

QUALITY ASSURANCE:

A REFERENCE SYSTEM FOR INDICATORS AND EVALUATION PROCEDURES

BY FRANÇOIS TAVENAS

FOR ELU (THE LATIN EUROPEAN UNIVERSITIES GROUP)



EUA

European University Association

QUALITY ASSURANCE:
A REFERENCE SYSTEM FOR INDICATORS
AND EVALUATION PROCEDURES

□ BY

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Report published for ELU,

*an informal group within the EUA consisting of universities
from the latin countries of Europe*

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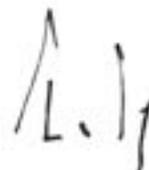
□ FOREWORD

I am particularly pleased to present this study prepared by ELU, an informal group of European University Association members, which was initially formed by the Conferences of university rectors and presidents of Belgium (French-speaking community), France, Italy, Spain, Switzerland and Portugal. This group, which was joined soon after by Luxembourg, wanted to discuss matters of common interest related to the work of EUA and the implementation of the Bologna Declaration.

Among the first matters that ELU addressed was an initial consideration of performance indicators and evaluation procedures. Given the high interest in this timely issue, ELU entrusted Dr François Tavenas (Rector Emeritus of Université de Laval, Quebec, and founding rector of the Université du Luxembourg) with the responsibility of preparing a report on these subjects with due regard both to practice in the various countries represented in ELU and to international practice in this area.

EUA is happy to support the publication of a topical study that offers an in-depth view of quality procedures in several European countries and contrasts them with North American practices. It also discusses from a theoretical and conceptual perspective the thorny notion of indicators. While the starting point for this discussion is set within the European context of the Bologna Declaration, international discussions regarding a global QA framework will be enriched by this study which considers the potential and limitations of harmonisation in higher education.

Unfortunately, as the manuscript was ready to be sent for printing, we were saddened by the sudden passing away of François Tavenas on 13 February 2004. He was eagerly awaiting publication and had been involved as well in the planning of several EUA activities. His wisdom and rich experience of higher education on both sides of the Atlantic will be sorely missed by all who knew him.



Eric Froment
President, EUA

□ ACKNOWLEDGMENTS

The present report is the outcome of Dr François Tavenas's¹ work in collaboration with ELU representatives². While preparing the report, Dr Tavenas received support from all ELU Group partners, who supplied him with information about ongoing national practices, as well as with comments on the successive versions of the report. At a meeting in Geneva on 15-16 January 2003, ELU Group members were able to discuss the draft report and agreed on final amendments to it. The final report was accepted by ELU Group members at the meeting of the Group in Lisbon on 29-30 April 2003.

The author is especially grateful to Jean-Pierre Finance, General Delegate of the Conference of University Presidents (CPU) for having been instrumental in launching this study and offering his constant encouragement while it was in progress. He also wishes to express his gratitude to Ms Emanuella Stefani, Director of the CRUI, Dr. Andrée Sursock, Deputy Secretary General of the European University Association, Mr Jean-Richard Cytermann, General Inspector for the French Ministry of Education, and representatives of the national rectors' conferences for their collaboration in drafting sections of the report.

¹ Rector Emeritus of Université Laval, Quebec and founding rector of Université de Luxembourg.

² ELU, an informal group within EUA, includes the Conference of University Rectors and Presidents of Belgium, France, Italy, Luxembourg, Spain, Portugal and Switzerland. The Spanish representatives were unable to take part in the work of the ELU Group after its first meeting.

□ PREFACE

In October 2002, ELU (the Latin European Universities Group), an organisation made up of rectors and staff of Swiss, Italian, Portuguese, francophone-Belgian and French rectors' conferences, decided to embark on a collective study about the evaluation of university systems. Based on a comparative study of nation-wide practices, an extensive system of indicators which offer a better understanding and mastering of the reality of European universities was compiled by professor François Tavenas, Rector Emeritus of the Université Laval in Quebec, and Rector of the Université de Luxembourg.

Published with the support of the European University Association (EUA), in which ELU is a working group, this report provides a comparative analysis of various uses of performance indicators as well as a typology and application tool for this group of indicators that is available to institutional leaders.

Both well-documented and rich in content, this study offers a definitive contribution to the European need to make national higher education teaching and research more efficient, relevant, attractive and dynamic. It also brings out the richness of "European university models", therefore encouraging exchanges across different cultures.

The increase in measurement and comparison tools available today plays a crucial role in the development of an attractive, diversified and dynamic European higher education and research area.

ELU would like to extend its sincere thanks to François Tavenas for the importance and excellence of this study as well as to EUA, in particular Andrée Surssock, for making the publication of this report in both English and French possible.



Jean Pierre FINANCE
General Delegate of the Conference
of University Presidents (CPU)

▣ INTRODUCTION

BACKGROUND

On 24 September 1998, the Council of the European Union adopted recommendation 98/561/EC on achieving quality assurance in higher education through the introduction of quality assurance mechanisms in all European Union countries as well as cooperation between national quality assurance agencies.

On 19 June 1999, the European Ministers of Education adopted the Bologna Declaration for the creation of an integrated European area for higher education by 2010 in which all institutions would offer programmes structured in accordance with the Bachelor – Master – Doctorate model, consisting of courses leading to the award of transferable credits (ECTS). The affirmed aim of the Bologna Declaration is to facilitate student mobility between universities in European countries.

Achieving these aims calls very clearly for the introduction of mechanisms that provide for university programmes of uniform quality. Accordingly, during the follow-up meeting to the Bologna Declaration in Prague in May 2001, Ministers of Education called upon the universities, national agencies and the European Network for Quality Assurance in Higher Education (ENQA) to collaborate in establishing a common frame of reference and to promote best practice in quality assurance.

This is the context in which those responsible for the conferences of rectors and presidencies of universities in the Latin countries of Europe, meeting within the ELU Group, agreed to work on the development of a *common reference system for indicators and evaluation procedures*.

AIMS OF THE STUDY

Against the background of the knowledge economy and the greater contribution that universities are expected to make to economic, social and cultural development, it is important for them to secure the means for improved planning of their development and better monitoring of their own teaching and research. The identification and use of appropriate indicators concerning their activity will provide them and their leaders with support for decision-making and the strategic monitoring of institutions. If all ELU institutions share these indicators, they will have the means to undertake comparative appraisals (benchmarking) among themselves, leading to an improvement in their performance.

Furthermore, and in-line with the decisions of the European Union institutions, the implementation of evaluation procedures common to universities in the ELU Group should ensure a high degree of uniformity in the quality of higher education programmes in the countries concerned, and thus provide a basis for easier student mobility between those universities.

Because of these developments, universities in the ELU Group will be better placed to meet the expectations of students and the population in general, regarding information about programmes and their resources, as well as products and quality, when those concerned have to choose a particular course or placement under the arrangements for European exchanges.

By using objective indicators of activity, resources and performance, institutions will also be able to develop an informed and constructive dialogue with their regulatory authorities and with all partners involved in financing them. Common evaluation and quality assurance systems will enable them to assure the authorities of the quality of their programmes and, by the same token, of the efficiency of public investment in higher education institutions.

Finally, using recognised objective indicators and evaluation systems, institutions will be able to develop a rational justification for the defence of higher education as a public service and for promoting a sector with a crucial contribution to society in the age of a globalised knowledge economy.

FUNDAMENTAL PRINCIPLES

In order to be constructive, the development of a shared reference system for indicators and evaluation procedures should comply with a certain number of principles that are fundamental to higher education in Europe.

First and foremost, and in-line with the Bologna Declaration, the common system should be entirely compatible with the cultural diversity on which the richness of the European Union depends. Care should be taken to ensure that it does not impose inflexible standards but instead proposes procedures that may be adapted to different national circumstances. The system should therefore make a point of respecting certain basic considerations specific to each country within a consistent European strategy.

In addition, the strength and vitality of universities are rooted in the permanent interaction between teaching and research. The proposed reference system should be capable of describing and assigning due importance to this relationship. In particular, evaluation mechanisms should be simultaneously concerned with these two essential aspects of a university undertaking and the way in which institutions articulate both activities so that each may enrich the other.

Furthermore, the tradition of university autonomy and academic freedom recognised by the 1988 *Magna Charta Universitatum* and reasserted in the conclusions of the 1998 UNESCO World Conference on Higher Education and the Bologna Declaration should underline the proposed system of evaluation. In particular, respect for university autonomy should be reflected in the selection of methods for encouraging the empowerment of institutions in fulfilling their responsibilities. In fact, the quality evaluation of teaching and research programmes should be an integral part of the mission of each university, while national and international quality assurance systems concentrate on monitoring the quality and rigour of the evaluation processes universities have established.

PART 1

- PERFORMANCE INDICATORS

1. CURRENT PRACTICES THROUGHOUT THE WORLD

The use of indicators concerned with the activity and performance of higher education institutions today assumes a wide variety of forms throughout the world. This diversity reflects to a large extent on the many different organisational and structural patterns of higher education systems, as well as the variety of methods for funding them. Here, we shall not attempt to survey all such practices comprehensively, but instead draw attention to the characteristics of some of the main systems of activity and performance indicators and describe the situation in the countries represented in the ELU Group.

1.1 UNESCO indicators

In 2001, UNESCO produced a major study on higher education performance indicators, in the follow-up to the World Conference on Higher Education in October 1998. Carried out by John Fielden and Karen Abercromby of the Commonwealth Higher Education Management Service (CHEMS)³, this study sought to provide member states with an analytical and statistical framework to help them in developing and monitoring their higher education policies.

The study sets out a fairly comprehensive list of indicators that may be taken into consideration by both state and institutional levels. It also cites the sources of primary indicators, essentially from UNESCO and the OECD, which may be used for purposes of international comparison. From this standpoint, it is an excellent reference document, regardless of the fact that it could be criticised for failing to discuss the limitations of the various indicators listed.

1.2 OECD indicators

For many years, OECD has published an annual compendium of indicators concerning activities in education, higher education and research in its member countries. These indicators relate to the entire education system of the various countries concerned, and set out to express four major topics in quantitative terms: graduate output and the impact of education; the financial and human resources earmarked for education; participation by the population in educational activity; and school organisation. University level activities are covered by some of the indicators but the data is aggregated to such an extent that only information of a very overall nature can be derived from it for the purpose of inter-state comparison. Even in this case, differences in national and local arrangements for organising and financing higher education make any meaningful comparison difficult.

OECD indicators, however, are the only ones currently available that provide for inter-state comparisons regarding university attendance and the financing of higher education. Reference to them is therefore appropriate.

³ John Fielden & Karen Abercromby, *Accountability and International Cooperation in the Renewal of Higher Education*, UNESCO Higher Education Indicators Study, 2001. The text of this study may be accessed on the UNESCO website at: www.unesco.org

1.3 The situation in the ELU Group

Belgium

The use of performance indicators is not very widespread in Belgium, particularly in regards to comparative surveys of institutions. There is a great deal of statistical data on the various aspects of the higher education system (student enrolment, qualifications awarded, available resources), but this information is not collected in order to measure performance or build up a special set of indicators concerned with the system as a whole. The management bodies of universities are equipped with tools for internal administration, however, they are reluctant to use statistical data for inter-institutional comparison.

France⁴

The development of a consistent and comprehensive system of indicators in France has run into a certain number of difficulties primarily related to the quality of statistical information on higher education. There are numerous reasons for this: the wide variety of products for computerised student administration in universities; the great many surveys whose findings are inconclusive or inconsistent; the instructions from the *Commission nationale de l'Informatique et des Libertés* (the national committee concerned with computerisation and its implications for personal privacy and freedom) which make it difficult to monitor the careers of students; and fields with poor statistical coverage such as the costs of education, student/teacher ratios and *the subsequent integration of students into working life*.

Such difficulties are amplified by the fact that responsibilities for maintaining statistical data are spread across various departments of the Ministries of Education and Research. The directorate in charge of statistics has been solely responsible for statistics relating only to students in the last 10 years and does not process statistics on staff, financial data or information concerned with research, in particular, bibliometrics. However, it plays an acknowledged role in generally coordinating the processing and circulation of statistical information.

Similarly, potentially very interesting indicators pose formidable methodological problems. The absence of any cost accounting or cost breakdowns of teaching loads means that it is extremely difficult to calculate costs by level and field in education, particularly since the Costs Observatory, which partially addressed this question, was abolished in 1997. In higher education, there is no standardised national test for investigating knowledge levels. Therefore, examination pass rates amount to no more than an internal measurement and must be interpreted with caution in any comparison.

Given the wide range of qualifications, it is difficult to obtain accurate or fully comprehensive data on how students enter working life after qualifying. The observatories established in many universities yield only very incomplete results and find it difficult to adopt a uniform methodology. An indicator for universities as a whole would have little meaning. The only available data on integration into working life are national findings derived from a representative sample.

A second set of reasons has to do with the organisation of higher education and research in France. The overlapping of universities with CNRS (the national science research council), in addition to the coexistence on a single regional site of universities with common laboratories, make it difficult or almost meaningless to attribute data on research contracts, the production of patents, or indicators of academic reputation based on its publications record to a particular university. Theoretically, for purposes of international comparison, it would make more sense to examine the production of a particular regional site rather than the production of each of the institutions located on it. In this case, data would no longer be a reflection of the contractual decisions of the CNRS and universities about who should manage contracts or the extent to which their common units are acknowledged for work carried out.

⁴ The following section is largely the work of Mr Jean-Richard Cytermann.

A similar consideration is that, in contrast to what happens in other countries, universities themselves do not control all the means required to implement policy relevant to them and certainly do not have the budgetary resources to do so. As reference has already been made to the staff of research organisations, another example is student life, for which the resources and policies are determined by specialised institutions outside the universities (the CROUS). This prevents the total resources of a university from appearing in its own budget, even if salaries paid by the state are included in it, and thus precludes any direct comparison of means at the disposal of French and foreign universities.

A third set of impediments is no doubt related, if not to a lack of political will, at least to a failure to accept the transparency required for a system of common broadly accessible indicators. In 1996, the publication of indicators on rates of admission to the second stage of higher education by the directorate for evaluation and forward planning (in the Ministry of Education) was not well received within university circles. The Conference of University Presidents (CPU) said that it did not wish for the INFOSUP database, which provides statistical information on each university, to be entirely accessible to all universities. Furthermore, in discussions on restructuring the SANREMO resource allocation system, the directorate for higher education was not in favour of making public the tables showing the consolidated budget by student, fearing that this would fuel protests.

However, in the last two or three years, various players appear to have become more favourably inclined to the idea of producing indicators for universities. Several factors have been responsible for this, among them is the existence of social demand like that which emerged in the case of the *lycées*. The alternatives were either to let the press publish ratings without any real strict scientific basis to them, or to arrange for serious research to be carried out. Just as in the case of the *lycée* performance indicators, the DPD (education ministry directorate for planning and development) opted for the second solution and decided to publish

DEUG pass rates for each university and major discipline. These rates for individual universities were compared with the rate that might have been expected given the characteristics of the student population (age and type of baccalauréat), in order to identify the added value of an institution. There was no strong opposition to the resulting publication which, on the contrary, gave rise to interesting discussions within some universities. The constructive role of a periodical such as *Vie Universitaire*, which publishes a special quantitative monthly survey focusing on the ministerial statistics, reflects this interest in shared data.

It is also likely that, given the nature of international competition and evaluation, French universities feel the need to publicise their results on the basis of a few carefully selected indicators. This new importance attached to evaluation is one of the key points of educational reform around the *Licence*⁵ - Master - Doctorate (LMD) structure. Finally, reform of organic law relating to financial legislation is partly based on performance measurement.

The second element has doubtlessly been that the Ministry of Research wishes to have data common to the professional categories of "researcher" and "teacher/researcher" in order to prepare the multi-annual recruitment plan for employment in the research sector, which has relied on an approach involving the "coordinated production of indicators". This approach has been successfully adopted by the *Observatoire des Sciences et Techniques* (OST), a public institution in which both the government and main research organisations are represented.

The third factor is that both the CPU, on the initiative of its first vice-president and its general delegate, and the DPD were determined to make progress on the question of indicators. The DPD sought to make more of what had been achieved by the information system on higher education, by producing a publication similar to *L'Etat de l'école* ("the state of schools") and *Géographie de l'école* ("the distinctive features of schools"), two publications based on the principle of broadly publicising 30 indicators of activity, cost and per-

5 Licence is the equivalent to a Bachelor's degree

formance. The publication was agreed in principle in 2001. The principle of undertaking work of this kind was the subject of a general agreement.

Trente indicateurs sur les universités françaises ("thirty indicators on French universities") outlines 30 precisely defined indicators or groups of indicators which are now almost all quantified. They may be classified into the following main groups:

- The first is concerned with demographic trends and characteristics of the student population: trends over a five-year period with a breakdown by sex, age and type of baccalaureate held by university entrants, breakdown by socio-professional category and the percentage of grant-holders. Indicators pointing to the attractiveness of universities are also included, such as the percentage of foreign students or of students who are not from a university's natural recruiting area (those studying for first-level qualifications) or who come from another university (second or third-level qualifications).
- The second group deals with educational provision: the breakdown of students by level and subject area, the proportion of vocational courses, and indications of the extent to which provision is diversified. This latter type of indicator may be difficult to interpret; it may just as much reflect the existence of a deliberate policy to inject a vocational dimension into qualifications, as a random scattering of this provision.
- The third group focuses on the structure of research: the percentage of those who are both teachers and researchers pursuing their activity in nationally recognised teams, the percentage of full-time researchers and of engineers and technicians who belong to research organisations.
- The fourth group deals with staff: purely demographic indicators illustrating the need for staff renewal, qualification indicators for teaching and non-teaching staff. Also included are indicators illustrating institutional policy or the limits placed on it, including teaching staff turnover and staff redeployment.

- The fifth group aims at greater insight into differences in institutional resource allocations: the number of staff per student, the number of square metres per student, the consolidated budget per student, the extent to which an institution is financed from its own resources, and its range of library resources.

- The sixth and last group consists of performance indicators with all the limits and methodological difficulties already referred to them. These indicators are concerned with examination performance, the production of theses and scale of research contracts, measuring the provision of continuing education and training, and the formal recognition of professional achievement. It is not possible at present to produce pertinent indicators on professional integration.

In order to make for a more meaningful comparison, the indicators will adopt the generally accepted classification conventions for institutions: multidisciplinary universities with or without branches of medicine, and universities specialising primarily in science and medicine, in arts, or in legal or economic branches of study.

Finally, it is clear that:

- The production of indicators concerned with universities is totally incompatible with the principle of university ratings. A single indicator is incapable of describing a phenomenon and indicators should only be read and interpreted with some knowledge of the context of universities.

- The production of indicators does not cover all aspects of the subject. In scrutinising their own activity, universities need indicators other than those used at national level: the principles underlying state and university contracts call for contract indicators.

Italy⁶

From 1992 to 1998, the *Conferenza dei Rettori delle Università Italiane* (CRUI) published indicators of university activity which broadly covered all aspects of the functioning and performance of universities (number, quality and performance of students, human and material resources available, level of research and its results, etc.). In 1996, the CRUI updated the indicators it had been using since 1992, but remained closely related to the pre-reform situation of the Italian university system. It is for this reason that as of 2001, the CRUI undertook fresh revisions of the indicators already available as part of the CampusOne scheme.

Since it was set up in 1999, the *Comitato Nazionale per la Valutazione del Sistema Universitario* (CN-VSU) has produced activity indicators for Italian universities. These data are included on the CN-VSU website⁷. Since 1999, a *Metodo di valutazione della ricerca svolta presso strutture scientifiche nell'ambito del macro-settore scientifico-disciplinare prevalente* has been introduced by the government. This makes reference to 22 indicators of research effectiveness, efficiency and quality and is used as a basis for calculating and allocating resources to support research in Italian universities.

The use of performance indicators has thus become well established over the last ten years or so in the Italian university system.

Portugal

In Portugal, evaluation is concerned with two components, namely research and study programmes. The evaluation of research is performed by a governmental agency and is not the direct responsibility of higher education institutions. The evaluation of study programmes is the responsibility of institutions representing universities and polytechnic institutes, and is carried out in accordance with guidelines laid out by a coordination agency (the National Council for the Evaluation of Higher Education) whose membership and responsibilities are defined in special legislation.

The process began in 1994 following a public universities initiative. In that same year, the parliament approved legislation stating that polytechnic institutes and private institutions should also be subject to an evaluation of this kind. However, it was only in 1998 that the National Council for the Evaluation of Higher Education was established, and only during the 2000/01 academic year that the entire higher education system followed public universities' lead.

The guidelines published by the Council do not define any indicators, although a list of aspects to be taken systematically into account is clearly referred to. It is felt that indicators should be increasingly defined in cooperation with government and the Council is now developing a proposal involving a set of indicators, which will help to "measure" the quality of institutions and their study programmes. This proposal is fundamental in order to implement the newly published legislation which states that an evaluation should be included in the award of a quality grade and will be used to grant or deny study programme accreditation.

⁶ The following section was prepared with the assistance of Mrs E. Stefani.

⁷ www.cnvsu.it/_library/downloadfile.asp?ID=10788

Until now, very little has been done in regards to the definition of indicators, and the only apparent mention made of this matter is in a law of 1996 concerning the funding of higher education institutions. In it is a reference to the introduction of the following quality parameters:

- teacher/student ratio per study programme,
- academic staff/non-academic staff ratio,
- quality indicators concerned with academic staff,
- quality indicators concerned with non-academic staff,
- qualification-related incentives for academic and non-academic staff,
- structure of budget, and in particular, the comparison between estimated and real staff costs.

It can be seen that much remains to be done if helpful indicators leading to a desired “measure” of quality are to be clearly defined. However, it is important to note that public universities asked a former Minister of Education to evaluate the existing process, and that one of his many important comments was a proposal for a set of indicators which might assist the National Council for the Evaluation of Higher Education in its work.

Switzerland⁸

National level university indicators available in Switzerland are produced by the Federal Office of Statistics (OFS). In close collaboration with higher institutions, the OFS has the task of keeping records of students, staff and financial statistics, as well as of research and development in the tertiary sector and a survey of graduates. The Office draws on this data as a source for regular publications as well as for a set of 30 “indicators on higher university institutions” that can be accessed on its website⁹. Besides their use for information purposes, the OFS data are also the basis for financing cantonal universities through contributions for students from other cantons and through federal contributions required by federal law on support to universities. Other bodies make a variety of quantitative information on Swiss universities available. Among them are the *Centre d'études de la science et de la technologie* (CEST, or science and technology study centre) which publishes bibliometric data¹⁰, or the university construction office which keeps a record of the surface area of premises¹¹.

The development of readily comparable information on Swiss universities is the subject of several current initiatives. Main ventures include the introduction of cost accounting¹², the first results of which may be available this year and, more recently, the preparation of a system of education and training indicators for Swiss institutions which was approved in principle by the Swiss University Conference (CUS), the common university policy-making body of the Confederation and the cantons, in June 2002.

8 The following section was contributed by Mr Raymond Werlen.

9 www.statistik.admin.ch/stat_ch/ber15/indik_hsw/ind15f_men.htm

10 www.cest.ch

11 <http://www.cus.ch>

12 <http://www.cus.ch>

2. METHODOLOGICAL PROBLEMS AND PRACTICAL LIMITATIONS

The definition and use of performance indicators for higher education gives rise to numerous difficulties, regardless of the level of investigation – institutional, regional, national or international – or their intended application.

The first difficulty is related to the availability, the representativeness, and the reliability of raw statistical data. This clearly depends on the analytical level. At institutional level, it may be assumed that any modern university institution is capable of generating statistical data relevant to its operation and strategic management. This does not mean that such data are immediately available, but that they may be collected if the institution feels it necessary. When going beyond institutional level, the situation becomes considerably more complicated. Due regard must be paid to matters such as differences in organisational arrangements and basic aims, which complicates the comparability of data. Mechanisms for gathering and validating data are also required. In many countries, several bodies collect statistical data on various sectors of activity in higher education for their own needs (financing, performance reporting, etc.); this raises the question of how consistent these data are. At international level, the effects of different patterns of organisation and different financing mechanisms must also be taken into account.

It is therefore expected that higher education performance indicators will differ depending on the level of analysis envisaged. One must similarly expect these indicators to be increasingly general in nature when the investigation moves from institutional level to regional, state or international level.

Besides this first problem area, a secondary difficulty stems from the relation between the level at which data are aggregated and their meaning. The more data are aggregated at national or international levels, the more they “brush over” significant information, thus making it harder to interpret what they represent and in particular, making it harder to apply them to a smaller context.

It is therefore necessary to exercise caution in analysing and interpreting indicators that rely on aggregated data, and to take into account relations that may exist between the level of aggregation and the meaning of the basic data used.

Unfortunately, there is no overall objective indicator of the “added value” of a university activity. The customary practice in most parts of the world involves devising a set of ad hoc indicators for the different facets of each university activity, while attempting to select the indicators in such a way that as a whole they represent the activity concerned as comprehensively as possible. Rudimentary indicators normally aim to reflect certain inputs, ie. resources made available, the origin and quality of students, research funding, etc.; certain organisational aspects, ie. available premises, research groups, computer or library facilities, etc.; or certain outputs, ie. number of degrees awarded, number of publications and patents, etc. It is vital to realise that no single indicator, on its own, objectively reflects the performance of the institution or the activity represented. Indeed, in virtually all cases, a given activity indicator may be interpreted in two contrasting ways. For example, a high graduation rate may be attributed to better organised teaching with effective supervision of students or, on the contrary, to lax evaluation procedures.

Under these circumstances, considerable caution must be exercised in using and interpreting performance indicators. In particular:

- The statistical indicators of any university activity have to be regarded as elements that support a particular judgement rather than objective facts;
- Indicators have to be used in complementary clusters so as to give a very precise and thorough picture of the activity concerned;
- Indicators should preferably be concerned with the distinctive features of a particular institution or a university sector and enable it to monitor its strategic orientations.

A third problem is derived from the many different practices associated with various academic disciplines, which have a considerable impact on teaching and research. Therefore, when selecting performance indicators, this diversity has to be taken into account. A university activity in philosophy is not evaluated in the same way as in molecular biology! Another consequence is that the diversity of disciplines represented in an institution or system will directly affect the values of most performance indicators when aggregated at the level of that institution or system.

Analysis of performance indicators at any level (institutional, regional or national) must therefore take information on the variety of academic disciplines in terms of their nature and relative representation fully into account.

Therefore, attention should also be paid to an increasingly important matter, given the way academic learning is evolving, which is that of representing and reflecting the true significance of interdisciplinary and multidisciplinary activities. Performance indicators too firmly rooted in the diversity of disciplines may not necessarily do this. By using indicators applicable to the major branches of learning such as natural sciences, applied sciences, life sciences, the social sciences and arts, this potential pitfall is largely averted. Furthermore, it would seem advisable to include indicators specific to inter and multidisciplinary activities.

A fourth problem relates to possible dangers inherent in using performance indicators to evaluate and finance institutions. When certain performance indicators are devised and uniformly applied to a series of university institutions, it is implicitly assumed that all institutions in this system function in accordance with similar basic aims and intentions. If this is indeed so, there will be no adverse consequences. If, on the other hand, the basic premises or objectives underlying their action differ widely, the adoption of uniform indicators will tend to negate and, as a result, play down this diversity simply because systems and persons will respond naturally to the publication and use of these uniform indicators.

The use of uniform performance indicators in a university system is only justified if all the institutions in this system have similar fundamental goals and responsibilities. If not, the adoption of such indicators carries with it the considerable risk that the system will eventually become uniform and sacrifice its diversity. They should therefore only be used discriminately and with the agreement of all concerned.

More generally, the publication of performance indicators raises the problem of the behavioural response they cause on the part of persons and organisations. It should be assumed at the outset that any indicator will lead interested observers to respond with a view to enhancing their own situation. Such responses have to be anticipated and appropriate steps taken to offset their possible effect. Thus it might be advisable to limit the use of certain indicators if it appears, for example, that students respond to them in such a way as to destabilise a particular institution or system.

It has to be fundamentally accepted that the publication of indicators leads those who use them to respond with a view to improving their position. This inductive phenomenon has to be taken into account when indicators are devised and publicised.

A recent development in several countries has been the practice of devising "classifications" of university institutions somewhat similar to the classification published for several years now by the *US News & World Report*. In most cases, these classifications are the work of newspapers or magazines and their success indicates that they satisfy an expectation on the part of the general public. The methodologies used to draw up these various "classifications" rely mainly on statistical indicators of inputs and outputs in education and training activities, which are combined in accordance with a formula established by the publisher to obtain a classification. It is important to realise that this formula has a bearing on the resulting classification. In other words, the classification is more a reflection of the publisher's decisions than the real relative quality of institutions. These forms of classification should be strongly discouraged as they can mislead their users, and in particular students seeking guidance for an appropriate course or institution.

Classifications of the "league ranking" variety are all seriously flawed, their main defect being that, essentially, they reflect the decisions of their authors concerning the way in which the basic factors considered are weighted and combined. Such rankings should be avoided as they are liable to mislead their users.

Certain approaches to classification make use of opinion polls among students, teachers, or the employers of graduates from the universities concerned. Classifications that rely on such techniques may be helpful, on condition that polls are conducted and their findings analysed in compliance with rigorous procedures.

The ideal approach would be to provide the public not with overall classifications which always tend to reflect the prejudices of those who publish them, but a solid foundation of objective data (statistical indicators) and subjective data (the results of opinion polls) to which individual users might turn in accordance with their personal interests or specific aims.

An example of this ideal approach exists in Germany. The *Centrum für Hochschul-entwicklung* has designed a comprehensive database incorporating a combination of statistical data provided by the universities or authorities responsible for them and opinion polls of students and teachers. Inter-institutional comparisons derived from it relate more to major academic fields than to institutions considered as a whole. Experience from this German initiative of Hochschul-ranking appears so far to have been very positive and it is now fully accepted by institutions. We shall return to it in section 4.

In concluding this section, it is helpful to recall the following:

- everything that can be measured is not necessarily a good "performance indicator";
- everything that should be evaluated is not necessarily easy to measure;
- the quality of university activities is more normally measured over the long term in relation to the subsequent careers of graduates or the repercussions of research on the development of society; by contrast, available indicators are generally drawn up in a short-term perspective;
- when a complex activity is summed up in a few simple statistical indicators, a certain amount of information is lost; this may lead to a distorted picture of the activity;
- there is a human tendency to defer to the impact of figures and the image they convey; experience has shown that once "performance indicators" have been published, they acquire "a life of their own".
- Finally, as the British Universities Funding Council emphasised in 1986:

"The use of performance indicators is an aid to good judgment and not a substitute for it. The numbers will not and never can speak for themselves. Mere inspection is not enough; interpretation is always necessary."

3. POSSIBLE TYPES OF PERFORMANCE INDICATORS

In the following section, indicators that might be considered for the purpose of describing the activity and performance of universities in teaching and research are discussed with the aim of identifying, if possible, their qualities, limits and problems involved in producing them. The final selection of indicators that should constitute the common reference system for universities in the Latin countries of Europe ought to be made with due regard for:

- the availability of the necessary basic data;
- the extent to which the forms of organisation or activities described by these data are readily comparable;
- the relevance of the information for potential users;
- the aims pursued by universities in regards to performance reporting.

Given the reservations about the representation of any indicator and the limitations in its use expressed in section 2, it seems preferable to think in terms of drawing up separate lists of indicators in accordance with how they might be used or the target groups that might exploit them.

Substantial differences exist between academic disciplines in the organisation and requirements of university teaching and research. In the case of several indicators concerned with teaching and research, it is common practice to define these activity indicators with respect to major fields of study rather than a particular institution considered as a whole. As much as possible, this should be the practice adopted for the common reference system for universities in the Latin countries of Europe, by including indicators that will do justice to multidisciplinary activities and retaining overall indicators for each institution in the case of certain major factors related to administration and resources. It will be desirable to check the availability of basic data for each sector and reach agreement on how to define the sectors to be covered.

3.1 The quality of students and their performance

The quality of students and their academic performance are key indicators in appraising university teaching activities. Ideally, one should seek to measure the “added value” of university provision, meaning the difference between the quality of students at the outset of their chosen programme and the quality of graduates. Unfortunately, such overall measurement of “added value” for an entire student population is not readily possible at the current stage of knowledge about measurement and evaluation. Without any such global measurement of “added value”, no possible performance indicators can offer anything more than a partial representation of the activity under consideration. They therefore have to be used with caution and, preferably, in clusters of related indicators to obtain a “*pointillist picture*” of the activity concerned, with the understanding that the selection and range of different indicators have a direct impact on the quality of the picture obtained.

The following indicators may be envisaged:

Quality of students on admission

- 1) **Marks on admission.** This is a good indicator if all students come from the same former education system. If the intention is to analyse a more diversified student population, it is however preferable to use a standardised form in which students are categorised by decile or percentile in their reference group. Given the diversity of national education systems, this standardised form is no doubt preferable.
- 2) **Social origin of students.** This indicator is important in obtaining a profile of the level of social diversity and thus, to some extent, of the cultural diversity of the institution’s student body. Several European countries possess such information. This factor also provides for more accurate analysis of other indicators, such as success rates or the average duration of studies.

- 3) **The proportion of students from outside the natural catchment area.** This indicator is an excellent gauge of the attractiveness of an institution and, therefore, of its perceived quality. In the European context, the indicator might be expressed in several ways: recruitment "outside the region" from across the country; recruitment from across Europe; or international recruitment excluding Europe. A distinction would have to be drawn between students enrolled full time in programmes and "mobility" students.
- 4) **Admission rates.** The relation between the number of students actually enrolled in a particular university programme and the number of enrolment applicants for the same programme is a good indication of the selectivity of the latter and, thus, of the quality of enrolled students. A direct relation is generally apparent between rates of admission and retention or graduation rates.
- 5) **Enrolment rates.** In the case of university programmes with a *numerus clausus*, or controlled admissions procedures, a good indication of the quality of an institution is its ability to attract students to whom it formally offers admission. The enrolment rate, meaning the ratio between the number of students enrolled and the number of places formally offered, is a sound guide to quality and attractiveness.

Student performance

- 6) **Retention rate in the first year.** The retention rate at the end of the first year may be a good indicator of the quality of a programme and the tuition an institution offers its students. However, it should be kept in mind that, in many university systems, selection occurs as a formal procedure at the end of the first year as an alternative to selection on admission. Whenever this indicator is used, therefore, careful consideration should be given to the reasons for doing so. Furthermore, there is a need for agreement

on how "retention" should be defined: whether it refers to retention in the initial programme, or retention in the institution without programme consideration. Either alternative may be equally justified, with the second approach no doubt legitimately providing for students who change courses in order to better achieve their educational or training objectives.

- 7) **Measures for the integration and supervision of new students.** Where national legislation or practice obliges institutions to unconditionally admit all students who satisfy the minimum qualification requirements, retention rates at the end of the first year are strongly influenced by whether or not there are special programmes for the integration and educational supervision of new students who are the least prepared. The existence of such programmes and their characteristics are good indicators of the importance institutions attach to their fundamental tasks of teaching students and ensuring that they do well.
- 8) **The graduation rate.** The graduation rate is frequently applied to measure the "productivity" of university programmes. Use of this indicator requires considerable caution, with due regard to factors such as the social composition and living conditions of the student body, as well as the employment market to which a particular programme is geared. There is little doubt that a modest graduation rate points to a mismatch between programme requirements and student expectations, to a certain misuse of public resources and, above all, a misuse of human capital. The foregoing considerations regarding "retention" apply equally to the definition of the graduation rate: does it refer to the programme in which a student first enrolls, or any programme offered by the institution? Finally, it is important to bear in mind, as far as this specific indicator is concerned, that observing it for what it is in no way justifies any particular conclusion to be drawn about the

quality of the institution's provisions. A relatively modest rate in an institution to which admission is very easy may therefore reflect upon a much better performance than a high rate in an institution in which there is considerable selection at the point of entry.

9) Average time to graduation. The average time students take to complete courses is a good indicator of the teaching support they receive, particularly at the postgraduate and research stage. Defining this indicator may pose methodological problems associated with administrative approaches to enrolment (whether or not there is an obligation to constantly enrol for each session or year) and whether students have full- or part-time status. It should be noted that, in the North American academic context, there is a strong inverse correlation between the length of time to graduation and the graduation rate at Master's and doctorate level, and the number of drop-outs tending to increase towards the end of courses that have taken too long to complete. This results in a waste of human and financial resources that is highly problematic from a societal standpoint.

10) Rate of transfer to employment after graduation. Use of this indicator is becoming increasingly common in the OECD countries. It is derived from surveys of graduates one, two or five years after graduation. However, it is important to be aware that the indicator is affected by many factors unrelated to university activity, including the vitality of the economy, the position of the field of studies or economic sector concerned, local practice regarding the mobility of the labour force, etc. In addition, the rate of transfer to employment also reflects the relevance of the particular course, the quality of its graduates and the reputation of the institution. This last factor is more or less dependent on the national culture concerned.

3.2 The Quality of Research

The quality of research in a university institution or its component units appears to be easier to evaluate than the quality of its teaching. In fact, numerous statistical indicators are available at local, national or international levels to support this evaluation of quality. However, it must be noted that, in order to be fully understood, the quality and social relevance of a university research undertaking has to be evaluated over a period of time, depending on the nature of the research and the expectations that society pins on its findings. It is helpful to bear in mind that the products of university research are, in order of societal importance: the training of future researchers who can sustain the country's research capacity (evaluation of this activity is relatively simple); the development of fundamental knowledge in all branches of learning to provide for the accomplishment of applied research and social, economic and technological development (evaluation of this activity is more complex and should be carried out in a longer term perspective); and involvement in the technological development and knowledge transfer on which any form of economic development is based (here, evaluation is relatively simple and conducted in a short-term perspective). In general, universities are solely responsible for the first two products of research that have just been cited, and therefore their activity should be evaluated with very special attention paid to both of them. Increasingly, in the context of a knowledge economy, governments and economic players attach considerable importance to the third of these products and the indicators associated with it. It is important to clearly define the aims of an evaluation prior to selecting the relevant indicators.

The following indicators may be envisaged:

Level of research activity

11) Proportion of teachers actively engaged in research.

In any university unit, the proportion of teachers actively engaged in research is a reliable indicator of the level of its research involvement. However, the meaning of a teacher actively engaged in research should be clearly defined. A common approach entails a consideration of three activity indicators, namely the supervision of doctoral students, the receipt of research grants and contracts, and work published. Nevertheless, the problem remains in identifying the initial point at which these indicators can be regarded as signs of established research activity. There must also be agreement on the reference population concerned; do we mean teachers who occupy a university post, any academic staff associated with the unit and capable of undertaking research, or other staff categories depending on the status of research ventures and the way they are organised nationally?

12) The doctoral student/teacher ratio.

This indicator is associated with the first basic responsibility of university research. It should normally relate solely to teachers with full tenure and full-time students. In regards to students, the use of fluctuating averages may be envisaged over a three-year period. Considerable caution is required in interpreting such an indicator, as this ratio must have an optimal value beyond which one is entitled to question the quality of the supervision offered by the teacher or unit. This optimal value may naturally vary in accordance with how research is organised in the unit, the material and financial resources available, the quality and independence of the students and the work capacity of the teachers concerned.

13) The research funding/teacher ratio.

The relevance of this indicator is directly dependent on national research funding mechanisms. It is especially helpful in a system where research is financed on the basis of grants obtained by individual researchers or teams following competitions adjudicated by panels of peers.

14) Number or proportion of full-time researchers.

In France and several other countries, there is a professional category of full-time researchers financed by national bodies such as the CNRS. For a university or unit within an institution, the number of full-time researchers is a good indicator of the level of research activity in the field under consideration. The proportion of such researchers among the teaching staff of the unit is a good indicator of the intensity of research. However, it should be remembered that the presence of full-time researchers varies from one academic field to the next and, above all, from one European country to the next.

15) The average research contract grant per teacher.

Universities are increasingly expected to contribute to a collective effort in the field of applied research and, to some extent, to technological development activities in collaboration with business and industry. Contractual research activities are a reliable indicator of the level of involvement of a particular university or unit in this commitment to supporting social and economic development. Naturally, substantial variations are to be expected in this indicator from one field of research to the next, as well as from one country to the next, depending on local practice and how the economy is structured.

Productivity of research activity

16) The doctorate/teacher ratio. This indicator provides a good idea of the effectiveness of research-based training. In order to take into account the way in which the indicator will inevitably vary with time, it is preferable to work with fluctuating averages over a three-year period.

17) The publications/teacher ratio. This indicator is one of the customary means of measuring research output. It is desirable to adequately define what a "publication" is, with due regard for the wide variety of practice in different fields of research, such as articles in an academic journal with an editorial selection committee, conference papers approved by a selection committee, and monographs.

18) Citation Index. The information produced by the ISI claims to measure the impact of publications. These data should be used with the utmost caution. The methodological problems associated with these indexes are now well known. They include very imbalanced coverage of subject area, relatively little coverage of periodicals in languages other than English, an overweighing of articles that describe experimental methods, a lack of distinction between favourable and critical references to an article, etc. As far as the Latin countries of Europe are concerned, it is by no means certain that these indexes constitute a sound objective indicator of the impact of university research. However, it should be noted that, under certain circumstances, indexes of quoted sources may provide the basis for a comparative study, if the latter is such as to avoid the systematic biases in these indexes. It is thus possible that a comparison between the performance of institutions in a single country and for a given academic field might yield certain significant findings, whereas international level comparisons between institutions might be more likely to suffer from serious limitations.

19) The number of patents/teacher ratio.

This indicator is clearly only relevant to fields of research whose findings may be patented, which essentially infers pure and applied sciences, and certain branches of health sciences. As the number of patents is normally limited, it is appropriate to use a prolonged period of observation (lasting three to five years). It should be noted that income from patent licences is not a good indicator for management purposes or for comparing institutions. Indeed, an institution with only one successful patented item will create a favourable impression even if its overall patents record is very mediocre. Other indicators of technological transfer activity are starting to emerge, especially in the North American context. Among them, the number of licences to work patented inventions, or the number of "start-up" concerns established to exploit the findings of university research may be cited. It is worth examining whether this type of activity has reached a sufficient level to justify the use of such indicators.

20) Prizes and honours. As a way of indicating the quality of their researchers, several universities publish a list of prizes and honorary awards received over a one-year period. This indicator is of some interest even though it is not especially reliable since, besides the quality of the researchers concerned, it also reflects their ability, and that of their institution, to effectively lobby organisations that award such distinctions.

3.3 Indicators of the level of resources earmarked for teaching and research

Indicators of the level of resources available for university teaching and research programmes are used very frequently, yet there are still problems involved in defining and using them. Indeed, these indicators are generally in the form of a ratio between primary indicators which thus complicates the way they are derived.

The most widespread indicators are the following:

21) The student/teacher ratio. The ratio between enrolled students and their teachers is a sound indicator of the level of resources and the effective level of supervision in teaching programmes. However, various interrelated problems of definition can arise and therefore need to be clarified:

- in calculating the number of students, the need to decide whether this means enrolled persons or full-time equivalents;
- the status of the teachers concerned;
- the breakdown of time spent by teachers in carrying out different parts of their basic assignment: teaching in different programmes and at different levels, research and service to the community;
- the student-teacher-programme relationship;
- taking certain categories of student into account: those freely able to attend lectures, students from other programmes, etc.

22) The student/auxiliary teaching staff ratio. Auxiliary teaching staff play an important part in supervising students. However, those who make up this category and their precise tasks vary widely from one country and institution to the next. While it appears important to define such an indicator, this may prove to be difficult, as agreement has to be reached first on a common definition of the status of the various staff that should be taken into account.

23) The technical and support staff/teacher ratio. This indicator of the level of resources able to support teachers is important in pure and applied sciences, health sciences and, more generally, in research programmes to which laboratory activities make an important contribution. Here again, the problem of defining staff categories must be taken into account.

24) The operating budget/student ratio.

In several systems of public-sector higher education, this indicator is actually used as a basis for financing university institutions. In all cases, it provides a picture for accountability purposes of the cost of education and may, by means of comparison, be used as an indicator of the relative efficiency of university institutions. However, bearing in mind the substantial differences apparent between national university systems, whether in terms of administrative organisation, financing methods, or accounting practices, this indicator is far from easy to define and use at international level. It would seem vital for European universities to reach a common definition of the cost elements to be taken into account before producing and using such an indicator. It also makes sense to take into consideration the political problems that could arise from using the indicator to compare institutions within a single national system and, even more so, from its use for international comparative purposes.

25) The material resources/student ratio.

The infrastructure available for students may be summarised in terms of a set of ratios linking the number of students to areas for teaching and research (the area of lecture halls, laboratories and study areas), computer facilities (number of computers per student), and libraries (number of monographs per student, the library resource budget per student, or access to computerised information).

3.4 Indicators on practices relating to governance and management

Good governance and effective management practice are essential to the sound functioning of a university. Indicators relating to these concerns tend to be qualitative rather than quantitative. This is no reason for disregarding them, yet it is important to be aware that this is an area in which national legislation is often the determining factor. The commitment to comply with such legislation must therefore be taken into account when deciding whether or not to include this type of information in the common reference system for universities in the ELU Group.

The following types of information gathering may be envisaged:

26) The make-up of decision-making bodies.

The presence, number and method of appointing representatives of teachers, staff, students, graduates or socio-economic interests to the administrative board, the senate, or study and research committees.

27) Mechanisms for the recognition of student participation.

Student participation in policy-making bodies and life of universities in general is an aspect of their education which may be important from the standpoint of simultaneously producing fully educated citizens and subject specialists. In implementing ECTS, universities may decide to award credits for participation, perhaps even devising procedures to ensure that this involves full preparation for citizenship. For some years, the experience of several Canadian universities with such a practice has been positive.

28) Mechanisms for allocating budgetary resources.

Effective quality management entails the need for selective resource allocation mechanisms in order to distribute resources in accordance with the strategic development aims adopted by university authorities. Does the institution concerned possess such mechanisms, and is it generally responsible for its entire budgetary allocation?

29) The diversity of sources of financing.

Any university may be able to access a variety of different sources of financing enabling it to function, such as public grant allocations, student tuition fees, research funding obtained on the basis of competitions adjudicated by peer committees, research contracts with private or public organisations, and donations by private individuals or organisations. The diversity of sources of financing and their relative significance is a sound overall indicator of the performance of a university and its researchers, as well as being indicative of its level of real autonomy.

30) Institutional planning mechanisms.

The principle of university autonomy is that universities are entrusted with the responsibility of defining strategic policies as part of their institutional planning. Ideally, this planning should mobilise all sectors of the university community and be supported by partners from outside the institution, including representatives of the regional or national socio-economic community who may contribute to formulating certain teaching and research requirements. Does the institution possess such a strategic planning mechanism?

31) Rate of academic staff turnover.

The turnover rate of academic staff, and mainly the teaching staff, provides a good indicator of the attractiveness of an institution and the quality of its professional environment. This indicator is naturally dependent on the national statutory framework within which academic teaching staff careers progress. International comparisons would therefore be unwise.

32) Mechanisms for the development of inter-disciplinary programmes.

The development of inter-disciplinary and multi-disciplinary teaching and research programmes is becoming an increasingly important challenge for all universities. Certain institutions have been more capable than others of responding to this challenge and establishing policies and organisational arrangements that encourage cooperation between subject-based faculties and departments for the implementation of programmes to meet the new requirements that transcend conventional disciplines. Indicators of the level of inter-disciplinary activity may be identified in the case of both teaching and research. They include the number of programmes with multidisciplinary components, the number of teachers involved in multidisciplinary activities, the number of inter-disciplinary research centres, etc.

33) Institutional adaptability. Given the increasingly rapid development of knowledge and constantly changing requirements in the area of teaching and research, universities have to develop approaches enabling them to adapt their programme provision rapidly and efficiently. The number of newly devised programmes, the number of programmes that are discontinued or substantially modified on an annual basis, and the average time it takes to establish new programmes are reliable indicators of the adaptability of an institution.

34) The quality of teaching and evaluation policy. Nowadays, most university institutions have adopted institutional policies to evaluate the quality of their teaching. However, these policies vary considerably both in their aims and procedures. The best organised institutions combine policies for evaluating class provision and teachers, which involve evaluation by students and constructive arrangements for monitoring teachers whose performance calls for improvement, policies for the evaluation of courses with the help of external experts in the discipline concerned, and policies for evaluating their academic units, which focus on the entire range of teaching and research, as well as the administrative functioning of particular units. The existence of such policies is a sound indicator of the stringency with which an institution is managed.

35) The openness of universities to their surrounding environment. Modern universities owe it to themselves to be responsive to their regional environment so as to support its social, economic and cultural development. This activity may be described by a certain number of indicators: the number of instances in which universities are involved in local joint activity; the number of teaching staff involved in such activity; the number of local business or industrial concerns established as a direct result of research by the university; the number of new jobs created as a result of its research; in the case of universities with medical faculties, the role of the university hospital network in regional health service provision; in the case of universities with units focused on the artistic and cultural sectors, the contributions these units make to the cultural life of the region; and the contribution of the university to adult education in the region.

36) The openness of universities to the world at large. Modern universities have to be broadly open to the world at large. They should provide their students with an education responsive to cultural and linguistic diversity, particularly through international mobility programmes. As far as these programmes in the European context are concerned, this openness may be measured by the proportion of (outgoing and incoming) students involved in the programmes, but also by the existence of special administrative arrangements for the support of mobile students, bilateral partnership agreements, and programmes that are offered jointly with foreign institutions and lead to the award of double degrees. The openness of universities to the world at large is no less vital in the field of research. Good indicators under this heading are the number of teachers actively involved in organised international research networks, the extent to which the university contributes to joint international-level publications and the existence of formal agreements for international cooperation in research.

4. OTHER POSSIBLE APPROACHES

Other possible approaches include the use of survey and ranking instruments. Many are available worldwide and the following sections describe a small selection of these tools.

4.1 A sociological approach: survey

With the support of the Pew Foundation and the Carnegie Foundation, the Centre for Postsecondary Research and Planning at Indiana University Bloomington has produced the *National Survey of Student Engagement*, the aim of which is to develop a fresh approach to measuring the quality of higher education institutions in the USA. The declared aim of this NSSE was to act as a counterweight to the very many “rankings” published by various American weeklies and, above all, to impart greater objectivity into the information made available to the public.

The NSSE seeks to measure the quality of university teaching by means of a questionnaire sent to a statistically significant sample of students at each institution taking part in the survey. The content of the questionnaire was prepared by a committee of educational experts and, in the words of the NSSE authors themselves, it focused on:

“...Student engagement: the extent to which students participate in the proven educational processes that contribute to the outcomes. Most academic leaders and faculty members agree that these are the right kind of questions to ask about the undergraduate experience.”

Over 63,000 students chosen at random in the 276 higher education institutions that took part in the study replied to the questionnaire, a copy of which is on the project website (see footnote 13). Students at the end of their first year and those about to graduate were equally represented.

The 40 questions in the questionnaire covered five topics:

- The “academic challenge”
- The practices of group learning and learning by problem-solving
- Student-teacher interaction
- Experience of responsiveness to cultural diversity
- The quality of the university environment.

The investigation has been conducted by institution, by groups of similar institutions in accordance with the normal American classification (the Carnegie 2000 system), and overall at national level. The data are set out in the customary statistical form (mean, standard deviation), with each institution able to position itself within its group or at national level by adopting a “benchmarking” approach for each of the topics. It should be noted that this approach has focused on individual institutions considered as a whole, without considering the diversity of their academic subject provision. Finally, it is important to note that the report published by the NSSE does not set out individual findings by institution. They are however available at each institution which may use them as it considers appropriate.

The authors of the study suggest various ways in which its findings might be used:

- Improving institutional practice
- Performance reporting by institutions to their regulatory authorities
- Developing relations with accreditation agencies
- Providing information to the general public; in this respect, the authors suggest that the findings of the survey might be used as an additional item of information by the periodicals that publish “rankings”.

Finally, in an annexe, the authors of the survey set out a list of institutions regarded as exemplary, solely as an example of what might be done in the future. All relevant information may be accessed on the project website¹³.

This approach has several interesting features. By concentrating on “student engagement”, the survey goes to the heart of what constitutes quality education. The approach also makes it possible to accommodate institutional differences and meaningfully compare institutions of different sizes and with different basic commitments. In this respect, it might also provide for meaningful comparisons between institutions in different countries. Finally, the approach offers each institution detailed comparative information, by question and by topic, so as to enable direct action to be taken in relation to educational practice. By contrast, the lack of any differentiation between disciplinary fields precludes what would unquestionably be helpful comparisons in this area. Incorporating separate approaches into the survey for each discipline would definitely require a bigger student sample and thus increase the costs of carrying it out.

The model provided by the *National Survey of Student Engagement* unquestionably calls for close consideration when developing a common reference system for indicators and evaluation procedures for universities in the Latin countries of Europe. Using the same approach and questionnaire would also have the additional advantage of enabling European and American practice to be compared.

4.2 The Approach of the Centrum für Hochschulentwicklung

Established some ten years ago by the Bertelsmann Foundation with the collaboration of the *Hochschulrektorenkonferenz* (HRK, the Association of Universities and other Higher Education Institutions in Germany), the *Centrum für Hochschulentwicklung* (CHE) has developed a method of evaluating universities with a focus on different academic fields. It makes use of a combination of statistical indicators and findings from surveys of students and teaching staff at the German universities that have taken

part. This method has been used since 1998. Its results are published annually by the magazine *Stern* and, most interestingly, may be accessed by any user on the magazine’s website¹⁴.

The CHE approach relies on statistical indicators for each academic field, which are supplied by the universities concerned and the bodies responsible for them and for financing research. These data are validated by cross-checking them and enable the preparation of indicators concerned with the quality of students, the resources available to them and how they progress through their courses, as well as data related to the quality of teaching staff and their involvement in research, and yet further data on the material living conditions offered to students on campus or in their university town or city. In addition, subjective data are gathered from students and teachers about the perceived quality of programmes, student/teacher relations and university infrastructure. The aim of this approach is to provide prospective students with the data they need to come to a well-informed decision about where they will study in their preferred academic field.

It is worth noting that, to obtain guidance in the choice and the formulation of the most pertinent indicators, the CHE calls periodical meetings of Advisory Boards, specific to each discipline, and composed of professors and university managers with relevant expertise and representing the different types of institutions active in the domain under consideration.

Around 30 items of information are available on each university active in the particular field concerned. In each of these fields, the CHE analyses the raw data to place universities in three categories for each indicator, namely “superior”, “average” or “inferior”. The classification of universities for each of the criteria is then published on the website and in the magazine. The CHE does not reprocess these separate classifications by individual indicator and thus publishes no overall classification. However, it has developed an analytical instrument available on the Web, enabling individual users to select indicators

13 www.indiana.edu/~nsse

14 www.stern.de

that seem important to them, depending on their own particular concerns or personal interests, and to obtain replies that list universities in descending order of performance with respect to the criteria selected.

As the system is relatively cumbersome to manage, the CHE conducts its investigation over a three-year cyclical period in which the various disciplinary fields are analysed in turn. The second such period is currently in progress. A very detailed explanation of the methodology adopted is available (in German) on the CHE website¹⁵.

Participation by German universities is now at a very high level and the system appears to be well accepted both by universities and, above all, students. However, Land governments appear not yet to have become fully aware of the existence and potential of this system of performance reporting, since the federal government has indicated its intention to set up its own "ranking" system. HRK spoke out against this government announcement, expressing its support for the CHE system.

The system used by the CHE to evaluate universities is probably the best model available today in the world of higher education. The combination of statistical indicators and student and teacher opinions provides a broad spectrum of quality indicators, while the analytical instrument available to the public on the website enables all those interested to obtain an evaluation corresponding to their interests and concerns. Furthermore, an analysis by major academic field is entirely consistent with the reality of university life and student requirements. And the classification into three categories, as opposed to a more detailed classification, enables the undesirable effects of the widespread press "league rankings" to be avoided. The disadvantage of the system lies in the cumbersome nature of the process for gathering basic data. In this respect, it is noteworthy that the CHE employs four professionals on a full-time basis for the project.

The CHE system unquestionably calls for very close consideration when developing a common reference system for indicators and evaluation procedures for universities in the Latin countries of Europe.

4.3 The SwissUp Approach

The SwissUp 2002 ranking is published by an independent body in which several leaders of the Swiss economic world are active.

Established with the support of a committee of university experts, the system has been developed using data from the Swiss Office for Statistics, official reports of the Swiss National Fund for Research and data supplied by the Commission for Technology and Innovation. The ranking also includes information obtained from an opinion poll conducted among 3500 students from all the institutions considered, and information gathered using a structured questionnaire distributed in individual meetings (see the Swissup website¹⁶). The questionnaire calls for a somewhat subjective evaluation on the part of the students questioned. In this respect, the approach is less reliable than that of the NSSE and may give rise to a certain degree of manipulation, in particular when used during individual meetings in which the tone of the conversation and the behaviour of those speaking to each other may lead to distortions.

The SwissUp method involves an analysis by major academic field on the basis of some 30 criteria grouped under six headings. The findings are given on the SwissUp website¹⁷.

Users may obtain three types of analyses of these findings: a standard classification of institutions established by the producers of SwissUp in accordance with their own selection of criteria; a classification corresponding to the interests of three distinctive types of students: those mainly interested in research, those seeking a labour market qualification, and those who above all value the quality of the academic environment as reflected in relations with teaching staff; and, finally, a classification obtained in accordance with a selection by individual users with a list of 20 criterias which seem important to them. This final analysis is very like the one offered by the CHE method in Germany.

15 www.che.de

16 www.swissup.com/upload/swissUpSURVEY_fr.pdf

17 www.swissup.com/r2k2_main.cfm?upid=FRwww.swissup

The SwissUp method is fairly similar to the one developed by the CHE, but its information gathering seems less refined. While publication of a classification by the authors of the method is open to criticism, given that the SwissUp ranking directly reflects their own selection of criteria, the classification approach is consistent with the concerns of three typical student profiles and, above all, the possibility for users to select criteria corresponding to their own concerns is not without interest.

Like the method developed by the CHE, the SwissUp method merits consideration. Simpler in its information gathering and thus probably less costly to manage, it does not however yield the same level of detail in its analysis.

4.4 The normative ISO approach: the Italian experience of CampusOne¹⁸

In the follow-up to the Campus Project (1995-2000), the Italian University Rectors' Conference (CRUI) decided to develop an evaluation and self-evaluation model for university programmes. It has drawn on practice in the non-university sector using the ISO 9000 normative framework for quality management to develop an approach that takes into account the distinctive features of university education.

The introduction of a model based on total quality concepts represents a basic change, in the fact that the notion of satisfaction of all interested parties is introduced. Besides students, this also implies teachers, technical and administrative staff, the world of work, and civil, economic, social and political society; in short, all those interested in the quality of student education. The ISO 9001 standard directives as basic criteria are not used for certification purposes, but primarily to stimulate a better approach to educational management in accordance with the adoption of planning principles and to monitoring which ensures that teaching activities and the aims they pursue are fully compatible.

With the Campus-ISO 9001 evaluation model, the CRUI wanted to demonstrate that an industrial approach adapted to the language and practice of educational circles with a firm emphasis on the process, provides for quality control of both the process and the product, namely education and training. Use of this approach in the last year of the Campus Vision 2000 scheme corresponds to the final stage of development. It will make it possible to intervene in all stages of the educational process in order to improve its quality and encourage its further enhancement on an ongoing basis.

The proposed methodology for the evaluation of teaching activities includes internal self-evaluation of both quantitative and qualitative aspects and external evaluation, which is carried out by a group of experts and includes a site visit.

The CRUI has pursued and developed the experience acquired in the Campus Project to devise the three-year CampusOne project which is intended to accompany the reform of Italian universities from 2001/02 onwards. The CampusOne evaluation model displays the following characteristics as far as the evaluation and self-evaluation of teaching programmes are concerned:

- a simple structure which draws attention to the management of the entire study programme;
- determination of the elements needed to measure the value of the programme, its strengths and weaknesses and the satisfaction of those affected by it;
- an analysis of the management system and the outcomes of the study programme in order to identify the actions needed for improvement and the corresponding monitoring mechanisms.

The model identifies five basic focal points of evaluation:

¹⁸ The following section is based on a text supplied by Mrs Emanuela Stefani.

- expectations and aims;
- the system of organisation;
- resources;
- the teaching process;
- outcomes, analysis and proposals for improvement.

Each of these concerns may be broken down into components enabling the evaluation to concentrate on the special aspects of each concern:

- Expectations and aims:
 - Expectations of the various interested parties
 - General aims and policies
 - Aims of learning
- System of organisation:
 - Responsibility
 - Management system
 - Monitoring
- Resources:
 - Human resources
 - Infrastructure
- Teaching process:
 - Planning
 - Delivery
 - Support services
- Outcome and analysis:
 - Outcomes
 - Analysis and recommendations for improvement

All activities associated with a teaching programme are considered and analysed in context and in relation to other activities.

More detailed information on the ISO 9001 approach implemented under the CampusOne Project may be obtained from the website¹⁹.

¹⁹ www.campusone.it/default.asp?Arg=58www.campusone.it

5. USE OF PERFORMANCE INDICATORS

Bearing in mind the methodological problems referred to in section 2, the development of a common reference system for performance indicators by universities in the Latin countries of Europe must be preceded by a thorough discussion of the aims pursued and on the availability of reliable and readily comparable data.

It is worth recalling here certain basic principles in the definition and use of performance indicators concerned with university activity.

- None of the indicators envisaged can fully reflect the activity that has to be described, and it is thus necessary to work with clusters of indicators;
- In order to more accurately reflect the way in which teaching and research practices vary significantly depending on the academic field concerned, indicators should be defined with respect to major branches of learning rather than to institutions considered as a whole;
- The extent to which the basic data used to prepare indicators are reliable should always be clearly specified when presenting the latter, as should the corresponding definitions and possible limits to the validity of the information provided.

The selection of performance indicators is a political and strategic exercise for the institutions concerned. It has to be carried out with due regard for clearly defined institutional objectives. Selection also has to be discriminatory depending on the aims pursued or the particular audience concerned. From this standpoint, the following practices may be suggested.

5.1 For the purposes of internal institutional management

The broadest possible spectrum of performance indicators is certainly justified as a decision-making support mechanism for the leaders of university institutions. The indicators should be determined at unit level – that of departments, institutes or faculties – and at programme level, thereby reflecting the organisational structure of the institution.

For the purposes of resource allocation, indicators such as 20, 21, 22 and 23 (see section 3) may be used to identify units that are over-resourced or under-resourced with respect to the institutional average and due regard for the wide variety of disciplines. These evaluations may be further clarified by means of inter-institutional comparisons of similar units, thereby providing sound decision-making support. However, it is appropriate to combine the analysis of indicators with a more strategic form of analysis that takes account of institutional development priorities. The publication of indicators providing for internal comparisons in the area of resources may easily result in internal conflict. Such disputes may be overcome on condition that decisions about resource allocation are fully transparent and institutional priorities are clearly stated and well documented.

For the purposes of internal evaluation of the performance of units and programmes, indicators 6, 7 and 8 in the case of teaching and indicators 10, 12, 14, 15 and 16 in the case of research present a fairly comprehensive picture. Again, the performance of units can be more effectively appraised if similar units in different institutions are compared. These indicators should always be an integral part of the self-evaluation reports of units or programmes in evaluation procedures (see part II).

The most constructive use of performance indicators is in relation to the strategic development plan of an institution and its units. Here, indicators are selected in such a way as to provide for the ongoing monitoring of progress in achieving institutional objectives. An administrative chart of the main indicators may be prepared for the benefit of all managers or, better still, the entire university community which will thus be able to establish its strategic objectives and the progress made in achieving them. However, given the limitations in the use of indicators referred to in section 2, a chart of statistical indicators should always also include more qualitative pointers to progress in achieving planning objectives or to the performance of units or the institution as a whole.

In any event, the decision to use performance indicators as decision-making and monitoring support mechanisms, as well as the selection of these indicators, should be the subject of internal debate. Indeed, it is important for all managers and members of the community to have a sound grasp of the aims being pursued and the context in which these indicators will be used. Moreover, the foregoing debate will enable indicators to be selected as effectively as possible and to reflect local particularities.

5.2 In the context of relations with the regulatory authorities

There are two main aspects to relations between universities and their regulatory authorities: the first is the allocation of resources, whether this occurs as a single operation or separately for each type of resource concerned; the second is reporting on the use made of these resources and on progress in expediting the fundamental tasks of universities.

In most cases, resource allocation to universities occurs more or less directly with due regard for a certain number of activity indicators. The San Remo model in France based on data concerning students and the various categories of staff, or the Italian model based on the number of degrees awarded are just two examples of how this may happen. These formulas for financing require the use of several indicators. They often indirectly reflect government development priorities, the underlying assumption being that institutions will take action consistent with these priorities by seeking to maximise their income.

Here, indeed, lies one of the more important aspects of the existence of performance indicators. They induce a response on the part of persons and organisations tending to secure the best possible position for themselves. While this phenomenon may be beneficial, it may also have significantly undesirable effects. It is therefore essential, when devising a system of indicators, to analyse the possible reactions of their readers and users in order to minimise the likelihood of such effects.

In the OECD countries, relations between universities and the governments that finance them are increasingly expressed formally in contracts involving a specific plan, or in "performance contracts". In this respect, institutions are generally authorised to formulate objectives which are then subject to negotiations with the authorities responsible for them. Contractual agreements may relate to some or all of the resources made available to institutions. In all cases, they specify the aims that institutions have to achieve in terms of programmes offered, student population, number of degrees, success rate, scale of research, etc. Contracts also commonly specify the indicators that should be used to monitor progress towards achieving agreed objectives.

Contractual approaches constitute an interesting framework for developing relations between universities and authorities responsible for them. In order to be fully effective, they should leave universities free to formulate strategic objectives that are consistent with strengths, weaknesses, and regional and national contexts specific to each institution. It is within such a contractual framework that the use of performance indicators will be most constructive.

5.3 Relations with the general public

The general public, especially students who wish to enrol in a university programme, ask for information about the programmes offered, the resources made available to them and, more generally, the performance of universities in teaching and research. This demand for information is very clearly reflected in the success of periodicals such as the *US News & World Report*, which has for many years published rankings of American universities. This practice has been emulated in several OECD countries in the last ten years.

While it is clear that the rankings dear to newspapers and magazines with a broad general circulation should be regarded as very questionable in so far as such published classifications reflect nothing other than the arbitrary preferences of those who produce them, it should be no less clear that universities are responsible for providing the public with sound objective information and, in particular, information structured so as to help prospective students make an informed choice of university and study programme.

Each university should maintain a website containing information for the public and students in particular. Besides detailed information about the study programmes and courses offered, the website should also contain statistical indicators describing the performance of the university in teaching and research.

At national level, the model developed by the *Centrum für Hochschulentwicklung* (CHE) is of great interest both in terms of its methodology and its possible applications for each user. The appropriate national bodies or possibly even the European institutions might profitably examine the possibility of developing a similar model. Alternatively, a survey along the lines of the *National Survey of Student Engagement* might be of the greatest interest for all European universities, given the prospects for an increase in student mobility in accordance with the aims of the Bologna agreements.

5.4 Comparative studies at European and international levels

The players in higher education, governments, national associations of universities and institutional leaders in particular are all, in various ways, interested in obtaining data for international comparative investigations into the scale of resources made available to universities and the efficiency of the latter in fulfilling their basic commitments.

The OECD publishes an annual compendium of activity indicators in education and higher education in its member countries. These indicators display a high level of aggregation and, as a result, are subject to severe limitations in the use that can be made of them. In fact, only course participation rates and certain financial data, such as the share of GDP invested in education, provide for really helpful comparisons.

The principal difficulty in international comparisons lies in the very wide variety of legal and administrative patterns of organisation, as well as in systems for financing higher education. Several attempts have been made to compare national systems but they have proved difficult and mostly inconclusive. It would indeed appear more constructive to approach comparisons at international level via the benchmarking of similar institutions or, better still, thorough comparisons between units (departments or faculties) in a given discipline. By this means, one may analyse the organisation of resources and the products of each unit in detail so as to ensure that findings can be meaningfully compared. Any statistical indicators used for comparative purposes should thus be selected only after a detailed investigation of the situation in the institutions concerned has been performed and in such a way as to ensure they are as representative as possible.

PART 2

- QUALITY EVALUATION PROCEDURES

1. PROCEDURES ESTABLISHED OR ENVISAGED IN ELU COUNTRIES

Evaluation procedures in ELU countries are striking for their considerable diversity and are therefore subject to constant change. An ENQA study published in 2003 provides a fairly comprehensive overview of the situation. Here we shall therefore limit ourselves to a summary appraisal of practices in the ELU Group and how they have changed recently in each country.

1.1 The situation in French-speaking Belgium

The Francophone Rectors' Council (CRef) has set up a programme to evaluate the quality of courses. This programme sets out to evaluate the courses of all universities over a six to seven year cycle, covering each individual discipline in a process consisting of self-evaluation and external evaluation by panels of experts. The panel of experts in each discipline visits all universities offering corresponding study programmes and, as a priority, examines their teaching programmes but also their research activities and administrative management practices with an impact on their educational provision. The entire operation is coordinated by an academic secretariat established by the Rectors' Conference. Evaluation reports are forwarded via the secretariat to the rectors of the institutions concerned on a strictly confidential basis.

The government of the French Community of Belgium is currently preparing a scheme for the establishment of an *Agence pour l'évaluation de la qualité de l'enseignement* (educational quality evaluation agency). The proposal is subject to consultation with university rectors and the Inter-university Council (CIUF). The relation between the proposed agency and the government is undergoing discussion in the light of ongoing practice in several European countries which have granted similar bodies a considerable degree of autonomy, with a view to maintaining the recognised autonomy of universities.

1.2 The situation in France

The French government set up the *Comité national d'évaluation* (CNE, or national evaluation committee) in 1984. Its task is to evaluate public institutions of an academic, cultural or vocational nature that are the responsibility of the Minister of Higher Education. The CNE, whose members are appointed by the government, enjoys a considerable degree of autonomy, drawing up its own programme of activities and devising the methodology for its evaluations. Following an initial phase in which it undertook evaluations at the request of institutions, it now operates on a much broader basis, with the result that all universities and some 60 higher specialist "schools" have been evaluated. The CNE also conducts site evaluations covering all institutions in a given area, as well as cross-sectional evaluations of specific academic fields.

CNE evaluation procedures have been the subject of consultation with the Conference of University Presidents. In all cases, the evaluations consist of self-evaluation and external evaluation by a peer committee. Peer committee reports are confidential to the institution concerned, but the final CNE evaluation report is made public, as is the response by the head of that institution to the report.

In the field of research, the *Comité national d'évaluation de la recherche* (CNER, or national committee for the evaluation of research) is responsible for appraising the implementation and results of national policy for research and technological development drawn up by the government. Consisting of 10 members appointed by the council of ministers and supported by a network of experts, it evaluates research organisations, programmes and incentives of all kinds. These organisations may be public or private. The CNER may be asked to offer an appraisal by a minister (mainly the minister for research) or by those responsible for public institutions or business or industrial concerns, but it may also act on its own initiative in the case of certain subjects for which it is responsible. In recent years, it has produced reports on technology transfer arrangements, animal research in human health, French research evaluation procedures, and the evaluation of a research organisation (INRIA) in the field of information and communication technology. For two years it has carried out evaluations that complement those

of the CNE and in partnership with it. Thus, it has produced two reports on the regional organisation of research in Grenoble and Montpellier.

The *Observatoire des sciences et des techniques* publishes statistical indicators as well as reports on research activity. These reports provide for evaluations of the level of activity and productivity of the university research system on a regional basis and with respect to the major branches of research rather than by institution. In addition, research units attached to the CNRS are evaluated when undertaking the budgetary allocations of this organisation.

There is, however, no established practice as such for evaluating courses or teaching and research units in university institutions themselves.

1.3 The situation in Italy

In Italy, quality evaluation is managed by various bodies whose activities sometimes complement each other, namely the CRUI²⁰, the CNVSU²¹, the CIVR²² and the CEPR²³.

The CRUI assumed responsibility for evaluation in 1991 when a committee was set up specifically for this purpose. The committee devised and experimented with a model that it offered Italian universities and promoted the importance of evaluation as a means of improving the Italian university system. The CRUI developed its evaluation activities in three areas, namely teaching, research and administrative management.

In regards to the evaluation of courses, the CRUI developed an innovative evaluation mechanism under its Campus Project which included 94 university degree programmes and 5000 students between 1995 and 2000. In 2001, the CampusOne Project was launched, with one of the aims being to develop a system for the evaluation and self-evaluation of study programmes on the basis of national and international experience in this area.

In 1998, the CRUI launched the ASIGEA²⁴, in order to study systems for the administrative management of courses and draw up a summary of factors conducive to effectiveness and efficiency in centralised management.

From 1998 to 2002, the CRUI supported a study seeking to determine the position of Italian universities in the world of academic research, by systematically analysing data on international academic publications. This study is based on an Italian Citation Report by the Institute for Scientific Information (ISI), which took account of references to articles published between 1981 and 1999 and whose authors were based at Italian universities. The report of the working group responsible for this study was published in 2002²⁵. Furthermore, since 1999, a *Metodo di valutazione della ricerca svolta presso strutture scientifiche nell'ambito del Macro-settore scientifico-disciplinare prevalente* has been introduced by the government. It refers to 22 indicators of the effectiveness, efficiency and quality of research and is used to calculate and allocate resources to support it.

The CNVSU, formerly the *Osservatorio per la Valutazione del Sistema Universitario*, was established by the government in 1999. It is attached to the *Ministero dell'Istruzione, dell'Università e della Ricerca* (MIUR) and one of its main responsibilities is to propose regulations and criteria for evaluating university activity and to collaborate in experimenting with, applying, and spreading good practice and methods in evaluation.

A working group on the accreditation of study programmes was set up in 2000, with the responsibility of studying the timeliness of accrediting study programmes and the methods that should be adopted to do so. The final report it produced in July 2001 contains a set of recommendations and proposes the implementation of this kind of approach²⁶.

20 Conferenza dei Rettori delle Università Italiane

21 Comitato Nazionale per la Valutazione del Sistema Universitario

22 Comitato di Indirizzo per la Valutazione della Ricerca

23 Comitato di Esperti per la Politica della Ricerca

24 Analisi dei Sistemi di Gestione degli Atenei

25 La ricerca scientifica nelle università italiane: una prima analisi delle citazioni della banca dati ISI, Elena Breno, Giovanni A. Fava, Vincenzo Guardabasso, Mario Stefanelli. CRUI, Roma, 2002

26 See the websites www.cnvsu.it and www.cruisv.it

In regards to the evaluation of administrative management, the Committee has developed two projects, namely *Good Practices* in 2000, and *Good Practices II* in 2002. The aim of the first was to develop and experiment with a system for analysing and measuring Italian university administrative services in accordance with the principles of functional analysis. The second project sought to introduce efficiency measurements of administrative activity through a “customer approach” which targeted internal customers (deans and rectors) as well as external customers (particularly students).

The CIVR was set up in 1998 in order to support research and the better use of products of scientific and technological research. It was also expected to devise criteria for evaluating the results of research, and to experiment with, apply and promote methods and good practice in the evaluation of research establishments and programmes, as well as projects for technological development, by making the most of cooperation between the various research organisations at national and international levels.

Also set up in 1998, the CEPR has an advisory role vis-à-vis the MIUR and carries out studies on the state of national research and its position in the international context. It also advises the government on the development of the National Research Programme (PNR).

1.4 The situation in Luxembourg

The Grand Duchy of Luxembourg is in the process of establishing the University of Luxembourg. Articles 41 and 42 of Chapter V of the law on the founding of the university refer to the mechanisms planned for the internal and external evaluation of the university. The evaluation will cover all teaching, research and administrative activities. It will be carried out every four years in the case of units and programmes, and every two years in the case of researchers, as well as being the subject of public reports. The rector will be responsible for preparing detailed evaluation procedures.

1.5 The situation in Portugal

In 1993, the Portuguese Rectors Conference (consisting of the rectors of public universities and the Portuguese Catholic University) decided to begin a nationwide evaluation of the study programmes provided by public universities (and non-integrated university schools) and the Portuguese Catholic University. This decision was welcomed by the government and later became the basis for the Portuguese Law on Evaluation of Higher Education institutions²⁷.

This law is applicable to all sub-sectors of the higher education system²⁸ and has been in place since 2001. It states that each sub-sector (public and private universities and university schools, including the Catholic University, as well as faculties and public and private polytechnics and polytechnic schools) is responsible for the process of evaluation through evaluation agencies which are set up for the purpose or part of already existing institutions. At present, these representative organisations/institutions are the Foundation of Portuguese Universities (representing the public university institutions and the Catholic University), the Association for the Development of Polytechnic Institutes (representing the public polytechnic institutions) and the Association of Private Higher Education Institutions (representing the whole private sub-sector). The terms of reference are negotiated with the government and, among other items, take into account the financing responsibilities of each party, the process of evaluation and the appointment of external peers. At present, the government pays 90% of the costs of evaluation, while the representative organisations propose the external peers to the government, though not without the prior approval of the National Council for the Evaluation of Higher Education Institutions (see below). While the government may refuse any of the names proposed, it is not entitled in such cases to select its own appointees. Instead, those not accepted have to be replaced in a fresh proposal.

The evaluation of study programmes started in all public universities in 1994 and was extended to the whole system of Higher Education through legislation published in 1998²⁹. A new Council (the National Council for the Evaluation of Higher Education

²⁷ Law 37/94 published on 11 November 1994.

²⁸ Military Academies were recently included in this process.

²⁹ Decree Law 205/98 published on 11 July 1998.

Institutions, or CNAVES) was then implemented in order to establish evaluation procedure guidelines and assume responsibility for meta-evaluation. CNAVES includes representatives of the Minister, the public and private universities, the polytechnic institutes, the different evaluation agencies (one for each sub-sector, private and public, universities and polytechnics) and the students.

Public and private universities (and non-integrated university schools) have their own common set of guidelines, as do public and private polytechnics (and non-integrated polytechnic schools).

Study programmes are evaluated every five years in a process based primarily on self-evaluation (including the opinions of students) which must take into account several factors liable to influence the quality of programmes and their delivery. This is then followed by external evaluations performed by peers (national and foreign academics and external experts from different walks of life). After these external visits, a report is prepared on each programme evaluated and sent to the institution concerned. Under Portuguese legislation, institutions are entitled to comment during a one-month period following their receipt of the document. If the external panel agrees with such comments, it may amend the document and then produce a final report.

Final reports and comments for institutions are made public by the Ministry via its public library and evaluation agencies, mainly over the Internet. Institutions are also encouraged to publish the reports on their websites and make them available in their own libraries.

All higher education institutions are entitled to an evaluation and, if they decline to take part in the foregoing process, they are evaluated in accordance with a procedure determined by the Minister. Under the legislation, they may also face other consequences. For example, it may be impossible for them to obtain public funding or permission to enrol new students and their programmes may not be recognised.

At the outset of this process, there was no immediate direct link between the outcome of evaluation and funding, the recognition of study programmes, or other considerations. Only after several consecutive evaluations could the resultant findings have any firm implications for institutions. Somehow this was a way of overcoming the resistance expected on the part of the academic community to a new and challenging “exercise”. However, as might also be guessed, there have been widespread calls for action when the evaluation results of any particular institution are poor. Despite resistance from some sectors of the academic community, these criticisms have begun to affect the government, which has put before Parliament fresh legislation³⁰ under which poor evaluation results may have serious consequences for institutions. Among many other things, it provides for penalties ranging from reduced public funding to the discontinuation of a programme, or even the closure of the institution concerned. In addition, evaluation has to conclude with the award of a grade to each programme, whose accreditation is also linked to an evaluation procedure.

The term “academic accreditation” has now been introduced into Portuguese legislation for the first time. Hitherto, no programmes or institutions were “accredited”: they were either recognised or licensed. However, one may be left with the impression that the legislator could have done more to clarify the concepts. Special regulations relating to this law are expected in due course and, in the meantime, there will be discussions about the concept of accreditation and how it should be applied.

Aside from academic evaluation, accreditation procedures are also performed by some professional associations for professional purposes. There is ongoing discussion with a view to establishing a common set of procedures that will reduce the burden that successive evaluations place on the academic community and its institutions.

In 1993, in regards to research, the Secretary of State for Science and Technology decided to conduct an evaluation by foreign peers of all Centres that had been funded under the EU Ciência programme; the first comprehensive evaluation of its kind. Later, in 1996, this decision was enshrined in

30 Law 1/2003 published on 6 January 2003.

31 <http://www.fct.mces.pt>

law and a new funding system and method of evaluating research were formally introduced³¹. Evaluations are now mainly the responsibility of foreign peers and conducted at all centres (research organisations in institutions) funded by the Foundation of Science and Technology (a government agency for research funding).

International experts evaluate the activities of centres every three years and the results are made public. Continued funding of projects, as well as increases or decreases in funding, are dependent on the outcome of evaluation of this kind.

1.6 The situation in Switzerland

All Swiss universities have policies for the evaluation of teaching. And like the University of Fribourg, most institutions have also adopted procedures for evaluating units or programmes, which entail self-evaluation and evaluation by external experts. Furthermore, the *Centre d'Etude de la Science et de la Technologie* (CEST, or centre for the study of science and technology) carries out studies concerned with the performance of the Swiss research system. These studies rely to a great extent on bibliometric analysis and have even led the CEST to use a "Champion's League" concept, which should be regarded with the utmost caution in the light of the serious methodological problems associated with the "Citation Index" and ISI data.

Following the enactment of the Law on University Support (LAU) of 8 October 1999 and the Agreement between the Confederation and university cantons on cooperation concerning higher university institutions (14 December 2000), the Confederation and cantons meeting within the Swiss University Conference (CUS) set up a Body for Accreditation and Quality Assurance (OAQ), an independent entity consisting of a five-member academic council, including two foreign experts, and a secretariat responsible for implementing procedures.

The purpose of the OAQ is twofold. First, at the request of institutions, it may accredit them or some of their programmes. Second, it issues rec-

ommendations on the quality assurance methods that universities should develop. As CUS directives for "the accreditation of higher university institutions"³² have come into effect since 1 January 2003, the OAQ is preparing its initial activities, particularly in regards to higher education institutions that are not part of either a cantonal or federal university.

In relation to the evaluation of study programmes or units, Swiss universities have so far adopted institutional practices that are sometimes quite complex. Under the emerging new framework, institutions will remain responsible for evaluations of this kind, but OAQ will be seeking to improve the above-mentioned practices and make them more uniform by means of directives that still have to be formulated. That said, the programme accreditation mechanism to be set up by the University Conference under OAQ management is very likely to lead to a twin mechanism for periodic evaluation. Indeed it is planned that accreditation will be granted for a limited period, implying therefore that there will be fresh accreditation and, with it, fresh evaluation every seven years. Furthermore, the government authorities, as well as the universities, may request accreditation on their own initiative. It is thus highly likely that institutions will in fact largely surrender their responsibility in the area of evaluation to the OAQ.

1.7 Conclusion

This short overview of the situation, which can be supplemented by the ENQA study, illustrates how approaches to evaluation in universities in the Latin countries of Europe vary quite widely. However, arrangements that rely on a national body for evaluation seem to be the most widespread, reflecting the customarily centralised organisation of higher education systems in the countries concerned. Given the likelihood of growing decentralisation and a corresponding increase in the autonomy of institutions and, with it, in the responsibilities they exercise, it seems timely to examine such current practices and adjust them so that universities assume broader responsibility for evaluating their teaching and research activities.

³² <http://www.cus.ch>

2. THE QUEBEC MODEL

Universities in Quebec have long been accustomed to evaluating the quality of their teaching, their programmes and the performance of departments, faculties and institutes. However, research is also evaluated when Canadian or Quebec financial support agencies award grants to individual researchers, research groups, centres or institutes. Evaluation procedures in Quebec have demonstrated their effectiveness for over 10 years and may well serve as an inspiration to European universities setting up their own systems of quality evaluation.

2.1 Course evaluation

In most Quebec universities, courses are evaluated by students on a regular basis. Practice in this respect varies slightly from one university to the next, mainly as far as the scale of evaluation is concerned and the way in which its findings are publicised.

To take an example, ongoing evaluation procedures at Laval University are concerned with at least 30% of the courses offered each semester. Each new course, or course given by a new teacher, is evaluated. Evaluation occurs in two stages: after the third or fourth course session at the beginning of the semester, teachers carry out an in-class formative evaluation to help them identify possible problems; at the end of the semester, the director of the department carries out a summative evaluation using a standard questionnaire, to which all students taking the course are asked to reply.

The evaluation questionnaire contains questions on the content of the course, the way it is positioned in the programme as a whole, and the accomplishments of the teacher concerned. This questionnaire has been approved by the teachers' departmental assembly. A standard questionnaire has been drawn up at university level, but departments are free to add further questions. In addition, comments are invited from students. In a new approach currently being introduced, the questionnaire will be available on the Internet so that it is easier for students to access.

Evaluation findings are analysed at departmental level. Individual teachers receive the results of their course evaluation confidentially, along with a comparison of their results in relation to the average results obtained by other teachers in the department. Normally, the director of the department takes the opportunity to meet teachers individually to discuss their results and their activity more generally. Furthermore, a meeting is planned once every six months between directors of departments and management committees of programmes in which their teachers give courses, in order to discuss the evaluation findings and steps to be taken to remedy perceived problems. In the event of a problematic evaluation of a course or teacher, the director offers advice to the latter and may require that he or she attends teacher training sessions provided by a central department of the university.

These procedures which have existed for several years yield good results in terms of teaching quality. Student associations have often demanded that the findings of all such evaluations be published. The University management has resisted their demands in the firm belief that the publicity would tend to demotivate teachers whose evaluation rating was poor. Instead, it has introduced the practice of holding meetings between departmental directors and programme management committees with student representation, which appears to have overcome the problem. Certain Quebec universities, such as McGill, customarily publish evaluation findings which may be consulted in their university libraries.

Evaluation results are entered in the career files of teachers and are used to evaluate them with a view to their promotion. Certain universities customarily remunerate their teachers on the basis of merit. In such instances, the results of evaluation are taken into account when determining their annual salary increase.

2.2 Evaluation of programmes at their inception

In Quebec, universities are fully responsible for their programmes. However, in order to be eligible for government financing, Bachelor, Master and doctoral programmes have to undergo a quality evaluation. The system of evaluation involves the university concerned, the Conference of Rectors and Principals of Quebec Universities (the CREPUQ) and the Ministry of Education.

A new programme typically comes into being in the following stages:

- The programme is drafted by a committee formed by the faculty initiating it;
- The proposal is evaluated by the university studies committee;
- It is approved by the university council;
- It is submitted to the CREPUQ programme evaluation committee (CEP), which consists of professors from different fields of study and universities, and establishes a committee of experts for each programme proposal submitted; their evaluation focuses on the quality of the proposal and the ability of the university to offer the programme; the CREPUQ³³ website contains a description of the CREPUQ evaluation mechanism;
- The CEP submits a report, with recommendations, to the university concerned; recommendations may range from approval of the proposal as it is, to approval couched with suggestions for improvement, a request for amendments to the proposal, or a rejection of it; the university is then free to decide how it will act on those recommendations;

- Programme proposals that have received a favourable recommendation from the CREPUQ are submitted to the Ministry of Education; the Ministry has formed a programme evaluation committee consisting of very senior professors appointed on the proposal of the CREPUQ, and civil servants, whose task is to assess whether it is appropriate to offer a new programme, bearing in mind others already on offer in Quebec;
- The Ministry reaches a decision; in the event of a positive outcome which results in the regular financing of students who enrol on the programme, the Ministry may also agree to finance its initial development and provide an investment budget if this is included in the university applications when the proposal is submitted.

Now operational for many years, the foregoing process has proved its worth. Its only shortcoming is the time needed to complete its different stages; typically, approximately two years may be required for approval of a well thought-out proposal for which a strong case has been made (however, attention should be drawn to recent efforts by the CREPUQ to reduce the period during which proposals are examined by its programme evaluation committee). In addition, tactics appear to have been devised by several universities to circumvent the foregoing procedures when having to satisfy an urgent need for fresh provision. The most widespread tactic under the authority of the university is to make use of an existing programme in a closely related field where a new course can be introduced. Once this option has been consolidated, the proposal for a new programme is launched, with the possibility of strengthening the application by pointing to the number of students enrolled in the course to demonstrate that there is a clear need for the programme. The hope then is that this will be approved when it produces its first graduates so that they can be awarded the appropriate corresponding degree!

It should be noted that the procedure described above takes the place of university programme accreditation procedures. However, it must be emphasised that in certain fields of professional training such as engineering, medicine and dentistry, university programmes are subject to accreditation procedures by professional corporations that govern practice in the sectors concerned. The procedures entailed are the responsibility of bodies that report to Canadian professional corporations or associations or, in the case of medicine, to American corporations or associations.

2.3 Periodic programme evaluation

Since the early 1980s, Quebec universities have gradually introduced procedures for the periodic evaluation of their programmes or, in certain cases, their academic or administrative units, including departments, faculties, institutes, research centres and administrative services. At the outset, these procedures were specific to each university, so that the thoroughness and rigour of evaluations varied quite considerably, as did the way in which their recommendations were followed up.

In the early 1990s, following concerns expressed by the Government, universities adopted a framework for developing more uniform practice in this area under the control of the CREPUQ. A policy for universities in Quebec concerning the periodic evaluation of existing programmes was adopted in March 1991. Its most recent version may be accessed on the CREPUQ website³⁴.

In compliance with the foregoing policy, the CVEP (a programme evaluation monitoring committee) was set up. Consisting of five members who are former university leaders of exceptional standing, the Committee has the task of periodically auditing policies and procedures for periodic programme evaluations at each university. The Committee visits institutions, examines documents describing their policies and, above all, in the case of

certain randomly selected programmes, examines records of evaluations carried out in accordance with institutional policy, and how recommendations made subsequent to these evaluations have been followed up. The Committee reports are public.

The immediate effect of introducing the Committee Policy has been the general extension of periodic programme evaluation activity in all universities. The publication of the Committee's initial reports has then led to policies becoming increasingly similar. Also, the Committee, supported by all the universities, has produced a guide to good practice in evaluation. Its key points are annexed to the text of the policy itself.

The basic principle is that institutions and units should themselves be given responsibility for evaluation. From this standpoint, the stages of evaluation are as follows:

- Self-evaluation by the unit or programme concerned, which entails not just the managers but also teaching staff members and student representatives;
- The contribution of an evaluation committee, which generally consists of teaching staff members from another unit in the university, students not involved in the programme and at least two specialist experts in the field of study concerned, who are from outside the university;
- An evaluation report which includes an official reaction by the person in charge of the unit or programme regarding how (s)he intends to follow up the recommendations;
- Arrangements for the receipt and monitoring of evaluation reports by the university's managing bodies;
- Reports must be made public.

34 www.crepuq.qc.ca

The effect of this policy on institutional evaluation practice at Quebec universities and on the development of a real “evaluation culture” in all institutions has been very positive. The Committee completed an initial monitoring phase in 1999, following which it produced a comprehensive activity report that may be accessed on the CREPUQ website³⁵. A symposium involving representatives from all the universities and the Ministry of Education was organised in November 1999 and provided an opportunity to learn from this first monitoring phase. As a result, the policy was amended in certain respects.

This approach is especially interesting in that it wholly respects the autonomy of institutions while at the same time rendering them accountable. It enables all universities to fully assure the Government and the general public that their programme quality management is rigorous. And it is also a way of avoiding the high administrative costs normally associated with the activities of national bodies for programme evaluation.

2.4 The Commission on University Programmes

In the aftermath of the Convention on Education held in 1995-96, universities supported by the Ministry of Education established a Commission on University Programmes (CUP), which was to be responsible for undertaking a thorough review of the teaching programmes on offer at all Quebec universities. Formed from representatives of all the universities and senior ministerial officials, the Commission set up around 20 sub-committees, each corresponding to a particular academic field. Each sub-committee was responsible for examining programme provision in the field concerned, with due regard for the nature and content of programmes, changes in student clientele, length of courses, graduation rates, teaching resources, research performance and the material and financial resources to support each programme.

As a result of the reports for each academic field produced by the CUP, it was possible to first obtain a broad picture of university programme provision in Quebec from the qualitative standpoint and second, in some cases to make recommendations as to how this provision might be rationalised. They included proposals that some programmes only poorly attended or without the resources necessary to sustain quality should be discontinued, or that universities should collaborate to offer joint programmes, or increase the level of specialised provision and, by the same token, the extent to which programmes were complementary. All reports resulting from CUP activity are available on the CREPUQ website³⁶.

The work of the CUP has above all significantly increased the level of collaboration between universities at departmental and subject levels. As a result, it has been possible to optimise the use of public funds made available to the universities.

Finally, it should be noted that universities decided to continue the activities undertaken by the CUP when it completed its work. A CREPUQ working group has thus been made responsible for keeping the databases describing the situation in various academic fields up to date and, more important still, appropriately following up the implementation of CUP recommendations.

35 www.crepuq.qc.ca

36 www.crepuq.qc.ca

2.5 Evaluation of research

University research in Quebec is financed by three main sources, namely the Canadian grant councils, which account for the major share of support, the Quebec grant councils and the business sector by means of research contracts.

Grants from the Canadian and Quebec councils are awarded to individual researchers, groups of researchers or research centres in accordance with the projects they submit for support, which are examined by panels of peers. The quality of a given project, as well as that of the researchers associated with it, are the main factors taken into account. The quality of researchers is evaluated mainly with reference to their publication records in terms of its extensiveness, the quality of the periodicals in which they have published and, in certain cases, by examining the three or five best published items selected by the researcher concerned. Indexes of quoted sources are never considered since they are not really regarded as indicative of the quality of researchers. Competition is fierce with success rates varying between 15% and 60% depending on the programme in question. Evaluations conducted in the case of grant applications may replace the main evaluation of research activity.

At unit level, evaluation of research activity is normally limited to examining the number of teachers with grant support, the number and amount of grants obtained, the size of publication output and supervision of doctoral students (numbers, average length of courses, graduation rates). Evaluation of this kind is an integral part of procedures for the periodic evaluation of programmes and units discussed in the previous section. Certain universities have adopted internal policies for the evaluation of groups and research centres. Implemented by specialist bodies (research committees), these policies normally involve appraisals by peer committees which sometimes include experts from outside the university concerned.

3. OTHER APPROACHES

3.1 The Approach in England

The university system in England has undergone major changes in the last ten years, especially with the adoption of the 1992 *Further and Higher Education Act* which conferred university status to polytechnic institutions. Another outcome of the Act was to restructure university funding and evaluation mechanisms.

The Higher Education Funding Council for England (HEFCE), which is in charge of financing universities, introduced a mechanism for the quality evaluation of subject-based programmes that led to the classification of each programme in one of three categories, namely “excellent”, “satisfactory” or “unsatisfactory”. Programmes identified as “excellent” by the universities underwent an evaluation visit; programmes that were not evaluated were automatically classified as “satisfactory”. With experience, HEFCE evaluations attracted growing criticism, essentially because they appeared to be favourably biased towards the historically established universities. After several attempts to change procedures, a new approach was introduced in 1997, with the establishment of the Quality Assurance Agency (QAA).

The initial mission of the QAA was to evaluate universities and their programmes periodically. Its procedures are described in its *Handbook for Academic Review*³⁷. The evaluation procedures initiated by the QAA were relatively cumbersome to manage, as will become clear from this document. Indeed, an HEFCE investigation in 2000³⁸ revealed that “subject reviews” were costly but only had a limited impact as no more than 0.2% of evaluations were negative. In fact, the evaluation procedures have been widely criticised by academics in England, mainly for the amount of documentary material that has to be produced and the cumbersome nature of the process. Therefore in 2002, the QAA shifted its attention to “institutional audits” whose procedures are described in the *QAA Handbook for Institutional Audit: England*³⁹ and which seek to evaluate the internal quality evaluation procedures and management practice of universities, only evaluating academic programmes if any problems have been detected.

Once every five years, the HEFCE also carries out Research Assessment Exercises (RAEs), the aim of which is to evaluate the research performance of universities in each discipline, with the findings directly influencing the financing of research at each institution. The procedures of these RAEs are described in a guide⁴⁰ and entail evaluation by peer committees of university reports in 70 academic fields. Each field for which a university submits a report for evaluation receives a score between 1 and 5, on which funding directly depends. There is no funding for disciplines that score 1 or 2, and four times as much funding for a discipline with a score of 5 than one with a score of 3 for research on the same scale.

It may be said that, to some extent, the English university system suffers from an overdose of evaluation. While the RAEs appear to have had a positive impact on the care universities take with the strategic management of their research activities, it is not really clear whether, as a whole, this overdeveloped approach to evaluation has had an impact commensurate with the management costs of the processes entailed. However, it is clear that many teams of experts have been mobilised in the course of these operations and that extensive organisational arrangements have been developed to implement them.

3.2 American approaches

In the United States, the development and complexity of the higher education system with its combination of public and private universities, and major research universities alongside small specialist universities and Liberal Arts Colleges, etc. has naturally resulted in evaluation and accreditation arrangements that are themselves very complex. Essentially, they take the form of bodies for the accreditation of programmes and qualifications, which may be private or public and which may themselves be recognised.

37 www.qaa.ac.uk

38 HEFCE, 2000, *Better Accountability for Higher Education*, Report 36

39 www.qaa.ac.uk

40 www.hero.ac.uk

Among them are the following:

- regional bodies for accreditation which are concerned with all private or public universities in a particular region;
- national bodies for accreditation which generally specialise in the evaluation of certain types of institutions (private denominational establishments) or programmes (distance education);
- professional bodies for the accreditation of professional training programmes (in medicine, dentistry, veterinary medicine, engineering and administration).

Most of these bodies are themselves recognised by the Council for Higher Education Accreditation (CHEA), which was set up in 1996 by the university sector and lays down standards of good practice that accrediting organisations have to comply with. All relevant information on CHEA procedures may be accessed on its website⁴¹. In parallel, the Department of Education conducts its own meta-accreditation which is a necessary condition to receive federal funds.

The European academic community would do well to closely examine the CHEA model at a time when quality assurance systems are being established in all European countries. Its approach involving the formulation of rules for good accreditation practices that the accrediting bodies have to comply with if they are to be recognised by the CHEA, appears to be particularly well suited to the European context with the implementation of the Bologna Declaration.

3.3 Other international initiatives

The last 10 years have witnessed the development of several initiatives at international level concerned with the question of “quality assurance”, accreditation and the recognition of university degrees.

At European level, the European Network for Quality Assurance in Higher Education (ENQA), which groups together 36 national bodies in Eu-

rope with responsibilities for national university quality evaluation systems, was set up in 1999 following the adoption of recommendation 98/561/EC by the Council of the European Union in September 1998. ENQA regularly organises meetings and conferences that bring together European contributors in the field of quality assurance, and publicises reports on its website⁴². The Bologna Declaration by European Ministers of Education in June 1999 and the Conferences of Education Ministers (Prague, 2001 and Berlin 2003) have called on all European countries to reinforce their cooperation in the area of quality assurance as they pursue the aims of the Bologna Declaration. The Bologna process has highlighted the potential role that ENQA can play at European level.

Similarly noteworthy is the development of the Joint Quality Initiative which involves 22 organisations from European countries – with English-speaking and Nordic countries in the majority – working together on quality assurance issues. As an outcome of a workshop organised in Maastricht in 2001, this body held a European meeting on the subject of quality assurance in Amsterdam in March 2002. The results from the meeting may be consulted on the organisation’s website⁴³.

More recently, UNESCO’s Division of Higher Education convened a first Global Forum concerned with this issue in Paris on 17-18 October 2002, in order to propose an action plan for the 2004-05 two-year period to the Director-General of UNESCO. This forum linked all major regional and international organisations concerned with higher education, including the OECD and the World Bank (only the World Trade Organization was not present). The forum undertook a broad review of questions that arose in relation to the GATS (General Agreement on Trade in Services) in the light of prospects for broader international exchange of services in higher education. The draft recommendations from this Global Forum may be consulted on the UNESCO website⁴⁴. UNESCO and OECD have agreed to work further on the issue of a global quality framework.

41 www.chea.org/about/Recognition.cfm www.chea.org

42 www.enqa.net/pubs.lasso

43 www.jointquality.org

44 www.unesco.org/education/studyingabroad/highlights/global_forum_main.shtml

4. PROPOSED RULES FOR GOOD PRACTICE IN EVALUATION

It has been seen that, in most Latin countries in Europe, major reforms are underway in the evaluation of higher education institutions and their teaching and research activities. To a large extent, these reforms reflect the distinctive features and national traditions of higher education systems. In fact, it may seem very surprising that, in the light of the Bologna commitments, there has not been greater consultation between States in establishing evaluation mechanisms. The aim, however, of introducing a common reference system for indicators and evaluation procedures to support the growth in student mobility that the Bologna Declaration is expected to generate calls for, if not more uniform evaluation procedures, at least the adoption of rules of good practice in evaluation on which there should be broad agreement.

What might these rules be? The following is based on ongoing practice in Europe as well as in North America, with due regard for the basic principle of university autonomy and concomitant responsibility, and bearing in mind also the fact that evaluation should ensure uniform quality while safeguarding the diversity of university educational provision.

4.1 Encouraging institutions to assume greater responsibility

The principle of university autonomy is universally recognised and moreover very clearly stated, for example in the conclusions of the 1998 UNESCO World Conference on Higher Education. However, the principle is reflected upon a very wide spectrum of practice in the various countries of the developed world, including those in Europe.

This principle of autonomy should guide all actions taken by universities and the authorities responsible for them. In universities, autonomy should go hand in hand with responsibility, and especially responsibility in the use of public re-

sources and the development of quality in teaching and research programmes. It should be natural enough for each university to adopt a policy for evaluating the quality of its courses on the one hand, and the efficiency of its teaching and research units on the other.

As far as university regulatory authorities are concerned, they should strive for policies stimulating universities to assume full responsibility for their quality and efficiency. In particular, they should encourage good practice on the part of universities when reporting on the appropriate use of public funds available to them, and establish mechanisms for monitoring their use.

Mechanisms for evaluating the quality of universities and their education and training programmes should be devised in such a way that they have prime responsibility for evaluation and appropriate follow-up subsequent to it. They should also include a mechanism or arrangements for auditing the way in which universities fulfil their responsibilities in the area of evaluation.

From this standpoint, it might be productive to reassess the current remits of the national evaluation agencies that have been entrusted with performing evaluations themselves, in that this *modus operandi* discourages universities, to some extent, from assuming their responsibilities in this area. On the other hand, by concentrating their efforts on formulating principles appropriate to institutional policies for evaluation and on monitoring the existence, the quality and the implementation of those policies, as well as ensuring that their observations are aired as widely as possible, these national evaluation agencies would fully assume their central responsibility for quality assurance in a higher education system committed to respecting the principle of institutional autonomy.

4.2 Self-evaluation – an essential first stage

In respecting the principle of autonomy and the responsibilities that derive from it, any operation to evaluate a university programme or unit should begin with serious introspection and thus self-evaluation. This undertaking should consist of two distinct phases. The first is an appraisal of activities carried out in recent years, which provides for the identification of strong points, shortcomings, risks and opportunities characteristic of the unit or programme concerned. This appraisal should then result in an action plan identifying measures to correct the weaknesses observed and to develop fresh avenues for managing perceived risks and exploiting the opportunities identified. The same self-evaluation should lead to the mobilisation of all those actively involved in the unit or programme to help develop collective awareness of the situation and nurture the conditions required for constructive collective action.

The first and essential stage of any evaluation should be the self-evaluation of the particular unit or programme, so that those actively involved in the unit can be mobilised with respect to a clearly perceived situation and the steps that should be taken to ensure the progress of the unit or programme concerned.

4.3 Peer evaluation – the foundation of the system

Universities should always be working at the cutting edge of knowledge in research, naturally enough, but also in teaching, which should benefit from the continued improvements made possible by progress in research. Evaluating their work therefore requires a sound grasp of the current state of knowledge and ongoing developments in the field of learning considered. Accordingly, evaluation should mobilise contributions from experts in that field and indeed, in the interests of objectivity, from experts outside the university. At the same time, evaluations should pay due regard to local and national circumstances, which justifies the participation of teams of local evaluators. The intervention of a particular committee external to the unit enables the analytical activity performed by members of the unit as part of their self-evaluation to be placed in an appropriate local and subject-oriented perspective. A critical view of this kind by persons who are knowledgeable but not directly involved guarantees the objectivity required.

A good institutional policy for evaluation should entrust responsibility for evaluation to a committee of experts in the concerned field who are external to the university, and to local players from outside the unit. Representatives of students and socio-economic interests associated with the programme or unit to be evaluated should take part in the work of the committee.

4.4 Publicising evaluation findings – the platform for credibility

To be really worthwhile and, above all, taken seriously by all relevant interests, an evaluation should result in the publication of a report widely circulated within the institution. Naturally, this report should respect the rights of individuals and thus be formulated to indicate general strategies that should be adopted as a priority by a unit or programme, and collective action that should be taken to implement them. The report should be published after being submitted for examination to the unit concerned, so that it can correct any possible factual errors and above all comment on it and explain how it intends to follow up the recommendations of the evaluation committee. The evaluation report and the unit's action should be the subject of a discussion and formal acceptance by the institution's governing bodies. Certain North American universities have established the practice of producing an executive summary of the evaluation report and circulating it not just within the entire university community but also among the regulatory authorities and the alumni and friends of the university in question.

4.5 Respecting diversity – an essential precondition for development

Modern universities are above all else places for the expression of cultural diversity, responsiveness to fresh ideas, and the development of new fields of study and research. They should therefore maintain the utmost discretion in regards to the development of standards concerned with the methods and content of their teaching and research activities. The only standard that should guide universities and all their players is that of quality judged with reference to best practice in international university circles.

Evaluation policies and practice should pay very close attention to protecting this cultural diversity essential to the healthy development of universities. This is important above all in the development of transnational evaluation processes as currently envisaged in Europe in the aftermath of the Bologna Declaration. In fact, this declaration is concerned with enriching educational provision through increased opportunities for student mobility, admitting implicitly that the provision of universities in different European countries has similar objectives but uses different methods in different contexts by means of which this greater interest and variety may be secured.

Evaluation policies should enable one to safeguard or make more of the diversity of practice in teaching and research in European universities. They should therefore place greater emphasis on the quality of results than on the analysis of means.

EUA is the representative organisation of universities and national rectors' conferences in 45 countries across Europe. EUA's mission is to promote the development of a coherent system of education and research at the European level, acknowledging the diversity of its members and the importance of solidarity.

Through projects and services to members, EUA aims to strengthen institutional governance and leadership, and to promote partnership in higher education and research both within Europe, and between Europe and the rest of the world.

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