Council of Universities

National Plan for Quality Assessment of Universities in Spain

Summary of the Final Report Third Round

February 2002

MINISTERIO
DE EDUCACIÓN,
CULTURA Y DEPORTE

NATIONAL PLAN FOR QUALITY ASSESSMENT OF UNIVERSITIES IN SPAIN

SUMMARY OF THE FINAL REPORT

THIRD ROUND

2001

Council of Universities

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0. PRESENTATION

In the first Plan for Quality Assessment of Universities (PNECU), the General Secretary of the Council of Universities agreed to present an Annual Report on the quality of universities.

This report synthesises all the information contained in the 384 assessment documents generated by the different units during the third round of the PNECU (300 self-assessment reports, 287 external assessment reports, 88 final reports of the units assessed and 10 university final reports. The documents include a total of 8,401 and 10,713 strong and weak points respectively, as well as 9,623 improvement proposals selected and assessed by approximately 900 people that took part in the process – including members of technical units and external evaluation committees.

The report includes all the information from the assessment projects which are directly managed by the Unit for the Quality of Andalusian Universities (Unidad para la Calidad de las Universidades Andaluzas) and the Agency for Quality in the University System of Catalonia (Agència per a la Qualitat del Sistema Universitari a Catalunya). The reports compiled by both agencies about the quality of the universities they are responsible for can be found on their respective web sites.

The first University Quality Plan is currently near completion and a second one is already underway. The report for the year 2002 – which is not yet available – will provide overall information about the results of PNECU over the period in question. However, we can conclude that the main objective of the plan – promoting institutional assessment of quality – has been fulfilled. 55 universities have taken part in the process, five autonomous regions (Andalusia, Catalonia, Castilla y León, Galicia and the Balearic Islands) have set up their own agencies and 63% of the degrees which were eligible for assessment were actually evaluated (the remainder had either been recently introduced or their study programmes had been changed)

Finally, we would like to thank all the people and institutions for their help in making this document possible, and especially the analysts and the team of people who have directly worked on this document.

Vicente ORTEGA CASTRO
Secretary General of the Council of Universities

1. INTRODUCTION

The National Plan for Quality Assessment of Universities requires a report on the results of each round of assessments. So far three rounds have been carried out; the first one in 1996; the second in 1998; and the third in 1999. This report gives an account of the activities undertaken and the results obtained in the third round.

The objective of the report is to provide society and educational bodies with information about the results obtained, an assessment of the strengths and weaknesses, as well as taking stock of the improvement proposals put forward by the different units assessed. A more detailed report on the third round and information regarding methodological aspects can be found in the *Informe sobre la Metodología de la Tercera Convocatoria* (Report on the Methodology of the Third Round) on the web page of the Council of Universities (http://www.mec.es/consejou/).

Strengths and weaknesses as well as improvement proposals are structured in accordance with the *Assessment Guide (Guía de Evaluación).*

Qualitative and quantitative information from all the Self Assessment, External Assessment, and Final Report documents of the units assessed as well as all the University Final Reports available was used to compile this report. The deadline for submission of documents was December 31, 2000. The results of the analysis totalled 80,000 computer files with over 50 controlled variables. Furthermore, a database was created with an analysis of a series of indicators (rates of success, achievement, and drop-out in the first two years) as proposed in the *Assessment Guide.*

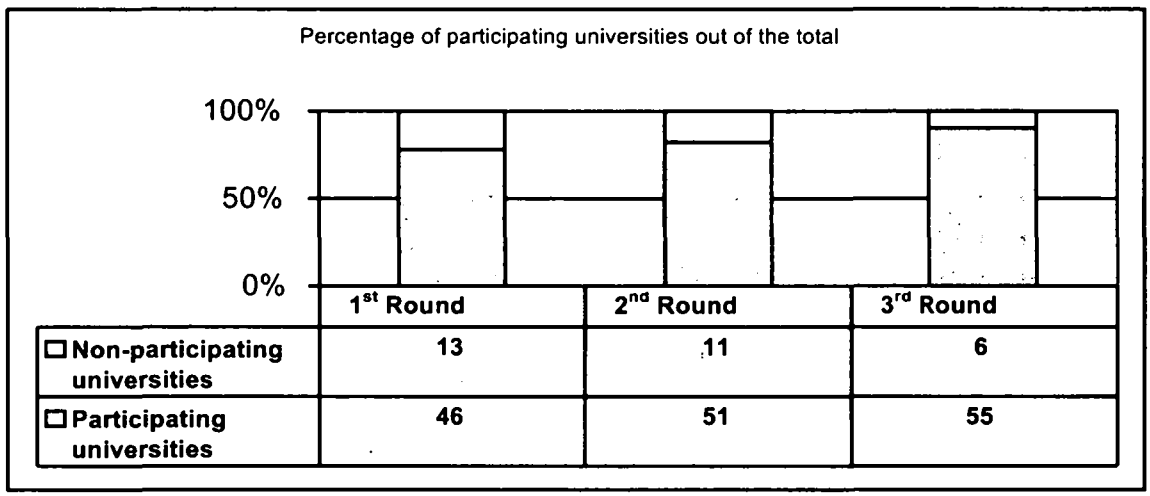
As for Regional Agency participation in the third round of the Plan, the Agency for Quality in the University System of Catalonia contributed information about the assessment project which was presented to the Council of Universities and also produced a report on the assessment process in the Catalan region. This provided the necessary information about the conclusions obtained in the Reports compiled by the Catalan universities. The Unit for the Quality of Andalusian Universities also contributed to the report by providing information about the assessment project which was presented to the Council of Universities. They also submitted the reports compiled by the different units, as well as the collection and analysis of the indicators which were used in this report. The information provided by Agencies from other autonomous regions has been included in the corresponding sections of this report.

In addition, both the Andalusian and Catalan agencies put together a report on the quality of their universities. The *Final Report on the Quality of Andalusian Universities* (*Informe Final de las Universidades Andaluzas*) was published in July, whilst the Assessment Process for the Quality of the Catalan University System (*Procés d'Avaluació de la Qualitat del Sistema Universitari a Catalunya*) was also published in various volumes. Reports by other regional agencies are available on the web sites of their respective agencies.

2. RESULTS OF THE 1999 ROUND

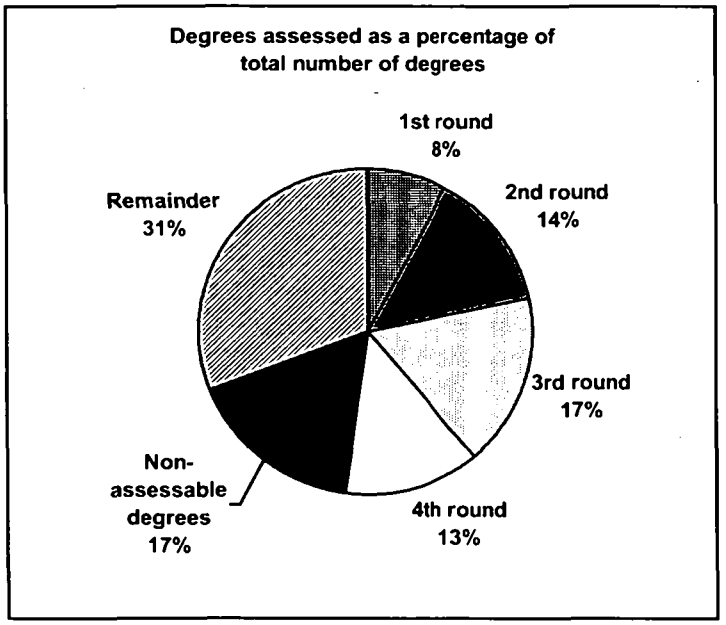
2.1 PARTICIPATING UNIVERSITIES

In the third round of the National Plan for Quality Assessment of Universities (1999), 55 universities presented projects. This accounts for 90% of the total number of universities. Therefore, we can say that almost all the universities took part in the Plan, especially if we consider the fact that some private universities had only recently been set up and this led to their exclusion from the third round of assessments. Of all the projects presented, only the following universities did not produce a report: the *University of Almería*, the *Universitat Oberta de Catalunya,* (the Catalan Open University), the *Universitat Ramón Llull*, the *University of Valencia* and the *University of Vic.* Therefore, if we take into consideration that participation in the Plan was already high in the previous rounds, we can say that it has increased even further .

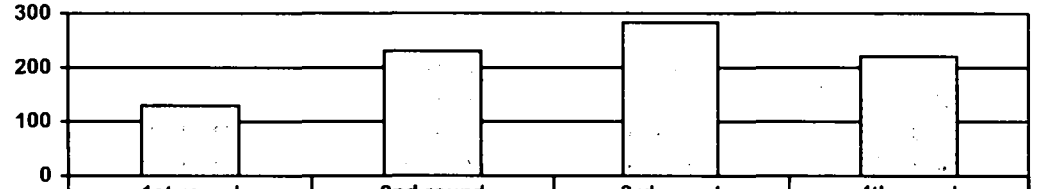


In the present round, 283 degrees as well as their related departments and services were assessed. In addition, 26 departments as actual units and a further 9 service units were assessed. This represents a 23% increase compared to the number of degrees evaluated in the previous round.

In the previous three rounds, 39% of all existing degrees were assessed in all the universities. Various units in the service and management areas were also assessed (see section 4.4). Figures reveal that 48% of the eligible degrees were assessed, taking the three previous rounds and the percentage of degrees which were excluded from the Plan due to the fact that they had been introduced in recent years into account. This percentage represents a 63% increase if we consider the number of degrees that were included in the fourth round. The results of the degrees assessed are shown in the following graph.



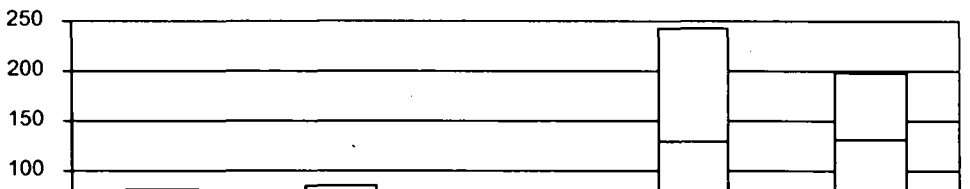
Number of degrees assessed per round



	1st round	2nd round	3rd round	4th round
Degrees	130	230	283	220

In terms of areas, the greatest number of degrees assessed belong to Social Sciences and Law. In the last round, these degrees together with Humanities and Health Sciences experienced considerable expansion.

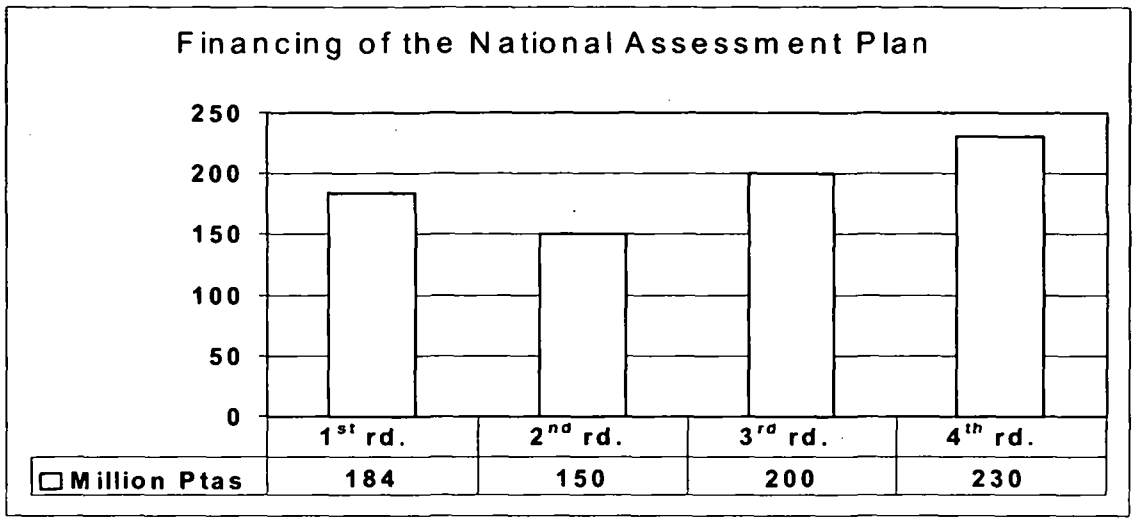
Number of degrees per area



	EX	HU	SA	SL	T S
3rd round	24	50	22	113	68
2nd round	29	24	2	100	75
1st round	28	11	5	30	56

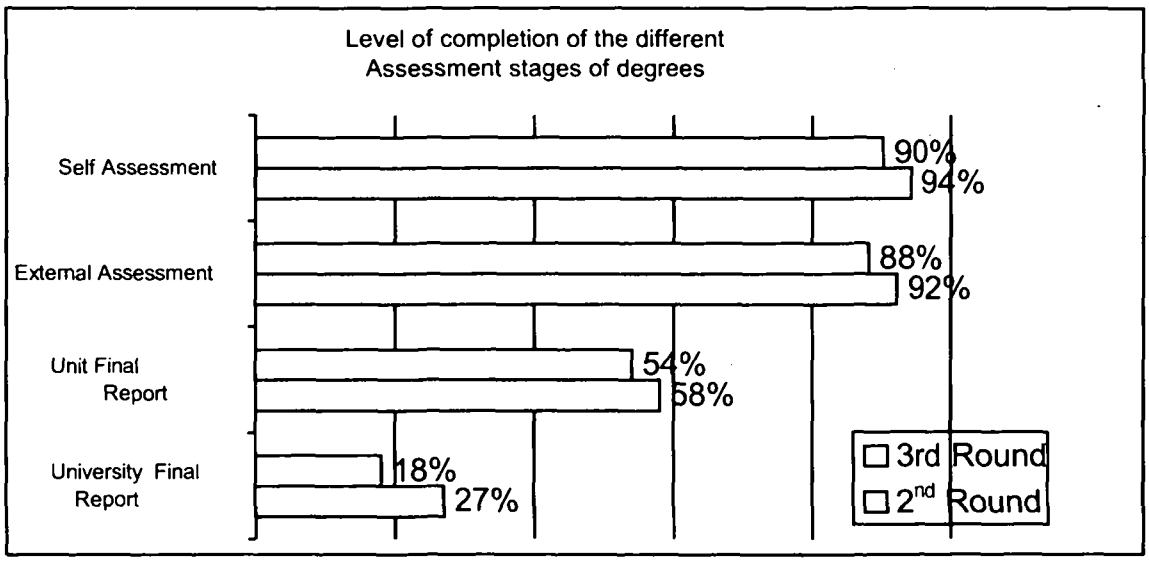
As far as the financing of the National Plan is concerned, the Spanish Ministry of Culture and Sport contributed 230 million pesetas to the last round. This represents an increase of 25% in comparison with the first round. However, as the total cost of the assessment

process is higher, two other financing sources were used; the universities themselves, which covered most of the expenses, and a specific fund that is assigned by some regional governments to support the PNECU. The total estimated cost of assessing the units that took part in the third round and of special studies that were carried out amounted to 607 million pesetas. This means that the percentage of the cost covered by the Ministry of Education accounted for approximately 32% of the total.



2.2 DEGREE OF COMPLETION OF THE DIFFERENT STAGES

The degree of completion decreased in the third round across the board. As we can see from the graph below, most of the Self-assessment and External Assessment stages were fully completed whereas only just over half of the degree reports and 18% of the final reports were completed. Given that these data were compiled almost 18 months after the process was started, and taking the results of the second round into account, it seems appropriate to review the necessity, usefulness and structure of both the Degree and the University Final Reports, as well as the appropriate and desirable length of the assessment process.



3. MAIN CONCLUSIONS

3.1 TEACHING

3.1.1 INSTITUTIONAL CONTEXT

Both the leadership of the university governing bodies and their level of organisational cohesion were viewed positively. However, there were suggestions that greater decision-making capacity in both centres and degrees would help to make management more efficient and relevant as opposed to the current centralisation.

In the centres, the coordination between the different degrees needs to be reinforced and their importance as units must be emphasised. This lack of identity tends to encourage the interests of the centre to the detriment of the interests of each degree.

The number of years that the centres have been operating is regarded in two different ways. Centres that have been in operation for longer consider that this is a strong point in their favour, whilst conversely, centres which opened more recently regard this as advantageous and are of the opinion that it increases their potential for greater flexibility and innovation.

It was clear that it is to the centres' advantage to be part of a larger university community as this facilitates access to a greater number of university services.

At a higher level, it was observed that adjustments in the assignment of functions and responsibilities within the centres and the different departments need to be made, especially as regards the management of teaching staff both in three and four or more year programmes.

3.1.2 TARGETS AND OBJETIVES

The first university quality assessments carried out in Spain found that there was a lack of definition of targets and objectives in most areas. The problem has become more accentuated over the past few years with the introduction of new courses, which have often been started without the implementation of thorough planning processes or projects, despite the significant number of reasons that justify their implementation.

Given the importance of this point as a core element in any planning process, the need to formulate clearly defined targets and objectives by consensus which, in turn, must enjoy the greatest possible level of dissemination within the members of the university community must be stressed. This element is also essential for implementing evaluation and review systems as well as improving the structure, operation and results of the different programmes.

Another element that is notoriously absent is the definition of professional profiles as regards the different degrees. This definition should be included in the formulation of targets and objectives. In addition, we have also found that there is a certain lack of awareness about, or little consideration given to, the academic profiles that are in demand in the job market. Therefore, studies need to be carried out to ascertain what professional

profiles are in demand and to set up the mechanisms required to match degrees with the results obtained in the studies.

As regards the previous point, the fact that there is a certain degree of dissatisfaction among students with the tuition they have received and with the lack of systematic procedures to follow-up their integration in the job market must also be mentioned. These studies are essential to evaluate the quality of study programmes in the different universities.

3.1.3 STUDY PROGRAMMES

The reform of study programmes is generally positively evaluated. However, there is a demand for improvement in the design and content of the programmes and subjects. Other elements that were generally highly rated included the increase in the number of subject credits on offer, student work placements, and the development of the "practicum" (work experience placements). However, theoretical classes still outweigh practical instruction. A new feature is that in recently created degrees considerable importance is given to the European dimension of syllabi, that is to say that there is an increasing concern about designing training programmes that are more in line with those in the European Union.

For reasons such as the one mentioned above, suggestions that study programmes should continue to be revamped or reviewed in order to provide them with the appropriate contents. The need to review the number and type of subject credits on offer, the length of degrees, the practical part of courses and the necessity for improvement in teaching conditions have also been highlighted.

Important deficiencies in the content of programmes are still found, such as gaps and unnecessary overlaps. In order to optimise students' learning progress, the need for more efficient coordination and sequencing of programme contents must be reinforced.

As far as timetables are concerned, the number of lecturing hours is generally high and this makes it increasingly difficult for students to keep up with their classes. Consequently, better planning of lecturing hours needs to be developed and implemented, since this is a key factor to improving the quality of teaching.

In this sense, an alternative that is currently being introduced in some universities is the addition of distance learning subject credits in their curricula.

Considerable efforts have been made to reach the optimum number of students per class, often by taking on extra teaching staff or using additional resources when required or whenever possible. However, the distribution of students per class is regarded as an element which affects the quality of teaching considerably and for this reason, the need to reduce the number of students per class both for practical and theoretical lectures continues to be highlighted.

3.1.4 TEACHING DEVELOPMENT

Tutorials are valued positively for their pedagogical potential. In this context, the dissemination of information about, and training in the potential and the use of tutorials, both for students and teachers, is one of the priorities for improving the quality of teaching in Spanish universities. However, the use of tutorials by students is low, due to a number of

reasons, such as poor student motivation, overlap with lectures, or lack of attention paid by teachers.

Growing concern among teachers about innovative teaching methods has also been detected. A more pro-active and participative philosophy is essential in this respect. Despite this concern, the lecturing teaching method is still dominant. Consequently, the need to develop training programmes for university staff which encourage and channel initiatives for methodological change needs to be emphasised.

Many difficulties in getting through the syllabi were also detected, especially as a consequence of the excessive workload that students have to deal with. The length and the level of difficulty of a good part of the subjects.

As regards exams, most universities tend to have well developed criteria for their general planning. The fact that both the whole teaching process and exam schedule are available from the beginning of the academic year are positively valued. There is also a high level of satisfaction with the fact that such planning is carried out by consensus with the students. However, certain deficiencies were still found concerning standardisation and clarity of criteria and deadlines, as well as the systems for reviewing exam marks. Another worrying aspect is the tendency of students to miss lectures during exam periods. This diagnosis calls for the need to revise the models of assessment which are most commonly used in Spanish universities.

3.1.5 TEACHING RESULTS

The data confirms that teaching results vary considerably depending on the different degrees.

The average drop-out rate is currently between 24% (for three year degrees) and 30% (for 4 year and over ones), with figures which range between 11% (for three year Health Sciences), 43% (for 4 year and over Experimental and Natural Sciences) and 39% (three year Technological Studies).

Table 1. Drop-out rates*

Degrees	Total Drop-out		Drop-out during the first year		% of drop-out during the first year as % of total	
	Three year	Four or more year	Three year	Four or more year	Three year	Four or more year
Experimental and Natural Sciences	25	43	17	19	68	44
Humanities		32		20		63
Health Sciences	11	28	7	9	64	32
Social Sciences and Law	19	23	9	13	47	57
Technological Studies	39	28	24	16	62	57
TOTAL	**24**	**30**	**15**	**17**	63	57

(*) Percentage of students in a cohort of students who have not enrolled for the current or previous academic years, i.e. number of students who have enrolled for 2 consecutive years as a percentage of the total of incoming students in the cohort.

Source: own, compiled from data included in the self-assessment reports.

The highest average rate of success (percentage of students who complete their studies within the number of years scheduled) and lowest average length of study were found in

three year Health Sciences (78% and 3.3 years respectively). This was followed by Social Sciences and Law (55% and 3.6 years respectively). The lowest rates of success and the longest duration of studies were those of Technological Studies (12% in four or more year degrees and 15% in three year degrees)

Table 2. Success rate as % of total in cohort of incoming students

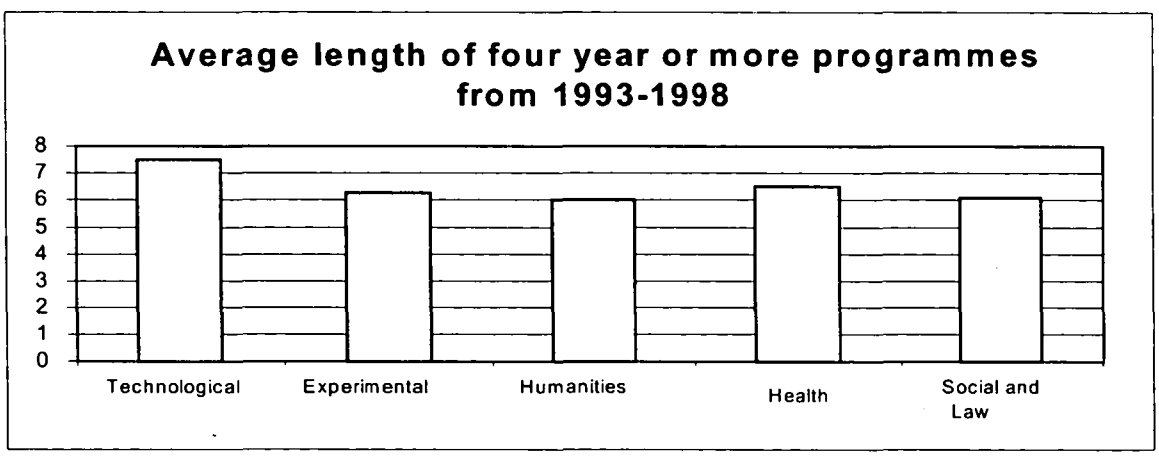
Degrees	Three year	Four or more year
Experimental and Natural Sciences	23	21
Humanities		32
Health Sciences	78	45
Social Sciences and Law	55	39
Technological Studies	12	15
Overall Total	**44**	**30**

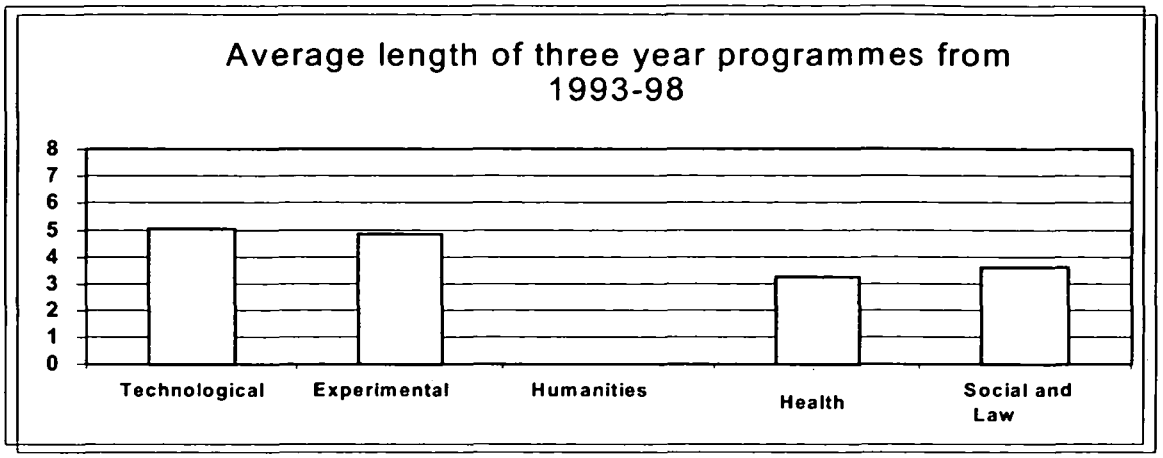
(*) Percentage of students in an incoming cohort who complete their studies in the number of years scheduled in their Study Programme as % of total of incoming students in the cohort.

Source: own, compiled from data contained in self-assessment reports

This scenario, which appears repeatedly in the results of various assessments, should lead to specific studies aimed at finding the causes of academic failure. The actions which are already being undertaken to improve results are aimed at reducing academic failure and often involve setting up specific groups for students that have undergone vocational training background, adjusting the number of students per class and subject, and providing introductory courses on certain basic areas of knowledge. In addition to these measures, the need to put forward proposals aimed at enhancing the level of excellence and improving the academic performance of students who already demonstrate good progress is obvious.

As for the data concerning graduates' incorporation into the job market, employability and demand for graduates, results vary significantly according to the different degrees. The amount of information is greater and generally more optimistic in Technological Studies and Social Sciences and Law. In contrast to this, there is a lack of data in Experimental and Natural Sciences, Health Sciences, and Humanities. The need to continue with the policy which is already being adopted in some universities of conducting specific studies for these areas is clear, as the section about objectives and professional profiles of the degrees points out.





Source: Council of Universities

3.1.6 STUDENTS

The information and guidance received by students is one of the aspects that receives greater attention in the assessment reports. In general, actions in this respect include a series of activities which are organised by the centres in areas of their own competence. The most common activities include welcoming and helping incoming students, group sessions providing information about how the centre works, open days, and information points aimed at providing advice and guidance. However, no institutional models that define a more general and coordinated framework for this type of actions have been found.

Some activities that have been positively valued include the publication of the syllabi of all the subjects – which are issued as part of academic guides or through other mechanisms – and the implementation of additional means of information which provide useful material, both for students and other users, and are available at the beginning of the academic year (these include rules and regulations, lecture and exam schedules, etc.).

Universities that provide specific student guidance services have been evaluated positively. However, more information about the job market and graduate demand, as well as the different specialisations on offer in each degree is needed.

Data reveals that there is also a lack of communication with secondary schools. In this respect, the need to promote open days has been pinpointed together with the need to encourage relations with secondary education centres in order to provide information about the university courses on offer, the qualifications required and the characteristics of the degrees and their related job opportunities.

The aspects discussed in the previous paragraph highlight the need to improve the information and guidance provided to students on how to get into university, time spent there and transition to the job market. Consequently, specific student information and guidance services need to be either created or improved. Moreover, such actions need to be carried out across the board and information plans and channels need to be improved.

As for the participation of students in their centres, considerable differences have been found even in degrees within the same university.

In some cases, student participation, especially in Humanities, is more positively valued and the level of student satisfaction with the training received, their vocational attitude, and the efficiency of student representation are also high. In other cases, the passivity and low level

of participation of students in the different curricular and extra-curricular activities are highlighted.

In general, participation is regarded as a very important factor both for students' training and for the development of activities carried out in the centres. Therefore, the need to introduce measures which increase levels of participation is essential. It is important to underline that the low level of participation is not a consequence of the lack of means for participation and expression, as their existence is valued positively. Therefore, the problem lies in the fact they are underused by students.

3.1.7 HUMAN RESOURCES

Teaching staff as a whole are generally rated positively in terms of academic qualifications, training profile, motivation, and interest in teaching. However, deficiencies concerning teachers' training profile have been reported in an important number of the degrees assessed.

The number of training courses and activities and the number of teachers involved in them reflect that a majority of teaching staff are concerned about modernising teaching methods. This is a positive attitude that should perhaps be encouraged in all public institutions. Consequently, the development of both staff training courses to innovate and update teaching methods, as well as activities to motivate teachers, continue to be a challenge.

Quality assessment of teaching is regarded as very positive and it needs to be implemented in institutions where it has not yet been included. However, the sometimes controversial implementation of assessment systems suggests that the methodology used for this type of process needs to be developed further and that consensus must be reached, not only within the institutions themselves, but also among the different institutions.

Work done by administrative and technical staff receives a positive evaluation. However, data has also revealed that there are insufficient administrative and technical staff in some universities, and consequently, the number of staff needs to be increased. In addition, there is a clear interest in training members of administrative and technical staff. In this sense, the development of training courses that cater for the needs of this staff group is essential.

3.1.8 FACILITIES AND RESOURCES

The effort made by some universities to build new classrooms, improve existing ones, and equip them with suitable teaching material is valued positively. In contrast, results are not as positive in regards to space available for laboratories and workshops as these are often insufficient or inadequate for academic and research activities (this is especially the case in Experimental and Natural Sciences and Health Sciences).

Similarly, there is insufficient office space for teachers. Moreover, there are still some architectural barriers which hinder people with disabilities. Consequently, universities need to set up short and medium term priority plans to solve problems concerning lack of space, insufficient equipment, as well as the lack of suitable facilities for academic and research requirements that have been reported in the assessment processes.

Another element that is positively rated is the considerable increase in computer equipment and facilities. However, despite this increase, demand for these facilities and equipment continues to rise and reports highlight that space for computer users is insufficient,

networks are frequently overloaded and some management programmes are poorly equipped. Moreover, information technologies are still insufficiently used as a teaching support. Consequently, all degrees need to include a practical, new technology-based element in their courses and this needs to be given preferential treatment in the technology and computing rooms. In addition, each university needs to use management software that is suited to its specific needs.

Safety and hygiene measures are still scarce in laboratories. Therefore, regulations on occupational risk prevention need to be promoted or implemented and periodical reviews carried out.

Finally, library management and services were also rated positively as were the availability of reference books, library opening times, the development of innovative activities and the creation of specific subject areas. In contrast, the use of trainee students to work in libraries and the lack of space available were valued negatively. The need to carry out studies to determine real library staff requirements was highlighted, as was the suggestion that library science students should only work in libraries to gain experience and not be given positions of responsibility.

Other measures proposed include encouraging communication among the different departments for the acquisition of reference works, assigning a separate study area within libraries, and promoting the use of virtual libraries and specialised areas which are more in tune with the degrees.

3.1.9 EXTERNAL RELATIONS

There has been an increase in relations with companies and organisations, especially through collaboration agreements for student work placements and the development of the *practicum*. However, this increase has not been supported by resources to manage these new schemes.

Another element that has been highlighted is the fact that there are considerable differences within the same degree in terms of the conditions of student work placements. Consequently, universities need to encourage the role of the Work Placement Co-ordinator and develop control and follow-up programmes backed by sufficient management resources.

There has been an important increase in exchanges and cooperation programmes, such as ERASMUS. However, participation is irregular and some degrees are more involved than others. In this respect, it would be advisable to establish strategic and priority policies of participation in programmes, encourage mobility of teachers and students and pay special attention to course accreditation between universities.

As for the assessment of the relevance that having a degree has on local socio-economic development, this is found mainly in Technological Studies and Experimental and Natural Sciences degrees. However, in many cases, direct involvement of universities in socio-economic development was not found. Consequently, encouraging communication between universities, local and regional administrations, as well as social, industrial and professional organisations, must be worked on.

3.2 RESEARCH

The most influential factors in the development of research activities are the size and structure of departments, the availability of services and resources for R+D activity, the commitment of teaching staff, the existence of well-structured research groups with defined, consolidated research areas and positive relationships between teaching and research activities.

These factors are, in turn, influenced by a series of elements. Research activities are particularly encouraged in consolidated postgraduate courses in which the high level of participation shown by departments in national and international courses reflect that research is included in regional, national and European scientific policies and in the relations with other institutions and companies – an aspect which is especially encouraged in the technical and bio-medical fields – as well as the creation of new areas of research.

Academic staff claim that there are a series of reasons that explain why their involvement in research programmes is insufficient. Reasons given include excessive lecturing workload, diversification of teaching, and excessive workload generated by the administrative and management aspects of projects.

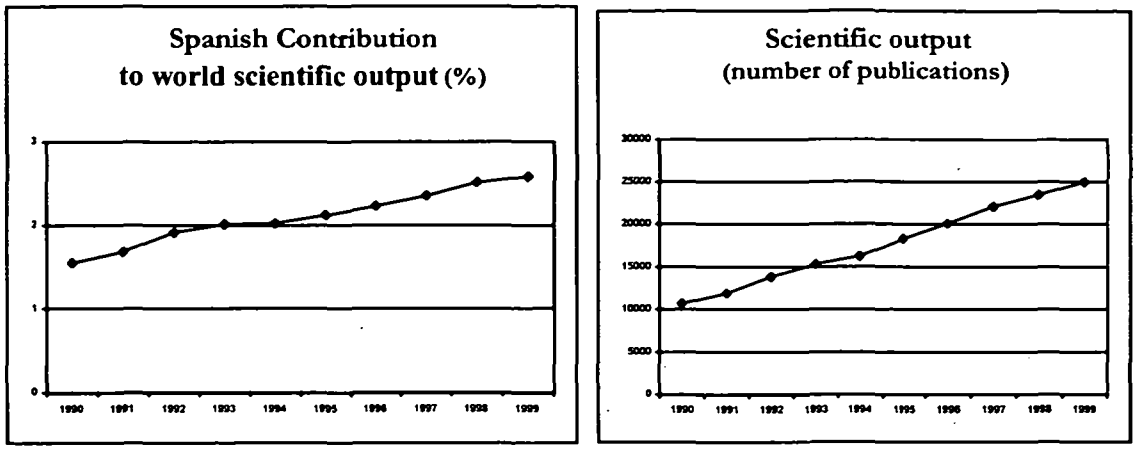
Other factors that seem to hinder the creation of research groups with well-defined research areas include the lack of objectives and planning of R+D programmes and poor communication and coordination between researchers within the same or with different departments.

As for the resources needed for the development of departmental research projects, there is a pressing need for a decent number of properly qualified staff to balance out the large number of trainee students and research support staff currently used.

In many cases, a policy to encourage the completion of PhDs is also needed.

As far as material resources and infrastructure for research are concerned, data has revealed that to date, considerable efforts have been made and that results are generally good. However, the need to continue investing in their improvement both from a qualitative and quantitative point of view, has also been highlighted. In this sense, the need to increase external financing and review the criteria of resource distribution within universities themselves is essential.

In order to solve the problem of insufficient funding, departments have resorted to attracting external financing through research projects and contracts. In this respect, new or improve existing information systems for the dissemination and follow-up of research activities and results need to be created. Moreover, the increasing amount of research data from theses, publications, and participation in conferences, as well as their quality, must be taken into account. Information systems help to increase Spanish input both in the international research community and specialised publications (the level of input in both is used as an indicator of the level of quality in scientific output and research results). In addition, quantitative indicators to measure research output and quality with the aim of systematically evaluating the activities carried out by the different groups need to be defined. Advances in this field are especially required in Social Sciences, Law and Humanities.



Source: www.mcyt.es: Indicators of the Spanish Scientific and Technological System, 2000.

3.3 SERVICES

Data has revealed that in the area of services, there is great diversity among the units assessed and that, although some units have carried out their analysis within the framework of the EFQM (European Foundation for Quality Management) model, its application was far from fulfilling its objectives and philosophy as only a few service units use Total Quality Management as their development model. This seems to suggest that the EFQM approach is not an assessment tool in itself but rather a management tool (which includes an assessment procedure) and that its logic and versatility is not applicable to units which do not use this approach as their development model. Therefore, we should stress that special care should be taken with generalisations concerning the conclusions obtained in the area of services.

We can also say that in the universities in which the governing bodies show an explicit and tangible commitment to a policy of quality, the assessment of service units obtains a high rating. However, it was found that universities in general are not planning on adopting a Global Quality Management model, apart from those that have already started the process.

Advances achieved in both internal and external communication are valued positively, as is the existence of a strategic plan for services, or the fact that this process is underway.

In most of the units assessed, advising services or at least taking their demands and needs into consideration in the design and planning of policies, is identified as a strong point.

As part of the assessment of service units, surveys were carried out to determine the level of satisfaction of both customers and users. In view of the good results obtained, this system should be consolidated in forthcoming years as a means of supporting decision making in the development of customer-oriented services.

The high level of satisfaction of staff linked to the service units assessed is evident. Despite this, the number of analyses and consultations aimed at determining the level of staff satisfaction should be increased and structured improvement plans should be implemented in order to consolidate or improve levels of satisfaction.

Two features that are rated as weak points in the service field were the lack of policies aimed at recognising staff performance and fulfilment of objectives, and the fact that explicit policies concerning staff management are non-existent. These policies are regarded

as indispensable to achieve true leadership. Consequently, improvement measures to better define objectives, functions and responsibilities for each position are suggested.

Data has revealed that the units assessed are highly professional when carrying out their duties. These results would improve even further if the number of resources required were increased as this would allow the development of a process-oriented management system, as well as the assessment and continuous redefinition of services. For this reason, the implementation and monitoring of process mapping by means of efficiency and effectiveness indicators is recommended.

In the units assessed, no evidence was found to confirm that the end results of services were being measured, or that service development was being analysed or results contrasted with those of other similar services. In order to achieve a quality policy with a constant level of development, attention must be paid to these aspects.

3.4 FINAL REFLECTION

These results and conclusions are a concise synthesis of a vast amount of results and conclusions which are specific to the different degrees and universities assessed in the present round of the PNECU. Consequently, they are average conclusions that are only applicable to a reasonably large group of institutions. Therefore, they are not in any case fully applicable to all the degrees assessed.

Despite the above, the results and conclusions presented in this report clearly show that there are certain features in university life that require and will continue to require special attention if we want to increase the level of quality of institutions and the university system as a whole.

It would make no sense to reproduce all the results and conclusions which have been synthesised in this report. However, some especially relevant aspects that can be defined as intervention priorities should be highlighted.

Relations between centres and departments and the assignment of responsibilities and functions among them, continues to be an area of friction and inefficiency which many universities must resolve once and for all.

The lack of targets, objectives and professional profiles in some degrees is in itself a very serious problem which considerably hinders the implementation of quality programmes. This problem becomes more acute in the case of new degrees which are being created without taking these requirements into account and often, without thorough planning beforehand.

Despite the efforts made in various reforms, a considerable number of study programmes present gaps and incoherent areas. In this respect, there are vertical and horizontal coordination problems which must be resolved, not forgetting a review of workloads and demands made on students.

We also need to continue investigating the causes behind such poor rates of academic achievement and to find possible solutions by means of specific studies in the different degrees. The problems of incorporation in the job market and graduate demand deserve a similar comment. Tutorials continue to be a challenge, due to their pedagogical importance and the fact that considerable levels of inefficiency have been reported.

Students' practical training needs to be supported by new curricular orientations. In this respect, better coordination of student work placements, the practicum and institutional relations with the professional world are also required.

Although great advances have been made by universities in the area of student information and guidance services, there is a general lack of solid global action plans which could improve the results of programmes that are already underway.

The implementation and development of staff training programmes which meet the requirements detected by means of analyses need to be further encouraged. The improvement of teaching activities must be carried out in accordance with innovation and equipment provision plans, and must be supported with the use of the latest technological resources.

Exchange programmes that require mobility of teachers and students are strategic elements in new academic management that universities should control by means of plans with well-defined criteria and at an institutional level.

Research requires a system of incentives that are channelled through PhD programmes, scholarship programmes, and training and support programmes for the management and coordination of projects.

Actions aimed at improving services should be supported firstly with global policies for the recognition of performance and achievement and secondly, with controlled assessment processes of effectiveness and efficiency in the fulfilment of functions.

4. APPENDICES

4.1 MEMBERS OF THE TECHNICAL COMMITTEE

The final report was approved by the members of the Technical Committee listed below (Order of the Ministry of Culture and Education 19 July 1999, BOE-Official Gazette of the Spanish Government, 5 August 1999)

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4.2 REPORT TEAM

This report was financed by a special programme set up by the *National Plan for Quality Assessment of Universities* and was coordinated by the University of León. A list of the participants is given below.

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