-the-job if given adequate support, especially by a competent professional management staff and occasional short management seminars.

If individual universities lack adequate information about their own internal activities, then it follows that those at the national level who carry responsibilities for monitoring, planning and coordinating the overall national university system, will also lack adequate information to do their job well. The same applies to educational authorities of Autonomous Communities.

The above considerations prompt us to make the following suggestions:

*First*, every Rector should have a competent professional management team, typically recruited from among well trained and experienced people outside the university who are paid competitive salaries and are not civil servants. The first task of such a team should be to establish an efficient internal information system that would provide a regular flow of selected types of information essential to management, planning and evaluation purposes. A parallel task should be to create an operations research and analysis unit capable of making effective use of such information, and capable also of undertaking special studies to illuminate important questions not covered by the regular information flow.

Our *second* suggestion is to establish an Institute for University Planning and Management, possibly under the aegis of the Council of Universities, to provide: (a) short term intensive orientation seminars for new rectors and their key assistants, and periodic follow-up seminars for more seasoned rectors and staff, and (b) more extensive training for current and future professional university management personnel. We visualize this as a small institute with a small regular staff, possibly attached to some relevant existing organization with adequate facilities and services to handle occasional seminars. These would be conducted mainly by carefully selected visiting experts experienced in institutional

management, planning and evaluation. Such seminars would not be based on lectures; rather they would involve lively exchanges among the participants concerning their real life management problems and how best to deal with them.

Our *third* suggestion concerns the selection and term of office of rectors. While we appreciate that there may be certain advantages in each university selecting its rector from its own faculty in accordance with the time-honored medieval tradition, the experience of other countries indicates that under today's greatly changed conditions, there may be greater advantages in selecting the top leaders of Universities from a wider field of candidates. Among these advantages are that it gives the university Search Committee a wider national field to choose from; the person chosen from the outside arrives with a fresh perspective and without entangling internal alliances or accumulated scars; and if well chosen, he or she is likely to bring fresh ideas and a strong sense of innovation. We also suggest that the rector's term not only be for at least four years, as at present in most universities, to allow ample time to learn the job and to put new initiatives into effect, but that his or her term should be renewable on the basis of good performance.

### **The problem of Size**

The management problems discussed above have been greatly compounded by the dramatic growth of Spanish higher education. As noted earlier total enrolments have increased more than five-fold over the past 25 years. To accommodate this rapidly expanding student body some new universities were founded, but the great bulk of the increase has been absorbed by existing institutions whose size expanded substantially. This has raised a critical question about institutional size. How large can a university get without seriously impairing its efficiency, quality, internal communication, conviviality, and human relations?

There is no precise scientific answer to this question but in the judgement of the ICED team, based on their experience in several Western countries, the optimum size for university is generally in the range of 10,000 to 20,000 students. Above this level the institution becomes increasingly unmanageable, impersonal and excessively bureaucratic. If much smaller than this optimum range a university cannot afford to provide an adequate variety of undergraduate and post-graduate educational offerings or give sufficient emphasis to research.

Where do Spain's public Universities currently stand in relation to this optimum size of 10,000 to 20,000 students? The answer is jolting. As shown in Table 3 (p. 29) only 6 out of 29 universities (excluding the Distance University and the Summer International University) fell within this optimum range of 1985/86. Eight others were below 10,000 (though three or four are likely to exceed this level soon). But the stunning fact is that 15 of the 29 are already above the 20,000 level, and still expanding.

The two giants, Madrid Complutense, with 107,600 students enrolled in 1985/86, and Barcelona Central, with 76,356 students, together account for nearly one quarter of total university enrolments. And both expanded their enrolments substantially between 1981/82 and 1985/86—Madrid Complutense by nearly one-third and Barcelona Central by nearly one-quarter.

Five other Universities had crossed the 40,000 threshold by 1985/86 (Granada, Madrid Polytechnica, País Vasco, Santiago, and Valencia), and a sixth (Sevilla) was about to exceed this level. Five of the above six had increased their enrolments by 20 to 30 percent between 1981/82 and 1985/86.

This academic gigantism confronts Spanish higher education with a major policy problem for the future. France faced a similar problem in the late 1960s with respect to the gigantic University of Paris, whose largest lecture halls could no longer accommodate all the students enrolled in the largest courses. The solution adopted was to break up the University of Paris into several separate institutions, each with its own president, facilities and faculty and its own distinctive program. The University of California solved the problem years ago by creating a «multi-university» with separate campuses in several different communities throughout the state, each managed by its own chancellor and each distinguished by its own special brand of excellence. More recently an elaborate plan was devised to split up the gigantic University of Rome, but it has not yet been implemented.

Big does not mean better in higher education. A large university can offer diversity and may also be able to provide depth and excellence in certain fields because of its large resources. But continued growth leads to diminishing returns, and it would be surprising if some of the largest Spanish universities—especially Madrid Complutense and Barcelona Central—have not already passed this point.

The most realistic solution to this size problem, in the view of the ICED team, is to halt the further growth of those universities that now exceed 40,000 students, and to develop plans to divide the two giant ones into several universities. But the question is, on what principle? For example, to divide them by such fields as the social sciences, the natural sciences and so forth would have the disadvantage of isolating disciplines from each other, at a time when greater emphasis is needed in Spanish higher education on interdisciplinary work. Our suggestion, therefore, is to appoint a special temporary commission to examine and assess various options.

# VI

IS EQUALITY COMPATIBLE WITH QUALITY?





## VI IS EQUALITY COMPATIBLE WITH QUALITY?

The two over-riding goals of the Spanish University Reform are to improve quality and to increase equality of educational opportunity. These are obviously laudable, indeed essential goals for any forward-looking democratic society in the late 20th Century. The question arises, however, whether these two goals are mutually compatible.

### Lessons of experience

The experience of many countries —including Spain— during the 1960s and 1970s leaves this matter in some doubt. During that period, under the banner of «fairness» and in response to powerful political pressures generated by an explosive increase in popular demand, virtually all countries, despite pious lipservice to quality, succumbed to a basic strategy of linear expansion of their inherited educational system, substantially in its old image, aimed at increasing enrolments at all levels as rapidly as possible. This strategy made a simplistic «numbers game» of educational planning and often purchased quantity at the expense of quality, but it nevertheless achieved impressive results in terms of its own narrow objective.

It should be noted that Spain differed from the general norm in this respect. Though the General Education Law of 1970 anticipated a substantial increase in university enrolments, it was unique for its time in giving priority to a variety of actions designed to improve the quality and relevance of higher education, such as curriculum reform, educational research, upgrading teacher training and expanding inservice training. A number of such actions were indeed taken, but in the end they were deluged by the inexorable tidal wave of students.

Meanwhile, two other important changes affecting quality were taking place. First, the rapidly growing body of student was becoming increasingly diversified in terms of their socioeconomic and cultural background, academic motivation, interests, ability and career aspirations. Statistically,

the *average* performance of this new mix bound to be somewhat lower than in the old rigorously selective elitist system, giving the superficial impression of a general decline of quality; but actually many of the ablest and most motivated students in the new mix may well have outperformed their elitist predecessors.

Second, in most systems the old educational structures, logistics, curriculum content, and teaching methods were not adequately adapted to the more diversified student body, or to keep pace with the explosion of new knowledge and revolutionary technological and economic changes going on all around them. As a result, educational programs became increasingly obsolete and ill-fitting in relation to the changing realistic learning needs of students and the changing human resource needs of the society. With 20/20 hindsight it is now clear that during the 1960s and 1970s virtually all countries—in varying degrees—were busily expanding the wrong educational system to fit the new set of circumstances. Herein lies one of the main causes of the resent world educational crisis.

The picture is not all black, however. In the first place, the quality problem, though certainly serious in many cases, is not as totally bleak as it is sometimes painted. There are numerous examples—some right in Spain—where quality has improved significantly.

In the second place, the great expansion certainly provided millions of young people in many countries with a useful education—albeit an imperfect one—that they would not otherwise have had. In so doing it also made a significant dent on the inequality problem, though generally not as big a dent as had been hoped. Moreover, the expansion greatly expanded and enriched the national pool of educated manpower and womanpower that could be drawn upon for social, economic and cultural advancement.

In the third place, there have been growing exceptions, especially in the latter 1970s and early 1980s, to our earlier observation about the static nature of the curriculum and teaching methods. One can find in various countries (Spain is a good case in point) an increasing number of curriculum improvements and other educational innovations designed to update and improve the relevance and quality of education. The main point, however, is that for the most part these were fragmented «mini-innovations», not «maxi-innovations» designed to alter the basic frame-

work, style, and orientation of the educational system in order to adapt it to a much more diversified clientele and to the ongoing proliferation of new types of learning needs.

One basic lesson from this historical experience that is of prime importance to Spanish higher education is the need now to shift the earlier emphasis on expanding enrolments to a strong new emphasis on internal changes and innovations calculated to improve the quality and relevance of the education being provided.

The conclusion we draw with respect to the question raised at the beginning of this section is that quality and equality are *not* inherently incompatible goals, but to make them compatible requires a much more careful balance of emphasis between the two than was the case previously. This means that educational planning and the assessment of educational progress can no longer be simply a «numbers game».

The General Education Law of 1970 sought such a balance but, as noted above, was only minimally successful. The University Reform Law of 1983 has opened the way for a more successful try. But no such law, of course, is self-implementing. The prime responsibility for taking advantage of this opportunity necessarily rests where the real action is in the Universities. The tasks of the central and regional governments are to guide and support the efforts of the Universities, to provide incentives and prod them into action if necessary, and to remove traditional obstacles and bureaucratic constraints that may inhibit their initiatives. But in the end the reform ball is solidly in the Universities' court.

One further point merits emphasis, namely, that to improve the performance of the Universities will also require important changes in the secondary schools that prepare their students, as well as general improvements in the articulation between secondary and higher education, a matter we will come to shortly.

### **Determinants of quality**

Quality is an elusive concept, difficult to define in meaningful terms and far more difficult to measure and evaluate. People often speak glibly of «standards» as if they were metaphysical absolutes, carved in stone and applicable to all times and places. In reality, of course, standards are relative indicators that differ from place to place and from one



period to another in the same place, according to the circumstances and to the particular learners involved. In an era of rapid change, such as the present, standards must be constantly adjusted to changing conditions. To regard yesterday's standards as absolutes can become an excuse for clinging to outmoded curricula, educational practices and folklore that may have served a useful purpose in the past but are inappropriate for a changing future.

It has been standard practice for educational evaluators to judge the quality of a school or university by the amount and quality of its inputs relative to the number of students, rather than by its outputs (which admittedly are far more difficult to identify and assess). Thus, for example, it is customary to gauge quality by such statistics as expenditure per student, class size, the student/teacher ratio, the qualifications profile of the teaching staff, classroom and laboratory space per student, and the number of books in the library. These are certainly important factors, but to stop with measuring the inputs begs the vital question of how they are actually being used with what efficiency and with what educational effect.

The acid test of a university's quality is what its students —both graduates and non-graduates— carry away from the institution, over and beyond the knowledge, intellectual skills, analytical abilities, values, attitudes and motivations they brought to the university initially. In other words, what «educational value added» has resulted from their university experience? The ultimate test, of course, is what they later do with all this learning, how relevant and useful it proves to be to their future life, to their family and community, and to the larger society.

These end results, by their very nature, cannot be measured with caliper precision. But the advances made in recent decades in the art of educational evaluation, including follow-up surveys of former students and their own retrospective critical assessments of their university education, can provide a useful basis for making reasonable judgements.

Clearly there is no single magic key to improving the quality of any university is the joint product of a combination of interacting factors, including especially the characteristics and preparation of the students and the teachers, the nature of the curriculum and the teaching methods, the linkage between research and teaching, the adequacy of the physical facilities and equipment, and not least of all the institutional climate of human relations, values, attitudes and motivations in which the

teaching/learning process takes places. Later we will comment more specifically on some of these important determinants of educational quality.





# VII

## EQUALITY OF EDUCATIONAL OPPORTUNITY



## VII. EQUALITY OF EDUCATIONAL OPPORTUNITY

Educational systems everywhere have a built-in social bias in favor of children of educated parents, which tends to correlate also (though not always) with middle and upper income families. Because schools place great weight on verbal ability, the child who brings from home a good middle class vocabulary, a well developed capacity for verbal expression and understanding, and a strong motivation for learning is off to a head start over his less culturally advantaged peers, and the gap between them tends to widen with each successive grade. Educational systems also tend to reflect and perpetuate the deep-rooted socioeconomic, sex and other disparities and prejudices in their society, even if unwittingly or unwillingly, for they are creatures of their environment. The geographic distribution of schools and their uneven quality often adds a further bias, to the disadvantage of children living in poor and sparsely settled rural areas, or in urban slum neighborhoods.

The testimony presented to the ICED team indicates that, historically, the socioeconomic disparities and the resulting educational inequalities in Spain have been broader and deeper than in most other Western countries —which is saying a great deal. It is in this context that the heavy new emphasis on equality of educational opportunity in the General Education Law of 1970, in the Constitution of 1978, and in the University Reform Law of 1983, takes on great importance. Hence a question of especial interest to our mission is: What progress has Spain made in recent years in reducing educational inequalities, particularly at the university level, and what further steps might be taken, consistent with preserving and improving quality, to accelerate this process in the years ahead?

To consider this question first requires a clarification of what is meant by equality of educational opportunity. An important distinction is made by Spanish education authorities between the period of free and compulsory education (nominally from age 6 to 14, and now in process of being raised to age 16), and the post-compulsory years of education. During the compulsory years the Government has the solemn obligation

to insure to the best of its ability that *all* children, irrespective of their socioeconomic, ethnic, or religious origins or their geographic location receive a free and equivalent basic general education, both in their own interest and in the interest of society at large. This has been the rationale not only for a vast expansion of free public schools but also for heavy public subsidies to private schools (up to age 14), and for permitting tuition charges for both sets of schools beyond the compulsory age of attendance.

To quote the informative C.I.D.E. 1985 report on *The Spanish Education System* (p. 627), «Real equality of opportunity does not require a free and undifferentiated offer of education at all levels, the costs to be borne by the public purse...

«At post-compulsory levels, the principle of equality demands that no one be discriminated against nor hindered in his educational advancement through lack of economic means...

«At post-compulsory levels, the right to education consists of being able to take full advantage of the educational system and its facilities, *according to personal capacity and intellectual effort* (italics added). At these levels equality of opportunity does not consist of a generalized offer of free places, but of the individualized support of a grants system (i.e. scholarships and reduced tuition fees to the needy).

The ICED mission strongly endorses the above distinction and principles for two reasons. First, no democratic system of higher education can hope to preserve its integrity and quality if it is obliged to accept all comers irrespective of their ability and demonstrated intellectual qualifications and motivation. A diversified higher education system may (desirably) establish different entry requirements for different types of programs, as is currently the case in Spain; but equality does not mandate that there be no academic requirements and selectivity whatsoever. The results of such a policy would be a satire on education.

Our second reason is that a totally free university for all students, at taxpayers' expense, seriously violates the basic principle of equality. It does so by requiring lower income taxpayers, whose children are far less likely to go to the university, or even to complete secondary school, to subsidize the free higher education of the children of well educated and more affluent parents who can well afford the cost, and who as university graduates are likely to secure more prestigious and better paid positions in society than those with less education.

We venture to suggest that, viewed in these terms, the present tuition charges in Spanish public Universities, which are estimated to average only 20 percent of the full cost per student seeking a national degree, are clearly inequitable. In our view, these tuition charges should be progressively stepped up to much larger share of the full cost *for those who can afford it*. At the same time, however, it is essential that qualified students with lesser means be given ample financial assistance to surmount economic obstacles that would otherwise prevent them from pursuing a university education.

The present Socialist Government took early action to reverse the downward trend in scholarship funds and since 1982 there has been a substantial increase in both the number and average size of scholarships. Whether this is sufficient, however, is questionable, particularly in view of evidence that suggest that children of low income families are still greatly underrepresented in university enrolments. In a recent year 15 percent of university students received sholarship grants, and the number is expected to grow further as financial conditions permit. The basic policy, as we understand it, is not only to relieve needy students of tuition charges but in addition to provide compensatory payments, in lieu of earnings foregone while studying, in cases where the family is heavily dependent on the student for support. This strikes us as a commendable policy, though we recognize that a policy that ties grants to family income and needs can present complicated administrative problems.

A strategy that combines higher tuition fees with more adequate scholarship funds makes good sense not only in terms of equity but in terms of the overall financing of higher education. The increased revenues from higher tuition fees can be used to finance increased scholarship grants as well as well targeted measures to improve quality. The need for an ample student grants program at the post-compulsory secondary school grades is equally important, for it is here that the real sorting out occurs between those who will and will not go on to the university.

### **The case for student loans**

In the past two or three decades student loans, repayable from future income, have become an important new component of the student assistance package in variety of countries, such as the United States and most Latin American nations. At present the issue of student loans, as opposed to outright student grants (or in combination with



grants), is a matter of high debate in such countries as the United Kingdom, the Netherlands, and the Federal Republic of Germany.

The argument in favor of student loans has two elements: the first concerns social justice and equity; the second concerns the degree to which cost considerations should affect the academic choices and behavior of students and in turn generate changes within universities.

The first element argues that those receiving a university education will, by that fact, be likely to enjoy higher income later. It is therefore reasonable that they should repay to society part of society's investment in their education. It is essentially an argument of income redistribution which, when organized in a national loan system, puts the duty on those who have benefitted from advantage in the past to support through loan repayments the extension of similar advantage to those who come after them.

The second argument is that, at least to some extent, student loans are conducive to creating a more self-responsible attitude amongst the borrowers toward both their careers and their studies. It may also be argued that loans, at least in theory, may be a more effective instrument for reducing repetition rates and increasing completion rates than simply by hortatory proclamations or by dint of legislation. In addition there is the argument that until the individual is fully aware of the cost incurred in study, he or she is less likely to seek alternative strategies or study courses that would maximize the rate of return on money invested.

In terms of the relationship between higher education and society and indeed in the matter of accountability itself, it can be argued that by making students responsible, in part, for the cost of their higher studies, a powerful force for generating change inside the university would be created. In short, greater awareness of likely options in the employment market, hitherto largely confined to certain elite sectors and professions—such as medicine and engineering— may by such a device be extended to other areas of the university. It might also—although we would wish to exercise the caution appropriate to any such statement of a speculative nature— serve to instill a keener awareness and appreciation of career opportunities outside the public sector, thus achieving a breakthrough in that mentality which, both historically and structurally, has been fostered in students and parents by the particular nature of Spanish Universities and national degrees.

We close this discussion of equal opportunity with two qualifying observations concerning tuition increases and student loans.

First, we are well aware of the political sensitivity, in all countries, of raising tuition fees, especially in public institutions. Experience has shown that few things can bring students into the streets more quickly and vociferously than a ministry press release announcing a tuition increase. Yet to continue the present across-the-board 80 percent subsidy to all students and their families, regardless of their ability to pay a larger share, is bound to have future adverse impacts on educational quality. The best we can suggest is that a major effort be undertaken to acquaint students and their families with the hard facts about university costs and the realistic choices that must be made between maintaining excessive student subsidies and providing students with a good quality and relevant education. Economic students, for example, as part of their education, might be asked as members of a team to examine the full facts concerning their university's costs and revenues and draw their own policy conclusions not from a selfish personal point of view but from the point of view of a responsible policy-maker concerned with improving both educational quality and equality.

Second, we recognize that a student loan system might not be feasible in Spain under present conditions, first because two-thirds of university students choose long-cycle courses and many take 6 to 7 years to complete them; second, because many students then require two years to find employment; and third, because of the current high inflation and interest rates. This combination would put an exceedingly heavy burden on both the students and the loan fund. Our suggestion, therefore, is simply that the student loan idea be borne in mind for future consideration as conditions improve.



# VIII

## ARTICULATION WITH SECONDARY SCHOOLS



## VIII. ARTICULATION WITH SECONDARY SCHOOLS

In any modern society the links between secondary and higher education are crucial, for several reasons. It is at this point that the mission of the educational system turns from that of training the great majority of young people to that of providing advanced training to a smaller proportion of the age group, many of whom will later occupy key positions in the life of the nation. It is also at this point that the expectations and ambitions of both parents and children are moulded, by their perceptions (whether realistic or fanciful) of the opportunities that access to higher education represents.

The relationship between the secondary schools and the universities can be viewed from a number of perspectives. It can be viewed as a technical exercise in how the curriculum, modes of teaching and the selective mechanisms of the schools determine the quality, orientation, and expectations of students entering higher education, on conversely as an exercise in how the requirements and expectations of the Universities influence the programs and behavior of the schools. It can also be viewed, on a broader cultural level, as the way in which social attitudes and social demand for «higher learning» are transmitted upward to the Universities.

In all events, this relationship is a two-way street in which both sets of institutions profoundly influence one another. If the articulation is working smoothly the students and both sets of institutions benefit; but if it is malfunctioning, everyone is penalized, including society.

### **The democratic challenge to secondary schools**

Before going further we should caution that, because our official task focussed on higher education, our impressions about the current state of secondary education in Spain are less than fully informed. We derived these impressions from documentation and from discussions with



government officials and university people, not from direct visits to the schools.

We can truthfully say, however, that we are well aware of and profoundly sympathetic toward the excruciatingly difficult challenges confronting the schools in this new era of mass secondary education. In an earlier era of elitist education their prime function was to select and prepare a small minority of «winners» who would go on to the university, while «weeding out» a much larger number of «losers». Today's secondary schools have been given a far more difficult set of tasks. They are still expected, as previously, to select and groom a minority of young people (though a much larger minority than formerly) for entry into higher education. But no less important, they must now also provide a sound terminal education for the majority who will leave the system at the end of compulsory education or soon thereafter.

And this is only part of their problem, for today's secondary schools, like the Universities, must cope not only with a far larger number of students but with a much more diversified student body, requiring differentiated treatment. Moreover, in today's democratic societies the schools are expected to produce only «winners», no «losers», in the sense of helping every young person to develop to the full his or her particular potential, whatever that potential may be.

If, then, the students entering universities today are not always up to what the faculty would like them to be, perhaps this says something about the failure of the Universities to provide sufficient help to the schools in their efforts to do a better job of handling this exceedingly difficult combination of tasks.

### **Shortcomings of the present structure**

A major objective of Spanish secondary education reform since 1970 has been to expand and refine «the screening process» for selecting and rank-ordering applicants for places in higher education, while at the same time providing a sound «preparation for life» for those not continuing to higher education. Such refinement, however, has been built on what may be termed a «heavily segmented» and relatively rigid system of secondary education, which divides students into two tracks at about age 15. Those successfully completing the eight years of Basic Education (EGB) may opt for either a 3-year «academic track» (the Bachillerato, or

BUP), or two years of initial vocational training (FP). Actually about 70 percent choose the «academic track».

That so high a proportion of students choose the academic track reflects both its prestige and the democratic nature of the school system. The remaining student who are less successful in EGB and receive only a «certification of attendance» are, in effect, forced into vocational education.

In principle, there can be lateral transfers between these two tracks under certain conditions, but in practice they have become essentially self-contained and sealed off from one another. A further element of inflexibility is that although the Bachillerato track has social prestige, it appears to have little terminal value, save as a means of access to the university, whereas the vocational track, though perhaps having a certain market value, has little social prestige and is commonly regarded as a parking area for «academic misfits».

A number of objections can and have been made against this arrangement. One is that the curriculum of the Bachillerato has become in practice excessively theoretical, it contains much stale knowledge, and it fails to prepare terminal students adequately for the difficult transition from the world of schooling to the world of work, since the prevocational elements of BUP foreseen in the 1970 Law were never actually introduced. A second objection is that the pattern of future changes in the economy and employment market (which are all but impossible to forecast accurately) is unlikely to endorse such a sharp distinction between academic and vocational education.

These considerations have prompted our group to make the following proposal, which we recognize would take some years to implement properly. The present two-track secondary school structure, immediately following EGB, should be phased out and replaced by a newly constituted common program of integrated general education for all young people through age 16. This program should be designed to develop creative and analytical minds, not simply good memories; to broaden and deepen the cultural and artistic side of young people as well as their introductory understanding of the methods of the social and natural sciences and their mathematical ability. It should also include pre-vocational components as an integral part of a modernized general education, as originally envisaged by the General Education Law of 1970. Such a program should serve to provide an effective terminal education on which future technical skills

and general learning could be grafted, whether within or outside the formal education system, as well as a sound preparation for university studies.

This program, as we see it, would constitute the lower two years of secondary education. We are less clear about the third and possible fourth year of secondary education though we suspect that these might well be more differentiated according to the particular interests, abilities and aspirations of the various students.

The one thing we are very clear about is that for at least two years before students either leave formal education or else proceed to higher education, they should be provided with the best possible information and professional guidance to assist them in assessing their own particular interests and capabilities and in understanding the academic and career choices available to them. Similar counselling and guidance should be extended for all entering students into the first year of the university, and should continue thereafter to be available at the request of individual students.

We have gained the definite impression that the COU, the year of intensive orientation for university life, has fallen far short of its original intention. It was meant to be located within the university as a kind of propaedeutic year to help students make the often difficult transition from secondary school to the very different environment of the university, and to provide them with effective guidance and useful information to help them make appropriate academic and career choices. For various reasons, however, the COU has become simply an additional year of secondary schooling, largely devoid of the kind of counselling and orientation intended. We suggest that in revamping the secondary system, serious consideration be given to transferring the originally intended functions of the COU to the Universities or, alternatively, keeping it in the secondary schools but with a mixture of well selected secondary school and university teachers and advisers.

# IX

## FUTURE FACULTY ISSUES





## IX. FUTURE FACULTY ISSUES

The enormous growth enrolments in Spanish Universities since 1970 has necessitated a parallel expansion of teaching staff. The available statistics present an impressive picture of faculty growth, illustrated by a 60 percent overall increase between 1975 and 1983 (from about 25,000 to 40,000 teachers). Similar overall statistics on trends in the student/teacher ratio, compared to UNESCO or OECD data on other countries, give the impression that a strenuous effort has been made to preserve quality.

Given the severe physical shortage of well-trained and experienced teachers, it should perhaps be seen as at least a minor miracle, or in any event a sizeable achievement, to have been able to fill so many teaching posts in such a hurry. One must remember, however, that such composite statistics, taken by themselves, often convey a misleading impression of the reality. No one doubts, for example, that as encouraging as the faculty growth figures are, the average quality of the new recruits is below what would have been possible had the expansion occurred more slowly, or if the Universities had succeeded in expanding the size and quality of their post-graduate doctoral programs more quickly. The current output of about 2000 Ph.D.'s a year is apparently enough—in quantity if not in quality—to support the present rate of expansion, though there are important deficit areas (such as Information Technology).

The composite figures on the pupil/teacher ratio also undoubtedly conceal wide variations between institutions and between different faculties and courses within the same institutions. Such variations are entirely normal in all countries, but a closer examination of them in the Spanish case might reveal some indefensible abnormalities that warrant correction. In any event, one needs to be exceedingly cautious about inter-country comparisons based on aggregate national statistics shown in the UNESCO Statistical Yearbook, lest one be guilty of comparing apples and bananas.

Understandably, and inevitably, this rapid expansion resulted in a

very lopsided composition of the overall university teaching staff, just as it did earlier in most other OECD countries (though perhaps to a lesser degree than in Spain). It became lopsided in several respects: in age distribution (the overall staff grew younger); in qualifications (many new recruits lacked the requisite degrees); in official ranks and tenure (by 1980 less than one-quarter of the staff had tenure, the rest being on limited term contracts); in unbalanced teaching loads as between higher and lower ranking professors; and in the proportion of part-time contract teachers (about 50% as of 1980).

Not surprisingly, this growing lop-sidedness, particularly in the high proportion of untenured teachers and the low proportion of full professors, eventually yielded a bitter harvest of insecurity, low morale, and a deep sense of unfairness among the untenured teachers (many of whom had years of experience). Since assuming power in 1982 the Socialist Government has initiated major steps to alleviate the situation, in particular by drastically reducing the incredibly complex teacher classification structure to only four basic categories, and by adopting an accelerated system for assessing the qualifications and abilities of experienced but untenured teachers and promoting those deemed to be suitable. Inevitably these measures have stirred considerable controversy on the part of both tenured and untenured faculty. Nevertheless, the process has already raised the proportion of tenured teachers from 20 percent several years ago to 60 percent at present, but numerous candidates still wait in line hoping to be next.

We do not pretend to understand all of the intricacies and subtleties of these transitional actions regarding teacher status. Hence we refrain from passing judgement on them, except to observe that they appear to us to be pointed in the right general direction. Perhaps the thing to be watched for especially is the soundness and fairness with which the process of teacher ability assessment is applied in practice, and whether adequate time is being allowed for making these important decisions, which will have a strong binding effect on the cost and quality of the university system for many years to come.

It is not so much the immediate situation that concerns us, however, as the important problems that will arise 10 to 15 years from now. If these problems are clearly anticipated they can be acted upon in sufficient time to make a substantial difference. But if they are put off until the problems come to a boil, it will then be too late to cope with them adequately.

We have particularly in mind three interconnected issues that bear heavily on the future excellence of Spanish higher education: (1) the age and academic distribution of the faculty; (2) mobility and competition in the selection of faculty, and (3) faculty salary structures.

### **Age and academic distribution**

As noted earlier, the rapid increase in the number of teachers in the past decade has resulted in a somewhat younger faculty age profile. As an example, of the sizeable number of non-tenured teachers who successfully passed the «assessment of ability» in 1984 and obtained tenure, over 85 percent were between the ages of 25 and 45. (Data from Council of Universities). We can reasonably assume that most of them will still be in post by the year 2000, and many for considerably longer. By then, however, two things will have happened. First, the present younger professors will have aged considerably. Second, the impact of Spain's earlier «baby boom» will have run its course and university enrolments may well have stabilized or even be on the decline. This phenomenon, as noted earlier, has already occurred in most European and North American countries whose post-war baby boom collapsed some 10 years earlier than in Spain. Consequently, their university enrolments have now stagnated, their predominantly young faculty have grown older, and blocked recruitment and promotions are now the order of the day.

This is the handwriting-on-the-wall of the faculty problems Spain will face by the late 1990s. By then the present young faculty will have aged, recruitment of new teachers will have dropped to a trickle, and the prime concern will be the lack of a steady infusion of new young blood with fresh energy and ideas and an appetite for innovation.

To compound the problem, it is virtually certain that by 2000 and in the years beyond, the present pattern of distribution of teachers among different disciplines, professions, and specialties will be substantially out of line with the pattern then required because of major changes in knowledge, technologies, student choices, and the economy manpower requirements. But if by then 80 percent or so of the existing faculty are frozen in place by permanent tenure and tightly wedded to their original specialties, and if there is only minimal scope for new recruitment, then the Universities will be left with little room for maneuver for adapting their programs to these changed conditions.

The immediate question therefore is: What can be done to loosen up



the above rigidities in order to provide the Universities with more scope for adapting to changing conditions? We venture to suggest that the following two-pronged strategy offers, the only real hope, and we would emphasize that it needs to be put in motion soon if it is to be truly effective. Admittedly it will not be easy to implement, politically or administratively, but the alternative of doing nothing, of simply letting nature take its course, could be disastrous for university quality, efficiency, and productivity.

The first prong of this strategy would be to husband a sizeable proportion of non-tenured positions —perhaps on the order of 30 to 35 percent of the total— in order to maintain ample room for turnover and recruiting fresh blood, and for shifting the pattern of specialties as changing conditions dictate. We appreciate that this would mean lowering somewhat the previously announced target of providing tenure to 80 percent of all university teachers in the relatively near future (as against the clearly inadequate 20 percent that existed in the early 1980s). We also appreciate the short term benefits that this 80 percent goal could have in terms of boosting the morale and efforts of untenured teachers who have already worked far too long under conditions of hardship, insecurity and uncertainty. The problem is essentially one of striking a reasonable balance between the legitimate short term interests and welfare of the individuals immediately concerned, and the long term integrity, flexibility and quality of the Universities as permanent institutions dedicated to serving the interests of the whole society. It strikes us that a 30/70 ratio of untenured to tenured teachers would be an enormous gain over the situation several years ago and a reasonable compromise between serving both the short term interests and the vital longer term interests of the universities and society.

The second prong of this suggested strategy is rather more complicated, but equally important. Its aim would be to encourage and assist a significant number of existing faculty members, especially relatively younger ones who are occupying positions in prospective «surplus» fields of specialization, to transfer their energies and abilities to one or another prospective «deficit» field of their choice. This options should be especially appealing to energetic individuals with lively minds and intellectual breadth and curiosity, the kind who get claustrophobia when tightly enclosed within the artificial confines of some narrow disciplinary sub-area.

Obviously some appropriate inducements and practical logistical support would be essential to attracting able teachers to undertake such

a reconversion. A number of possibilities come to mind, such as sabbatical leaves for study and research in a chosen new field, preferably at an institution other than their own, or perhaps a reduced teaching load to allow time for reading and research in a new but related field. An especially interesting possibility might be the development of joint research and study programs of a cross-national nature with foreign Universities, perhaps with financial support in some cases from the Commission of the European Community. This could extend the international contacts of the home institution while at the same time providing the individual with the opportunity to gather at first hand up-to-date knowledge and techniques in his chosen new field.

The logistics of such a strategy of faculty reconversion and redeployment would obviously need to be carefully thought through and well planned, including the question of funding. Expenditures for this purpose, in our view, would constitute a high yielding investment in the future compared to simply continuing the pay of teachers for whose services the demand had significantly declined.

Apart from redeploying some teachers to new fields, it will be important to enable others to keep up with the moving frontiers of their particular field and to keep growing on the job. One attractive possibility, we suggest, would be for the Council of Universities to arrange a series of summer seminars each year at various campuses where teachers working in the same field in different Universities could gather together to explore frontier developments in their particular field. Another possibility would be to exchange faculty members between different Universities for a period of one or two years to get a change of scenery.

### **Mobility, competition and quality**

We observed earlier that no university, however large and well-endowed, can hope to achieve excellence in all fields; but even small Universities can aspire to excellence in one or a few fields.

Excellence in the universities, of any country is born out of wholesome competition among institutions, not only for the best students but for the best academic minds who can in turn attract the best students. Excellence also derives from a strong institutional determination to provide the essential physical facilities and other essentials to support the learning and teaching activities of such students and faculty, and to support their cooperative linkages with other centers of excellence.



In this respect we have been concerned by what we understand is a strong tendency for Spanish Universities to draw students mainly from their local catchment area and to select and promote faculty members largely from within their own institution. This tendency undoubtedly derives from the particular cultural background of Spanish academia, including a strong tendency toward faculty corporatism and a traditional preference of many students to live at home. Our concern is that this propensity for inbreeding might well be exacerbated by the new autonomy of Universities, which increases their freedom to select their own new faculty members. This inbreeding tendency contrasts sharply with the practice of leading Universities in other OECD countries, where the recruitment of distinguished faculty members, as well as rectors, vice-chancellors and presidents, customarily involves a nationwide and even international search for the best talent. It has become customary and accepted practice in the United States for such private Universities as Harvard, Yale, Princeton, Columbia and Chicago, and equally prestigious public Universities in such states as California, Minnesota, Wisconsin and Texas, to «pirate» distinguished scholars and researchers from each other, including Nobel Laureates. There is no doubt that this competitiveness and high mobility of scholars and students alike has served to stimulate excellence in all these institutions.

British Universities have a similar practice of reaching out competitively for talent. An opening for a professorship or a new vice-chancellor is always openly advertised for candidates, not only within the country but often throughout the Commonwealth. More often than not the post is filled by an «outsider» after extensive screening.

With all due respect, we submit that if Spanish Universities fail to exercise their new found autonomy by reaching beyond their own institutional borders in the quest for outstanding students and faculty members, and if instead by implicit common agreement they «limit the market» for talent by suppressing competition, then they will suffer severely from a self-imposed handicap in their quest for excellence.

Excellence in a nationwide and international sense need not inhibit the contribution of Spanish Universities to meeting important special needs of their own particular region. On the contrary, today's leading state supported Universities in the United States, with nationwide and international reputations, also led the way in providing important assistance to the social and economic development of their own respective states.

The new system of teacher selection under the Reform, by a five member commission, only two members of which (including the Chairman) can be from the particular university, with the other three chosen by lot by the Council of Universities, would appear on the surface to be an important step toward broadening the area of recruitment. We understand, however, that in actual practice the winning candidate tends to be from within the same university. Perhaps the outcome might be changed somewhat if a clearer and stronger set of criteria and guidelines were to be given to these selection commissions, including the instruction that if none of the candidates meets the criteria the position should be left open for the time being. It would also help to attract able candidates from other Universities if the transfer were to be accompanied by a significant salary increase and other incentives.

### **Faculty salaries**

The members of the ICED mission agreed unanimously that a uniform nationwide faculty salary structure, in countries where public Universities predominate, may have certain advantages but also serious disadvantages, especially when the salary structure is too rigid. Such a structure tends to discourage outstanding performance by those with special abilities, to discourage interinstitutional mobility among outstanding professors and graduate students, and to drive too many of them, especially in such competitive fields as science, technology, economics and medicine, to leave the Universities for private sector employment.

The expanded autonomy of Spanish Universities injects a certain new (though limited) flexibility with respect to salaries that can help reduce these disadvantages. Although the uniform national professional salary structure remains, each university now has the flexible authority to recognize particularly meritorious performance in teaching and research with merit salary awards and other special incentives. Wisely used, this can be an important tool for encouraging special talent and enhancing quality. We would strongly urge university administrators to make greater use of this new flexibility than they apparently have thus far.

We also suggest that the capacity to attract, hold, and encourage outstanding talent could be further enhanced if the uniform national salary structure provided a wider range of salary steps within each grade of the structure, so that special merit could be recognized and rewarded within each or the four professional categories, short of promotion to the next category.



X

COSTS, FINANCE AND EFFICIENCY





## **X. COST, FINANCE AND EFFICIENCY**

Under this new autonomy the Universities have much more control and flexibility than previously over shaping their budgets and managing their available resources. At the same time, however, they are required to secure the concurrence of their Social Council on their proposed annual budget, and in some cases also the final approval of their Autonomous Community government. They are also accountable to these two bodies for how well they have used their previous available resources.

Since university budgets in fully empowered autonomous regions will hereafter come from a lump sum grant by the central government to the regional government to cover all types of regional services, this will place the Universities in direct competition with the schools, public works and other public services for their slice of the lump sum. It is not clear to us how these lump sums will be determined by the Central Government, whether, for example, the university budgets in each region will be reviewed and taken into account by the Central Government, or to what extent the special needs of poorer regions will be given special treatment.

It will take quite some time for these new arrangements to shake down. Thus it is too early to know how these new relationships and processes will finally work out. One thing that does seem clear, however, is that university rectors will hereafter spend less time carrying their begging bowls to Madrid, and more time negotiating with their Social Council and their regional educational and financial authorities. It is also self-evident that, having been freed at last from the uniform and rigid budgetary formulas imposed by the Central Government, it is now imperative for Universities to give much greater attention than ever before to the matter of selecting clear program and budget priorities, to making meaningful institutional plans that look well beyond the next budget year, to evaluating the performance of all sector of the university and, as we emphasized earlier, to keeping much closer and detailed track of their costs and how their available resources are actually being used.

## **The revenue side of the picture**

We were curious to know what the trend of financial support has been in Spain for education generally, and for university education in particular. The available data did not provide a clear picture, nor a consistent one. There seems to be no doubt, however, that in terms of current prices public funds directed to higher education increased considerably from 1970 to 1986, and especially since 1983. But to be meaningful, these figures must be discounted for inflation and matched against the great increase in enrolments and teachers. The net impression we arrived at (a very rough impression) is that public and private support of higher education, allowing for Spain's lower per capita GNP, has been more or less in line with that of OECD countries north of the Pyrenees.

The more important question, however, concerns the future prospects. Implementation of the ambitious goals of the University Reform implies substantial additional costs. To strengthen management, to raise quality, to upgrade faculty, to strengthen research, to underwrite a variety of major innovations, to expand laboratory space and equipment and the supply of library books and journals, and to enlarge assistance for able but needy students—all these imply substantially increased costs per student.

University budgets throughout the OECD area have been under severe pressure in recent years and in more than a few cases—as in England—have been subjected to substantial real cuts. We were therefore rather surprised that Spanish national education officials did not consider future funding to be an insurmountable problem, presumably because the present Government has demonstrably attached a high priority to education. Our discussions at the university level, however, revealed much greater concern about the adequacy of resources, both present and future. Rectors and others cited numerous specific examples of resource scarcities that were hampering quality, such as insufficient laboratory space and facilities for science courses, library books and journals, money for faculty study leaves and research, and for mounting major curriculum changes and other innovations.

There is no doubt in our minds that successful pursuit of the objectives of the University Reform will indeed require substantial additional resources, especially if enrolments continue to rise. But where will the additional money come from? The hard reality in Spain, as in other OECD countries, is that foreseeable additional public resources for higher education will be limited by the rate of growth of the GNP per capita and

by the competition of other important public needs and services. Thus, without a sizeable increase in economic growth, additional national government funds for higher education per student will be seriously restricted. If one accepts this proposition, then two questions must be asked: First, are there supplemental sources of revenue that might be tapped, over and beyond Central Government funds? Second, how much room is there for utilizing existing resources more efficiently?

Logically, additional resources might come from: (1) additional taxes (particularly in view of the fact that the portion of the GNP taken by Government is significantly lower in Spain than in most OECD countries); (2) revenues collected by the Autonomous Communities and allocated in part to Universities; (3) increased tuition charges; (4) tuition revenues from new cooperative training programs with business enterprises; (5) government and business research grants and contracts; (6) grants from private foundations and individuals, including grateful alumni; and (7) support from the Commission of the European Community for innovative training programs and inter-country cooperative research and training programs.

A number of Universities are already tapping some of these supplementary sources of revenue under the more flexible provisions of the University Reform. In most of the cases we heard about, the new funds are earmarked for special purposes over and above the regular budget, such as interesting innovations. We would urge that this practice of earmarking special revenues be followed, rather than allowing them to disappear into the general budget where their leverage for supporting specific priority needs and important innovations will be lost. Given the pressures normally at work, it is easy for any spare general funds available to be swallowed up in the salary budget, for example, by hiring an additional professor whose salary will mortgage future budgets indefinitely; in contrast, say, to the purchase of a few personal computers or a temporary research grant to one or a team of faculty members that does not become an enduring claim on future budgets. Special supplementary funds, earmarked and carefully targeted, can be a very effective incentive for including changes and innovations of many sorts that would otherwise be very difficult to bring about with already committed funds from the regular budget.

### **Reducing costs and increasing efficiency**

There are numerous possibilities, we suggest, for making more efficient and effective use of the resources already available to Spanish



state Universities. We do not mean to imply that this is a panacea, but we do believe that achieving such economies must be an essential aspect of any strategy for strengthening the financial position of Universities in the years ahead.

To begin with, the real cost per student and especially the cost per graduate is strongly influenced by three factors: (1) the 5 or 6 year official duration of first degree courses, in contrast to only 3 or 4 years in most OECD countries; (2) the high rate of repetition, which means that many students actually take 6 or 7 years to complete a 5 year degree program; and (3) the high abandonment rate, especially in the first year (excluding the many cases where students do not actually drop out but transfer to an alternative major field).

So far as we are aware, there has been no systematic effort to measure the amount of total university resources absorbed by each of the above factors, but it is clearly very large. We suggest, therefore, that each university, with technical assistance provided by the Council of Universities, conduct such a self-study and, in the light of the findings, consider various possible ways to reduce the large wastage implicit in the above factors.

There is a host of other possibilities for making more productive use of university resources that warrant examination. One, for example, is through the more intensive use of existing facilities and equipment. What may appear on the surface, for example, to be a shortage of laboratory and classroom space may actually be the result of a low rate of utilization caused by the traditional academic timetable. We know of institutions in other countries where the classrooms are jammed in the morning and the laboratories and library are nearly empty, whereas the reverse is true in the afternoon and evening. In addition, expensive facilities often sit idle during weekends and long vacation periods, because of the inflexibility of the academic calendar.

We also suggest, therefore, that each university, as part of its new management system, undertake a space utilization study of all its main facilities and equipment. Such studies in other countries have often produced shocking evidence of waste and prompted actions to achieve more efficient utilization.

Unnecessary duplication of expensive specialized programs between different higher institutions is another major form of waste, which tends

to develop especially when the overall system is undergoing rapid expansion. We were told in one Autonomous Community that four medical schools presently exist in the same area, whereas a smaller number would undoubtedly suffice and probably do a better quality and less expensive job.

Another major and ubiquitous form of waste, of course, is the extensive deadwood —the obsolete or low priority content— found in many curriculums. As Spanish Universities go about reforming and updating their curriculum in the years immediately ahead, they will have an unusual opportunity to cull out such content and make room for more relevant and useful content.

The most precious resource in any university is the time of teachers and students. Thus a central question is whether their time can be used more productively in terms of learning results and research efforts. By the time a student reaches the university, he or she should have an increased capacity for self-instruction, whether through reading books, writing creative papers, doing experiments in a laboratory, or researching, a meaningful problem. One must therefore ask, for example, whether students spend excessive time listening to lectures that might better be read, and indulging in rote learning of somebody else's interpretations and solutions instead of finding their own. A related question is whether adequate use is being made of new and more efficient educational technologies —such as computers, audio-visual tapes, new information system and so forth— not as an add-on superimposed on the old methods but in part as a substitute for them.

It is similarly worth asking whether faculty members —the most expensive and essential component in the educational process— are using their limited time in the most productive way. How much is really known about how they actually spend their time, and what alternatives might exist for spending some of it more productively?

We are convinced that a series of systematic self-studies of such questions by each university would uncover a surprising variety of opportunities for realising scarce resources for more productive use. The University Reform and new autonomy affords an unusual opportunity and set of incentives to move with dispatch in this direction. The results would still not eliminate the need for additional revenues, but any university that can demonstrate that it is bending every effort to use its present resources more efficiently stands a much better chance of attracting additional resources.



It cannot be repeated too often that good cost data and cost analysis are powerful tools for uncovering opportunities to eliminate waste and increase the efficiency of resource use in any university. These tools have been much too neglected up to now.

# XI

STRUCTURE, CURRICULUM AND DEGREES



## **XI. STRUCTURE, CURRICULUM AND DEGREES**

The three cycle university structure established by the General Education Law of 1970, and its inclusion of short cycle University Schools and Colleges within that structure, was a major step forward, in our view, toward broadening, modernizing and democratizing the Spanish higher education system. These actions contributed greater diversity to university offerings, broadened the choices available to students, increased the status of short cycle training programs, and were consonant with the increasingly diversified needs of the evolving Spanish society and economy.

Certain correlary provisions of the 1970 Law, however, which were envisaged as integral elements of this earlier structural reform, were subsequently ignored or at best only partially implemented. One of these provisions would have organized long cycle university programs primarily on the basis of disciplinary departments, as distinct from the traditional faculties. Two closely related provisions stressed the need for inter-disciplinary courses and for closer cooperation and integration between all of the organizational components of the restructured universities. Partly because of the failure to implement these provisions the university system is now malfunctioning in important aspects.

The new University Reform Law endorses these same neglected principles and thus provides fresh opportunity to take further forward steps.

### **The need for integration**

As matters now stand, the various «Centers» (i.e., Faculties, Departments, Schools, Colleges and Institutes) encompassed by each university are typically quite isolated from one another —programmatically, intellectually, logistically, and often geographically. In addition, most individual courses tend to be narrowly and prematurely specialized, at a time in history when all societies require graduates (and teachers) who are not

only competent specialists but also broad-gauged generalists. Moreover, it has become increasingly clear that analyzing and finding solutions to various complex social problems (including educational problems) and achieving significant advances in science and technology, requires and inter-disciplinary approach. In short, the traditional organizational arrangement whereby various academic and professional specialities were separated by sound-proof walls has become a serious obstacle to intellectual, social, cultural and scientific progress and a barrier to academic excellence.

The scientists of the world have been among the first to recognize this need for meshing the traditional disciplines to create new hybrid fields such as astrophysics, geophysics, and environmental science. The scientists, of course unlike the humanists and social scientists, have the advantage, of knowing more clearly where the moving frontiers of their field stand at the moment, and what next questions and hypotheses need to be attacked.

We were much impressed and heartened when we were greeted at one Spanish university by an enthusiastic inter-disciplinary team from chemistry, physics, biology and metallurgy who were working closely together, sharing high-tech equipment, and seeking ways to marry their teaching and research.

We know of no magic formula for achieving greater integration between various disciplines and organizational units of a university, or developing cooperation between members of different universities. In our experience such fruitful collaboration and integration usually grows out of a joint initiative by a few faculty members with common interests. For this to happen, however, requires not only the tolerance but the positive encouragement and support of the university leadership, and the overcoming of bureaucratic, attitudinal and other obstacles to such «unconventional» joint endeavors.

It might be helpful, we suggest, if the Council of Universities were to lend special encouragement to the integration movement by seeking out and publicizing good examples of integrated efforts in particular Universities.

### **The case for departments**

Contrary to the intention of the 1970 Law, the traditional «faculties» are still the dominant organizational unit in most Spanish Universities.



Each such faculty is self-contained and has a natural reluctance to look beyond its own borders for any needed academic assistance. Thus, for example, if a Faculty of Law feels the need to inject some instruction in economics, political science or sociology into its law program, the typical solution is to add one or more professors in these fields to its own faculty.

This has the effect of spreading such disciplinary talent thinly across a number of faculties, rather than building a critical mass in each of several strong disciplinary departments that could serve the needs of all faculties more efficiently and competently. Making such departments the basic organizational units of the Universities would have the further advantages of encouraging interdisciplinary cooperation, of stimulating more and better disciplinary research, and of strengthening post-graduate doctoral programs in each of these fields.

We therefore strongly endorse the aim of the University Reform to make strong departments the basic organizational building blocks of the Universities. We would caution, however, against the potential danger of some department heads becoming academic czars in the tradition of the old faculty heads.

### **Length of studies**

We call attention to three unusual features of the Spanish university system mentioned earlier, that have enormous consequences for financial and teacher requirements.

First, the minimum official time required to earn a first degree (5 to 6 years) is significantly longer than in most other OECD and EEC countries. Second, many students actually take an additional one or more years to complete the degree, mainly because of the extraordinarily high rate of course failures and repetitions. Third is the fact that nearly three-quarters of all students (in Faculties plus Technical Universities) elect to pursue long cycle courses rather than short cycle courses in University Schools.

Earlier we observed that substantial additional resources will be required (in our judgement) to implement the qualitative goals of the University Reform. The question we pose here is whether there are any feasible strategies for reducing any of the above three heavy cost factors, thereby releasing substantial resources for qualitative improvement of various kinds (e.g., research, curriculum reform, better equipment,

enriching library resources, and scholarships for able but needy students).

We realize that it would be exceedingly difficult, politically, to reduce the minimum time required to earn a first degree, which at this stage would undoubtedly be widely interpreted as a «cheapening» of the degree. From an educational standpoint, however, we are convinced that it should eventually be possible to produce in fewer years a stronger degree than now, at least in most fields, by means of a thorough-going overhaul, up-dating and enrichment of the curriculum, combined with the wider adoption of more efficient and effective teaching and learning methods. We suggest that this possibility might be worth consideration as a longer run strategy, allowing ample time, of course, for curriculum reform before reducing the official length of degree courses.

We also suggest that it would be very useful in the meantime to arrange for some comparative evaluations of student achievement in a few selected fields in Spanish Universities and in Universities in a few other European countries that have shorter first degree programs. Such a study could make a valuable contribution to the whole process of curriculum reform and qualitative improvement, and also demonstrate the feasibility of shortening degree courses without sacrificing quality.

The following observation in the C.I.D.E. Report on *The Spanish Educational System* (1985) reinforces our view that more evaluative research of this sort is needed.

«The results of the Spanish higher education system have scarcely been analyzed. It is a fact that little research has been done on the overall system of higher education, and specifically on the quality of the education provided by Spanish Universities». (p. 507).

The second factor mentioned above —the unusually high rate of failure and repetition of courses— suggests that something must be seriously amiss, either in the admission system, or in the methods of evaluating student achievement in university courses, or in the teaching process itself, or some combination of these.

Any attempt to correct this high repetition problem simply by limiting the number of repeats any student is allowed would fail to get to the real source of the problem. It would be better, we suggest, to undertake a wide-ranging, objective, in-depth diagnosis of the problem, on the basis

of which a corrective strategy could be formulated. An earlier sample study in Spain, referred to in the 1985 C.I.D.E. Report (pp. 507-516), pointed up some serious shortcomings in the student grading system and in the whole area of quality and relevance of university courses. Since that study covered only a relatively small sample of students in only a few Universities and subject fields, and since its findings are based on students who began their university studies in the mid-1970s, it would seem well worthwhile to mount a fresh and more comprehensive study. The published results could have a very stimulating effect in each university and could also provide an abundance of pertinent information for student guidance.

The third major cost increasing factor mentioned above and referred to earlier in this report —the perverse ratio between enrolments in long-cycle and short-cycle courses— may be susceptible to at least partial remedy by actions along two lines.

The first would be to strengthen the quality, relevance and employment value of the various training programs on offer in the University Schools. In this connection there appears to be an evident need to readjust the capacity of some of these programs, either up or down, and perhaps also to add some new ones, to bring them more into line with changing employment market prospects. We note that over 40 percent of the centers in these schools have established enrolment limitations, which suggests that capacity bottlenecks and not simply student choice may be contributing to the perverse ratio.

The second line of action (taken in concert with the first) would be to make a concerted effort to convince more secondary students that these short-cycle training programs constitute sound and valuable terminal programs leading directly to employment. Here again, some follow-up research on the comparative employment record of previous graduates of these various programs could be very useful, both for assessing the need for changes in their relative capacity and for providing future students and their guidance counsellors with pertinent information.

### **The changing status of degrees**

Spain and France are exceptional among Western nations in their traditional practice of granting «national degrees» whose quality and value are authenticated not by the individual university but by the National Government through its control of the curricula of all Universities.



Historically, the national degree was the hallmark of the «Napoleonic university model», which emphasized nationwide uniformity of all education and was largely supported by central government funds. Prior to the recent great expansion of university enrolments the national degree functioned as an automatic passport into government service (especially teaching) for the great majority of university graduates, and for the remaining minority it was a public license to practice in the old professions of medicine, law and engineering. It also served as a protective shield for the members of various professions and academic disciplines against intruders not possessing a national degree.

The recent great expansion in the number of degree holders, coupled with the increasing diversity of university curricula and basic «sea changes» in the national employment market, have raised some vexing and controversial questions in both France and Spain about the future role and practicality of national degrees, especially in the context of Spain's new university autonomy. Even though a national degree is clearly no longer a virtual guarantee of a government job or of a successful career in one of the old professions, it still retains high prestige with the general public and strongly influences the academic choices of many students (and their fathers). Thus, for example, recent proposals in France to abolish national degrees —on the grounds that they were outmoded vestigial remains of a bygone era, serving only to perpetuate the centralized power of the Ministry of Education— touched off a firestorm of opposition that quickly killed the proposal (at least for the time being).

The situation in Spain is somewhat different. The positive case for retaining national degrees, apart from the great symbolic importance attached to them by the general public, is that they are important for maintaining a national sense of solidarity among the various Autonomous Communities with their differing historical and cultural backgrounds, and for insuring the unity of national employment markets (so that a degree earned in a particular field in one region is of comparable value to one earned in another).

Frankly, our team members were initially skeptical about the desirability of retaining national degrees, but realizing our limited knowledge, we eventually bowed to the greater wisdom of our Spanish informants on this intricate and delicate question and accepted the foregoing case for retaining such degrees.

It should be noted, however, that a significantly more flexible approach to national degrees has been adopted under the University

Reform Law, in two major respects. First, the Council of Universities rather than the Ministry now has responsibility for setting curriculum guidelines for national degrees, and it is the expressed intention of the Council to make these guidelines quite flexible. Moreover, it is expected that the guidelines, particularly with respect to the humanities and social sciences, will apply to only 40 percent or so of the curriculum, the rest being left free for each university to determine. If so, then it can hardly be claimed that the new autonomy has been seriously breached by these guidelines.

The second important change is that Universities are now authorized to offer their own degrees, in addition to national degrees, in any field of their choosing and at whatever tuition they wish to charge. It seems unlikely that many Universities will quickly seize this opportunity on any substantial scale, so long as the great majority of their students and potential students insist on a national degree, and so long as a high proportion of their faculty members are involved in teaching national degree courses. It is our surmise, however, that eventually these new university degrees may acquire considerable importance in updating the curricula and upgrading the quality of university courses.

The reason for this surmise is the growing divorce now going on in Spain and throughout Western Europe between Universities and traditional government employment, and the increasing demand from private employers for new types of university courses and graduates better suited to their real requirements. These evolving private sector demands, especially with the recovery of economic growth and with the changes induced by Spain's new membership in the EEC, should eventually provide a stronger incentive for Universities to move toward offering more of their own degrees in new fields. The quality and fitness of each of these new degrees will, of course, have to stand the pragmatic test of the marketplace. But this is all to the good for it will stimulate the kind of inter-university competition from which excellence is born.

One further important new departure from national degrees is the authority individual Universities now have to conduct special courses, especially part-time short courses, to meet the special needs and interests of both former graduates and non-graduates, often in cooperation with business firms, government agencies and other organizations, or simply on their own. We applaud the recent proliferation of such «short courses» by several Universities; they have the potential advantage not only of paying their own way but of providing stimulating experiences for faculty members and of forging stronger links between the Universities, their local community, and the world of work.



In summary, while we concede a continued important role for national degrees, particularly in the traditional professional fields, we also visualize a basic transformation in coming years that will stimulate an increasing number and variety of university degree programs in response to new types of needs and demands emerging from the frontiers of both economic and social development.

# XII

A LARGER ROLE FOR RESEARCH



## **XII. A LARGER ROLE FOR RESEARCH**

We would hope that another feature of this coming transformation would be a greatly strengthened role for research in Spanish Universities. This is absolutely essential, in our opinion, for improving the quality and effectiveness of teaching in virtually all fields, for training a larger and more diverse supply of competent researchers for the nation, and for advancing research and knowledge in a variety of important areas.

During the past hectic period of rapid university expansion, research has suffered for lack of resources and for lack of professors' time, though there have been some exceptional cases where significant research has been done. We found wide agreement in our university discussions and elsewhere that teaching and research must nourish each other, and a positive desire by teachers to strengthen this marriage. What this requires, of course, is that all professors, whether or not they are directly engaged in research, must be enabled to keep abreast of new research findings in their own field and related fields. For this to happen, they must have convenient access to the flow of new research reports, journals and digests, as well as sufficient time for digesting this new material and for injecting it in the courses.

It is similarly essential for students to be exposed to the spirit and methods of research, to be encouraged to seek out relevant research findings in connection with their studies, and to develop the habit of research in seeking answers to questions. For this to happen, research must be an integral part of all their courses.

Ph. D. programs in all fields should be more research-oriented in order to develop effective teachers and effective researchers for the whole society. This will require more resources and a strong will to use them for research.

The new system of national research priorities, peer review of proposals, and sizeable grants for team research is well adapted to frontier research in the natural sciences and technology. But it is ill-adapted to

smaller scale individual research, particularly in the social sciences and humanities. We therefore suggest that each university should have a modest Research Fund for competitive grants in these neglected fields to individual professors (or small teams), based on rigorous peer review.

There is a serious language barrier for Spanish scholars and researchers to be published in English, French, and other international languages and thus to become known internationally. To help overcome this barrier we suggest that an annual competition be sponsored, perhaps by one or more private foundations, to select the most outstanding scholarly and research writings to be translated and published in leading international journals and by foreign book publishers. (A similar provision is urgently needed, incidentally, in Latin American countries, whose able scholars, researchers and writers are too often unknown in non-Spanish-speaking countries.)

Spain has made significant advances in educational research under actions inspired by the General Education Law of 1970. But as a number of our earlier observations suggest, there is pressing need for broader and deeper research studies, not only in pedagogical research but in such areas as the economics of education, educational technology, systems evaluation, and harmonizing education at all levels with the evolving needs of society and the economy. Most such research calls for an interdisciplinary approach and thus requires the active cooperation of various disciplines.



# XIII

## XIII. POTENTIAL CONTRIBUTIONS OF PRIVATE UNIVERSITIES



### **XIII. POTENTIAL CONTRIBUTIONS OF PRIVATE UNIVERSITIES**

For deeply rooted historical reasons, the concept of private Universities tends to be equated in Spain with Catholic institutions, of which there are four at present that have a good recent record of educational creativity and good quality. The University Reform Law encourages the creation of new private Universities, including ones that have no religious affiliation. This would be a new and interesting experience for Spain and, we believe, a potentially useful one.

Private Universities, both secular and church-connected, exist in abundance in a variety of other countries, especially in North America and Latin America, and new ones have emerged in recent times in Western European countries. Some, if not all, of these private institutions, partly because of their high degree of independence, have made distinctive contributions by blazing new trails and setting new standards for the rest of higher education in their countries. We see this as a promising possibility for Spain, but the problem to date has been to find appropriate sponsors and necessary financial support for new private Universities, especially of a non-profit and non-church-connected variety. Possibly the prospects would improve if there were clear assurance of freedom from government controls that would enable any new private university to compete freely in the academic marketplace to establish its own distinction —or lack of it.





# XIV

## HIGHER EDUCATION AND EMPLOYMENT





## **XIV. HIGHER EDUCATION AND EMPLOYMENT**

Clearly the most disturbing and challenging problem facing Spanish higher education today is the widespread misfit between the number and types of graduates being turned out each year and the economy's capacity to absorb and utilize them productively. This section of our report weaves together a variety of points already touched upon in earlier sections with the aim of identifying some of the main causes of this disturbing problem and some possible measures for alleviating it.

The root causes of today's problems go back to the early 1970s. The rapid expansion of higher education that followed the enactment of the General Education Law of 1970 coincided with the economic boom that had built up during the 1960s, creating rising employment and optimistic expectations of further growth. This would have been an ideal time to institute the kind of planning of higher education development and manpower programming envisaged by the 1970 Law, but such efforts were set aside. As a consequence, the spectacular increase in enrolments during the 1970s proceeded without effective guidelines, leaving in its wake serious qualitative problems rooted in inadequate staffing, equipment and management. In addition, coping with this avalanche of students left insufficient time for many desirable innovations to become fully understood and accepted by existing institutions. To add to the difficulties, student massification continued to overcrowd older Universities in spite of newly built facilities, thus strengthening the impression of declining educational standards as the rising flood of graduates eventually saturated employment markets in almost every professional sector.

The 1973 world economic crisis, combined with the terminal phase of the dictatorial regime (whose interest in planning, modernizing and democratizing higher education left much to be desired), struck a heavy blow against all efforts to adapt Universities to the changing needs of Spanish society and to achieve a viable balance of university programs and these evolving needs. It remained for the University Reform Law of 1983 to provide a fresh start on reshaping higher education to fit the realistic needs of its students and the changing conditions of the Spanish

society and economy. The challenge now is to seize this fresh opportunity.

Obviously there is no quick and easy solution to his problem. Even to moderate it will require a combination of actions, both inside and outside the university system, most of which will require considerable time.

Among the essential actions needed outside the university system, as we see the situation, are the following:

First and foremost, a clear and compelling political vision of the development goals for tomorrow's Spain, whether on the one hand to become a more highly industrialized and more sophisticated agricultural and service society or, alternatively, to accept the larger challenge and opportunity to become one of the emerging advanced societies in the field of communication, information and high technology in which intellectual work increasingly replaces manual work. Whichever choice is adopted will impose far-reaching requirements on university teaching curricula and research.

Second, the full integration of Spain into the European Economic Community, taking advantage of the manifold opportunities such participation offers for mutual cultural enrichment, modernization, increased trade, research and knowledge sharing, and technological advance.

Third, government encouragement of high risk capital investments, especially in advanced technological industries and other frontier fields.

Fourth, a bold national labor policy ensuring adequate flexibility for employers to create jobs and increase productivity, and for creative individuals to establish new business ventures.

Fifth, high priority support to basic and applied research, starting within Universities, in cooperation with outside research institutions, industry and commerce, and specialized government organizations.

Among the essential actions required within the university community, as we perceive the need, are the following:

First, a broadscale strengthening of well-targeted research in all fields, and a much closer linkage between research and teaching.

Second, the diversification of curricula offerings, founded on the research and teaching competence of particular university centers, to provide for a greater variety of diplomas and degrees to match changing employment market demands.

Third, greater flexibility in curricula, including practical training, to keep pace with the continuously changing theoretical and experimental knowledge relating to various professional activities.

Fourth, increased emphasis on promoting in students habits of initiative, creativity and team work, within the context of a more interdisciplinary and intersectoral approach, rather than excessively narrow specialization.

Fifth, a concerted effort, starting in secondary schools or earlier, to develop competence in foreign languages as a requisite for strengthening international cooperation, trade, and the free flow of qualified manpower.

Sixth, a substantial increase in the proportion of able students enrolled in the scientific and engineering fields, especially the newer and expanding ones, taking care to ensure, however, that a high level of research and teaching competence is available in all teaching centers in these fields.

Seventh, the organization of short-term up-dating and recycling courses on a regular basis, based on the principle of life-long learning, to keep adults abreast of the latest developments in their respective fields, and to enable graduates in surplus fields to transfer to an unsaturated related field.

A point that warrants special emphasis is that historically the educational system itself has been the largest employer of its own products. But this pattern is rapidly changing, as the current surplus of newly trained primary level teachers dramatically demonstrates. Within a relatively few years a similar contraction is certain to occur in the demand for secondary teachers and then university professors as enrolments at these levels stagnate or even decline.

The implications are obvious. One thinks immediately, for example, of the implications of this inexorable near future trend for the more than 130,000 students now enrolled in university faculties of Philosophy and Letters, for whom the principal market has long been teaching. Or to take an opposite example, if the proportion of enrolments in the scientific and technical fields should expand substantially over the next 10



years, as would seem desirable, will there then be enough truly qualified teachers in these fields to support this shift?

These are but two examples of the major changes in the present pattern of university capacity and enrolments that must occur, and relatively quickly, if even greater maladjustments between higher education and society's changing needs and circumstances are to be avoided. How to achieve such changes is without doubt the most immediately urgent challenge to university planning and higher education strategy.

Even if all the corrective measures outlined above were taken, it seems likely that substantial unemployment of new graduates would still exist in the years to come, due not only to the accumulated surpluses from the past in various fields but also to the lingering high expectations of students and parents, rooted in a now outdated view of the special rights and privileged role in life associated with a university degree. The hard truth is that, in Spain as in other countries, the average university degree will never again have the scarcity value it had in the old elitist days. The sooner this truth is accepted by students and parents alike, the sooner their academic choices will become more realistic.

In the long run the solution to Spain's unemployment problem lies in a restructuring of both the economy and the pattern of higher education. If Spain chooses to reach higher levels of industrialization while developing a more sophisticated agriculture and a dynamic service sector, including tourism, then solid and more extensive technical education at both the secondary and post-secondary level will be essential, along with general cultural education and training for the growing service sector and consumption related business.

However, if Spain should choose to go further and become a more advanced society in the information, communication and high technology field, then even greater emphasis will be required all across the Universities in basic research and advanced technology.

In either event, it will be essential to develop a variety of centers of excellence to achieve the levels of productivity and international competitiveness required for Spain to do well in an increasingly competitive international milieu and to improve the quality of life at home. Even in the most optimistic scenario, however, only a minority of graduates will be engaged in the industrial and higher technology fields, which will spur the growth of the whole economy. The rest will find useful employment



largely in agriculture and especially in the dynamically growing service sector. Some of these will be engaged in important services associated with industry and agriculture, including imports and aggressive export activities. With an equitable redistribution of income from a growing GNP, a great mass of first cycle graduates along with key second cycle personnel will be required for building a broader social «hinterland» essential for providing better services to children, the elderly, the sick and disadvantaged, and for expanding myriad leisure activities for all.

This, at any rate, strikes us as the sort of constructive vision that is required to propel the Spanish society and economy to greater heights in the future, and to invigorate the present blueprint for the reform of Universities.



**XV**

**THE NEED FOR BETTER PLANNING**



## XV. THE NEED FOR BETTER PLANNING

It seems appropriate to close this report with a few comments of university planning, since planning touches upon virtually all the topics and issues dealt with in earlier sections and since the lack of adequate planning today constitutes the Achilles Heel of Spanish Universities.

Effective integrated planning at all levels of the university system—including short term, medium term and longer term planning—is an indispensable tool for bringing about the many changes and innovations that are urgently required. It is also essential to achieving a much more balanced set of relationships, both within the university system itself and between the system as a whole and the changing needs and conditions of society and the economy.

The lack of such planning has been and remains a major managerial handicap. Trying to manage an individual university or the system as a whole without good planning based on clearly defined goals and specific objectives and on a regularized flow and analysis of pertinent information, both quantitative and qualitative, is comparable to trying to steer a ship without a chart, a compass or a rudder.

We found a keen awareness of the need to strengthen planning among university administrators and Autonomous Community educational officials, and especially in the Council of Universities which has responsibility for overall planning of the national university system. Thus an appreciation of the need and the desire to meet it already exist; the problem now is to get started.

It should be emphasized that planning in the new context of university autonomy should be seen as a process of consensus building of future goals and objectives and as an indispensable guide to rational decisionmaking—it should *not* be seen as the restoration of rigid central controls in disguise. It should also be seen as a necessary means for testing the feasibility of desired changes, for laying out practical



paths to such changes, and for providing valuable reference points for assessing future progress.

Developing an adequate planning process is a sizeable undertaking whose difficulties should not be underestimated. It can be done in stages, however, and can begin to yield beneficial results, albeit incomplete ones, fairly quickly. Given the evident urgency of many of the changes needed in the Spanish university system, it is obviously important to get started without delay on building the initial stages.

We suggest that this be done from the bottom up and the top down, cooperatively and simultaneously, in order to insure consistency between the broader goals and guidelines adopted at the national level and the more specific objectives and timing adopted at the Autonomous Community and individual university levels.

In order to get this undertaking off to a good start, it would be helpful, we suggest, if the Council of Universities inaugurated a series of inter-university technical seminars for the individuals primarily responsible for developing the planning process in each university and Autonomous Community and the national level.

We close by emphasizing that planning *per se* is no panacea for the ills that plague university systems, or any other systems. But it is essential to providing a rational and realistic basis for taking informed decisions and actions, hard as they may be. And such decisions and actions are clearly imperative if the Spanish educational system is to enjoy a bright future.







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