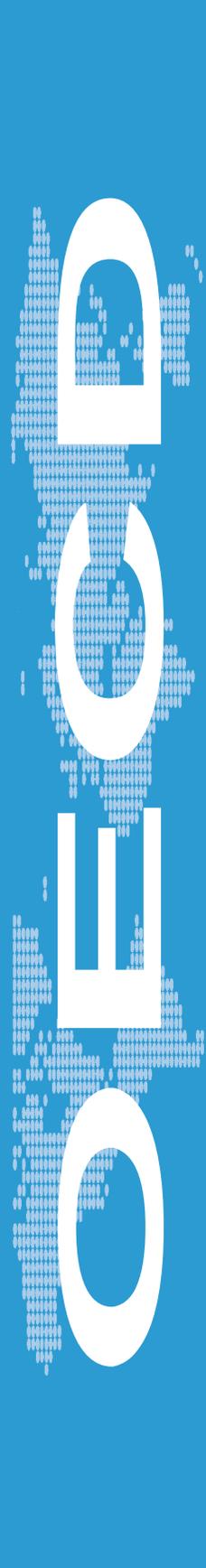


JOURNAL OF THE PROGRAMME ON
INSTITUTIONAL MANAGEMENT IN HIGHER EDUCATION

Higher Education Management

Vol. 10 - No. 3

imhe



JOURNAL OF THE PROGRAMME ON INSTITUTIONAL MANAGEMENT IN HIGHER EDUCATION

Higher Education Management

Vol. 10 - No. 3

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971), New Zealand (29th May 1973), Mexico (18th May 1994), the Czech Republic (21st December 1995), Hungary (7th May 1996), Poland (22nd November 1996) and Korea (12th December 1996). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

The Programme on Institutional Management in Higher Education (IMHE) started in 1969 as an activity of the OECD's newly established Centre for Educational Research and Innovation (CERI). In November 1972, the OECD Council decided that the Programme would operate as an independent decentralised project and authorised the Secretary-General to administer it. Responsibility for its supervision was assigned to a Directing Group of representatives of governments and institutions participating in the Programme. Since 1972, the Council has periodically extended this arrangement; the latest renewal now expires on 31st December 2001.

The main objectives of the Programme are as follows:

- to promote, through research, training and information exchange, greater professionalism in the management of institutions of higher education; and
- to facilitate a wider dissemination of practical management methods and approaches.



THE OPINIONS EXPRESSED AND ARGUMENTS EMPLOYED IN THIS PUBLICATION ARE THE RESPONSIBILITY OF THE AUTHORS AND DO NOT NECESSARILY REPRESENT THOSE OF THE OECD OR OF THE NATIONAL OR LOCAL AUTHORITIES CONCERNED.

*
* *

Publié en français sous le titre :
GESTION DE L'ENSEIGNEMENT SUPÉRIEUR

© OECD 1998

Permission to reproduce a portion of this work for non-commercial purposes or classroom use should be obtained through the Centre français d'exploitation du droit de copie (CFC), 20, rue des Grands-Augustins, 75006 Paris, France, Tel. (33-1) 44 07 47 70, Fax (33-1) 46 34 67 19, for every country except the United States. In the United States permission should be obtained through the Copyright Clearance Center, Customer Service, (508)750-8400, 222 Rosewood Drive, Danvers, MA 01923 USA, or CCC Online: <http://www.copyright.com/>. All other applications for permission to reproduce or translate all or part of this book should be made to OECD Publications, 2, rue André-Pascal, 75775 Paris Cedex 16, France.

HIGHER EDUCATION MANAGEMENT

- A journal addressed to administrators and managers of institutions of higher education and researchers in the field of institutional management.
- Covering the field of institutional management through articles and reports on research projects.
- A source of information on activities and events organised by OECD's Programme on Institutional Management in Higher Education.
- Published under the title *International Journal of Institutional Management in Higher Education* between 1977 and 1988, it appears three times a year.
- Issued in English and French editions.

Information for authors wishing to submit articles for publication appears at the end of this issue. Articles and related correspondence should be sent directly to the Editor:

Prof. Maurice Kogan
48 Duncan Terrace
London N1 8AL
United Kingdom

To enter a subscription, send your order to:

OECD Publications Service
2, rue André-Pascal, 75775 Paris Cedex 16, France

1999 subscription (3 issues):

FF 385 \$70 DM 115 £45 ¥ 9 000

Single issue price (1998):

FF 135 \$25 DM 40 £15 ¥ 2 900

For information on how to order past issues please write to:

OECD Publications Service
2, rue André-Pascal, 75775 Paris Cedex 16, France.

CONTENTS

Quality Assessment in Higher Education – Conference in Mexico City	
Editor's note	7
The European Systems of Quality Assurance – Dimensions of Harmonisation and Differentiation	
C. Thune	9
Is there a Scandinavian Model of Evaluation of Higher Education?	
S. Wahlén	27
Accreditation's Role in Quality Assurance in the United States	
E. El-Khawas	43
Quality Assessment in Mexican Higher Education	
J. F. Zorrilla	57
Innovation through Merging?	
O.-J. Skodvin and B. Stensaker	73
Organisational Challenges for the University	
F. Santos, M. V. Heitor and J. Caraça	87
Organisation of First-cycle Teaching at University: Models and Issues	
D. Bertrand and G. G. Busugutsala	109
The Finnish Open University as Young Adults' Testing Arena	
E. Piesanen	137

QUALITY ASSESSMENT IN HIGHER EDUCATION CONFERENCE IN MEXICO CITY

The IMHE project on quality management, quality assessment and the decision making process will soon reach a productive conclusion with the publication of an edited volume of more than 30 case studies and of a general report. As part of the programme there has been a series of dissemination conferences starting with one in Germany in May 1997 and continuing over 1998 and 1999 in Poland, Latvia and Australia.

In this issue, we publish a small selection of papers presented at a conference held in December 1997 in Mexico City. The conference included no less than 11 contributions from Mexican experts and practitioners but also included contributions from the United Kingdom, the United States, Denmark, France and Sweden.

The selection published now illustrates the international range of the IMHE programme. Juan Fidel Zorilla presents basic information on Mexico's national quality assessment agencies programmes set within the context of Mexican higher education policy and the concern for quality assessment. Christian Thune provides a contrasting picture of European systems of quality assurance. Elaine El-Khawas contributes a paper on the role of accreditation in quality assurance in the USA. And Staffan Wahlén offers an account of the Scandinavian model of evaluation.

The conference proceedings as a whole, of which these papers are examples only, illustrate the continuing importance of the issue of quality assurance in member countries. They will be published in Spanish by UNAM.

The Editor

THE EUROPEAN SYSTEMS OF QUALITY ASSURANCE DIMENSIONS OF HARMONISATION AND DIFFERENTIATION

Christian Thune

Danish Centre for Quality Assurance and Evaluation
of Higher Education
Denmark

ABSTRACT

Whilst the evaluation of higher education in different countries shares many features, it is subject to a range of interpretations and operational procedures. This variation is evident in the use made of external experts, the role played by various stake-holders and the scope and level of evaluation, including the extent to which education, and teaching, is assessed. Pilot projects at the European level are noted. The need for a harmonious European framework is assessed.

SETTING UP SYSTEMATIC EVALUATIONS IN WESTERN EUROPE

The last decade has witnessed a remarkable European trend towards assessment and improvement of higher education. Government policies of decentralisation, value-for-money perspective, and internationalisation have all contributed.

Several parallel developments have influenced this trend. Thus the move in higher education from an elite to a mass-system has changed the nature of the student population, and has produced a need for a quality in higher education that may meet a diversity of student needs and abilities. At the same time

national governments have focused more on the need for accountability of the higher education institutions. This “value for money” perspective has in some countries been further influenced by a process of decentralisation. In this context more freedom for the institutions has been balanced by the setting up of systematic evaluation procedures. Finally the growing trend of internationalisation of students and studies has given a priority to international comparison of well-defined levels of quality.

Accordingly government initiatives caused the establishment of agencies in France (1986), the Netherlands (1988), the United Kingdom (1992) and Denmark (1992) with the task of systematically assessing all higher education in these respective countries. Other countries such as Finland, Norway, Portugal, Spain and Sweden followed although at varying levels of ambition in terms of a systematic effort.

Today in most of the fifteen member states of the European Union national systems of evaluation have been or are now being developed. These systems have of course similarities as well as differences. Methodologies are adapted to the specifications of each country and they try to meet the particular circumstances of each member State.

CHOICES OF METHODOLOGY AND PROCEDURES

Over the last years representatives of European evaluation agencies have regularly met to discuss their national experiences of methodology, procedures and best practices. The first systems in place, the French, Dutch, British and Danish, undeniably have had many elements in common. For example, they all initially planned their evaluations on the basis that all study programmes or institutions must within a specified cycle of time be evaluated. And all of them insisted that the instruments used for managing systems must in principle be autonomous and independent, both from the Government and from the higher education institutions.

There has been a general agreement among experts from these four national systems on the importance of self-evaluation, of peer review, of site visits, and on the value to be obtained from evaluation reports, which are then published. But within this general consensus European discussions have been fed by differences in national interpretations and experiences of the operational implications of setting up procedures. The following sections will present some of the more relevant items of discussions and priorities.

Self-evaluation

The self-evaluation is the standard against which the institution can measure itself. It provides a framework for building up a definition of quality, it helps the institution decide how far it is achieving its strategic mission and goals, and it allows it to build an action plan for development. All the European agencies share the practice to make the self-evaluation of the institutions an essential part of the evaluation process. Practically all agencies provide guidance or manuals for the self-evaluations, even if only a minority provides actual training on doing self-evaluations. In this context it could in passing be mentioned that the exporting of self-evaluation procedures and manuals has been a major phenomenon of systems export from the older to the newer systems.

The self-evaluation ideally should reflect a subtle balance between qualitative and quantitative data. But there is no doubt that especially the quantitative part, bordering on performance indicators, causes considerable work and some apprehension at the institutions. Not all European agencies request this kind of data, but those who do share the experience that many universities are not yet geared to compile and deliver that kind of precise data.

In the qualitative context the self-evaluation should be used to put more stress on inviting the study programmes to analyse their mission, values, goals and strengths and weaknesses respectively. Therefore the second and perhaps even more important purpose of the self-evaluation is to provide the institution and the study programme with a commitment and a valid procedure and method to continue a process of quality assurance. It is very important to stress that the long term perspective of the effort vested in the self-evaluations is not only delivering the material for a control process, but also contributing towards local quality improvement.

In this context the role of the external experts is important. The experts will conclude on the quality of the institution or the programme on the basis of the self-evaluation and the site visit. The more the self-evaluation is given priority in this process, the more the self-evaluation will function as training and preparing the institution or the study programme for taking over the responsibility for its own quality development – and the less the self-evaluation is seen merely as producing information for the experts.

The role of experts

The appointment of experts to the visiting panel is a critical part of the evaluation project. It is decisive for the successful outcome of the project that the panel is well-functioning, competent and that the members take their job seriously. Several interests have therefore to be considered and there are distinct differences in European practices.

Of course there is a consensus among European agencies that the experts need a thorough understanding and knowledge of the subject matter under scrutiny and that they must be independent of the study programme and the institution being evaluated. It must also be ensured that the external panels do not reflect biased views in relation to the environments about to be evaluated.

The latter goal is difficult to obtain with the use of national experts, and a special problem is therefore the ambition of some national systems to invite international experts. The problem is that international experts may possess the true externality *vis-à-vis* the process, but at the same time they lack the basic knowledge and understanding of the national system in question. Accordingly it is necessary to be aware of the need to avoid the frustrations caused in the institutions of higher education if an inter-national panel demonstrates lack of understanding of the educational-political premises within which the study programmes function. Another implication of the use of international experts is the need of preparing the data in English and communicating with the experts in English. In some institutional environments this is considered to be a hindrance to the process, which could make a successful dialogue difficult.

The composition of the visiting panels and the qualifications of the individual experts are another crucial issue. In most countries the peer concept is applied and the panels consist of so-called single professional peers who are experts in the disciplinary field(s) under evaluation. In a few countries a broader peer concept is in use, and visiting panels may include experts in fields connected to higher education, *e.g.* institutional management, financing or pedagogics/didactics. Further, there is a growing tendency to include representatives of employers in the visiting panel.

A final interesting dimension of the functioning of external panels is the division of labour between the experts and the professionals at the evaluation agency. In neither the French, Dutch, British nor Danish systems the experts are expected to carry the responsibility of actually drafting and writing reports. This is the responsibility of the agency staff assigned to the specific evaluations or of specially trained experts. One of the agency heads has presented this division of labour in terms that the experts own their thoughts and their judgements, the agency owns the words with which these judgements are presented in a report.

The site visit

The visit by the experts to the programme or institution is interestingly enough a field with major differences in procedures among agencies. The British spend up to four days on a visit which even includes observations by the experts of class room teaching. The Danes concentrate on a one day visit which, however,

is so carefully planned that all relevant groups from the level of Rectors/Deans down to students are covered in sessions.

However, there is general agreement that successful site visits must provide the necessary supplement and perspectives to the self assessment, provide participants with the opportunity of expressing their view points on strengths and weaknesses of the programme, ensure that institutional representatives have already by the end of the visit been provided with input to further quality improvement by the themes brought forward for discussion by the steering committee, and finally that institutional representatives and the steering committee all interpret the evaluation process as a quality improvement process and conduct the visit accordingly.

Performance indicators

A substantial item in discussions is the use of statistical data and performance indicators. The problem for many national agencies is the enthusiasm of politicians and ministries of finance for performance indicators and belief in quantitative result-based approaches. It is certainly a major educational task for agencies to warn against the pitfalls in these approaches. Most agencies seem to agree that there is no necessary link between performance indicators and quality, which is about much more than output measures. It is also about inputs, about the quality of the teaching and lecturing staff, and about the quality of the equipment and laboratories available within universities and colleges. It is also important to look at processes when one is assessing quality. More than anything perhaps it is essential through the evaluation procedures to achieve some relevant idea of the extent to which the educational and teaching processes provide the students with value-added in terms of their basic entrance qualifications.

Of course it is important to have a look at outputs in the form of student-success ratios and post-course success ratios, and measures of client satisfaction. However quality assessment should not be about output measures only, but should also be concerned with the quality of inputs and the quality of the educational process.

The relevance and role of stakeholders and users of higher education in the quality process

A central item is the discussion on the identity of the relevant stakeholders *vis-à-vis* higher education (students, graduates, employers, Government, and other budget providers) and how stakeholders and consumer interests may be mobilised and utilised in the context of quality development and assurance.

This discussion on the role of stakeholders leads to two questions. The first question is to what extent stakeholders, whether students or employers from the public or private sector, should indeed play an active role in evaluations, or whether evaluations should be left to administrators of evaluation agencies and university professors with good academic credentials. The same question which follows from the answer to the first one is of course that if stakeholders should play such a role, what organisational implications could this have within the various national systems of evaluation.

Generally stakeholders are not very visible in the European evaluation procedures. As one example the Danish system has the most explicit focus always using employer representatives in the expert panels and conducting extensive surveys of the attitudes of employers, recent graduates and students in the evaluation processes. As another example the Swedes do none of this, but on the other hand include students in the expert panels.

For most national systems it seems as if the focus is on the evaluation process as a fundamentally academic phenomenon. There seems to be an apprehension that the dialogue between stakeholders and institutions cannot be properly balanced in such a way that the integrity and independence of the institutions are not in question. The experience of the Danish system and of others is, however, that it is indeed possible to hold the balance keeping in mind that the role of the stakeholder is to give information and advice, and not to take over the institutions, nor to dictate the content of the education or to control the production. The consumer is not always right.

Students are also users of education – just like graduates and employers. The students have a concrete and precise impression of the strengths and weaknesses of education programmes. It is the students, who as recipients of teaching receive the direct impact if there are problems with the quality of teaching or with the necessary facilities – and it is the students who gain when teaching is inspired and study plans are cohesive. At the same time the students constitute a spontaneous group of users who seldom let their judgement depend on strategic speculations and overall political contexts. The students may pose the unpolished critical questions and the unpleasant suggestions for renewal. In other words students are a real group of users whose input may to great advantage be used in quality assurance of higher education.

This is also the case in all systems at least at the level where interviews with student representatives are an important element in site visits. On the other hand it seems as if not all systems take care that institutions and programmes do provide the students with a substantive role in the self-evaluation process.

The comprehensiveness of evaluation systems

The European systems vary in terms of the scope and level of institutions and activities targeted by evaluations. These different interpretations of the relevant comprehensiveness are firstly evidenced by the fact that almost all European systems do make a distinction between evaluation of higher education at the level of universities and the level of non-university institutions, *i.e.* short range programmes, medium level programmes, *fachhochschule*, polytechnics, or whatever terms are used to identify this second level. In fact almost all the European agencies have at least a focus on university level institutions. An exception is Ireland where the National Council for Educational Awards now has been evaluating or accrediting the non-university sector for 25 years, making it the senior agency in Europe. The Danish system combines evaluation of university and non university institutions within the same procedure and methodology. The Dutch have two distinct agencies of which one is run by the Association of Universities (VSNU) for the universities and one is run by the Association of Dutch Polytechnics and Colleges (HBO-Raad) for the non-university sector.

A second aspect of comprehensiveness is evident in the various national designs for programme evaluations. Some countries such as the Netherlands and Denmark benefit from their smallness in the sense that within a given discipline area they evaluate all programmes at the same time on a nation wide basis. Other countries such as England due to the number of programmes must subdivide discipline areas.

In this perspective small is probably beautiful. An evaluation procedure which encompasses a whole national discipline area provides for a consistency in judgements and for a further stimulus for professional identification with the discipline area and for co-operation among universities in the field.

A third aspect of comprehensiveness may be identified in the relationship between evaluation at the institutional or programme level. Most European evaluation systems target the level of programmes. But of course even when through a systematic approach eventually all programmes have been evaluated within a university there would still be no basis for drawing conclusions on the quality of the partial elements (programmes) to the quality of the whole university. On the other hand even a well functioning system of national audits (Sweden) or institutional evaluations (France) may run the risk of a top-down bias which downplays the conditions of quality at the level of departments and programmes.

A fourth and final aspect of comprehensiveness has recently been introduced in the Danish context, where the Parliament was planning to discuss in the spring of 1998 a proposal to set up an agency covering all education from primary to tertiary level within the same basic methodological approach.

The relationship between evaluation of education and of research

The initiatives of the European Union member States towards evaluation of higher education have not attempted to integrate evaluation of education and research quality as a general rule. However, two distinct viewpoints may be identified on the need for convergence of evaluation of research and education.

One is based on the fact that a close connection between the higher education and the research taking place is characteristic for any university, so that educational quality cannot be assessed without taking into account this connection. Accordingly in the future it will become necessary to combine the evaluation of research and education when possible and reasonable.

In marked contrast the other viewpoint is that no evidence demonstrates unequivocally a causal link between teaching and research. There is no necessary link between high quality research and high quality teaching, although there is of course evidence to support the view that research can have useful spin-offs to teaching: certainly the complete absence of any research will, over time, cause the teaching to become out of date. But the point made is that there are no significant problems with separating the evaluation of the quality of teaching from the evaluation of the quality of research. Indeed there are several distinct advantages. Institutions need not be good research institutions to be rated as excellent in teaching. One could disengage research from teaching, because there is no evidence that these two need to be seen as a single activity.

This separation allows good teaching to be identified and rewarded, and perhaps goes a little way to redress the imbalance between the rewards and incentives for teaching and research. It allows teaching to have a different definition compared to research, which for a diverse sector is necessary. It still allows research to keep at least its international standards. It allows institutions to focus on their particular strengths. It does not compel institutions to carry out research to be rated highly. And separation in this way allows the various customers' needs to be addressed more specifically.

A general conclusion could be that it is important to secure evaluation of education as well as of research, but that in the short run the emphasis would have to be on education. In the longer run, there will be a need to combine evaluation of education and research respectively and to develop evaluation methods and techniques, which may be employed in both areas.

The process of implementation

In some countries, where evaluation procedures have been established, the issue of openness has been controversial. The standard argument in favour of confidential proceedings has concerned the self-evaluation. The argument runs

that confidentiality should encourage the authors of the self evaluation to be more honest and critical. In the Netherlands the reports are accordingly confidential. In the UNITED KINGDOM and Denmark openness is viewed as a cardinal point in regard to the overall target of making evaluations the platform for qualified knowledge of the merits of various study programmes. All reports are therefore published or available.

Once an evaluation is finished and a report available in some form or other the crucial phase begins of implementation of the conclusions and recommendations.

In France and Denmark the evaluation report is expected to assist and advice the Ministry on the specific recommendations in the report. But the launching of a continuous process of quality assurance is primarily the task of the institution and the study programme, and it is crucial that the institutions themselves are committed to this follow up.

There is little doubt that a series of well-executed evaluations does not in themselves bring any merit to the concept of systematic evaluations. The proof of success will be the impact and follow-up in the longer perspective of the foundation for quality improvement launched by a successful evaluation.

Comparison, but no ranking

Evaluation may well lead to relevant comparing of study programmes at different institutions. However, there seems to be a consensus among national systems that there should not be any *Michelin Guide* approach to reports, *i.e.* that higher education institutions should not be ranked along single dimensions and listed by numbers. The shared arguments are that institutions have different aims and different objectives. Considering the diversity of institutions, which exists within national higher education systems, it is important that quality assessment should assess the extent to which institutions actually achieve the aims and objectives, which they set for themselves. This assessment of the relationship between objectives and actual achievement focuses on the core of the quality issue.

Linking evaluation to funding

A much commented and controversial issue is any linkage between evaluation and government funding. The issue is whether government allocation of budgets to universities should wholly or in part be based on the results of systematic evaluations. For the moment this is the case only in the United Kingdom, where those departments rated “excellent” in the evaluation done by the Funding Councils receive additional funding.

One argument in warning against such a direct link between evaluation and funding has pointed to the real danger of creating a compliance culture among the higher education institutions. However, a different opinion voiced by representatives from the evaluation system of the British Funding Councils takes a less drastic view. In their opinion all one can do is minimise the risks of compliance, which are real risks under any evaluation system, by making the system as sophisticated as possible.

A EUROPEAN PERSPECTIVE

The way in which evaluations are organised and implemented in European countries may be interpreted as remarkably different or quite similar. Depending on one's perspective it is a question of the bottle being half-empty or half-full. The quality of assurance tools is as a rule the same, but the difference lies in the distribution of responsibility and goals between central authorities, institutions, and units like an evaluation agency.

However, a contrasting viewpoint has to do with what could be referred to as the European dimension. In a sense there is a need to warn against focusing too much on the spirit of promoting national systems, and thus missing the possibilities to strengthen the European dimension through more formalised structures of co-operation. Of course it is crucial to keep in mind that there should not be any attempt to do at the European level what could be done as well or better at the national level. But on the other hand it follows from this argument that the European international organisations should see it as their task to achieve at the European level what cannot be achieved at the national level.

The implications of this argument may be traced through the following analysis of the European Pilot Project. The Project for Evaluating Quality in Higher Education was initiated by the European Commission, Directorate General XXII: Education, Training and Youth, in November 1994. The project involved 17 countries – the 15 Member countries, Norway and Iceland – a total of 46 institutions. The project was officially concluded in December 1995 with the finalisation of the European report, which presents the results of the project.

Two of the most important results of the European Pilot Project were firstly the recognition by all the participants of the relevance and intensity of collaboration made possible within the framework of the projects and secondly the resulting strong support by all for the continuation of the collaboration.

THE EUROPEAN PILOT PROJECT

Organisation

The decision to carry out a number of pilot projects in the field of quality assurance at the European level was introduced by the Council of Ministers and the Ministers of Education on the initiative of the Dutch presidency in November 1991. Hereafter the Commission was invited to undertake a comparative study of the methods used in the Member States to evaluate the quality of Higher Education. Furthermore the Commission was asked to examine the possibility of developing a limited number of pilot projects in quality assessment in higher education with a view to strengthening co-operation in this field at the European level, taking into account concrete experiences acquired by the Member States in this area.

The Commission proposed undertaking European pilot projects focused on the evaluation of teaching and learning in a number of selected disciplines with the use of a common methodology. The projects were approved by the Education Committee of the Council in June 1994. The EFTA/EAA countries who had been following the preparation of the project and had expressed a strong interest in the project were invited to participate as well.

In the implementation phase the *Commission* resumed the overall responsibility for the project. An *Advisory Group* consisting of two members from each participating State assisted the Commission in proposing follow-up measures to the project.

In the day-to-day management of the project the Commission was assisted by a *Management Group* which consisted of the small group of experts from the United Kingdom, the Netherlands, France and Denmark, supplemented by one representative from Germany, Portugal and Norway respectively. The Management Group delegated the responsibility of the daily management of the project to a *secretariat* shared between the Centre for Evaluation in Denmark and the *Comité National d'Evaluation* (CNE) in France.

Each member state set up a *National Committee* which was responsible for the implementation of the project at the national level and for analysing and presenting the results of the project in a national report. A *European Committee* composed of the chairmen and secretaries of the National Committees was responsible for the European report based on the national reports from the participating States.

The objectives and the method

The main objectives of the projects were to enhance the awareness of the need for evaluation in higher education, enrich existing national evaluation

procedures, spur the transfer of experience among the Member States and thus impart a European dimension to evaluation. The pilot projects were designed to achieve these objectives by testing a common methodology.

The method rested on the following elements:

- autonomy and independence in terms of procedures and methods concerning quality evaluation both from Government and from higher education institutions;
- self-evaluation;
- external assessment by a peer review group (group of experts) and a site visit;
- publication of a report.

The methodology was based on the principles which could be identified as the common indicators of the four existing, national evaluation systems in Denmark, France, the Netherlands and United Kingdom. The methodologies applied in these four countries have been adapted to the specific context of each country and meet the particular circumstances of each Member State. There is, however, a fundamental consensus on essential procedures and methods which made it possible to set up a common platform based on the experiences from these countries by adaptation of the best elements of the systems.

The project focused on the evaluation of the quality of teaching and learning as well as the impact of research activities on the teaching process, but it did not include an evaluation of the research activities as such. The participating disciplines were found in two broad discipline areas in the university and non-university sectors respectively. These discipline areas were engineering and art, design and communication. Each country depending on its size was asked to select two or four institutions working in these fields according to criteria set by the Commission.

The project should enable the higher education institutions, via European co-operation, to set measurable objectives for quality based on methods which are both objective and comparable at Community level. The project did not aim at establishing a ranking of institutions by the quality of teaching in a specific discipline, but rather at organising a transfer of experience on evaluation methods, whilst adding elements of the "European dimension".

The participating institutions were allowed to adapt the methodology of the project to their specific national traditions and cultures. Accordingly, the project did not aim at creating a European system of evaluation, the responsibility for instituting evaluation systems resting with the participating countries.

The follow-up on the pilot projects

The main responsibility for assuring a direct follow-up to the pilot projects in regard to the participating institutions and the continued development of evaluation procedures rested with the Member States.

At the national level a majority of the countries which had not at the time of the pilot projects any systematic national evaluation procedures have since the finalisation of the projects either set up a framework for systematic evaluation procedures at the national/federal level (*e.g.* Finland, Spain, Portugal, Lower Saxony in Germany, the Flemish speaking community in Belgium), or are preparing legislation for the establishment of evaluation procedures (*e.g.* Iceland, Norway, French-speaking Community in Belgium). Yet another group of countries have conducted or are in the process of conducting evaluation pilots (*e.g.* Austria, Italy).

At the European level the Commission has been working intensively on preparing the grounds for continued co-operation which is outlined in the following paragraph.

Transfer of experience – the coming European quality network

A primary objective of the pilot project, was the transfer of experience between the Member States. In this context the project has of course ensured that a number of institutions and experts in each Member State have gained an experience with assessment which other institutions and relevant authorities can draw on.

However, one of the most crucial conclusions of the project was the wish expressed by all participants, *i.e.* institutions, national authorities and national experts in the field of quality assurance, to continue the co-operation and the transfer of experience within the structures established during the pilot project.

After the finalisation of the pilot projects the already existing quality assurance agencies in the European Union met at the initiative of the Dutch VSNU. The first meeting was in Utrecht in 1996 and a second meeting convened in Lisbon. This was an expression of the need for a framework for regular exchange of information among those having an administrative and operational responsibility for quality assurance in higher education. It proved further the commitment to networking.

The steps towards the establishment of a formal quality network and the beginning of a preparatory phase were taken at the outset of 1997 by the Commission in co-operation with an advisory group of experts and with the French and Danish evaluation agencies. The planning and elaboration of an organisational framework and a formulation of specific objectives and activities took place dur-

ing this phase. During a meeting in November 1997 of the educational committee of the European Commission a formal decision on the network was taken and a number of activities should now be able to take place in accordance with the recommendations in the Pilot Projects, *e.g.* workshops and exchange of information on Internet. The day-to-day-management of the network will be the responsibility of a secretariat shared by the CNE and the Centre for Evaluation.

The pilot projects proved that the benefits of the co-operation were strengthened by the implementation of specific projects that enable the participants to work together towards a common goal and to exchange experiences and best practices within a common framework and to place these experiences in a comparative perspective. The network will try in this perspective to build on the momentum from the pilot projects.

The philosophy behind the network is to establish an operational forum for the exchange of information between the members. The network first and foremost aims at functioning as a platform for the regular exchange of information in the field of evaluation and quality assurance of higher education. The Internet is expected to be the main source of communication, *e.g.* through the establishment of a newsletter and a WWW home page linked to other relevant WWW sites.

Another principal task of the network will be to provide the members with support and training on methodological aspects in connection with the planning, the implementation and the development of evaluation and quality assurance activities. Furthermore the network will arrange workshops and seminars which will enable larger groups of members to discuss common methodological problems, *e.g.* different types of evaluation, quality definitions or meta-level evaluations.

It is important to stress, however, that the co-operation and the exchange of experience are done with respect to the large differences in national educational legislation, national academic cultures and educational structures. The co-operation is by no means aimed at harmonising the educational or evaluation systems in Europe but at developing strengths and addressing weaknesses of the quality of the teaching and learning available and of the systems set up to evaluate the quality.

CONCLUSION: A FUTURE OF HARMONISATION OR DIFFERENTIATION

It follows from the analysis of this paper that, looking at Western Europe in terms of the existence of systems of quality assurance, the argument points on systematic cohesiveness as well as systematic differences.

Seen from the level of the various national actors it is of course on the one hand a reality that national higher education cultures do constitute a very differentiated picture. On the other hand there is the evidence of the relative harmony that is the consequence of basic European agreement on methodological approaches and priority on evaluation of teaching. Thus, even different national characteristics do not seem to have an influence on the need for co-operation among those working with systematic quality assurance. The quality assurance systems are continuously being developed, and all systems are regularly faced with new challenges. There is a common belief both among the less and the more experienced that regular exchange of experience among those working in the field of evaluation and quality assurance of higher education is valuable for the continuous improvement of the national evaluation and quality assurance procedures.

Seen from the level of European co-operation in the European Union and other fora there is a distinct interest in furthering a basically harmonious European framework for quality assurance. This framework is surely supposed to be nationally based but should at the same time be consistent, transparent and comparable in terms of results in order to provide the necessary basis for the free flow of talents, students and graduates among the Member countries.

However, there seems little doubt that after the first decade of relative closeness and similarity of approaches the future may well imply more differentiation among national systems. The United Kingdom has in the summer of 1997 seen the establishment of the new Quality Assurance Agency with the mandate to propose an evaluation system based on standards within the next two or three years. Along with other countries such as Sweden and Denmark the United Kingdom may proceed towards a multi method system with the use of an audit approach parallel to programme evaluations and even accreditations. Until now it has been striking that practically all the Western European agencies have concentrated on one specific methodological approach whether this be evaluation or auditing of institutions or evaluation by discipline or programme area.

Several countries such as Austria, Portugal and Italy, may have systems which will decidedly be owned by the higher education institutions themselves. Most Eastern and Central European countries seem for the time being to be mainly fascinated by a US inspired accreditation approach to quality assurance.

As far as the European Union goes some Member States are very cautious towards any decisive moves towards actual harmonisation within the area of culture and education. A fairly safe prognosis is therefore that the differences among Western European national systems of higher education will still be with us in the foreseeable future.

The essential harmony among national systems of quality assurance will also be there in terms of the agreement of basic methodology (a self-evaluation report, expert visits, public reports). But a move towards transeuropean evaluations will run into the difficulties of language, differences in educational systems and other elements that would make any comparison of educational quality across borders a very difficult issue indeed.

REFERENCES

- Comparative Analysis of Initiatives of Quality Assurance and Assessment of Higher Education in Europe (1995)*, European Commission, Christian Thune, Dorte Kristoffersen and Sidsel Wied (Evalueringcenteret, Copenhagen), January.
- The European Report (1995)*, European Pilot Project for Evaluating Quality in Higher Education, European Commission, Jim Donaldson (Scottish Higher Education Funding Council, Edinburgh), André Staropoli and Marie-Odile Ottenwaelter (Comité National d'Évaluation, Paris), Christian Thune and Dorte Kristoffersen (Evalueringcenteret, Copenhagen), Ton Vroeijenstijn (Vereniging van Samenwerkende Nederlands Universiteiten – VSNU – Utrecht) November.
- FRAZER, M. (1997), *Report on the Survey of Systems of External Evaluation of Higher Education*, CEPES/UNESCO.
- THUNE, C. (1994), "New Systems of Evaluation in Europe. A Comparative Overview", paper presented at the Conference "Autonomia e Valutazione delle Università. Aspetti Metodologici e Organizzativi", Macerata, June.
- THUNE, C. (1996), "The Alliance of Accountability and Improvement: the Danish Experience", *Quality in Higher Education*, 2, 1.

IS THERE A SCANDINAVIAN MODEL OF EVALUATION OF HIGHER EDUCATION?

Staffan Wahlén

National Agency for Higher Education,
Sweden

ABSTRACT

As a result of changes of the relationship between the State and the universities from a system of management by rule to one of management by goals or results, universities in the Scandinavian countries have become more autonomous during the 1990s. Consequently, systems of national evaluation have developed in Denmark, Finland, Norway and Sweden, with different scope and methods. However, all four countries use a similar model consisting of self-assessment by institutions and site visits and assessment by teams of peers and public reports. In 1993 Denmark introduced a system of full-scale rotating evaluations of all major education programmes. Finland is trying out various models, including quality audit, institutional evaluations and programme evaluations. The government policy is for all universities to go through at least one form of evaluation by the end of the year 2000. Norway has conducted a national pilot project of evaluation of selected disciplines. Sweden, finally, has a system of rotating quality audits of all universities, programme evaluation of selected programmes and subjects and evaluation of programmes for accreditation and the establishment of professorships at small and medium-sized colleges.

It is not unlikely that the exchange of members of evaluation teams and other forms of co-operation between the four countries will lead to the development of more similar approaches.

INTRODUCTION

What follows is an overview of the systems of national evaluation of higher education on a national scale in Denmark, Finland, Norway and Sweden, concentrating on Denmark and Sweden, which have the longest history in this field in Scandinavia, dating back about six years. It concentrates almost exclusively on evaluation of undergraduate education.

I will argue that although the four countries have chosen different models of evaluation, there are similarities in outlook and rationale. In all of them the background is a change of relationship between the state and the universities, a move from management by rule to management by goals, objectives and results.

As a consequence, universities are developing far more *autonomy*; in Sweden the size of the Higher Education Ordinance is now about one-fourth of what it was six years ago. Universities are now more or less entirely responsible for programmes and courses (within the general framework of the degree system), management at all levels, recruitment and appointments, etc.

Second, there is an emphasis on the *professional* role of university staff. In an autonomous, or quasi-autonomous system, with few rules imposed by external forces, there is a need for a professional culture to develop, one in which professional groups, *i.e.* professors, lecturers, other staff, university leaders, take full responsibility for their work and its results.

Third, *self-regulation* becomes important for continual internal improvement. Universities are expected continuously to follow up and evaluate their own activities and take action on the basis of the results.

In this respect the role of the State as one of the major stakeholders in higher education and representative of those who finance it, *i.e.* the tax-payers, becomes to make sure that quality is maintained and enhanced. The Scandinavian governments have developed different strategies, from more improvement-oriented to more control-oriented models.

SYSTEMS OF HIGHER EDUCATION

In spite of the fact that the four neighbouring countries have a common culture and close relationships, their systems of higher education as a whole are different in many respects.

Denmark has a population of about 5.3 million and 160 000 students. There are five universities and nearly 100 other institutions of higher education including a number of colleges of paramedical training, teacher-training colleges, engineering colleges, etc.

There is now a relatively uniform structure of studies, starting with a three-year first degree programme, followed by a two-year Master's degree programme. The PhD programme is nominally three years.

Finland, also with a population of a little over 5 million, has approximately the same number of students enrolled in 20 universities and 28 vocationally oriented higher education institutions (polytechnics). The introduction of a binary system is relatively recent; the vocationally oriented post-secondary education institutions were made part of the higher education system only a few years ago.

The structure of the programmes of university sector is that of a four-year basic degree programme followed by a two-year Master's programme. The doctoral programme is nominally four years.

Norway, with a population of about 4.5 million has about 175 000 students. There are four universities and several university-level specialised institutions in addition to state colleges offering shorter vocationally-oriented programmes. In a recent structural reform the number of these state colleges was reduced from about 98 to 26 in a major merger of institutions.

The structure of degree programmes is a four-year undergraduate degree, followed by a two-year advanced degree. The PhD takes a minimum of three years to complete. The state colleges offer a two-year degree which can be augmented by one or two extra years to lead to an undergraduate degree.

With nearly 9 million inhabitants, *Sweden* has a total of nearly 300 000 students. The higher education sector includes traditional degree programmes as well as vocational programmes. There are 38 institutions of higher education, including large-scale universities, colleges offering basic degrees, and colleges of fine arts.

The general structure of degree programmes is a three-year Bachelor's degree, followed by a one-year Master's programme. The PhD programme is planned for four years.

In all the four countries universities and colleges are financed by the State.

RATIONALE FOR EVALUATION

Higher education is a growing sector in the four countries – there is considerable faith in higher education as a means to improve the economy (and hiding unemployment figures?) – but increasing numbers of students is also seen by some as a possible threat to the overall quality of higher education. The participation rate in Sweden is now about 34 per cent and growing. The number of

places actually corresponds to about 50 per cent of an age group, but there is a substantial number of mature students.

Two of the countries included in this survey, Sweden and Finland, have traditionally had strong government control of higher education. In Sweden up until the late 1970s this meant that the Ministry of Education made decisions even on individual curricula at each university. Since then major reforms have taken place in all four countries involving decentralisation, increased institutional autonomy and self-regulation on the part of institutions and thus a shift of responsibility for the operations from the State to individual universities and colleges. In all four countries this development has taken place in the early 1990s and in that context the concept of accountability has become important, like in so many other countries.

In addition, in Sweden (partly) and Denmark (to a large extent) universities are funded on the basis of outcome, which has added to the insistence on accountability. Similar developments are taking place in the two other countries. In Sweden in 1993 the idea of funding on the basis of quality indicators was discussed, and indeed decided by Parliament, a decision which was later revoked.

SURVEY OF THE DIFFERENT MODELS

Denmark

Denmark has opted for full-scale rotating evaluations of all major education programmes. So far about 40 programmes have been assessed between 1993 and 1997. The responsibility of implementing them rests on the Danish Centre for Quality Assurance and Evaluation of Higher Education. It is funded by the State, but virtually independent with regard to the government and the higher education institutions.

In an evaluation, which lasts for a total of about a year, five phases can be identified:

Planning

A steering committee of four or five members is established, which is responsible for supervising the evaluation, and for the conclusions and recommendations of the final report. The group normally includes at least one non-Danish subject expert from the other Nordic countries. The Danish members are mostly representatives of employers within the field under evaluation and of universities. It is a peer evaluation, but one in which the concept of peer is sometimes

very broad. The role of the Centre is that of administering, planning and implementing the evaluation and preparing the reports.

Self-assessment

One aim of the institution's self-assessment is to be instrumental in internal quality improvement. Secondly, it is, of course, used by the experts as the most important documentation for the evaluation. It is thus essential that it should be not only descriptive, but truly analytical and give an account of the strengths and weaknesses of the programme, leading to suggestions for future improvement. The Centre provides an instruction manual, in order that the different self-assessments should be roughly comparable, while still of course stressing the particular characteristics of the specific programme. The manual contains a quantitative part, which requires institutions to provide data on staff, students, completion rates, costs, sources of income and internationalisation, and a qualitative, analytical part, which asks institutions to provide information on missions, values and goals and analyses of *e.g.* structure and context of undergraduate education, PhD programmes, staff, interaction with business, industry and the community.

User surveys and external examiner reports

A characteristic of the Danish system is the systematic use of surveys of graduates, current students or employers. The secretariat at the Centre decides which of these target groups is most important to survey in relation to a specific evaluation.

A further source of information for the steering committee comes from external examiners required by the Government. The information is sometimes gathered on the basis of a survey conducted by the Centre, but is usually based on the annual reports submitted by the external examiners.

Site visit

The site visit takes place during one day at each institution offering the programme under review. The steering committee attends all the meetings, together with staff from the Centre who are responsible for drafting the meeting minutes.

Reports

A first draft report is prepared by the steering committee in co-operation with the Centre. It is discussed at an evaluation conference, attended by the institu-

tions affected, the steering group and Centre staff. The purpose is to give institutions and programmes a chance to react to the proposed conclusions and recommendations, and to amend factual errors. Minutes of this meeting are prepared by the Centre.

The final reports are then published, taking the previous information into account, together with the self-assessment reports and the external examiners' reports and often given substantial press coverage.

The aims of the final report are:

- to contribute to the quality improvement of the programmes at the different institutions involved in the evaluation;
- to provide the National Education Councils responsible for advising the Minister of Education on matters relating to higher education with information on the basis of which they can give advise for further action.

Follow-up of the evaluations is intended to take place at the evaluation of the ensuing cycle. However, it is, of course, the institution's responsibility to take account of the recommendations of the report and to act upon them. The Ministry takes action in the sense that it requires institutions to present plans for the follow-up of the recommendations.

Finland

A Higher Education Evaluation Council was established in 1996. The purpose of the Council is to assist both higher education institutions and the Finnish Ministry of Education in developing evaluation.

The relationship between the Ministry of Education and the universities is based on a procedure by which the Ministry and universities agree on objectives in terms of numbers of degrees and financing levels. The results of these deliberations is a "performance agreement" signed by both parties and included in the national budget statement. To guide the agreement there is information to be gathered from a national university database giving data on *e.g.* applications and admissions; number of degrees and duration of studies, teaching and other staff; research publications; graduate placement; and target number of degrees agreed on in the Ministry-university consultations.

The consultations described above and the use of the extensive information found in the database have resulted in the emphasis to a large extent being on internal evaluations, and it is, indeed, the role of the Council to foster the development of such a culture.

The Council is thus more consultative than controlling. It has essentially three tasks:

- training for those responsible for quality assurance *within* the institutions;
- conducting national and institutional evaluations;
- evaluation of applications from vocationally-oriented institutions (polytechnics) for accreditation.

A number of evaluations supported by the Ministry of Education have taken place over the past 10 years in Finland. They include institutional evaluations and programme evaluations, covering one field in several or all universities. Most fields had been evaluated in this way in the early 1990s. Research evaluations are organised by the Academy of Finland.

The current policy includes a plan for all the universities to be evaluated by the year 2000. Ten such evaluations have been concluded, in accordance with agreements reached before the establishment of the Higher Education Evaluation Council. The focus has varied. Six of them have been institutional evaluations, three of them have concentrated on the regional role and impact of the universities. One of them is a university-wide evaluation of teaching.

The methods have varied according to the needs and interest of the universities. For the ten remaining evaluations no one model will be prescribed. It is, however, taken for granted that they will all include elements of self-assessment, external peer group and a public report. But the focus, the exact methodology and the role of the peer group will be worked out in conjunction between the Council and the institution in question.

Norway

In Norway the Ministry of Education and Church Affairs uses data from a recently built up database for state steering and resource allocation within higher education. There are also indications that qualitative data based on evaluations of selected disciplines will be used for these purposes. In order to work out the parameters for such an approach, a national pilot project was launched and carried out between 1992 and 1996 of five areas: business administration, sociology, mathematics, electronic engineering and music. The main focus of these national evaluations, as stressed by the Ministry, was improvement and self-development rather than control and also a means of stimulating local evaluations.

The evaluations were organised by the Institute for Studies in Research and Higher Education, which was in charge of training for institutions and expert groups in matters of evaluation, preparing material, arranging meetings and supervising the process. The individual institution was expected to prepare a

self-evaluation report. The experts were expected to go through the documentation, make site-visits and write a final report on their findings. Experts were generally taken from the other Nordic countries, and from Norwegian industry and other areas of Norwegian society.

Thus, the general methodology is that employed by the other Nordic countries, and, indeed in many European evaluations: peer group, self-assessment, site-visit and public report.

The criteria for the evaluations were established at a start-up conference which included a discussion based on a checklist of three categories and 12 sub-themes to be addressed in each self-assessment and evaluation.*

The experience gathered from these five national evaluations is that the self-evaluation process was regarded as very valuable; it resulted in positive discussions in the institutions and departments involved, and in measures implemented as a result of the process. On the other hand, the evaluators maintained that they could not always use the self-evaluation reports as an important instrument for their own analysis.

One effect of this experimental process is that there is felt to be a need for some sort of independent body to run and supervise the national evaluation process. The Ministry is now establishing a quality control unit, a buffer organisation responsible for organising national evaluations. The form of these evaluations, whether they will be quality audits supplemented by programme evaluations or whether they will take another shape is still unclear, since the head of the unit was appointed recently.

Sweden

There are four forms of evaluation on a national scale:

- **National assessment of subjects and education programmes.** Examples of areas covered by such assessments are teacher education, mathematics, medical training, paramedical programmes and doctoral language programmes. Objects for evaluation are selected on the basis of identified problems or other criteria.
- **Evaluation of education programmes for accreditation.** This has proved one of the most effective quality-driving measures to improve standards at university colleges. It is carried out on the basis of established criteria, the

* The three categories were actors, with the sub-themes students, teachers, administrators/leaders; education with the sub-themes goals, exams, results, content, teaching and student-learning conditions; context with the sub-themes resources, institutional organisation and external relations.

same for all evaluations, among which are the ratio of teachers with a PhD degree, the number and scope of advanced courses, library resources and other facilities.

- **Evaluation of small and medium-sized institutions** for the establishment of **professorships** and, more recently, for granting full **university status**. Established criteria similar to those used for accreditation are applied.
- **Quality audit**, which is the only full-scale form of evaluation and therefore described in more detail below.

Background of audit

As a result of the 1993 Higher Education Reform, Swedish higher education institutions gained (relative) autonomy. The responsibility for *e.g.* the organisation of studies, appointments, and internal allocation of resources was decentralised. A new, largely performance-based system of funding universities and colleges was introduced, based on student achievements as well as on student numbers, in order to ensure intensified development of teaching, research and administrative processes. Each institution is responsible for developing the quality of its own activities, but also for demonstrating to the Government the standard of its quality enhancement mechanisms. It was emphasised that, in the words of the 1993 Higher Education Act, “the available resources must be used efficiently in order to ensure high quality activities”.

It was thus made clear that each institution was responsible for maintaining and improving the quality of its activities, and was accountable to the Government and society for this. It may be maintained that universities and colleges have always been quality-driven. What has now been added, however, is that they must have (and demonstrate that they have) systematic improvement processes regarding undergraduate education, graduate education, research and administration. They are required to develop routines for reflecting on their activities, and make corrections whenever necessary for the sound improvement of the institution. These processes, which are audited by the National Agency for Higher Education, may be illustrated by table 1.

The audit by the National Agency for Higher Education of the quality enhancement programmes of universities and colleges is part of the evaluation by the Government of the activities of higher education institutions in Sweden. All 36 institutions of higher education are scheduled to be audited during the three-year period 1996-1999.

The audit system has the characteristics described below.

Table 1. **A model of the relationship between institutional activities, quality processes and quality audit in Swedish higher education**

National Agency's evaluation of mechanisms for systematic improvement and their results
QUALITY AUDIT
Systematic improvement based on reflection
QUALITY IMPROVEMENT
Examination, admissions, appointment processes, recruitment, evaluations, etc.
QUALITY ASSURANCE
Teaching, research, administration, etc.
ACTIVITIES

Source: Author.

Method

The focus is on undergraduate education, and the main aspects covered are:

- **The strategies of the quality enhancement processes:** What policy, plans and programmes have been developed to realise overall goals and ambitions for quality enhancement? How have the goals been operationalised? What form has been given to the organisation and distribution of responsibility? How have priorities been set?
- **Leadership:** How is leadership exercised on different levels to, *e.g.*, impart visions, create motivation, participation and responsibility, develop competence and strategically implement and follow up on quality enhancement programmes?
- **Co-operation with stakeholders:** In what ways have the stakeholders been identified, their needs and demands determined, and how has the institution co-operated with them?
- **Involvement in quality enhancement processes:** How and to what extent are teachers, researchers, administrative staff and students committed, involved and responsible participants?
- **Integration:** How is quality enhancement integrated into university work and its various components?
- **Systems of evaluation and follow-up:** What methods, routines and measures have been adopted for recurring evaluations and the resultant development?
- **External professional relations:** In what ways is the university pursuing national and international contacts of long-term and permanent impor-

tance for the professional nature and future direction of university activities?

The audit is preceded by a self-evaluation by the institution and is carried out as a peer review by audit teams appointed by the National Agency. The teams consist of two or three well-established academic leaders, one person from industry or public administration and one student. In conjunction with the publication of the team's report there is a meeting between the Chancellor of the Swedish universities, who has the overall responsibility for the process and the institution's management for a discussion on what measures should be taken as a result of the audit. There is a follow-up by the University Chancellor one year after the audit.

One of the basic tenets of the Swedish philosophy is that each institution is responsible for its own quality enhancement. They are expected to have a quality enhancement programme and this programme together with the self-evaluation document commenting on the strengths and weaknesses of the quality enhancement efforts are the basic points of departure of the visiting team.

Results

The main impression provided by the 19 reports so far is a positive one. The following problem areas have been highlighted by evaluators and institutions.

One major ambition of the colleges is building up a research potential in various ways, *e.g.*, by encouraging staff without PhDs to pursue doctoral studies. Other shared ambitions include programmes for evaluating teaching, the integration of quality enhancement into the regular work of the institution, developing IT strategies.

Academic leadership is discussed at some length in most reports. One report stresses the conflict between the collegial form of leadership and the need for more managerial structure imposed by demands for efficiency. This conflict is present, to a higher or lower degree, at all the institutions, including the smaller ones.

Strategic, reasonably long-term programmes stating clear operational goals for the quality enhancement ambitions are necessary tools for effective management. The clarity of the strategies and programmes audited varies from vagueness to the statement of reasonably specific objectives.

Identifying and co-operating with the stakeholders of higher education are necessary ingredients in university strategies and in the opinion of the audit groups; the efforts and success of the institutions in this respect vary. It may be easier for a smaller regional college to take account of the world outside than for a centuries-old institution.

One of the main criticisms of institutions' quality efforts concerns evaluation procedures and follow-up both as regards quality enhancement and other activities. It appears that the lack of both operational goals in one institution and the lack of sufficient data in others prevent them from interpreting the results of their activities.

The effects of educational efforts are studied only sporadically. In fact, not even course evaluations are always stringent and consistent enough, and, above all, not used in the planning of future courses. Peer reviews of teaching are becoming more common, however.

Other areas covered by the audit groups include staff development and recruitment of staff. Staff development in the colleges focuses on PhD programmes for teachers without doctorates.

Finally, generally positive comments are made concerning efforts in the areas of promoting internationalisation and equal opportunities.

Effects

It is still early to evaluate results of quality efforts; 19 of a total of 37 audits have been concluded so far [end of 1997]. The reports have been widely circulated throughout the institutions. Reactions from universities are mostly positive, and there is at least one case of unreserved enthusiasm, even in the face of fairly severe criticism. That particular institution argued that the report gave the management the strength to pursue policies which would otherwise have been accepted only reluctantly. One rector expressed the opinion that the visiting team should be transformed into a permanent advisory group. After all, there was no other group which knew the institution and its strengths and weaknesses so well. The audits have been commented on favourably in the university or college internal staff magazines, with indications that these are the areas which are now at the focus of the Rector's attention.

An important aspect is the learning process for both institutions and, not least, the visiting teams, which has been commented on by several of those involved.

CONCLUDING REMARKS

As we have seen, the systems of evaluation vary between the four countries. Denmark has a model of rotating programme evaluation. Norway has developed a pilot project of five programme evaluations leading up to the establishment of a national agency and a national system of evaluation. In Finland, a Higher Educa-

tion Council has been established with a brief to assist institutions and the responsibility for national evaluations and accreditation. A cyclical quality audit is the heart of the Swedish system, which also includes programme evaluation and accreditation.

The general model of evaluation is, however, that used in many countries: self-assessment followed by site-visit by a peer group which produces a public report as a tool for institutions and the authorities. It is clear that in all countries the self-evaluation process is felt to be extremely useful for the internal development of the institutions. It may be argued, too, that systematic self-evaluations would not take place without an external force. The amount of guidance provided for the institutions as to the self-evaluation varies. Sweden and Finland are open in this respect, whereas Denmark, and Norway in their trial evaluations, are more directive.

The composition of the peer groups, and their role, varies: The Danish choice to use mostly stakeholders (e.g. employers) is particularly interesting.

The degree of external control varies. Martin Trow (1994) argues that in order to be of genuine value in the development of an institution, the best kind of model for evaluations is internal and supportive (type I) as illustrated in Table 2. An external, evaluative model (Type IV) may lead to evasive strategies on the part of the institutions, and thus not to real improvement.

Whether the Swedish and Finnish models lead to more improvement than those in Denmark and Norway, and the latter should be placed in the external, evaluative slot in Trow's diagram, is, however, impossible to judge at this stage. Perhaps more far-reaching indications will be given in the near future as to the impact of the systems in Denmark and Sweden, since both countries are approaching the end of their first cycle of assessments and audits, respectively.

An answer to the question given in the title of this article is, therefore, that although there are different approaches to national evaluation in the four countries, many of the methods are similar. The general view of the purpose of evaluations seems to differ to a certain extent between Sweden and Finland on

Table 2. **A Typology of Academic Reviews**

Origin of the Review	Function of the Review	
	Internal	Supportive I
External	III	IV

Source: A Typology of Academic Reviews (Trow, 1994, p. 21).

the one hand, and Denmark and Norway on the other. The systems of higher education differ between the four nations, requiring evaluation systems which meet slightly different needs. On the other hand, now that a new evaluation system is being built up in Norway and another, more eclectic model is developing in Finland, and Sweden and Denmark are going into their second cycles of audits and assessments, it is not unlikely that the four countries may adopt ideas from each other and may gradually develop more similar models.

REFERENCES

There is an abundance of reports from the four countries, many of which have been used as a background for this paper. Most of them are written in the vernacular. The following reports have been referred to more specifically, together with information from the various national agencies.

LIUHANEN, A.M., "Internal Quality Assurance in Finnish Universities", paper presented at the CHER Conference 1997 in Alicante.

The National Swedish Agency for Higher Education, *The National Quality Audit of Swedish Universities and Colleges*, 1995:1R.

SMEDBY, J.C. (ed.) (1996), *Evaluation of Higher Education in the Nordic Countries*, Nord. Nordic Council of Ministers, June.

TROW, M. (1994), *Academic Reviews and the Culture of Excellence*, Kanslersämbetets skriftserie 1994:1.

ACCREDITATION'S ROLE IN QUALITY ASSURANCE IN THE UNITED STATES

Elaine El-Khawas

University of California, Los Angeles
United States

ABSTRACT

US accreditation is best understood as a set of review processes that are complemented by other quality assurance procedures organized by state and federal agencies as well as by universities themselves. This article describes US accreditation processes within this larger context of accountability and reviews some of the continuing debates over ways to improve accreditation. Several key issues – gathering evidence and making use of expert judgment – have received considerable attention by accrediting agencies over the last few decades.

INTRODUCTION

Quality assurance plays an important role in American higher education. State and federal agencies, national and regional associations, and organisations representing individual disciplines are among the external bodies that shape the many different procedures for quality assurance that affect American colleges and universities. Each of these bodies have long, well-developed traditions of monitoring and influencing institutional quality processes; indeed, many trace their history back at least a century.

The accreditation process is one major form of quality assurance for universities and colleges in the United States. This paper will examine some key elements of the accreditation process as well as some of the general premises behind our current accreditation processes. First, however, the larger context will

be considered, that is, the many other elements of quality assurance that affect the functioning of universities and colleges in the United States. To understand the entire picture for quality assurance requires both this broad look at a wide range of quality assurance practices, as well as a closer look at accreditation.

THE LARGER CONTEXT: MECHANISMS OF QUALITY ASSURANCE

There are, in fact, two distinct processes of quality assurance, one that looks outward to a university's external constituencies, and a separate process that looks inward, examining educational practice and results. Overlapping vocabulary and traditions tend to blur the distinction between these two purposes.

An important policy statement on accountability (Graham *et al.*, 1995), made this demarcation the basis of its recommendations for major changes in American quality assurance. As the widely-known, respected authors of the statement – Patricia Graham, Richard Lyman and Martin Trow – argued:

“Internal accountability focuses primarily on academic concerns and is campus-centered, while external accountability provides evidence and assurance, largely to outside audiences, that institutional missions are being accomplished”.

Thus, the key audiences, the purposes and the focus of activity are different. One offers inspection, to assure outside audiences; the other focuses on what internal actors must do to improve learning. They further explain:

“In external accountability, there is the obligation of colleges and universities to their supporters, and ultimately to society at large, to provide assurance that they are pursuing their missions faithfully, that they are using their resources honestly and responsibly, and that they are meeting legitimate expectations. In internal accountability, there is not so much the provision of evidence and argument to justify their trust and support, but rather detailed evidence of how they are carrying out their mission, how well they are performing, what they are doing to assess their own effectiveness and identify where improvement is needed, and what they are doing to make those improvements”.

This distinction is fundamental. There is much activity at both levels that can be described as quality assurance.

This distinction between external and internal accountability is helpful in understanding the larger context in which accreditation operates in the United States. It also directs attention to the considerable range and depth of activity that routinely occurs as part of internal accountability.

Based on this distinction, some major forms of quality assurance in the United States can be described, including, first, those forms that involve *external* quality assurance and, secondly, those forms that involve *internal* approaches to quality assurance (El-Khawas, 1993*b*). Tables 1 and 2 summarize these two different areas of activity.

A few comments are in order. First, the US tradition has been one in which the federal government maintains an at-a-distance relationship with universities, primarily because the individual states have the major responsibility for education. The source of federal involvement is technically a narrow one – whether an institution is eligible to participate in federal programs that offer financial assistance to students. Today, substantial amounts of financial aid are at stake, so few universities would want to do without such eligibility.

Table 1. **External quality assurance agencies in the United States**

FEDERAL GOVERNMENT:
Linked to eligibility for federal financial aid programs
STATE GOVERNMENT:
Linked to funding of public universities and colleges
Linked to authorization of institutions to operate and offer programs
Linked to license or certification of individuals
INSTITUTIONAL ACCREDITATION AGENCIES:
Review and reporting on the educational capability of universities and colleges
PROGRAM ACCREDITATION AGENCIES: (SPECIALIZED)
Review and reporting on programs awarding degrees in specific fields

Source: Author.

Table 2. **Process of internal accountability**

REVIEW AND OVERSIGHT BY GOVERNING BOARD
UNIVERSITY-WIDE CURRICULUM COMMITTEES
NEW PROGRAM PLANNING AND DEVELOPMENT
PROGRAM REVIEW
Review of each academic program every 5 years
STUDENT ASSESSMENT
EVALUATION OF INDIVIDUAL ACADEMICS

Source: Author.

Our state governments have the primary responsibility for education in our federal system of government. The states are the primary funding source for public institutions of higher education, responsible for almost all funding in support of instruction and for a major share of support of research. In carrying out their oversight responsibilities that are related to this funding role, states have always imposed accountability requirements of some form. At the same time, state governments are authorized to determine which institutions of higher education, and how many, may operate in their state, where they can be located, and what mission they will be granted. For public institutions, the state government may choose to review and change these decisions quite often.

The individual states also have a monitoring role, affecting both public and private universities and colleges within the state. Their activities vary widely but always include, at a minimum, the responsibility for authorizing institutions to offer academic programs and the responsibility for licensing of individuals (*i.e.*, graduates of educational programs) as competent to work in many professional areas. Most observers (*e.g.*, Ewell, 1993) note that a gradual process continues, with a slow accretion of additional requirements and closer monitoring in most states. Of interest, in the context of quality assurance, is the fact that a number of states have developed monitoring systems based on performance indicators.

Internal accountability, as Table 2 suggests, involves a number of overlapping processes. In any single year, an institution may conduct numerous program reviews and conduct some assessment activity while all scheduled courses are evaluated and many faculty undergo periodic evaluations of their accomplishments. The institution's governing board may conduct other reviews as well.

US universities and colleges are substantially committed to internal accountability. A 1993 survey found, for example, that:

- More than 90 per cent of universities and colleges have systematic activities to assess student outcomes and use the results to improve student learning. These assessment activities are quite new, mainly introduced during the last decade.
- More than 80 per cent have regular program reviews. These are procedures to review and evaluate each academic program, usually on a five-year cycle.
- About 7 in 10 institutions have recently explored the use of TQM or similar quality improvement techniques, usually in areas of administration and management (El-Khawas, 1993a).

Some remarks should be made about program review, a very important process for US campuses. Program review is a system in which each academic department, or program, invites outside experts to review and comment on the program in order to suggest ways to strengthen it (Brennan *et al.*, 1994). Program

review is most flexibly carried out at private universities, where outside experts may be given considerable freedom in how they review a program. Most reviewers are expected to comment on the program's own self-study report but they do so in whatever manner they wish. They are allowed to offer whatever suggestions they wish for how the program can be strengthened.

A general trend is quite evident. That is, US universities and colleges are increasingly carrying out strategic management activities: identifying priorities, planning carefully to promote those priorities, monitoring operations more closely and establishing various benchmarks and indicators for their own use. This increased self-scrutiny extends not only to administration but also to academic programs (Banta *et al.*, 1993) and is conducted wholly apart from accreditation.

Understanding accreditation

Accreditation is best understood within the context of these many mechanisms of quality assurance. In the US experience, accreditation is the narrower term, describing a process that has evolved since the early years of the twentieth century. A particularly comprehensive review of accreditation procedures, prepared by Young, Chambers, Kells and others in the early 1980s, is among the best sources for a general understanding of US accreditation processes (Young *et al.*, 1983).

Accreditation, in US terms, is a process by which an educational program or institution provides information about its operations and accomplishments to an outside body that independently evaluates and judges that information in order to make a public statement about the worth or quality of the institution or program. US accreditation can seem confusing because there are numerous bodies that carry out accreditation, but the general process follows a general pattern. Accreditation includes many of the same steps as any rigorous evaluation procedure – evidence is systematically gathered; the evidence is used to answer questions, typically at the level of an entire program of study or an entire institution.

The distinctive aspect of accreditation is the process of making a decision, and publicly attesting to the worth of an educational program. In the United States, the key decision is whether a program or institution is accredited or not accredited. Accredited institutions and programs are regularly re-evaluated to determine if they can continue to be accredited. These are public decisions in the sense that they are publicly announced and have consequences for the decisions of other universities (especially, whether to allow credit and degree recognition) and certain governmental agencies (especially, as a condition of eligibility for certain governmental funding programs).

Over time, several elements of accreditation have developed. Most well-known are the use of *self-studies*, in which analyses and facts are gathered and interpreted by the program or institution itself, and the use of *peer review teams*, in which other educators visit the institution, evaluate its program, and prepare a confidential report. Indeed, these elements also can be found in the quality assurance processes for higher education institutions of many other countries (Westerheijden *et al.*, 1994).

There are other critical elements as well, although they are not recognized as widely. These include the use of *evaluative standards or guidelines*, often quite numerous, that provide a detailed framework for both the self-study and the review team's report. Just as important are *procedural safeguards*, including quite detailed rules of procedure developed to avoid bias and ensure objectivity and fairness. Accrediting agencies have detailed procedures, for example, regarding how peer review teams are formed and trained, and how decisions are reached (El-Khawas, 1993b).

These elements of accreditation are found in most accreditation processes, with details varying among the many accrediting organisations that exist. There are at least 70 accrediting organisations in the United States, including 12 that evaluate entire institutions and another 60 or so that evaluate specific academic programs. This difference in focus among accrediting agencies is another key characteristic of accreditation in the United States. Two different groups of organisations carry out the accrediting role, and these groups, as a general rule, work separately and do not coordinate their standards or procedures, even when they have activities that relate to the same institution.

The two groups include:

- Institutional accrediting agencies, which review and accredit the educational capability of entire universities and colleges. These agencies are organized regionally.
- Program accrediting agencies, each of which reviews and accredits a specific academic program.

Accreditation processes are found especially in programs tied to health care (*e.g.*, medicine, dentistry, pharmacy, physical therapy, public health, nursing), the performing arts (*e.g.*, art, music, dance), teaching (*e.g.*, school counselors, high school teachers) and other professions (*e.g.*, architecture, engineering, law).

Program accrediting – or specialized accrediting, as it is also called – gives scrutiny to most of the professional programs that universities and colleges offer. Not included in their scrutiny, however, and therefore not subject to such detailed review, are the many other academic degree programs, especially in the sciences, the social sciences and the arts and humanities. Note that, in US usage, an academic program is an entire program of study leading to either an associate

degree, for 2-year programs; a baccalaureate degree, for 4-year programs; a master's degree, for programs of one or two years study beyond the baccalaureate; or a doctoral degree, the most advanced level of study.

In the United States we have introduced another term recently – assessment, as in “outcomes assessment” or “student assessment”. This is a form of evaluation, given a distinctive name because it focuses especially on student learning and uses somewhat new techniques. Assessment procedures have, in fact, become part of the expectations built into accrediting processes in most parts of the United States (Banta *et al.*, 1993). Assessment, therefore, is a tool for use in accreditation; yet too, much assessment activity also is conducted entirely separate from accreditation processes.

Another form of evaluation involves course evaluation and course equivalencies, part of a process for determining credit transfer and degree recognition policies for students who move from one institution to another. Again, it should be understood that this course evaluation and recognition process is distinct from accreditation as we use the term. In fact, however, it is also true that accreditation has its roots, early in this century, in the need for decisions between US universities and colleges on credit transfer and degree recognition (Young *et al.*, 1983).

Change and continuity in accreditation

With this descriptive context in mind, consideration can be given to some of the continuing tensions that underlie accreditation and other quality assurance processes. In my view, accreditation – and quality assessment – are quite complicated processes. Accreditation processes depend on an objective process of gathering evidence; they also involve judgment, because evidence must be interpreted in light of some prior questions or standards. There are four enduring challenges underlying the process:

- What is appropriate evidence for accrediting an educational program?
- How can accrediting judgments be made for programs that differ in their purpose and operations?
- What is the best, most objective process for gathering information about a program?
- What is the proper role of expert judgment and how can the disinterestedness of experts be assured?

Perspective can be gained on how these questions have been addressed by reviewing changes in US accreditation experience over the last few decades, first as related to changes that institutional accrediting agencies have made and, secondly, as related to procedures followed by specialized accrediting agencies.

These two reviews will illustrate the different ways that accrediting agencies have tried to address these enduring challenges to the integrity of their procedures (Young *et al.*, 1983).

Changing procedures for institutional accrediting

Institutional accrediting agencies, which evaluate an entire college or university, have undergone an interesting evolution over the last few decades. During this time they have taken quite different approaches to issues of evidence, objectivity, and the use of expert judgment.

Accrediting agencies have a long history of requiring institutions to provide specific evidence about what they do. Even in the early days of accrediting, this evidence took quantitative form. When US accrediting agencies were formed, around the turn of the century, they required very specific information on the college's structure and programs. By the 1930s, typical requirements asked for such indicators as the number and capacity of classroom buildings, the number of volumes in the library, the number and credentials of academic staff, and the size of the annual budget.

This approach was criticized on three grounds: first, it gave too much attention to information that was readily available or "countable" but not necessarily meaningful. Second, it did not allow for differences in institutional mission and type. Third, these measures were said to give too much emphasis to "inputs" or "resources" rather than to what use was made of them.

By the 1940s the value of greater flexibility was acknowledged and more leeway was introduced. Qualitative judgments became more important and, while numerical information continued to be used, it was given less importance.

The need to acknowledge differences in institutional type and mission has not been entirely settled. At issue here is whether expectations and requirements can be uniform across differing types of institutions, and whether all institutions need to provide comparable forms of evidence. This issue quickly becomes complicated: where there are important differences among institutions, what distinctions (and how many) are to be accommodated and how different will expectations be?

Responses have taken different forms. At one extreme, accrediting agencies have created separate sub-units for different types of institutions. For example, the Western Association of Schools and Colleges has one accrediting commission to review community and junior colleges and another commission to review colleges and universities offering a baccalaureate or higher degree.

At the other extreme is a single approach that tries to accommodate many different purposes. Under this approach, an institution is to be judged entirely in

terms of its chosen mission, with the accrediting agency imposing few constraints on what that mission should be. A school of music, the argument goes, should be judged on different grounds than a school of engineering. Under this approach, the accrediting agency will review whether a clear and coherently stated mission exists, whether there is evidence that this mission is being accomplished, and whether the institution has the resources necessary to be able to accomplish this mission in the near future.

A middle ground has also been attempted. Under this approach, the accrediting agency has a single set of standards and criteria but, in every step in the process, makes small adjustments to reflect institutional differences. In the United States, this translates, for example, into situations where the accrediting review team may be composed of educators from similar institutions. A team sent to evaluate a small, relatively new college would not be made up of educators from our largest, most prestigious universities. A very prestigious university, in turn, would expect that its visiting team was made up of persons from similar institutional backgrounds. So too, judgments about each institution are made in light of what can be expected for its size and relative resources.

None of these approaches is entirely satisfactory. Problems of institutional differences continue to create tensions in accrediting procedures.

In the 1980s, a distinctively new approach has been adopted by institutional accrediting agencies, one that emphasizes “outcomes”, especially the accomplishments of students enrolled at the institution. The objective is to expect an institution to show that it regularly looks at student outcomes as a source of ideas on how to improve student learning. This puts much greater emphasis on program improvement than earlier accrediting requirements.

Outcomes assessment has taken several forms (Banta *et al.*, 1993). The simplest approach, usually an interim step, has been to focus on rates of degree completion, that is the percentage of students that receive their intended degree (or, the percentage that do so within a specific period of time). This is not a simple task in actual practice, especially because many US students study part-time, change their degree objectives or interrupt their studies. It can also be criticized as a highly simplified view of an institution’s “results” or “accomplishments” (for example, ignoring variation in level of student accomplishment, or ignoring other, more specific outcomes that could be assessed).

As a second approach, some accrediting agencies have focused on process, that is, requiring institutions to implement an assessment process. These rules do not stipulate what kind of outcomes must be studied, allowing for institutional discretion, but they do require that some process be developed and that the institution demonstrate that it is using results from its assessment research to improve its academic programs.

A more ambitious approach to outcomes assessment is one that focuses on the actual competencies that students should possess upon completion of their studies. This approach has not been required by institutional accrediting agencies; however, it has been adopted by some of the agencies that accredit specific academic programs (for example, in architecture and physical therapy). Under this competency-based approach, both the program of study and the accreditation process have been entirely redirected to focus on the specific skills and competencies students should gain by the time they complete a program. Under this approach, degree requirements are performance-based, as are accrediting standards. In architecture, for example, accrediting review teams examine an elaborate display of actual student work, with projects chosen to demonstrate the program's standards on dozens of different criteria.

Summing up, this review covers different ways that institutional accrediting agencies have tried to address core issues in gathering appropriate evidence for evaluating academic programs. Their experience suggests that specific, quantitative information has its limits, but that a focus on institutional structures, processes and resources also has its limits. The most recent approach – looking at student outcomes – may offer a distinctive contribution, particularly in spurring greater attention to program improvement. What seems to be most enduring, however, is that any quantitative information will always need to be put into perspective. The use of judgment remains central.

Recent trends with specialized accrediting

The experience of specialized accrediting agencies illustrates the way that accrediting agencies have dealt with the difficulties inherent in relying on expert judgment. There are two aspects to this: first, the careful development of evaluative standards or criteria and, second, the development of procedures for avoiding reviewer bias.

Specialized accrediting agencies have not followed a policy of allowing each program to develop on its own. Instead, they have generally taken responsibility for defining what would be considered “best practice” in their field. Their statement of best practice is found in the form of evaluative criteria or standards, and this statement is the framework for all accrediting activities.

These standards are developed in a broadly participatory process. Typically, a committee is appointed, made up of a wide range of persons with successful and well-established reputations in the field. The committee develops a draft statement that is circulated widely, subjected to hearings at various meetings, and then voted on by an assembly of the sponsoring organisation. Revisions are regularly considered, following the same process.

These standards, applicable to all programs, generally address issues related to 1) the organisation, administration, and governance of the program; 2) faculty qualifications, teaching loads and other responsibilities; 3) admission, retention, and performance of students; 4) curriculum content; 5) adequacy of supporting resources, including the library, laboratory facilities, and equipment; and 6) financial resources. For programs in physical therapy, for example, more than 40 specific evaluative criteria have been developed. Self-study reports and peer review visits are organized around the task of judging whether the program is in compliance with each of these criteria.

Care is also been taken in addressing the possibility of bias on the part of reviewers. Peer review teams are a key part of US accreditation. It should be understood that team members are not experts in a narrow sense; that is, they are not hired specifically to be accrediting examiners. Rather, accrediting agencies use teams of “amateurs”, whose strengths, both individually and collectively, are that they are accomplished and well-regarded teachers and administrators with programs similar to those being evaluated. Collectively, they bring different types of real-world knowledge and experience that helps them judge important components of a program or institution. A dean or college president in the United States might be part of an accrediting team at least once a year, for example, considering it as a duty or responsibility to the professional community.

It remains true, however, that no matter how conscientious an individual may be, the accrediting agency must take responsible steps to ensure that review team members make objective judgments. Recognizing that the credibility of the accrediting process could be jeopardized by even an occasional lapse, most accrediting agencies have developed quite detailed rules and procedures. The agencies that accredit specific academic programs have been especially vigilant, in part because many serve fields that have a relatively small number of professionals.

The following is a composite sketch of the various procedures that most specialized agencies use in forming and working with peer review teams. They include:

- reviewers selected by nomination and interview;
- a formal roster of peer reviewers;
- training of reviewers;
- institutional approval of team members;
- checklists and standard forms to follow during visits;
- guidelines for report preparation;
- option for an institutional response to the team report;
- separate commissions to review the report and take action;

- appeal processes;
- evaluations of team members and team visits.

The agencies have taken what, in essence, is a qualitative process and have tried to make it as objective as possible. They rely on expert judgment but it is judgment that is bounded, both by clear standards and by procedural safeguards.

Concluding comments

My general remarks, and these two reviews, were intended to convey both descriptive information on US accrediting processes and a general appreciation of the many, lasting challenges and tensions inherent in the process of trying to make a summary judgment about educational programs. Let me conclude by noting both some strengths and some weaknesses, or areas of concern.

First, I consider it an important strength that accreditation holds to its core reliance on expert judgment. Today's mood – in the age of the computer with its enormous capacity for “crunching” numbers – is one in which informed opinion or judgment is sometimes thought to be outdated.

Accreditation seeks a good balance of qualitative and quantitative evidence: it uses numerical information, as interpreted by informed opinion. No scores or rankings exist. At the same time, accreditation has taken steps to keep opinion appropriately bounded. Judgments are made in the context of specific standards developed by a broadly consultative process. Those who make judgments are subject to numerous procedural safeguards to ensure high standards of objectivity.

Another strength of US accreditation is its conscientious attention to procedural safeguards. The numerous procedures create a burden and inevitably are cumbersome and costly, but the commitment to such procedures is vitally important. They help each institution or program being reviewed to have confidence that it will be treated fairly. They contribute to the integrity of the entire process.

With respect to areas of weakness, a primary concern is the relatively poor quality of evidence that is presented for accrediting review. Despite much progress in articulating areas to be evaluated and expectations to be met, most of an accrediting review remains very imprecise in its method and in the actual measures used. Self-studies are not very analytical; they describe, but they do little to evaluate, compare, or judge a program.

The accrediting process lacks adequate assessment tools and measures. Some indicators have been developed; some questions have been subject to research, usually by students completing a dissertation. But if accrediting evaluation methods were judged in terms of the basic criteria of good social science

research – looking at the reliability and validity of their measures of evidence – they would be found to be very weak.

Another weakness helps explain the poor status of evidence in accreditation. Accreditation does not have a good theory. By this I mean a coherent theory or conceptual framework of what effective education is, of what the key variables are that are most critical to educational accomplishment at the level of university studies. Accreditation is largely atheoretical. It is primarily an administrative review process, responsive to “managerialist” needs and questions. It is especially weak in making any statement about what the critical organisational supports are for good educational outcomes.

The present attention to assessment in the United States is laudable for its broad attempt to integrate theories of student learning into accreditation. So far, however, it has taken a narrow approach, quickly jumping to student outcomes and leaving out important questions about what programs should be like.

Accreditation would benefit from systematic attention to theory-building. A larger picture is needed for describing what is good educational experience and, especially, what attributes of the institution and its environment contribute most to effective education. With an adequate theory to describe what universities should do, the various quantitative indicators could be more readily evaluated for their relevance. Some measures now in use would be abandoned; other areas might be very insightful and worthy of greater development.

My final comment is that, despite its weaknesses, accreditation continues to have many strengths. Notably, academics still, and properly, have the central role in accreditation. Universities and colleges also have quite diverse internal mechanisms to supplement accreditation and these mechanisms have become more sophisticated over time. The other external forms of accountability – state-level scrutiny, especially – are usually quite consonant with the purposes of accrediting agencies. Thus, the broad picture of quality assurance – which admittedly requires us to consider many separate procedures – is one that offers a healthy, dynamic climate in which institutions and programs know they will be scrutinized for their educational quality. The questions and concerns that are the essence of accrediting and other quality assurance mechanisms are not distant and irregular, but instead are built into the normal routine of educators and educational institutions on a continuing basis.

REFERENCES

- BANTA, T.W. *et al.* (1993), *Making a Difference: Outcomes of a Decade of Assessment in Higher Education*, San Francisco, Jossey-Bass.
- BRENNAN, J., EL-KHAWAS, E. and SHAH, T. (1994), *Peer Review and the Assessment of Higher Education Quality: An International Perspective*, London, Quality Support Centre, Report No. 3, London, Open University.
- EL-KHAWAS, E. (1993a), *Campus Trends, 1993*, Washington, DC, American Council on Education.
- EL-KHAWAS, E. (1993b), "External Scrutiny, US Style: Multiple actors, Overlapping Roles", in T. Becher, *Governments and Professional Education*, London, SRHE/Open University Press, pp. 107-122.
- EWELL, P.T. (1993), "The Role of States and Accreditors in Shaping Assessment Practice", pp. 339-356, in Trudy W. Banta *et al.*, *Making a Difference: Outcomes of a Decade of Assessment in Higher Education*, San Francisco, Jossey-Bass.
- GRAHAM, P.A., LYMAN, R.W. and TROW, M. (1995), *Accountability of Colleges and Universities: An Essay*, New York, Columbia University.
- WESTERHEIJDEN, D.F., BRENNAN, J. and MAASSEN, P.A.M. (eds) (1994), *Changing Contexts of Quality Assessment: Recent Trends in Western European Higher Education*, Utrecht, Lemma.
- YOUNG, K.E., CHAMBERS, C.M., KELLS, H.R. *et al.* (1983), *Understanding Accreditation*, San Francisco, Jossey-Bass.

QUALITY ASSESSMENT IN MEXICAN HIGHER EDUCATION

Juan Fidel Zorrilla

UNAM
Mexico

ABSTRACT

Mexico's quality assessment policies for higher education have been closely related to the diversification of mechanisms through which subsidies were granted to public institutions in response to an acute public financial crisis that erupted in 1982. This crisis brought to an end a period of extraordinary net enrollment growth in higher education.

After, in 1984, the Mexican Government launched a series of new quality-oriented policies that were provided with resources for the economic encouragement of high-level individual performance of faculty. All these efforts gave a decisive boost to the introduction of a culture of assessment, which had previously been very limited. Ten years after the new assessment policies began, experience with internal assessment revealed undeniable achievements, but also conceptual shortcomings and an inadequate application of guidelines, indicators, and procedures for analysis. As a result, both the State and some of Mexico's most important universities decided it was necessary to enrich the quality promotion policies in two different ways. The first of these was through the design of medium-term strategies with precise indicators of the progress made by the programs toward the general goals of education policy. The second way involved the use of external assessment, namely the OECD's, as a new and useful element for establishing international comparisons and making good use of other countries' experiences.

This article examines the results obtained up to the present.

INTRODUCTION

Mexican higher education policy and the concern for quality assessment

Mexico's quality assessment policies in higher education have been closely related to concerns regarding the evaluation of the individual performance of faculty, and to a lesser extent of specific academic programs. The Mexican Government became interested in the quality of individual faculty performance as a result of the need to diversify the mechanisms through which subsidies were granted to public institutions, in response to an acute public financial crisis that erupted in 1982. This crisis brought to an end a period of extraordinary net enrollment growth in higher education.

The rush to adjust budgets caused distinctions to be made between what was merely desirable, and what was socially relevant. All the agents involved – university authorities, civil servants, academics, and specialists – reviewed their priorities, paying particular attention to returns on education spending. The experience of the immediate past, when abundant resources were administered without due care, provided many examples of things to avoid.

In 1984, the Mexican Government launched a series of new quality-oriented policies that were provided with resources for the economic encouragement of high-level individual performance of faculty. All these efforts gave a decisive boost to the introduction of a culture of assessment, which had previously been very limited. However, since indices for determining the progress made in quality were not available when the programs were introduced, the effects of these goals and criteria are still not clear.

Given this experience, since 1996, two new programs with more accurately assessable goals have been implemented. The first one is the introduction of a single entrance examination for upper secondary school candidates in the Mexico City metropolitan area, a region traditionally opposed to it. The standardization of the selection process has created a salutary demonstration effect throughout the land. This mechanism also helped sharpen students' and parents' perceptions of the desirable level of quality in education.

The second program, which began in the second half of 1996, is an ambitious support project for improving the profile of higher education teaching staff. This Program for Upgrading Teachers at Institutes of Higher Education (PROMEPE) is based on assessments of the relationship between certain standards deemed desirable at the national level and each institution's plans and actions towards attaining them.

There are two main frames of reference that clearly identify the goals and objectives of general education policy. The first is the development plan that the

Mexican Presidency has to submit at the beginning of each new federal administration. The second is the OECD's Higher Education Policy Review of 1996. This review was among the first external assessments of national policy to be conducted by the OECD at the Mexican Government's request. Nowadays, national, state, and institutional higher education policies are monitored in order to assess progress towards the goals contained in the current Educational Development Program and the OECD's recommendations.

In order to fully understand the current status of evaluation and quality assessment in higher education one must refer to the general features of the Mexican education system. That is the purpose of the next section. Later sections will review the role that assessment has played in the current functioning of higher education.

SOME RELEVANT FEATURES OF THE MEXICAN EDUCATION SYSTEM

Participation in education

In Mexico, education is divided into three levels: 1) The compulsory level has a national curriculum, lasts nine years, six years of primary school and three years of lower secondary school, and caters to children between the ages of 6 and 15; 2) Upper secondary education (USE) is, on the contrary, highly decentralized. USE has over 300 different variations around a basic core curriculum. With a few exceptions, USE lasts for three years; 3) Most higher education programs are designed to take at least five years, although the average duration of these studies is greater. More than 80 per cent of students enrolled in higher education are at autonomous, state, or private institutions, with the remainder served by federal institutions.

At present, the average level of schooling in Mexico is 7.4 years; this is because prior to 1993, obligatory education covered only 6 grades. According to OECD figures for 1996, Mexico's rate of participation in education between the ages of 6 and 12 is 93 per cent, for 14-year-olds it is 77.0 per cent, and for 18-year-olds it drops to 18.3 per cent (for the OECD nations, the corresponding figures are 92.8 per cent and 64.6 per cent) (SEP, 1997).

An examination of the rates of participation prevailing in Mexico must take into consideration that the country's population multiplied by 3.7 between 1950 and 1996 and that at the start of that period the rate of participation for six years of primary education was 71.6 per cent. The extraordinary growth demanded of educational services over that period in order to increase schooling and cater to ever higher student numbers meant that the enrolled population in Mexican primary schools multiplied by a factor of five, in lower secondary education by a

factor of 69, in upper secondary education by a factor of 56, and in higher education by a factor of 52 (OECD, 1996).

Apart from population growth, there are other elements that affect and negatively impact participation at all educational levels. First and foremost of these is the high dropout rate at all scholastic levels.

At post-compulsory levels of education, dropout rates are influenced by the traditional bias of educational supply and demand towards general preparatory programs for higher education, which attract 85 per cent of all students. For two-thirds of all students, this dominant type of upper secondary education only leads to a certificate that is of clear usefulness within the labor market if at least eight years of full-time post-compulsory education are successfully concluded. This very long track is only completed by a small minority, equal to 15 per cent of all those who start out on it after the end of obligatory education. This bias works against the students' prospects for employment and social mobility (OECD, 1996).

Low graduation efficiency rates and their cost

The proportion of USE graduates that enters higher education has wavered between 61 per cent and 88 per cent for the past ten years (Dirección General de Educación Superior, SEP, 1997). Practically all of them, 98 per cent, enter five-year, International Standard Classification of Education (ISCED) level 6 programs. The ISCED level 5 options, which were created only recently and are currently experiencing rapid growth, cater for no more than 1.2 per cent of all students. In addition, enrollment in level 6 programs is excessively concentrated (33 per cent of the total) in the fields of law, business, and accountancy. The exceptionally high dropout rates in USE and higher education impose a high social cost for their families and lead to personal frustrations for the students, since in 1994 the national graduation efficiency rate of students completing their ISCED level 6 studies and obtaining a degree was 21.3 per cent of those who had set out along that long track six years earlier. This phenomenon also imposes a cost on industry and the service sector. When these young people are hired, time and resources have to be invested to train them to perform as ISCED level 3 or 5 technicians or managers, which points to a serious lack of coordination between the education system, the job market, and the employment and salary needs of large numbers of young people. The dropout phenomenon has other negative repercussions, in that it provokes individual frustration among most students entering higher education – when they are unable to complete those studies and they are forced to work in jobs and areas for which they have not been trained and, consequently, they are poorly paid.

In terms of public spending, this pattern is once again extremely costly in relative terms. First of all, this is because Mexico's educational expenditure per

student in higher education is 5.75 times higher than educational expenditure per student at the primary level, and 1.99 higher than educational expenditure per student at the secondary level (OECD, 1996). The high relative cost can also be seen in terms of expenditure per student relative to the per capita Gross Domestic Product, which is one of the indicators commonly used by the OECD: Mexico's figure is the second highest of all those recorded by the Organisation (OECD, 1996).

It is paradoxical that in spite of these results, many sectors of public opinion, most students and most institutes of higher education continue to demonstrate a marked preference for long track, university-type programs and the corresponding preparatory options at the upper secondary level. It would be useful, therefore, to ponder the prestige of higher education and examine why it exerts such an attraction on Mexican society.

The contribution of higher education

Mexico's modern universities, like their Latin American counterparts, were created with great aspirations for the development of the professions, scientific research, culture, and the arts. In these areas – all of which were vital for the construction and strengthening of the young republic – the role played by the public university has been enormous. Since 1940, with sustained economic growth, the prices paid for the professional services of higher education graduates allowed standards of living that were much higher than the average, which made a university degree a symbol of social mobility. Later, after a half-century of lagging behind the developed nations, by the end of the 1970s higher education achieved participation rates of 15 per cent, which in that decade the OECD deemed as having reached a level of massification. Thanks to the proliferation of educational opportunities, public opinion was provided with evidence to support the belief in the nation's real capacity for satisfying keenly sought demands, with which the public universities became one of the most prestigious institution in the country and an important avenue for social mobility.

At the threshold of the 21st century, the contribution made by Mexico's institutes of higher education is still, even from the most critical perspective, of great importance in training leaders for politics, business, the professions, education, science, and national culture. Moreover, the academic training of graduates is closely tied to the process of creating a national culture that identifies problems and indicates projects for our country.

The higher education system comprises institutions of five different types: universities, public technological institutes, teacher training colleges, technological universities, and finally small specialized institutions, mainly for military, artistic or research education.

Universities are defined as offering a minimum of six programs, in at least three areas of knowledge from the six which comprise all the disciplines taught. The universities' historical model is the National Autonomous University of Mexico (UNAM), which holds a very important position within the national panorama. There are 39 public universities that offer programs to be completed, on average, in a minimum of five years.

There are 111 public technological institutes that depend directly on the Federal Subsecretariat for Technological Education and Research and make up a centralized system with common study plans and programs. Their programs also have an average minimum duration of five years. There are also more than 30 state technological institutes. In practical terms, programs offered at technological institutes and universities differ only very slightly.

Teacher training colleges (*normales*) are in charge of training teachers for basic education. They can offer up to a maximum of five programs: pre-school, primary, secondary, special, and physical education. These schools have their own identity in terms of their curricula, organisational structures, and philosophies.

Technological universities arose as a model in 1991 to offer short, two-year programs that did not exist at other kinds of institutions. Based on the model of the French University Institutes of Technology, they represent a new kind of institute of higher education with two-year programs. These institutions are the type currently growing the fastest: at present there are 24 [in 1997], and by the year 2000 there will be 42 such universities, with an enrollment of 50 000 students. Technological universities offer a successful way to address the current imbalance in the supply of short programs that are closely linked to productive activities.

Financing higher education

For a long period of time, from the 1940s to the early 1980s, Mexico's burgeoning productive output and the social and economic prestige that the university community were able to secure for their activities determined generous public financing to support the expansion of higher education. Institutions grew apace with enrollment and public subsidies. In turn, the State acquired the prestige derived from this expansion.

This scheme posed several problems, and continues to impose limitations on national policy. In Mexico, 85 per cent of subsidies for public universities are granted through a system that the experts call automatic or block financing, under which funds are given to the institutions without the State being involved in how they are used and distributed. The State's ability to direct education policy toward national goals is therefore greatly curtailed. In turn, the institutions' academic independence from the State does not keep them from almost invariably being equally limited by the tendency within them for each unit to be given a

similarly automatic quota, the amount of which is determined as a function of the money granted the previous year. In the final instance, automatic or block financing restricts national and institutional policies and maintains inertia, without introducing corrective mechanisms (J.J. Brunner, 1990, 1993).

One first step presently taken in the direction of a better use of public funds was the recent creation of a single, standardized information service for the State Public Universities, since government funds account for around 95 per cent of the total public higher education budget, and then 85 per cent of this amount is block financing. This service provides comparative national and international data for the strategic planning and development tasks of the institutions themselves, the federal Government, the state governments, and society at large. It is known as the Program For Standardizing Financial and Academic Information. It includes information on finance, human resources, enrollment, planning, institutional assessment, and graduate location and performance. This will enable the use of performance indicators based on unit costs, allowing inter-institutional comparisons with national and international parameters. At a later stage it will help to link performance in graduation indicators to granting public subsidies.

Consensus-building as a mechanism for facilitating policy

The field of higher education in Mexico includes institutions of very different kinds. With its two sectors, the public, 75 per cent of total enrollment, and the private, it contains institutions with very different numbers of programs, student populations ranging from a few hundred to more than a hundred thousand, and which are legally constituted under very different terms. Moreover, the studies undertaken at each are not easily compatible with those of other schools. In addition, the autonomy of the public universities – which, with a few exceptions, obtain 90 per cent or more of their financing from government funds – require that these institutions be consulted regarding the national policies that affect them.

This heterogeneity is also derived from the different levels of effectiveness with which changes have been implemented in each institution over the past 25 years. There are also great differences in the results obtained from the public funding applied within them and in the ways in which those funds are distributed between administration and teaching and between their different academic programs (upper secondary, higher education, and graduate). These differences translate into variations in costs and yields, visible by studying the proportion of students graduating as a proportion of those who enroll, and the time it takes them to do so, in accordance with the little information that is available. The very unequal results between programs and institutions frequently combine with pockets of inertia: the academic immaturity of programs, inadequately qualified teaching personnel, administrations that are impermeable to modern institutional

management practices, and libraries that are insufficiently geared towards high-quality learning.

These factors illustrate the complexity of directing national higher education policies and the usefulness of having effective arenas for negotiation and consensus-building, known in the literature as buffer institutions. There are three types of bodies for coordination and consensus-building: civil agencies, those that are a part of the public administration, and mixed ones, which involve both civil and government components.

The longest-standing consensus-building and consultation agency is the National Association of Universities and Institutions of Higher Education (ANUIES), a civil body created in 1950. The ANUIES gathers together universities, public technological institutes, and private institutions, and it carries out coordination work among its members. It has played a fundamental role in resolving conflicts (both between the federal Government and the public universities, and between given specific institutions and the corresponding state governments) and in drawing up initiatives and guidelines for general policy. In addition, in 1992 the ANUIES created another council to group together public institutes in order to discuss and propose common goals.

Another civil association for consensus-building is the Federation of Mexican Private Higher Education Institutions (FIMPES) which gathers together and represents private institutions, mainly in their dealings with the Ministry of Public Education (SEP) and the federal and state governments. FIMPES has begun an assessment program for all its member institutes geared towards giving accreditation to each institution.

Among the government sector agencies is the Council for the Technological Education System (COSNET), created to coordinate the public, federal technological institutes. Its purpose is to provide attention, supervision, and support for teacher training and refresher courses and for scientific research within the institutions of the technological subsystem. The COSNET played a major role in changing the study plans of the technological subsystem in 1993 and in the training and refreshing of teaching personnel prior to implementing those reforms.

Higher education planning

In the late 1970s, the Ministry of Public Education, the ANUIES, and the federal Government introduced a National Higher Education Permanent Planning System (SINAPPES) to guide and regulate higher education as a whole. During the 1980s, state and regional agencies showed scant ability to make decisions and reach significant agreements, which in turn led to the weakening of SINAPPES as a whole (Gago Hugué and Mercado del Collado, 1995). Between 1990 and 1993, one of its commissions assumed responsibility for collaborating on the design of a

national assessment process for higher education which included: the Higher Education Modernization Fund (FOMES), the policy that governs incentives and scholarships for academic personnel; the Inter-institutional Committees for Higher Education Assessment (CIEES) responsible for issuing recommendations for higher education programs on request; and the National Higher Education Assessment Center (CENEVAL) in charge of implementing entrance examinations to upper secondary and higher education.

PROGRAMS AIMED AT ASSESSING QUALITY

The higher education modernization fund (FOMES)

FOMES uses external judges to assess the infrastructure modernization projects of public state universities. At present, FOMES's general frame of reference comprises the national policies set forth in the PDE that deal with quality, relevance, coverage, and organisation, while its specific frame of reference has to do with the congruence between the actions this Fund supports and those assisted by the education sector's other programs, particularly PROMEP and PRONAD. Using diagnostic tools, universities can determine their strengths and opportunities for strategic development and their specific programs. The institutional proposal must be compatible with the PDE's policies and goals and form part of an institutional development plan.

Teaching career

With the start of the period of accelerated growth in the 1970s, higher education institutions were able to absorb thousands of students and professors by increasing the number of part-time or hourly-paid teacher through the proliferation of existing forms of organisation. Catering to 40 or 50 times as many students with the same academic structure and a similar type of financing relationship with the State had greater repercussions than was originally assumed. Indeed, the growth in enrollment and in the public subsidies that made this explosion possible between 1971 and 1982 fostered a degree of complacency and, in its wake, a high level of improvisation. The hiring of new teaching staff was extremely lax; many of the new teachers had not yet finished their first degrees and many others were not specialists in the fields in which they began to work, and this led to serious weaknesses in the transmission of vital disciplinary knowledge. Significantly, total teaching staff numbers increased four-fold between 1970 and 1985, and only in certain law, medicine, and engineering programs of a traditional nature were requirements intended to guarantee a minimum level of quality imposed.

Professionalization developed along corporatist and trade-union lines, with many aspects of academic life determined by negotiations with the teachers' unions. The result of this process was a gradual change in social perceptions of academic activities, which evolved from being a prestigious task to a professional occupation not very different from any other (OECD, 1996).

In 1989, the Teaching Career Program (CP) was introduced to reverse some of the more negative results of this process. The mechanism used to apply these funds was to de-standardize professors' earnings through incentives for individual performance. De-standardization involved breaking with the principle that all academics at the same level in the country should have the same level of income, without any other funds to reward superior performance. Standardization caused to the demoralization of the more productive and responsible academics, which in turn led to a vicious circle in which average performances sooner or later tended to descend to below-average level. This vicious circle was reinforced by slackness of the demands made of teaching staff, a product of the universities' liberal tradition.

De-standardization was introduced through the CP, which provides federal funds for the nationwide implementation of systems that give significant rewards for academic productivity. Under this scheme, each institution draws up the criteria in accordance with which the incentives are to be awarded. The CONPES commission and the Ministry of the Treasury and Public Credit designed the general guidelines, which have been used to enable each institution to draft its own applicable regulations.

Over the last seven years, financing for the CP has grown at an average annual rate of more than 60 per cent and now accounts for 5 per cent of the universities' federal subsidy. However, the program's general effect on the quality of students' education is not yet clear, since no indicators to track progress were adopted. Moreover, deficiencies in the application of assessment procedures and criteria and in their operating mechanisms have given rise to certain practices that work against the original aims of this program.

Program for improving teachers at institutions of higher education

The need to rethink the aim of the actions aimed at ensuring a substantially different level of quality was the driving force behind a new program that began in 1996: the Program for Improving Teachers at Institutions of Higher Education (PROMEP), directed at the public state universities by the Subsecretariat for Technological Education and Research. PROMEP identifies the desirable qualifications of teaching staff in accordance with the characteristics of the programs where they work. It distinguishes between five different types of program: 1) practical science; 2) practical with individual training; 3) practical; 4) basic and 5) intermediate between practical science and basic.

Each program type and level is assigned a desirable proportion of full-time and by-subject professors, along with their minimum and preferred levels of schooling. PROMEP assumes that the development of each department's academic staff will be planned, and agreements between the institutes of higher education and the Ministry of Public Education (SEP) are entered into to encourage the teaching staff to attain the desired profiles. These agreements define the necessary numbers of future professors with the desired attributes, they support actions aimed at improving the infrastructure required for optimal profiles, and they help support the establishment of internal and academic management standards in accordance with the Program's objectives.

The planned period for meeting the desired conditions contained in PROMEP is ten years. The estimated goals represent a significant change over the current profile of the whole teaching staff at the universities in question. By the year 2006, and on the basis of the enrollment growth rate contained in the Educational Development Program, the proportion of full-time professors would more than double, from 31 per cent to 70 per cent, and the proportion of full-time teachers with doctorates would increase by a factor of 2 to 22 per cent. The remaining full-time staff would have either masters degrees or a specialization in higher education teaching. Average student/staff ratios would fall from 29 to 22. Enrollment in good quality graduate programs would be 120 000 and the system could produce 2 000 doctoral graduates a year, when the country currently has a total of 20 000 doctors. To attain this goal, it will be necessary to double the number of full-time professors with doctorates by the year 2006, double the number of full-time professors from 33 000 to almost 68 000, ensure they all meet the necessary profile, and reduce the total numbers of by-subject professors. In addition, 36 000 full-time professors as yet lacking specializations or masters degrees will receive training at those levels.

FOMES, PROMEP, and the other higher education policies and programs are aimed at promoting a reactivation of the State planning bodies created in the late 1970s, in order to ensure that the initiatives that emerge from the state level and receive federal support also enjoy local consensus and are strongly encouraged by the corresponding state governments.

Inter-institutional committees for higher education assessment

The inter-institutional assessment of academic programs was a part of the quality promoting initiative of the 1990s. The committees are empowered to conduct formative assessments of all higher education programs. The field of action of the CIESS comprises all the country's institutions of higher education, both public and private, with the exception of schools that train teachers for basic education. The assessments are aimed at identifying the achievements and

deficiencies of higher education, with a view towards improving their quality and efficiency and encouraging their modernization. As of 1997 the CIEES had undertaken 861 assessments from a total of more than 5 500 programs.

National higher education assessment center (CENEVAL)

CENEVAL is charged with designing and implementing entrance and graduation examinations for the upper secondary and higher educational levels. CENEVAL currently administers a series of examinations: 1) the selection exam for those hoping to enter upper secondary education is a test that identifies candidates' levels of academic performance; 2) the diagnostic exam for those hoping to enter higher education is an auxiliary tool for diagnosing candidates wishing to enter higher education for the first time; 3) the general professional quality exams for veterinary and zoo-technical medicine, accountancy, nursing, dentistry, pharmaco-biological chemistry, civil engineering, architecture, and business studies are intended for graduates of different ISCED level 6 higher education programs.

Professional certification and accreditation of study programs and plans

In Mexico professional certification takes place at the federal level and for that reason the professional registration issued by SEP's General Directorate of Professions allows professional practice throughout the nation. The SEP's certification uses only administrative criteria to establish that the documents presented are adequate and valid.

Regarding accreditation, two different meanings of this concept prevail. The first involves legal connotations, referring to the official recognition given to studies carried out at an institution. At present, it is the State that performs that function, either directly by recognizing studies done at a given institute, or through the power that the law grants certain autonomous institutions to offer educational services and to give their recognition to the studies offered by another institution.

Under the second meaning, accreditation consists of the information by means of which an official or private body emits a value judgment on the worth of an institution or program in comparison with a national standard. The national standards necessary to undertake this type of accreditation are still on the agenda for the future. The same can be said of international recognition of Mexican degrees. The most progress to date towards ratifying the international recognition procedure has been made in civil engineering, which enjoys the recognition of Texas and of all the Canadian provinces. In Canada and the USA professions are regulated at the state level, which means that international agreements have to be ratified by each state or province. In general, obtaining

professional recognition entails many problems, on account of legislative differences, individual recognition procedures, and the political situation in each state or province. The accreditation of institutions, programs, and individuals is still an ongoing process in our country and, with a few exceptions, the projects are still in the planning stage.

National science and technology council: the national researchers system and the national register of excellent graduate programs

The National Science and Technology Council (CONACYT) is a SEP agency charged with coordinating and implementing science and technology programs, except for those managed by other ministries. It is responsible for the National Researchers System (SNI), which was the first program to diversify higher education financing methods. The SNI awards four different levels of scholarships to the most productive researchers. These scholarships constitute an additional tax-free monthly income equal to four, six, seven, and ten times the minimum wage. Applications are evaluated by peer review committees, which also conduct regular analyses of the recipients' performance in order to decide whether the scholarship is to continue or be withdrawn. The SNI's database is Mexico's richest source of information on scientific research activities in the country.

CONACYT is also responsible for a National Register of Excellent Graduate Programs that keeps track of graduate programs that guarantee top-quality student training. Successful candidates to these programs receive a CONACYT scholarship to enable them to undertake their studies. Entry to the register depends on the ruling of peer evaluation committees.

Assessment of higher education policies

In 1994, the Mexican Government asked the OECD to review its higher education policies. The work took longer than originally planned, due to the need to take into account the changes in the federal Government and the financial crisis that erupted in December 1994. Fortunately, the problems posed by those situations were overcome and the result was policy continuity. The greater length of time for the study allowed the external analysts a greater depth of understanding of a society as complex as Mexico's.

In January 1996, almost three months before the OECD submitted its report, the 1995-2000 Educational Development Program (PDE) was presented, containing the current policy goals. The OECD's diagnosis and working strategies were enriched by the PDE's content. For that reason, the recommendations in the OECD study agree with the PDE's interest in quality, relevance, coverage, teacher training and refresher courses, and system coordination. As of that moment,

the application of the policies contained in the PDE have benefited from the analysis undertaken by the OECD experts.

CONCLUSION

This article has offered descriptions of the higher education assessment mechanisms and agencies that exist in Mexico. These are the result of a review of the financing system that was in force until 1984, the aim of which was to provide new funding for programs and actions aimed at bringing about substantial changes in academic quality. This funding helped counter the deterioration in the incomes of academics and institutions that had arisen as a result of the financial crisis that began in 1982. In retrospective, it can now be seen that the logic governing many of those efforts involved making sure that funds were being allocated through more rational procedures than automatic or block financing. It would thus appear that it was not a priority to provide indicators to determine the real impact of these funds on quality.

The experience of the past 15 years shows a large-scale dissemination of mechanisms for assessing the academic performance of staff and students and the preparation of proposals for obtaining additional funding. Nevertheless, a substantial improvement in academic quality is still a necessity, from at least three points of view. First, Mexican society has become increasingly demanding. Second, terminal efficiency within higher education programs is worryingly low and, in relative terms, costs per student and per graduate are very high for our per capita gross national product. Third, in light of the prevailing low level of terminal efficiency, Mexican society would do well to ask how relevant the current supply is for both students and the economy at large.

The commitment to obtaining better levels of academic performance and to using assessment as an ideal tool remains in place, but attaining the goal is more complex than it appeared five or more years ago. Now, improving quality cannot fail to consider – or, worse, work against – a significant increase in graduate efficiency. It is impossible to adequately discharge the task society has given us without seriously reconsidering the way in which academic work affects the work of students and is useful to them in accordance with their abilities and aspirations. Overcoming the currently low level of performance is a complex task that will require the joint efforts of academics in order to pay priority attention to student learning. To achieve this, we must be sure that the actions, programs, and ordinary and extraordinary funding bring about a high standard of quality with a high level of graduate efficiency. This new way of seeing the future agenda is largely the result of having adopted an OECD perspective. The challenge now is to promote quality assurance, to which end international experience is a vital resource.

REFERENCES

- BRUNNER, J.J. (1990), *Educación Superior en América Latina: cambios y desafíos*, Fondo de Cultura Económica, Santiago de Chile.
- BRUNNER, J.J. (1993), *Educación superior en América Latina durante la década de los ochenta: la economía política de los sistemas*, Udapso, La Paz.
- Dirección General de Educación Superior, SEP, (1997), *Reporte Ejecutivo*.
- GAGO HUGUET, A. and MERCADO DEL COLLADO, R. (1995), "La evaluación en la Educación Superior Mexicana", *Revista de Educación Superior Mexicana*, October-December, ANUIES, Mexico City.
- OECD, (1996), *Exámenes de las Políticas Nacionales de Educación*, Mexico, pp. 68-69.
- OECD, (1996), *Reviews of National Policies for Education. Mexico Higher Education*, Paris.
- OECD, (1996), *Education at a Glance*, Paris.
- SEP, (1997), *Perfil de la Educación en México*.

INNOVATION THROUGH MERGING?

Ole-Jacob Skodvin and Bjørn Stensaker
Norwegian Institute for Studies in Research
and Higher Education (NIFU)
Norway

ABSTRACT

As a part of the "Norway Network" idea, the Norwegian Ministry of Education initiated an extensive reorganisation of the non-university sector in 1994. The central vision behind the reform was that the increased size of institutions through merging, along with disciplinary specialisation within institutions, and better co-operation between all higher education institutions should result in increased innovation, integration and effectiveness both at the national level as well as within single institutions. Using network theory as a framework, this article studies how a newly merged multicampus college has adapted to the reform, and in particular, whether innovation has occurred as a result of the reorganisation. The case study identifies several problems with the merging and innovation process at the institutional level which lead to administrative rather than academic gains. In the conclusion, lessons to be learned from the merging process are highlighted.

INTRODUCTION

In the early nineties, the higher education system in Norway faced two problems common to many western European countries. Large numbers of students entered the system and budgets tightened. A series of disciplinary and administrative reforms was therefore introduced in an effort to increase the quality and effectiveness of the higher education system. In 1990-91, Norwegian political authorities launched the idea of a Norway Network in higher education. A

central vision behind the idea was that the increased size of institutions through merging, along with disciplinary specialisation and the establishment of "centres of excellence" within institutions, and better co-operation between all higher education institutions should result in increased innovation, integration and effectiveness both at the national level as well as within single institutions. The goal was to build up an integrated higher education system consisting of larger non-university institutions that should be active partners to the existing universities (St. Meld. nr. 40, 1990-91). The main element of the reform can be said to have been implemented when 98 regional colleges merged into 26 state colleges in August 1994 (Kyvik and Skodvin, 1996). The reform encompassed the previous regional colleges with their emphasis on business and undergraduate university studies (14), the colleges of education (25), engineering (15), health education (27), social work (3), and various other small specialised colleges (14).

Many (9) of the new colleges that appeared as a result of the reform are multicampus institutions; they have their schools and departments spread around in different municipalities. To achieve the objectives of the reform, increased innovation, integration and effectiveness, these institutions face some general problems. It could be anticipated that the stated objectives would be more difficult to obtain at a network college than at a college located in the same place, because costs connected with running multicampus colleges could be higher than for geographically integrated institutions, thus putting further strain on the creative process of administrative and academic innovation. In addition, multicampus colleges must also tackle the ordinary problems associated with mergers, cultural differences and power struggles for positions and influence. Altogether, these factors provide some explanations of why merging former independent institutions is rarely labelled as a success story (Goedegebuure, 1992; Mulvey, 1993; Harman, 1996). It is, however, also possible to turn the coin and claim that creativeness and academic innovation are absolutely necessary for the potential success of new multicampus colleges facing such problems, and especially when increased effectiveness is one of the main objectives with the merger.

In this article, we will study the merging process at Telemark College with the purpose of identifying some of the factors that have prevented or led to innovations at the institution. For analytical purposes, network theory is used as a framework, both to define the term "innovation", as well as to provide us with different categories of innovation.

DATA AND METHODS

The article is based on two rounds of interviews with academic leaders, administrators and faculty at Telemark College in January/February 1996 and in

February 1997, respectively two and three years after the merging process. The first round of interviews tried to clarify the strategic and academic direction academic leaders wanted to follow after a round of external evaluations at Telemark College. The second round of interviews studied the effects of the merging process at the departmental and managerial level, and how academic integration and co-operation between the different geographically located campuses worked three years after the reorganisation. Both interview rounds were based on semi-structured and focused interview guides (Merton *et al.*, 1990). The interview guides were pre-tested for increased validity. The execution of two rounds of interviews should also improve the chances for high reliability (Kirk and Miller, 1986). A total of 23 persons were interviewed including administrative and academic personnel in all five campuses of Telemark College.

NETWORKS AS INNOVATIONS – AN OUTLINE

Our case study, Telemark College, was chosen because it is one of the colleges facing the greatest challenges after the amalgamation in 1994. The College has five campuses with large distances between each campus. In addition two departments are also divided between two different campuses. The College has over 4 000 full-time students and over 400 faculty and staff. Telemark College offers a broad range of studies from one-semester courses, two- and three-semester degrees in academic disciplines, and three- and four-year professional degrees. In addition, it offers five- and six-year Master's Degrees and Doctorate programmes, mostly in co-operation with universities in Norway and abroad. Telemark College is the outcome of a merger between four previously independent colleges, a college of engineering, a college of health education, a college of teacher training (separated in two campuses), and a regional college. Each of these colleges had its own culture and traditions that in some way or another should be "melted together". One may therefore say that Telemark College faced three particular problems following the merger. First, there were relatively large distances between the campuses varying from twenty to one hundred and eighty kilometres. This makes interpersonal contact and communication both between employees and between students difficult. A second challenge was to develop functional organisational structure of the new multicampus institution, integrating and co-ordinating the activity in the five different campuses. Third, the cultural differences between the previous colleges were large. Units at the previous regional college with its "university ideals", teacher training and health education with their own professional ideals, and engineering with close ties to local industry had different traditions, and before the merger had very little contact with each other.

Telemark College had in other words a great need for innovation, a term which in this article is defined as a combination of reform and change, representing something new and different (Levine, 1980). And as illustrated, the innovation needs of Telemark College were not only located in the academic area, but also in infrastructural and organisational matters. If one splits up the innovation in such areas, network theory becomes very relevant as an analytical framework (cf. Granovetter, 1985; Burt, 1992; Aldrich *et al.*, 1991). The network concept is used to show relations or relationships between objects, in our case between different campuses at Telemark College. The network consists of *nodes* that are connected by different *links* or *ties* (Lösch, 1954; Christaller, 1966; Törnqvist, 1990). In the literature, three different types of networks can be identified: infrastructural, organisational and social networks. *Infrastructural* networks are physical, and are used in relation to different forms of transportation of materials, people, and messages (Dicken and Lloyd, 1990). The latter reflects more technological networks like computer-based networks and related systems. For Telemark College, the large geographical distances between the campuses meant that some sort of computer-based network had to be developed if extensive travelling between the different campuses should be avoided. However, costs associated with this kind of technological network are often high, and the development and training of personnel and students would require substantial resources and energy. This could, at least in the short run, jeopardise the objective of increased effectiveness at Telemark College. Thus, studies show that saving money in a newly merged higher education institution rarely occurs during the first years after a merging process (Fielden and Markham, 1997; Rowley, 1997; Mulvey, 1993).

Organisational networks link individuals, segments and workplaces together in production systems, enterprises and other organisations (Tichy, 1981). For Telemark College, creating an organisational network would however involve choosing between three basic organisational forms (cf. Lee and Bowen, 1971): flagship, consolidated or integrated organisational systems. Within flagship systems, one of the units/campuses clearly dominates academically, administratively and economically. Central administrative functions take place at the “main campus”, which also has the most important teaching and research activities in the multicampus organisation. The consolidated system, in contrast, involves units which are equal, but the central administration and governing board are located at one campus. In the integrated systems, the principle is that none of the units/campuses should “dominate”. This represents a decentralised steering and management model, *i.e.* the administration is spread over different campuses. Each of the three organisational solutions has certain advantages and disadvantages. Selection of *e.g.* a flagship or a consolidated system at Telemark College could, for instance, create organisational tensions in the struggle for power and positions between the campuses and in that respect be a hindrance for organisational

integration that was one of the main objectives of the merging process. An integrated solution could, on the other hand, only be a solution that kept the former cultures intact in the different campuses and stimulate “business as usual” with a protection of own territory and the old structures. A potential effect could also be less organisational integration.

Social networks transmit ideas, impulses, and influence within different parts of society. This type of network is usually made up of individuals who know each other quite well and who repeatedly have personal contact (Tichy *et al.*, 1979; Burt, 1980). To achieve educational and academic innovation, Telemark College had to stimulate the development of new social networks. Again, at least two different options existed. Should Telemark College be a comprehensive institution where the different educational and academic fields just diversify from each other, or should the College stimulate increased academic integration and co-operation between the different professional areas with, *e.g.*, elimination of duplicative study programmes? Studies from Australia (Harman, 1996; Harman and Robertson-Cuninghame, 1995; Harman and Meek, 1988), the United States (Mulvey, 1993) and the Netherlands (Goedegebuure, 1992) have shown that mergers often create new and improved study programmes in higher education institutions, but that this process often creates tension and conflicts at the institutions. For Telemark College, one of the challenges in this respect was to support academic creativity and innovation without getting the tension often associated with this process.

INFRASTRUCTURAL NETWORKS

During the merging process, Telemark College got extra resources to build up its technological infrastructure. Telemark was a pilot college in the so-called compact project initiated by educational authorities. This meant that Telemark College was the first college in the country which established a modern information technology network in relation to telephone and data communication (the Internet and e-mail), as well as conditions for videoconferencing and distance education. The physical transportation of people, however, was not given high priority, and private transportation is still used when personnel from different campuses meet “face-to-face”. Several of the interviewees made the point that even if information technology overcomes certain obstacles, people still have to meet from time to time, especially in academic matters. The distances in Telemark county also mean that much work time is spent on travelling, if face-to-face meetings are to be held. Some academics even stated that to be an *aficionado* when it comes to driving was an important qualification if co-operation between campuses and departments should take place. During the interviews, almost all of

the administrative and academic leaders underlined that compared to a college that is located in one place, it is quite expensive to run a network organisation such as Telemark College. First of all, it involves substantial one-off costs in infrastructural investments. Second, maintenance and technical support of the new networks demand high resources and take a considerable amount of time. Parallel to this, general budget cuts from the Ministry of Education in the years following the merging process have resulted in internal cuts that also decreased the amount of resources that personnel should have spent in learning to use the new technology. The central administration at Telemark College also acknowledge that the general costs related to network integration were indeed underestimated. If one only looks at the resources spent on the technological infrastructure, it therefore seems that these costs have not jeopardised the objective of increased effectiveness at Telemark College. It is however questionable whether efficiency related to the new technological networks is as high as it could be.

Nevertheless, the technological networks may serve as a good basis for future co-operation and academic integration within Telemark College. According to leaders at the College centrally, but also at the different campuses, these types of communication seem to have reduced the importance of distance to some degree. Especially among the administrative staff, the use of teleconferencing and videoconferencing is increasing. As indicated, it is not the same success story for the academic staff. Some projects with distance education and “the electronic classroom” have been established, but not much has happened between campuses and departments. Rather, these projects have been initiated by individuals at one campus or department, with little organisational spin-off effects. The informants identify two reasons for this. First, the previously mentioned lack of training in using the technology. Second, the lack of an organisational initiative and strategy for the development of interdepartmental education and teaching projects. Some of these informants claim that the lack of an organisational initiative in this matter, partly relates to hesitation by administrative and academic leaders to “push” academic staff, with the argument that this would be interpreted as if administrators and managers were trying to take over academic matters, and that this could kill academic creativity. However, this “strategy” does not seem to be successful.

ORGANISATIONAL NETWORKS

Of the three network models mentioned (flagship systems, consolidated systems and integrated systems), the consolidated system is the best description of what Telemark College chose as an organisational structure. At Telemark College, the rectorate and the central administration are located at one campus

(Porsgrunn), but the different campuses are regarded as equal in principle. However, the process when this matter was decided must be described as turbulent, with the other campuses and departments claiming that a consolidated structure in the long run would imply moving the other departments and campuses to Porsgrunn, to further increase efficiency and reduce administrative costs. It could be argued that developments after the merging process are according to the critics' claims. First, Porsgrunn campus is at present the strongest academically. It is the only campus which offers a doctoral degree (engineering). Second, of the four "centres of excellence" that have been given to Telemark College by the Ministry of Education as part of the Norway Network concept, Porsgrunn campus has received three (environmental technology, process automation and process technology). It is, therefore, possible to claim that academic innovation is taking place at Telemark College, but that such innovation is mostly intradepartmental. As some critics say, this development could also easily lead to a future change from the consolidated to the flagship model at Telemark College, with Porsgrunn campus as the leading one.

When interviewed, many administrative and academic leaders said that they hoped to avoid tensions during the process when an organisational structure was chosen, and that they hoped to show flexibility in developing new organisational routines and systems, thus creating a good climate for institutional integration. However, administrative reforms launched by the Ministry of Education, parallel to the merging process, became a hindrance to local discretion and autonomy. New personnel-administrative systems and the harmonisation of rules and regulations in the higher education sector, implemented by the central administrations at each new college, created an atmosphere where the central administration at Porsgrunn was accused of acting as a "decentralised Ministry of Education office". In addition, the reforms have led to the unforeseen effect that much administrative time is used coping with these new administrative reforms, while less administrative time is used in relation to the needs of academic staff, and to increase services for staff and students. Academic staff, therefore, feel little improvement in the administrative services that concern them, even if many academics also admit that administrative systems and routines have become more transparent and accessible after the merging process, factors suggesting an increased professionalisation of the administration.

There are, however, also more internal explanations to why tensions during the merging process occurred. Some academics point to the fact that because administrative leaders were recruited and put in place before academic leaders, the whole organisational structure in Telemark College and its administrative systems and routines are more adapted to administrative than to academic needs. During the interviews, some of the academics also claim that since the College is adjusted to administrative needs, this has led to a situation where the

administrative staff is much larger than necessary. This is apparently not correct. A recent study shows that the central administration at Telemark College is rather small compared to other merged colleges, and that local administrations at each campus are the same size as in other colleges (Research Council of Norway, 1997). This fact could also lead to the opposite statement, launched by one of the academic leaders at the College, that the main problem in Telemark College is not a large central administration – implying heavy central steering – but a lack of hard priorities in and between the different campuses and departments by the central administration at the College. The informant continues by saying the selection of organisational structure at Telemark College did not include facing the problems of resource allocations in the new structure, and that a hard-nosed decision on resource allocation in the first phase of the merging process certainly would have created higher tensions in the short run, but possibly be a better solution than the continued struggle today between the campuses for power and resources.

SOCIAL NETWORKS

For a multicampus college, establishing new social networks is an important task in the creation of a new institution. New social networks may, *e.g.* be said to be a prerequisite in the development of new study programmes or interdepartmental co-operation. How social networks function is, however, dependent on the strength of the different network links or ties. One can differentiate between weak and strong ties or links (Granovetter, 1973; Krackhardt, 1992). The strength of the ties depends on the relations between the different units. The perfect network is where there is mutual interdependence between the different nodes in the network. One condition for the strength of the ties is that a common culture, and not least, a common understanding of the overall goals of an institution, must be established. This may be said to be especially important for Telemark College which previously consisted of different institutions with their own culture and traditions. The interviews indicate, however, that the College still has a lot to do in this area, even if consensus about goals and strategies in a new institution is something which must be allowed to develop over time. The fact that the merging process at Telemark College was relatively conflictual was not the best start in the creation of a common culture, especially since different departments during the reorganisation process spent much time “marketing” themselves, and several leaders mentioned that this, along with the time used for handling conflicts, took place at the cost of primary activities such as teaching and research. Academics at the College even stated that the merging process has resulted in academic stagnation and isolation: although co-operation between departments and

different campuses was encouraged by the central administration, many departments and campuses have not been interested in taking the initiative to collaborate across subject, disciplinary and department borders. Fear that such projects may transfer resources from other activities inside their own department, and fear of losing academic specialities to other departments and/or campuses are often mentioned as reasons for this isolation. The academic strength of Porsgrunn campus is especially highlighted as a potential threat to the other campuses. In other words, creating mutual benefits through co-operation seems difficult.

Beside explanations related to the tensions between campuses and departments during the merging process, the interviews with administrative and academic personnel also give us additional arguments for the lack of new social networks at Telemark College. First, an overall initiative from the central administration of the institution to stimulate academic collaboration appears so far to be non-existent. As mentioned, one reason for this seems to be a wish not to “steer” or “push” the academic staff in a certain direction by the central rectorate and administration. The result was, however, that bottom-up initiatives never came about. Second, several academics said that the lack of such initiatives is because the previous colleges simply became new campuses of Telemark College, and did not break up or challenge existing social networks. In addition, when new recruitment of personnel did not take place, mainly because of budget cuts, the old cultures and personal relations were kept intact. The lack of new recruitment may have been a particularly important factor in explaining the absence of new social networks. Thus, experiences from countries such as the Netherlands, the United States and Australia have suggested that it is generally important to have new recruitment after a merger (Goedegebuure, 1992; Mulvey, 1993; Harman and Robertson-Cunninghame, 1995; Harman, 1996). These studies show that bringing “new blood” into a system with large cultural conflicts and tensions improves the chances of creating a new common identity. Thirdly, several academics claim that time for updating existing academic personnel, and stimulating these to think of new ways to make co-operative projects possible, have also been totally absent after the merger. These informants claim that almost all the time they have left after their own teaching and research is spent on administrative tasks and meetings, trying to make the new institution work. Again, it is possible to identify both academics and administrative personnel who mention that social networks are better at the managerial level than at the grass roots level. The social bonds between actors at a leadership level appear strong. These leaders have, however, concrete tasks working on budget and management issues which make collaboration between them easier. Fourth, an important hindrance for increased collaboration between departments and campuses at Telemark College is that there are no common principles for the formation of work plans. It is difficult to exchange academic personnel when the methods for calculating workload vary between

departments. This argument supports previous statements about the lack of co-ordination and initiatives from the central administration of Telemark College.

However, merging is a time-consuming process (*cf.* Millet, 1975; Goedegebuure, 1992; Mulvey, 1993), and there are indications that the picture can change somewhat in the near future. Regarding academic collaboration and integration at Telemark College, a consciousness-raising process is taking place between the units and gradually several of them seem to recognise that there are possibilities for collaboration. First, many subjects are taught in parallel (duplicative programmes), for instance mathematics, economics and different humanistic disciplines. Thus, there are possibilities and plans for a certain amount of co-ordination. Second, many also see possibilities to create new inter- or multidisciplinary studies which build upon basic education. Ethics may, *e.g.*, be offered to all students at the College, and studies in engineering and economics could be more closely integrated through the establishment of new cross-disciplinary electives. As one academic stated, there are problems related to such cross-disciplinary co-operation. Teaching mathematics in teacher training is not the same as teaching mathematics to engineering students, and the basic problem still seems to be that such academic innovation lacks social networks between different departments and campuses.

LESSONS LEARNED

In order for a multicampus institution such as Telemark College to function well, it is necessary that its infrastructural, organisational and social networks work. As illustrated, it seems that the infrastructural and organisational network, at least at the administrative level, is developed somewhat, without, however, the introduction of any special “innovations” leading to new social networks, and most importantly, to academic innovation and integration in teaching and research.

Reflecting on the development of the infrastructural network, the extra resources which were appropriated for the development of new, advanced means of communication must be said to have been an important reason why the infrastructure at Telemark College was established so quickly and without functional problems. The system worked without many of the mistakes which so often characterise such innovations. At the same time, it appears that the “old technology”, such as the physical transportation of people, has been ignored during the same period. And, as many informants emphasised, new technology cannot replace the value of frequent meetings face-to-face. Regardless of how fast new technology seems to be, it appears that it cannot replace personal conversations and discussions. That the technological innovations were much more expensive

than expected, and that there were often far too few resources for learning to use the new technology, are other factors which appear to limit its use. It often takes time until people become used to new technology and its possibilities (Tushman and Anderson, 1986).

The organisational network at Telemark College must be regarded as still under development, where some informants, perhaps correctly, think that a move is under way from a consolidated organisational structure to a flagship structure. The insecurity resulting from not having decided whether this is really the case appears to have many negative effects. As mentioned, there have been many rumours about the size and executive level of the administration at Telemark College; this is not supported by empirical data. Indeed, the situation may well be the opposite. The lack of a strong central administration at the institution, and the final clarification of some organisational conditions, including the distribution of resources, have resulted in an underdeveloped climate of collaboration at Telemark College. Furthermore, national administrative reforms have created an administration which gives more concern to external and internal reporting, rather than support for faculty; this creates the impression that organisationally the situation is worse than before the merger. That senior administrators were employed before senior academics, may also have contributed to the impression that the merger received more administrative than academic focus.

The lack of new social networks, new collaborative projects and new educational possibilities is without doubt connected to how the infrastructural and organisational networks at Telemark College have developed. The lack of key initiatives for collaboration from the central administration does not appear, *e.g.*, to have stimulated bottom-up initiatives concerning new forms of collaboration in teaching and research. Disputes about the localisation of departments, resources and concerns about guarding personal academic interests appear to have overshadowed the gains that academic innovation and closer integration could create. The administrative focus, which the merger appears to have brought about, has resulted in fewer resources for the recruitment of "new blood", and very little time for professional learning and development.

On the basis of this study, it is therefore possible to identify some general lessons to be drawn from the merger. First, a merging project which attempts to meet several objectives in one operation will have difficulties. Increased effectiveness, better integration and more innovation, can theoretically be objectives which might be inter-related. However, in the present economical climate in higher education, the pressure for increased effectiveness dominates the agenda. Thus, focus on increased effectiveness has, at least until now, overshadowed the other two objectives, and appears to have hindered rather than to have stimulated innovation – a result also supported by other studies (Dougherty, 1996). This leads us to another possible lesson in regard to the merger of Telemark

College, namely that even if effectiveness is regarded as the most important objective in such a process, it is still a difficult objective to reach in the short run. Two reasons for this are that the process of merging in itself often costs more money and time than stipulated, but also that there are extensive development costs connected to establishing new forms of collaboration, new research projects and new study programmes. A third lesson from this study is that respect for academic autonomy does not mean that a certain form of institutional steering should not occur during a process of merging. Some studies of creative organisations show that innovation rarely happens by chance. It has to be organised (Morgan, 1989). Thus, the lack of central steering at Telemark College does not seem to have resulted in creativity and innovations, but in uncertainty and internal tensions. Fourth, even if the relationship between Telemark College and the Ministry of Education has only been touched upon in this article, a final lesson also seems to be that to stimulate innovation, institutions also need some flexibility and room to manoeuvre by authorities. The introduction of administrative reforms parallel to the merging process by the Ministry of Education, budget cuts and complicated and time-consuming routines at the national level, when new academic studies or study programmes are to be approved, are not the best move by authorities to stimulate innovation at lower levels.

Acknowledgement

The authors are indebted to Sue Ellen Walters for assistance in preparing the English version of this article.

REFERENCES

- ALDRICH, H., REESE, P.R. and DUBINI, P. (1991), "The Go-between: Brokers roles in entrepreneurial networks", in N. Churchill (ed.), *Frontiers of Entrepreneurship Research 1990*, Center for Entrepreneurial Studies, Wellesley, MA.
- BURT, R.S. (1980), "Models of Network Structure", *Annual Review of Sociology*, No. 6, pp. 79-141.
- BURT, R.S. (1992), *Structural Holes: The Social Structure of Competition*, Harvard University Press, Cambridge.
- CHRISTALLER, W. (1966), *Central Places in Southern Germany*, Prentice-Hall, Englewood Cliffs, N.J.
- DICKEN, P. and LLOYD, P.E. (1990), *Location in Space. Theoretical Perspectives in Economic Geography*, Harper and Row Publishers, New York.
- DOUGHERTY, D. (1996), "Organising for Innovation", in S. Clegg, C. Hardy and W.R. Nord (eds.), *Handbook of Organisation Studies*, Sage Publications, London.
- FIELDEN, J. and MARKHAM, L. (1997), "Learning Lessons from Mergers in Higher Education", CHEMS Paper 17, Commonwealth Higher Education Management Service (CHEMS), London.
- GOEDEGEBUURE, L. (1992), *Mergers in Higher Education. A Comparative Perspective*, Lemma, Utrecht.
- GRANOVETTER, M.S. (1973), "The Strength of Weak Ties", *American Journal of Sociology*, No. 78, pp. 1360-1380.
- GRANOVETTER, M.S. (1985), "Economic Action and Social Structure: A Theory of Embeddedness", *American Journal of Sociology*, No. 91, pp. 481-510.
- HARMAN, G. (1996), "The Break-up of the University of New England Merger", in U. Dahllöf and S. Selander (eds.), *Expanding Colleges and New Universities*, Uppsala Studies in Education 66, pp. 29-50.
- HARMAN, G. and MEEK, V.L. (eds.) (1988), *Institutional Amalgamations in Higher Education. Process and Outcome in Five Countries*, University of New England, Armidale.
- HARMAN, G. and ROBERTSON-CUNINGHAME, R. (eds.) (1995), *The Network UNE Experience. Reflections of the Amalgamated University of New England 1989-1993*, University of New England, Armidale.
- KIRK, J. and MILLER, M.L. (1986), *Reliability and Validity in Qualitative Research*, Qualitative Research Methods Series, 1, Sage, London.

- KRACKHARDT, D. (1992), "The Strength of Strong Ties: The Importance of Philos in Organisations", in N. Nohria and R.G. Eccles (eds.), *Networks and Organisations*, Harvard Business School Press, Boston, Ma.
- KYVIK, S. and SKODVIN, O.J. (1996), "From Functional Specialisation to Regional Integration: The reorganisation of non-university higher education in Norway", in U. Dahllöf and S. Selander (eds.), *Expanding Colleges and New Universities*, Uppsala Studies in Education 66, pp. 133-147.
- LAMPINEN, O. (1995), *Polytechnics – an Alternative to Universities*, Ministry of Education, Helsinki.
- LEE, E.C. and BOWEN, F.M. (1971), *The Multicampus University. A Study of Academic Governance*, McGraw-Hill Book Company, New York.
- LEVINE, A. (1980), *Why Innovation Fails*, State University of New York Press, Albany.
- LÖSCH, A. (1954), *The Economics of Location*, Yale University Press, New Haven, Conn.
- MERTON, R.K., FINKE, M. and KENDALL, P.L. (1990), *The Focused Interview: A Manual of Problems and Procedures*, The Free Press, New York.
- MILLET, J.D. (1976), *Mergers in Higher Education; An Analysis of Ten Case Studies*, The American Council of Education, Washington.
- MORGAN, G. (1989), *Creative Organisation Theory. A Resourcebook*, Sage Publications, Newbury Park, Ca.
- MULVEY, T.M. (1993), *An Analysis of the Mergers of American Institutions of Higher Education*, UMI, Ann Arbor, Mi.
- Norwegian Research Council (Norges Forskningsråd) (1997), *Evaluering av høskolereformen*, Arbeidsnotatserie 1, Oslo.
- ROWLEY, G. (1997), "Mergers in higher education. A strategic analysis", *Higher Education Quarterly*, Vol. 51, No. 3, pp. 251-263.
- St. Meld. nr. 40 (1990-91), *Om høgre utdanning*, Kirke-, utdannings- og forskningsdepartementet, Oslo.
- TICHY, N. (1981), "Networks in Organisations", in P.C. Nyström and W.H. Starbuck (eds.), *Handbook of Organisational Design*, 2, Oxford University Press, New York.
- TICHY N., TUSHMAN, M., and FOMBRUN, C. (1979), "Social Network Analysis for Organisations", *Academy of Management Review*, 4, pp. 507-519.
- TUSHMAN, M. and ANDERSON, P. (1986), "Technological Discontinuities and Organisational Environments", *Administrative Science Quarterly*, No. 31, pp. 439-465.
- TÖRNQVIST, G. (1982), "Lokaliseringsteorier og modeller inom geografin", in T. Strand (ed.), *Geografi som samfunnsvitenskap*, AD NOVAS – Norwegian Geographical Studies, No. 19, Universitetsforlaget, Bergen.
- TÖRNQVIST, G. (1990), "Det upplösta rummet – begrepp och teoretiske ansatsar I geografin", in A. Karlqvist (ed.), *Nätverk, Gidlunds*, Stockholm.

ORGANISATIONAL CHALLENGES FOR THE UNIVERSITY

Filipe Santos, Manuel V. Heitor and João Caraça
Lisbon Technical University
Portugal

ABSTRACT

The aim of this article is to discuss the most suitable organisational model for universities, given the singularities of the university institution and the challenges it is currently facing in the context of the knowledge society. We approach this issue from a contingency and systemic perspective, tracing the historical evolution of the university's organisational structure in relation to the transformation of its environment. The analysis shows that the academic organisation of the University should become more organic and take into consideration the different organisational requirements of the two central university activities – research and education. This means that the typical departmentalised structure of the university, which is still the building block of its organisation, should evolve into new organisational forms, otherwise the capacity of the university to innovate will be impaired and the fulfilment of its social role will be endangered.

Based on this analysis, we suggest some principles of organisation and management for the university, adapted to a more dynamic and digital environment. These principles enable us to draft a new organisational model and to outline some management and institutional policy implications.

THE NEW CONTEXT AND CHALLENGES FACING UNIVERSITIES

Created during the Middle Ages, the university institution soon developed its own identity and culture, which did not fundamentally change until the

nineteenth century. According to Boorstin (1983), the old European universities and colleges were created not to discover new knowledge, but to disseminate a heritage. The main objective of these institutions was to rediscover and keep alive the cultural, philosophical and religious heritage of the classical age.

The industrial development of the nineteenth and twentieth centuries broadened the employment base for qualified professionals, leading to great development of the universities, especially those connected with the exact sciences and industrial fields. Additionally, there was a growing independence of the universities from religious power, a trend which, in Europe, was associated with greater dependence on political power (Ben-David, 1972). The evolution of the university paradigm during the twentieth century in the developed countries also recognised that research is a fundamental activity of the university, equal in importance to education. The basic principles of the Humboldtian research university were thus assimilated (Caraça *et al.*, 1997).

The second half of the twentieth century set the stage for an extraordinary development of higher education systems, which ensured the education of 20 to 30 per cent of each generation cohort, whereas previously this number was less than 5 per cent (Gellert, 1993, p. 17). This development and democratisation of higher education systems led to a great institutional differentiation in universities and a diversification in the typology and contents of education programmes. The importance of the research function of universities grew considerably during this period (Rosenberg and Nelson, 1996), and the traditionally isolated position of the universities began to be questioned. This change has led Readings (1996) to argue that while in the past the integrity of the modern university was linked to the nation-state, which it has served by promoting and protecting the idea of a national culture, the concept of nation-state is now in decline and national culture no longer needs to be either promoted or protected. Instead, the globalisation of national economies has increasingly turned universities into transnational corporations, and the idea of culture is being replaced by the discourse of "excellence". Arguing that there is a lack of specific referents for terms like "culture" and "excellence", in that they no longer refer to a specific set of ideas, Readings puts forward the concept of the university as a new community of thinkers.

The debate concerning the role of universities in the development and restructuring of national economies has continued without properly taking into consideration the changing university functions and the pressures that the university institution is facing throughout the world. Amongst these pressures we can emphasise decreasing funding, a considerable ageing of the population in the developed countries, disturbances caused by more than two decades of rapid growth (OECD, 1987, p. 8) and a considerable shift of the labour force towards the services sector (Alic, 1997). In spite of the differences between developed and developing countries (Salomon, 1995), recent technological developments, nota-

bly the considerable advances in information technologies, have created similar challenges for the management of universities in both economic contexts. The OECD highlights the plurality of roles of the university and calls for stronger leadership, capable of paving the way for transformation in universities. This analysis still seems valid in the nineties given the conclusions of recent reports of the World Bank (1994) and UNESCO (1994), where the thesis of a crisis in higher education is advanced alongside with the requirement to transform the higher education system. UNESCO calls for better management in universities and a higher degree of accountability to society. The World Bank emphasises the need for a greater autonomy in the management of universities and the introduction of evaluation and accountability mechanisms.

It is within this context of relative dissatisfaction with the role that universities are playing in society, that we discuss in this paper the evolutionary trend of the university organisation and management, drawing on the cross-national comparative work of Clark (1983). Our analysis focuses on the concept of the so-called research university, the strengths and fragilities of which were particularly analysed by Rosovsky (1990). We start by analysing the main organisational features of the university institution, mainly using the nomenclature adopted by Mintzberg (1979), and presenting a systemic view of the university and its environment. The university is then further analysed in the third section based on a perspective from organisational theory, which calls for a contingency view of organisations given its environment. The fourth section provides a historical perspective of the evolution of the university environment and organisation, which allows us to conclude that there is a need for an organisation renewal in universities. In the fifth section, we define some principles for the university's organisation and management and draft a new organisation model, also suggesting some new management procedures. The main conclusions and implications are presented in the last section.

MAIN ORGANISATIONAL FEATURES OF THE UNIVERSITY

The university institution has revealed an extraordinary capacity to survive and thrive throughout history. The characteristics of companies and other organisations have radically changed over the last century, but the university of today still shows remarkable similarities to the universities of Paris, Bologna or Oxford, founded in the twelfth and thirteenth centuries. Clark Kerr, in *The Uses of University* (1982), states:

“... there remain today in recognisable form only about eighty-five of the institutions established in the western world before 1520. These include the Catholic Church, the Parliaments of the Isle of Man, of Iceland and of Great Britain, several Swiss Cantons and seventy universities.”

An analysis of the functioning of American universities, carried out in 1909 by M. Cooke, a disciple of Frederick Taylor, at the request of the Carnegie Foundation for the Advancement of Teaching, revealed that the universities used management practices strongly criticised by the theories of Scientific Management. The author stated that the hiring of the departments' own graduates was a common practice; excessive departmental autonomy hindered the development of the universities; the reward system was based on the longevity of personnel and not on merit and achievement; the decision-making processes, based on committees, was highly ineffective. Almost ninety years later, we can clearly recognise similar procedures in the universities of today.

This longevity and resistance to change of universities are certainly uncommon in other organisations, and some authors believe that the university has some unique organisational characteristics. For example, Balridge *et al.* (1978, p. 25) state that:

“... academic organisations have several unique organisational characteristics. They have unclear and contested goal structures; almost anything can be justified, but almost anything can be attacked as illegitimate. They serve clients who demand input into the decision-making process. They have a problematic technology, for in order to serve their clients the technology must be holistic and non-routine. As a result, academic organisations are important instances of professionalised organisations where professionals serving the clients demand a large measure of control over the institution's decision processes...”

The vision of the university as an organisation of professionals is generally accepted. According to the typology presented by Henry Mintzberg in his seminal work of 1979, the university can be included in the configuration of professional bureaucracy. This configuration is common in organisations which have a stable, but complex, set of activities to perform, demanding direct control by the professional workers performing those activities. Thus the structure of this type of organisation is based on the decentralisation of authority and standardisation of the capacities of the professionals as a way to organise activities (Mintzberg, 1979). Co-ordination is achieved by the advanced training and education of the workers, giving birth to true professional organisations. This is also the typical organisational structure of hospitals and law or consultancy firms.

In this perspective, Van Vught and Maassen (1992) have identified some of the fundamental characteristics of universities, as follows:

- the main activity is based on knowledge;
- the division between disciplines and the specialisation of knowledge and research methods are the basis of the organisation of universities, creating a highly fragmented departmental structure;

- the decision-making processes are highly diffuse and decentralised and the different sub-units of the university are concerned with their own goals and disregard organisation goals and strategy;
- within each scientific field, the universities can be innovative and adaptable, even though most innovations are incremental; nevertheless, at a structural level, the university is very resistant to change.

It is clear that these organisational characteristics cannot be dissociated from the environmental conditions affecting universities. This relation between the university and its environment is analysed in the following section.

THE RELATION BETWEEN THE UNIVERSITY AND ITS ENVIRONMENT

Organisations and the environment

Organisations are complex adaptive systems interacting with their environment and this interaction is essential to the sustainable development of the organisation (Daft and Steers, 1986, p. 285). The environment of an organisation can be defined as the set of institutions and factors which are external to the organisation and may have an impact on its activity (Robbins, 1983, p. 142). The borderline or frontier between the organisation and its environment is not clearly defined and sometimes the organisation can, through its strategy, affect its environment or choose a different environment to develop its activities. Thus it is important to distinguish between the general environment and the specific environment of an organisation. The general environment is formed of the set of agents and factors whose impact is homogeneous for all organisations and is not critical for the survival of the organisation. The level of economic growth of a country or the cultural level of a population are elements belonging to the general environment. On the other hand, the specific environment of an organisation is formed of the set of elements and agents which directly affect the capacity of an organisation to achieve its goals and to survive. The specific environment of an organisation is thus, at each moment of time, composed of all factors and external groups (stakeholders) who are critical for the success of the organisation.

In his characterisation of the specific environment of organisations, Henry Mintzberg (1979, p. 268) made use of two fundamental variables, stability and complexity:

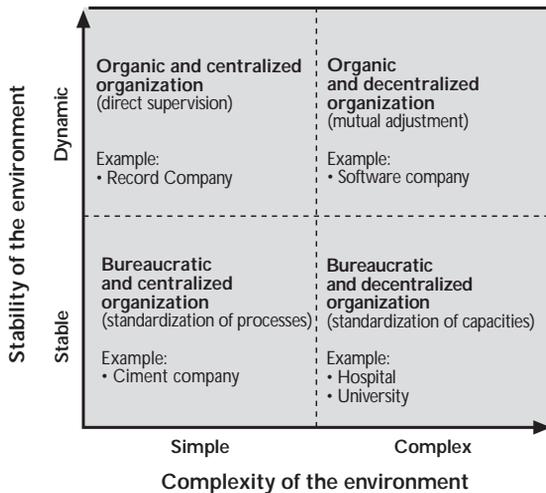
- **Stability** is related to the degree of change in the environment. This degree of change or dynamics represents the most important source of external uncertainty for an organisation, understood as unexpected and unpredictable changes in the conditions affecting the organisation. Other important sources of instability are the degree of competition and hostility

of the environment, as well as dependence on strategic resources. Mintzberg, according to the conclusions of Burns and Stalker (1961), states that a more organic and less bureaucratic organisation is more adapted to a dynamic environment.

- **Complexity** is related to the number and diversity of the environmental factors which are relevant to the organisation, affecting the volume of knowledge that the organisation should contain and apply. Other important sources of complexity are the diversity of markets that the organisation acts upon, the diversity of clients it serves, and the number of geographical areas where it is located. According to Mintzberg, the more complex the environment, the more decentralised the organisation should be, because it is impossible for a few decision-makers to assimilate and understand all the complexity of the organisation. A high degree of complexity is usually dealt with by dividing the organisation into sub-units with a certain degree of autonomy.

The integration of these two main characteristics, stability and complexity, leads to the definition of four generic types of environment, implying four different types of organisations, as identified in Figure 1. A complex environment leads to the creation of decentralised organisations, while centralised

◆ Figure 1. *Relation between the organisation and its environment*



organisations are more adapted to a simple environment. On the other hand, a dynamic environment leads to adaptable and organic organisations, while stable environments are associated with bureaucratic organisations, as presented in Figure 1.

Different levels of complexity and stability demand different internal co-ordination mechanisms. A bureaucratic organisation implies a certain type of standardisation, either of the work processes in a stable environment, or of the human capacities in a complex environment. On the other hand, an organic organisation is co-ordinated by mutual adjustment in a complex environment, or by direct supervision in a simple environment. The complexity and dynamism of the environment are thus reflected directly in the organisation's sub-systems. The more complex and heterogeneous the specific environment, the more complex and differentiated the organisation's sub-systems should be (Stacey, 1993, p. 133). The application of these organisational theories to the university will enable us to analyse the relations between the university's specific environment and its organisational and management models.

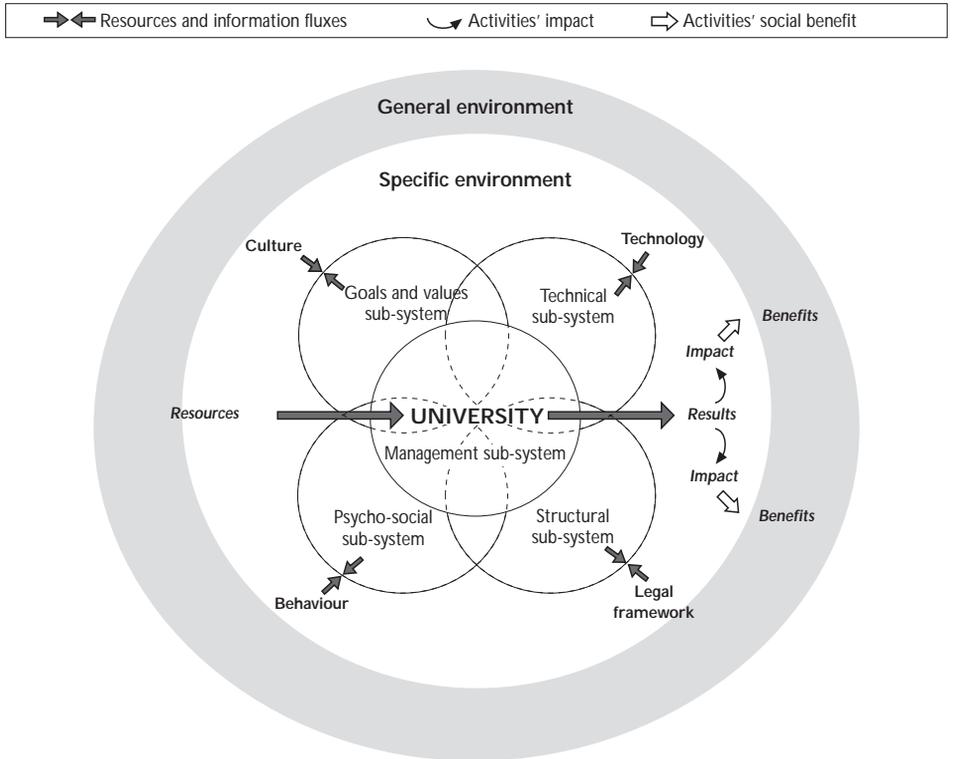
The environment of universities

The university, understood from this contingency perspective, is formed of different sub-systems, and in this paper we identify five sub-systems, namely Goals and Values; Psycho-Social; Structural; Technical; and Management. These sub-systems are in a constant process of interaction with each other and with the overall environment, as represented schematically in Figure 2 (further details can be found in Santos, 1996).

Each university, depending on the scope of its activity, historical context and strategy, is faced with a specific environment which can have a considerable impact on its success and thus influences its organisational structure. Nevertheless, the specific environments of different universities will certainly have common characteristics and several authors have agreed that the environment of the university has been of the complex and stable type, leading to a configuration of professional bureaucracy (*e.g.* Mintzberg, 1979; Robbins, 1983; Daft and Steers, 1986). Their reasoning is as follows:

- The environment is complex because of the high number of institutions and agents that the university has to deal with to perform its activities and also because of the diversity of advanced knowledge that the university must possess. The university needs to hold more advanced knowledge than probably any other organisation. The better way to deal with this complexity is by dividing knowledge into disciplines, covered within different units – the departments – with a high degree of autonomy. This is possible due to the relative independence of each scientific field. Thus the university assumes a very high degree of decentralisation.

◆ Figure 2. *A systemic view of the university*



Source: Santos (1996).

- The environment is stable because there has been no unpredictable and sudden transformations in the university's environment that might endanger the survival of the institution. The degree of hostility and competitiveness is not high, the scarcity of resources is not critical and the environment is not particularly dynamic. These conditions indicate a low degree of uncertainty and lead to a bureaucratic structure based on the standardisation of capacities as a mechanism of co-ordination. In this type of structure, each member of the university, based on professional training, knows which role and functions he or she should perform and how. Each element has the autonomy to make decisions in his or her area of expertise and to

carry out incremental innovations, if needed. Nevertheless, the organisational structure as a whole has a high degree of inertia and is very resistant to change, which is not necessarily negative given the stability of the environment.

This analysis suggests that the configuration of professional bureaucracy (decentralised and bureaucratic organisation) assumed by universities is well adapted to the environmental conditions in which the university traditionally operates. This adaptation is consistent with the great capacity to survive which the university has demonstrated over the centuries (OECD, 1987, p. 91). Nevertheless, an important question needs to be put: is it reasonable to consider that, at the turn of this century, the environment of the university is still stable and complex? We attempt to answer this question based on an historical analysis of the evolution of the university's specific environment. This study of the dynamic features of the environment will give us insight into the historical development of the university's organisation and management.

THE HISTORICAL EVOLUTION OF THE UNIVERSITY'S ENVIRONMENT

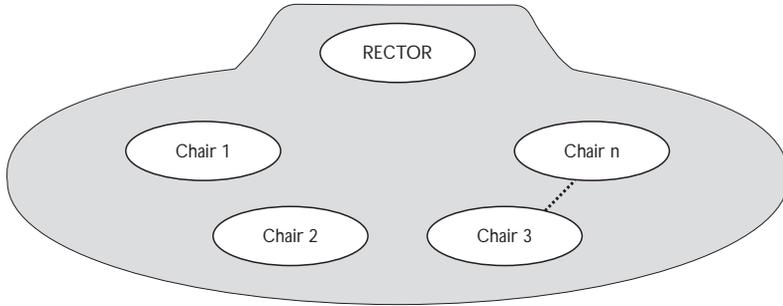
The specific environment of the classical university

The medieval university existed in relative isolation from society and its efforts were dedicated to the education of elite groups of future leaders and professionals, mainly in medicine, law, philosophy and theology. Research activities were not intended to have a practical application and were geared to the quest for knowledge and consistency with tradition.

As universities were generally small and received students from the upper classes of society, there were no severe restrictions of funding. The different fields of knowledge were still poorly developed and were completely independent of each other. Radical scientific developments were very rare and were usually not accepted by orthodox academics. Some innovations only surfaced and were accepted after becoming irrefutable facts.

One of the few restrictions on the university was religious dogma. The classic university was thus faced with a clearly stable environment with a relative degree of complexity, conditions that were more or less maintained until the nineteenth century. In this context, the organisation of the university was based on the concept of the *chair*, an organisational unit dedicated to the development of a scientific discipline, as shown in Figure 3.

A clear example of this structure was reported by Nicholas Lobkowitz (1987, p. 151), in his work on the German University. He presents the university of the nineteenth century as organised into a set of chairs, grouped in research areas.

◆ Figure 3. *The structure of the classical university*

Source: Santos (1996).

Each chair was controlled by a senior professor, assisted by two or three younger professors. The rector was considered *primus inter pares* and represented the University.

The specific environment of the modern university

As a result of industrialisation and the need for a better qualified workforce, the universities began, from the end of the nineteenth century, to offer education in new fields. These fields were mainly related to science and technology, with emphasis on agriculture, engineering and social sciences (OECD, 1987). The research function of universities was reinforced and numerous universities were founded over this period.

Due to the development of new scientific fields and to the more active role of universities in society, the degree of complexity of the environment increased over the first half of the twentieth century. The university of the mid-twentieth century thus had to face a stable and complex environment. Nevertheless, it is possible to identify two distinctive periods of transformation, namely the period from 1940 to 1975, and from 1975 to the present (OECD, 1994, p. 202).

From 1940 to 1975

After the Second World War, science and technology began to be considered as key elements for the socio-economic development of nations. R&D activities

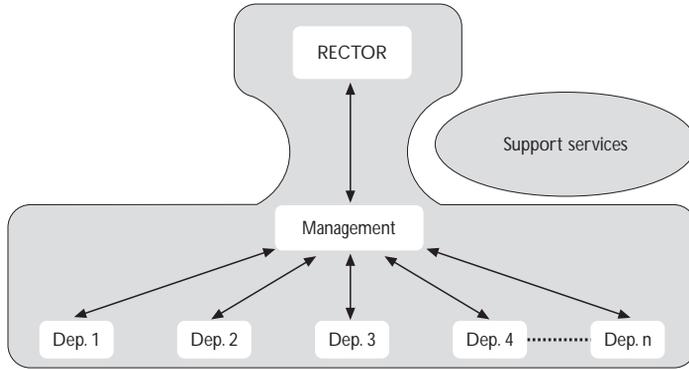
were seen as key university functions and the university established closer links with society, seeking to serve the needs of industry and the economy.

Post-secondary education was extended to all the population (Gellert, 1993, p. 17) and there was a rapid growth of higher education systems in the 1950s and 1960s, both in number of universities and in their size. The resources and conditions needed for this development were supported by the high economic growth of this period (OECD, 1994, p. 67) and by economic theories which emphasised the great economic value of higher education (Eicher and Chevaillier, 1993, p. 458). Associated with the quantitative growth of universities, there was a trend towards a considerable diversification of types of institutions and forms of education. This period is also characterised by an explosive growth in scientific knowledge. Derek Bok (1986), for example, states that more books were published in the period from 1945 to 1985 than in all the centuries before. The OECD (1987, p. 21) acknowledges the creation of hundreds of scientific disciplines over this period.

As a result of these trends, there was a clear increase in the complexity of the university's environment as well as a moderate increase in its uncertainty, due to the technology developments of the period. The average size of universities increased enormously leading to the bureaucratisation of internal procedures. The increase in size of the universities was not accompanied by an increase in the number of chairs, and the balance of power in the universities was disturbed, because academic authority was concentrated in a very few number of chair holders. Additionally, the chair system induced great resistance to change because the chair was occupied for the entire life of an individual and this individual had few incentives to innovate. Thus, the organisation of the university could no longer be based on the chair and evolved to new organisational forms. Decision-making power shifted from the chair to representative bodies and to departmental structures. The department – a group of professors with interests and professional training in the same scientific field – became the structural unit of the university. In parallel with this change in academic structure, the universities developed a support structure to provide complementary and administrative functions, as well as an intermediate management level between the Rector and the departments, as illustrated in Figure 4.

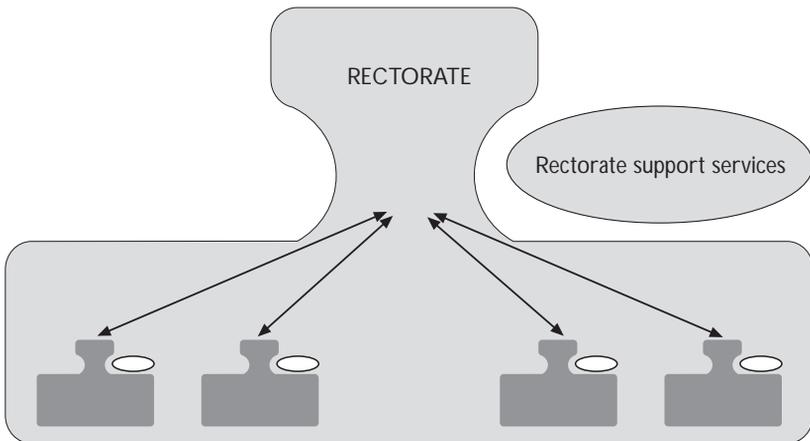
In a great number of universities, greater diversity in scientific fields and the increased departmental dimension led to the creation of autonomous intermediate structures capable of co-ordinating activities in related scientific fields. Thus, the modern federal-type university is composed of a basic departmental structure organised in faculties or schools with a high degree of autonomy and with their own support structure, as shown in Figure 5.

◆ Figure 4. *The structure of the modern integrated university*



Source: Santos (1996).

◆ Figure 5. *Structure of the modern federal university*



From 1975 to the present

During the 1970s, higher education in developed economies faced a grave crisis (OECD, 1994, p. 141), being subjected to significant restrictions in public funding. This situation was a result of a complex set of factors, generally caused by a severe economic crisis at a time when universities were trying to manage the consequences of two decades of rapid growth (OECD, 1987, p. 8). At the same time, the demands of society concerning the role of universities increased and the university is now expected to perform multiple functions and missions. The university not only has to perform basic research, but is also supposed to be concerned with the impact of research on socio-economic development (Rosenberg and Nelson, 1996).

The last twenty years have witnessed an accelerated pace of technological development. Scientific fields which hardly existed in the 1960s assumed tremendous importance in just a few years, as is the case of electronics and biotechnology, demanding radical instead of incremental innovations in the management of university's scientific competences. According to UNESCO (1996), the volume of information and knowledge is still increasing at an exponential rate.

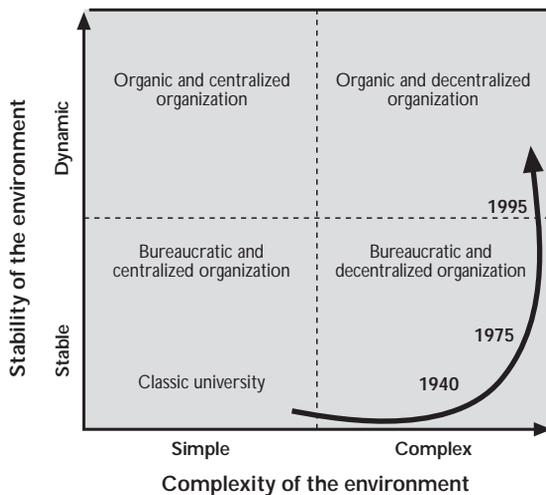
It is also important to note the reduction in time between scientific discovery and the marketing of innovations (Hounshell, 1996). A key implication of this situation is the increasing heterogeneity of research characteristics (Rip and van der Meulen, 1996), in that traditional categories such as "basic" and "applied" research cannot be used any more. The traditional vision of the innovation process as a linear model, originating from basic R&D to applied research, development, manufacturing and commercialisation has been replaced by a new understanding of the innovation process as an integrated and interactive approach that blends scientific, technological, social-economic and cultural aspects in rapidly moving environments (Conceição *et al.*, 1997). As a consequence, disciplinary demarcations are becoming obsolete and the frontier of advancement of knowledge lies in innovative combinations and applications of existing and new knowledge.

This context of increasing dynamics (Caraça, 1993, p. 50), has led to decreased effectiveness of the division of knowledge in specific disciplines as a co-ordinating mechanism for the university's activities. Research activities and research problems have a deeper interdisciplinary character and the labour market demands professionals with training in different disciplines and a good learning ability (UNESCO, 1996). This trend, associated with the accumulation of specialised knowledge and with the revolution in information and communication technologies, suggest that an academic education should be more concerned with creating in students the capacity to retrieve data, to transform data into information, and to synthesise information into knowledge, in a way which promotes their creativity and critical reasoning.

In short, the multiple roles assumed by universities and the extraordinary increase in the number of disciplines are leading to an increase in the complexity of the university's environment. At the same time, funding restrictions, rapid developments in technology, and the increasing difficulty in co-ordinating university activities, are leading to an increase in the uncertainty and dynamism of the university environment. The implications of this scenario for the organisation and management of the universities can be analysed in terms of the evolution of the university environment from the classical university up to modern times, as depicted in Figure 6.

This analysis indicates that the organisation and management of universities should be adapted to a more complex and much more dynamic environment. This type of environment tends to generate organisations which are more organic than bureaucratic, that is, which have more flexible structures with less formal rules and more mutual adjustments. Organisations of this type are very innovative and adaptable to changes in the environment. This is in contrast with the departmental and bureaucratic structure of universities, which makes it more difficult to develop new education programmes, suited to the needs of the labour market, and new interdisciplinary research programmes, which demand the co-operation and joint resources of several departments. This is one of the central problems of

◆ Figure 6. *Evolution of the university's environment*



the modern university and solutions to this problem will probably reshape the very foundation of the university's organisation.

ORGANISATION RENEWAL IN THE UNIVERSITY

The departmental organisation of the universities represents an evolution compared to the traditional organisation of universities in chairs and was a response to the growth of universities and increasing complexity their environment. The departmental structure nevertheless maintained some of the characteristics of the chair system and the concept of the chair still exists in present times. In a similar way, it can be conceived that an increasingly dynamic university environment, as analysed in previous sections, will force the creation of new organisational arrangements in universities, which will extend the traditional concepts of discipline and departmental structure, concepts which for decades have been the basis of the university's organisation and which have contributed to some extent to the erosion of the institution's unity (*The Economist*, 1997).

The development of complex education and research activities, especially those of interdisciplinary character, demands a new organisational model, with the creation of new structures, independent of departmental power. This independence is necessary to ensure proper incentives for decision-making. As most educational programmes are not focused exclusively on one scientific area but instead share the resources of several departments, the decision of a programme co-ordinator to increase the multidisciplinary of his or her programme will probably be countered by the head of the main department involved in the programme, who can see this movement as a threat to the development and growth of the academic unit. Similar reasoning can be developed for research programmes, which have an increasingly interdisciplinary character and are geared to address society's main problems. The scientific resources needed for a specific project may thus be dispersed amongst the various departments of the university, making it more difficult to gather resources if the programme co-ordination is not independent of departmental power.

This analysis suggests the creation in the university of units responsible for the development of education activities and other units responsible for the development of research activities. These units should be independent of departmental power but would have to liaise with the departments to obtain the scientific resources needed. This organisation principle is supported by recent corporate management practices, which tend to conceive of organisations as a matrix, organised in terms of areas of competence *vs.* areas of activity. These new structures do not need to be formal and rigid. One possible approach is the creation of a true "ad-hocratic" organisation, as described by Mintzberg, an organ-

isation where even the frontier between the university and its environment would be blurred, and a network of individuals and teams would form relationships with outside organisations to develop and fund new research and education activities. This kind of ad-hocratic organisation, also called *socially distributed knowledge-production systems* (Gibbons *et al.*, 1994), should function in a very loose way, but a set of very clear rules, management procedures and co-ordination mechanisms should be devised in order to prevent conflicts of interest and preserve the university's institutional integrity.

A management model for the university

Knowledge is the focus of higher education (Clark, 1983). The university exists to create and disseminate knowledge in a systematic and structured way. In this context, knowledge should be the basis for the university's power structure. The university authority should thus be primarily based on knowledge, as suggested by Rosovsky (1990). Given the diversity of the structural components of the university, the principle of knowledge-driven authority suggests different management styles for the different areas of the university, as follows:

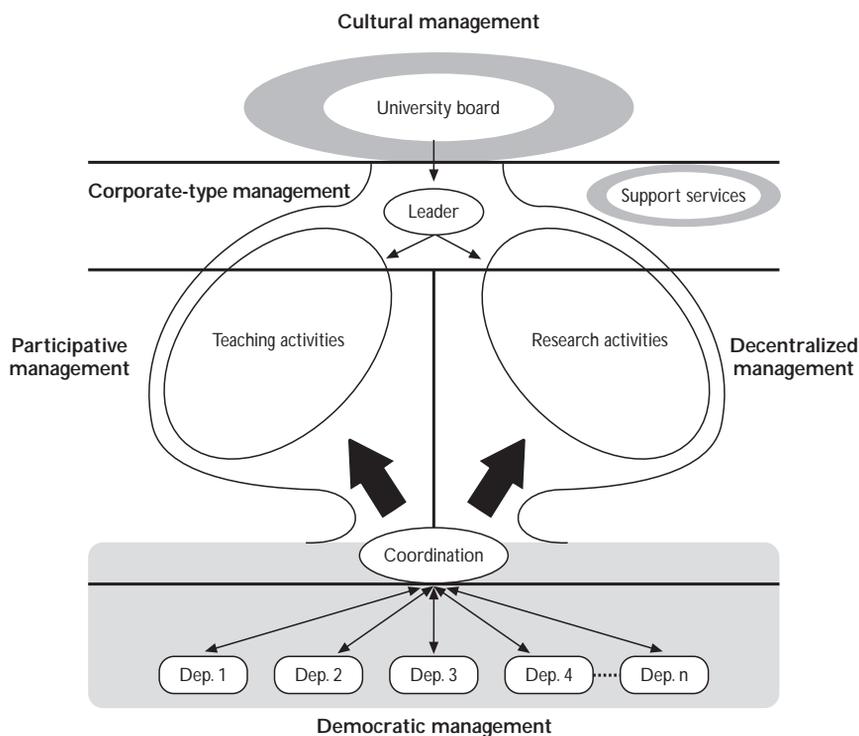
- At the level of departments, which are the basic units responsible for the development of advanced knowledge in disciplinary areas, there should be a **democratic management** style, because the knowledge in each discipline is dispersed among all the members of the department.
- In terms of the management of research activities it is essential that researchers have a high degree of autonomy because they hold the most advanced knowledge in their research field. A **decentralised management** system is thus the most suitable for the management of research activities, which should function in a cluster of research teams and university centres geared to the development and management of research activities. Additionally, there should be a facilitating central unit, which would supply administrative services for the facilitation of research activities (financial, administrative and legal management and counselling, protection and valorisation of intellectual property).
- In terms of the management of education programmes, pedagogic knowledge is shared by all the participants in the education process, suggesting a **participative management** style. Nevertheless, scientific knowledge is embodied in the faculty, and the complexity of the education process (management of schedules, students, faculty, curricula and budget) suggests a considerable intervention from the programme co-ordinators.
- At the top management level, there should be an external board – The University Council (which could also include university members detached from daily university affairs), serving as a link with society and legitimating

the power of the university leaders. The top management should develop a **cultural management** style, understood as the communication of the vision, ideals, challenges and identity of the university in a top-down approach, and channelling the expectations of society to the university members.

- At the support structure level, including all administrative functions, there should be a **professional management**, headed by the university leader, who should be appointed by the University Council. This bureaucratic-type management should include job descriptions, formal units and defined hierarchies.

Figure 7 illustrates the organisation and management model proposed for the university. As the university is an organisation of professionals there should

◆ Figure 7. *Proposed organisation and management model for the university*



exist a bottom-up approach towards decision making. To bring coherence and unity to the university's activities, strong and visionary leadership for the university is needed, based on an external board and embodied in the university's leader, nominated by this board.

The department still forms the building block of scientific competences. Nevertheless, there should also be specific bodies to co-ordinate the different teaching activities and others to develop research activities, both types of bodies drawing their legitimacy from the University Council and not from the departments. A co-ordination mechanism, functioning by mutual adjustment and organised according to a set of clear and simple rules, guarantees that the scientific competences of the departments are efficiently allocated to the development of the university activities.

This new type of structure should naturally be supported by an integrated information system and an activity based management model, including financing, budgeting and evaluation by activity.

The next section presents the main conclusion of this paper and points out some implications of the proposed organisation model.

CONCLUSION: TOWARDS A NEW UNIVERSITY ORGANISATIONAL MODEL

This article provides an historical perspective of the university in terms of current organisational theories. The analysis presented indicates that a changing environment is forcing the university institution into a process of organisational renewal in order to face the challenges of the knowledge society.

The evolution of the university's environment is shown to be characterised by an increase in complexity and instability. The traditional resistance to change of university structures, which is an advantage in a more stable environment, is slowing the adaptation process. For example, universities are not taking full advantage of the new opportunities created by the digital economy and communication technology. These opportunities will thus become threats for the non-adaptable university, which will be at a serious disadvantage compared to other kinds of organisations or to more dynamic university institutions. In order to preserve the role and integrity of the university in the knowledge society these issues should be fully incorporated into the university's policies and organisational models.

The article suggests an evolution to an organisational model based on a new perspective of departmental functions in the university. The departments should no longer manage complex teaching and research programmes and there should

be separate bodies to perform these activities. The links between the departments (where the scientific resources are located) and the management of activities should be conducted through a mechanism of mutual adjustment, based on a resource management system for the University, allocating resources (financial, scientific, organisational and infrastructural) to the activities.

The guiding principle for the management of the university should be knowledge-driven authority. This form of authority establishes different styles of management according to the different types of units found in the university. This principle also implies a bottom-up attitude towards decision-making and the need to guarantee the integrity of the institution through visionary leadership which brings coherence and unity. A decisive element of the university structure is the external board, which serves to validate the most important decisions and to strive for effectiveness and added value of the university's activities for society.

A university based on these organisation and management principles is better prepared to face the dynamism and challenges of the knowledge economy in which we live, and to fulfil its fundamental role in society.

REFERENCES

- ALIC, J. (1997), "Technological Change, Employment and Sustainability" *Technological Forecasting and Social Change*, Vol. 55, No. 1, pp. 1-14.
- BEN-DAVID, J. (1972), *Trends in American Higher Education*, Chicago, The University of Chicago Press.
- BOK, D. (1986), *Higher Education* (Brazilian version: *Educação Superior*), Rio de Janeiro, Ed. Forense Universitária.
- BOORSTIN, D.J. (1994), *The Discoverers*, Random House.
- BURNS, T. and STALKER G.M. (1961), *The Management of Innovation*, London, Avistick Publications.
- CARAÇA, J., CONCEIÇÃO, P. and HEITOR, M. (1997), "On the Definition of a Public Policy for the Research University", *Higher Education Policy* (submitted for publication).
- CARAÇA, J. (1993), *Do Saber ao Fazer: Porquê Organizar a Ciência*, Lisbon, Gradiva.
- CLARK, B.R. (1983), *The Higher Education System: Academic Organisation in Cross-National Perspective*, Berkeley, University of California Press.
- CONCEIÇÃO, P., GIBSON, D., HEITOR, M. and SHARIQ, S. (1997), "Towards a Research Agenda for Knowledge Policies and Management", *International Journal of Knowledge Management* (December issue), Bedford, IFS International Ltd.
- DAFT, R.L. and STEERS, R.M. (1986), *Organisations: A Micro/Macro Approach*, Glenview, Illinois, Scott, Foresman & Co.
- DUNCAN, R.D. (1972), "Characteristics of Perceived Environment and perceived Environmental Uncertainty", *Administrative Science Quarterly*, Year 17th, 3, pp. 313-327.
- ECONOMIST (THE) (1997), "The Knowledge Factory – A Survey of Universities", *Special Issue*.
- EICHER, J. and CHEVAILLIER, T. (1993), "Rethinking the Finance of Post-Compulsory Education", *International Journal of Educational Research*, 19, pp. 445-519.
- GELLERT, C. (1993), "Changing Patterns of European Higher Education", in C. Gellert (ed.), *Higher Education in Europe*, London, Jessica Kingsley Publishers.
- GIBBONS, M., LIMOGES, C., NOWOTNY, H., SCWARTZMAN, S., SCOTT, P. and TROW, M. (1994), *The New Production of Knowledge – The Dynamics of Science and Research in Contemporary Societies*, Sage Publishers.
- KERR, C. (1982), *The Uses of the University* (3rd ed. revised) Cambridge, Mass., Harvard University Press.

- HOUNSHELL, D.A. (1996), "The Evolution of Industrial Research in the United States", in R.S. Rosenbloom and W.J. Spencer (eds), *Engines of Innovation*, Harvard Business School Press, pp. 87-109.
- LOBKOWICZ, N. (1987), "The German University Since World War II", in H. Wasser (ed.), *The History of European Ideas – Special Issue: The History of the European University in Society*, London, Pergamon Press.
- MINTZBERG, H. (1979), *The Structuring of Organisations*, New Jersey, Prentice-Hall Inc.
- OECD (1987), *Universities under Scrutiny*, Paris.
- OECD (1994), *Education 1960-1990: The OECD Perspective*, Paris.
- READINGS, B. (1996), *The University in Ruins*, Harvard University Press.
- RIP, A. and VAN DER MEULEN, B.J.R. (1996), "The Post-Modern Research System", *Science and Public Policy*, Vol. 23, No. 6, pp. 342-352.
- ROBBINS, S.P. (1983), *Organisation Theory – The Structure and Design of Organisations*, New Jersey, Prentice Hall Inc.
- ROSENBERG, N. and NELSON, R.R. (1996), "The Roles of Universities in the Advances of Industrial Technology", in R.S. Rosenbloom and W.J. Spencer (eds), *Engines of Innovation*, Harvard Business School Press, pp. 87-109.
- ROSOVSKY, H. (1990), *The University: An Owner's Manual*, New York, Norton.
- SANTOS, F. (1996), *The Organisation and Management of Universities*, MSc Thesis, Instituto Superior de Economia e Gestão, Technical University of Lisbon (in Portuguese).
- SALOMON, J.J. (1995), "The Uncertain Quest: Mobilising Science and Technology for Development", *Science and Public Policy*, Vol. 22, No. 1, pp. 9-18.
- STACEY, R.D. (1993), *Strategic Management and Organisational Dynamics*, London, Pitman Publishing.
- UNESCO (1994), *Policy Paper for Change and Development in Higher Education*.
- UNESCO (1996), *Learning: The Treasure Within*.
- VAN VUGHT, F.A. and MAASSEN, P. (1992), "Strategic Planning", in B. Clark and G. Neave (eds.), *Encyclopaedia of Higher Education*, Vol. 2, III, pp. 1483-1493, Oxford, Pergamon Press.
- WORLD BANK (1994), *Higher Education: the Lessons of Experience*.

ORGANISATION OF FIRST-CYCLE TEACHING AT UNIVERSITY: MODELS AND ISSUES

Denis Bertrand and Gandayi Gabudisa Busugutsala
Université du Québec à Montréal
Canada

ABSTRACT

With this article in which theoretical analysis is followed by a proposal for practical action, the authors wish to contribute to a better conceptual grasp of the subject and to the efficient organisation of first-cycle teaching at university. There are three stages in their approach.

In the first, they define a new theoretical framework making it possible to integrate and interconnect the various components of the first-cycle teaching system.

In the second, they use this framework to describe some models for the organisation of the teaching function, thereby bringing out the main underlying issues. They start by identifying three particularly important general types of organisation for this function: a model prioritising demand, a model prioritising spontaneous supply from the main direct education agents, a model streamlining the educational supply side by using management processes. From these initial models the authors derive a series of sub-models which, as they acknowledge, are neither mutually exclusive nor actually exist as such.

In the third stage, they propose a "prescriptive", contingent-type model in order to help the various actors, particularly at programme and basic unit level, to find the best possible balance between the various components in the first-cycle organisational system. They propose the use of a "compass", which defines some strategic approaches for the actors and may also make it safer for them to sail the uncertain and difficult seas of first-cycle teaching.

At this time of rapid change in the general social and economic environment of universities, researchers have studied several aspects of university life, and in particular the present crisis over the policy focus of universities and their funding. The organisation of first-cycle teaching seems, however, to be the poor relation of research on higher education and has not attracted much notice from researchers, or from university teachers and “managers”, most of whom are still basically attached to traditional practices in this area.

There is little agreement anywhere in the world on the exact nature of first-cycle teaching, on its place within universities, on the justification for applying management processes to this activity, or on efficient ways of organising it. Moreover, considering the very many financial constraints on universities today, there is just as little agreement on the best ways of guaranteeing its quality at the least cost, while at the same time continuing to finance second and third-cycle teaching, research involving freely selected or set projects, and the other services provided by universities for society, such as critical appraisal, assistance for disadvantaged communities, their role in international solidarity, etc.

Our research started with two questions. What are the main current models for the organisation of first-cycle teaching? How can first-cycle teaching be best organised to meet the needs of the new type of university as it adjusts to the 21st century?¹

In this study, we therefore wish to contribute to the definition of conceptual approaches which will give a better understanding of how the important university function of first-cycle teaching is organised and which will result in more appropriate action in this area by the major education agents.

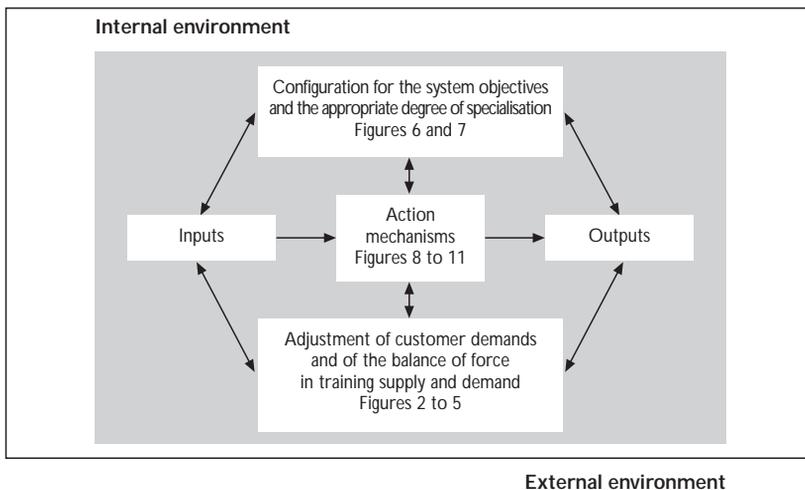
There will be three stages in our approach: we shall firstly define a new theoretical framework in order to integrate and interconnect the various components in the first-cycle teaching system; we shall then use this framework to discuss some models describing the organisation of this teaching function, at the same time bring out the main underlying issues, meaning the values, postulates and interests expressed or defended by each of these models, and by way of conclusion, propose a contingent-type prescriptive model based on the balance that is to be continuously sought between the various components in this first-cycle teaching system; lastly, we shall propose four theoretical strategies which could be used to establish a prescriptive model of this kind and thus thoroughly renovate the organisation of first-cycle teaching.

THE COMPONENTS OF THE FIRST-CYCLE TEACHING SYSTEM

Like any other system, the university function of first-cycle teaching can be seen as a series of interconnected activities which take place within a given environment, are adjusted to a certain extent to the forces of supply and demand, and are aimed at converting inputs into outputs in order to attain objectives and satisfy the various customer categories (individuals, groups and society as a whole), as well as the main actors involved in the system. As shown by Figure 1, the main characteristics of this system are the adjustment of customer demands and of the balance of forces in training supply and demand specific to the first cycle (Figures 2 to 5), the configuration for the various system objectives and for the appropriate degree of specialisation in training (Figures 6 and 7), and the nature and importance of the action mechanisms advocated by the various education agents (Figures 8 to 11).

Throughout this study, we shall be using the concept of the tension triangle – borrowed from another of our publications entitled “*L’université québécoise du troisième type. Dynamique vers l’an 2010*” – to show the various choices open to the many education agents who, in various capacities, have a role to play in defining, particularly by means of teaching or management activities, the function of first-

◆ Figure 1. *The first-cycle teaching system*



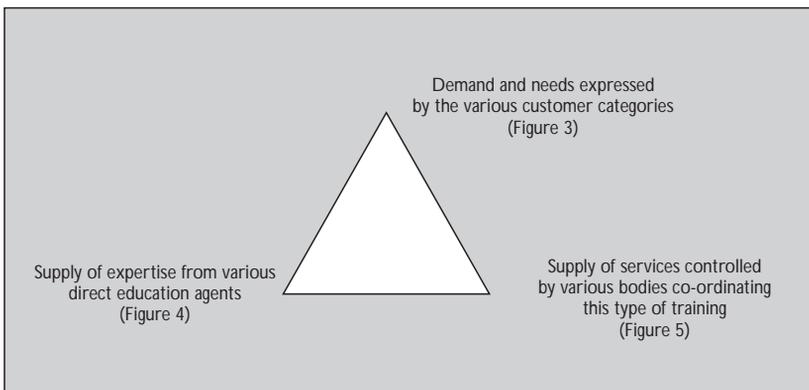
cycle teaching. In some figures we shall also use the concept of a continuum between two opposing forces in order to identify other particularly important basic characteristics in this system.

Adjustment of customer demands and of the balance of forces in training supply and demand

Inspired by Burton Clark,² but enhanced and used rather at microscopic level to describe the forces regulating first-cycle teaching on the basis of the customer categories served and the balance of the main forces in first-cycle training supply and demand, this tension triangle (Figure 2) singles out three main forces:

- education demand and needs expressed by the various customer categories;
- the supply of expertise from various direct education agents: professors, lecturers, programme managers and other staff;
- the supply of services controlled by various bodies co-ordinating this specific type of training: governments, universities and basic units; the units are the main bodies responsible for guiding, structuring and

◆ Figure 2. *Tension triangle for adjusting customer demands and the balance of the main forces in first-cycle training supply and demand*



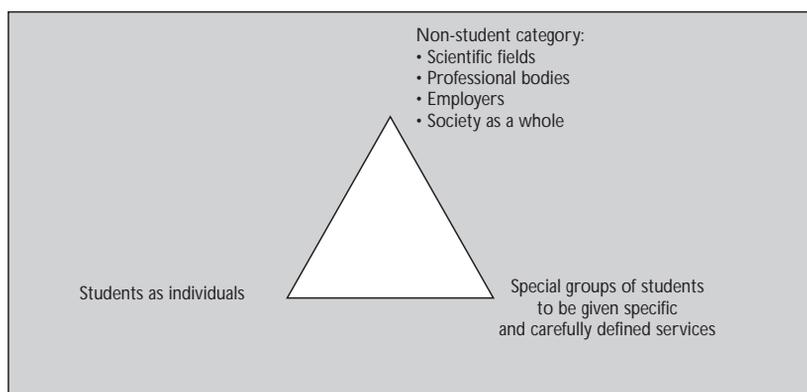
organising programmes and, in our view, are the only bodies capable of marking the originality of each type of training and thus of meeting specific training objectives and the demands and needs of various customer categories.

The following three figures show the components of each of these main forces.

Firstly, with regard to demands and needs of various customer categories, we have selected three separate but complementary entities which the university must continuously try to reconcile despite the efforts involved in such an approach (Figure 3):

- the demands and needs of the non-student category, such as scientific fields, professional bodies, employers and society as a whole;
- the demands and needs of students as individuals;
- the demands and needs of target groups of students who have special characteristics and for whom a university therefore tries to provide specific and carefully defined services.

◆ Figure 3. *Tension triangle showing the configuration of the forces reflecting the demands and needs of the various customer categories for first-cycling training*



Secondly, with regard to the expertise of the various direct educators, we then identify theoretically three major forms or systems (Figure 4):

- a system based on the personal expertise of full professors;
- a system based on the coexistence of two different types of teachers, comprising full professors and lecturers;
- an even wider scheme pooling the work of the main direct education agents within teaching teams: professors and lecturers, but also teaching assistants, programme directors, course co-ordinators, guidance counsellors, documentalists, etc.

Lastly, with regard to the supply of services, we see the regulation of first-cycle teaching as the responsibility of three major entities (Figure 5):

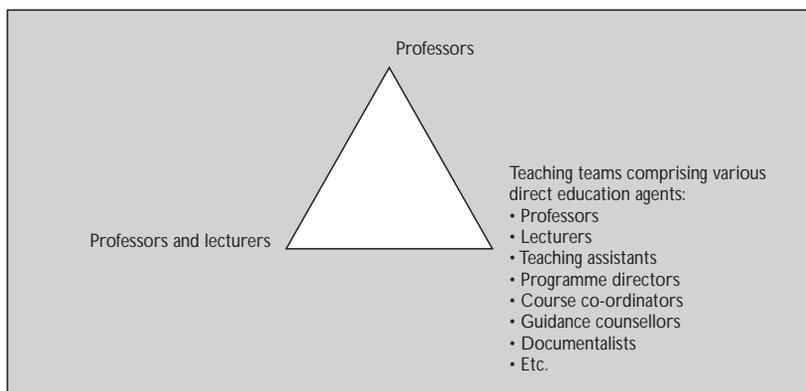
- the bodies planning and co-ordinating first-cycle teaching within the overall university network concerned: for example, in Quebec, the Ministry of Education, the Conference of Rectors and Principals of the Quebec Universities (CREPUQ), and a provisional structure such as the University Programmes Committee (CUP);
- the legislative and executive bodies responsible for managing first-cycle training in the various universities: the Governing Council, the Academic Committee, the First-Cycle Sub-Committee, executive staff, first-cycle deans, etc.;
- the basic management units for the training provided: faculties, programme committees, programme heads and joint student/teacher structures which identify the demands and needs of the various customer categories, adjust programmes to market fluctuations, guide them, structure them and give them real competitive advantages, guarantee the effective co-ordination of the various direct education agents and provide training of a recognised standard.

It is obvious that it is not easy to achieve a perfect balance between these various forces. Any overestimate or underestimate of one or the other may be detrimental to the efficiency of first-cycle teaching.

We also believe that the balance cannot be established once and for all and for the entire university sphere, for each of the national university systems or even for each of the universities. The balance is specific to each programme which has its own special characteristics and is set in a particular context.

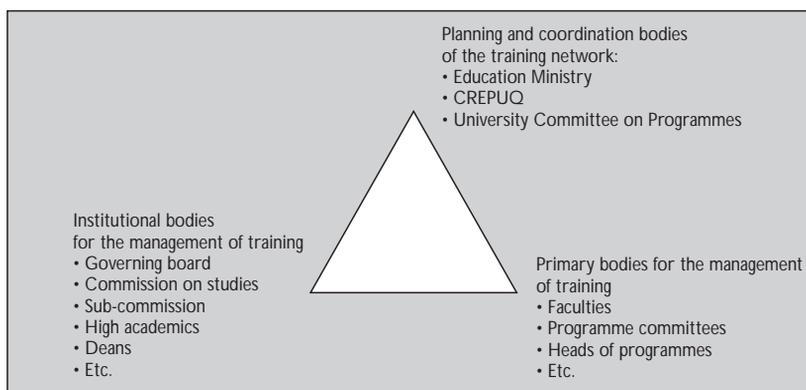
In the second half of this report we shall use the main components in Figures 2 to 5 to propose various descriptive models for the organisation of first-cycle teaching.

◆ Figure 4. *Tension triangle showing the configuration, within the supply side, of the expertise provided by the various direct education agents in first-cycle training*



Source: Authors.

◆ Figure 5. *Tension triangle showing the configuration, within the supply side, of various bodies co-ordinating first-cycle training*



Source: Authors.

The configuration of the objectives in this system and the degree of training specialisation

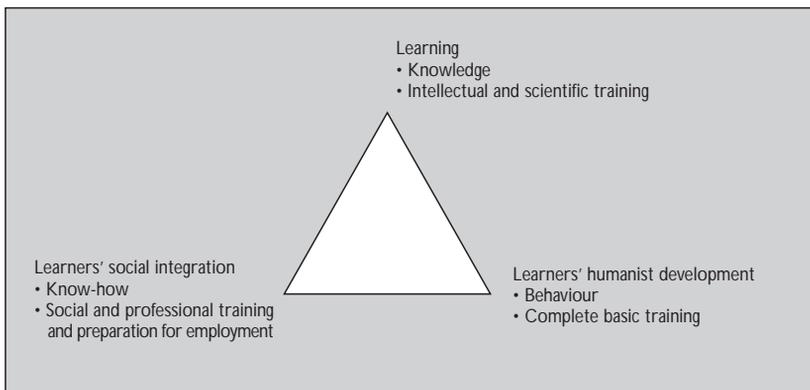
By adapting the classification used by Vaniscotte³ and placing it in a tension triangle representing the constant search for new balances, we illustrate by means of Figure 6 the first-cycle training system depending on the configuration of the various training objectives: the acquisition of knowledge by students, their integration into society and their full cultural development.

The first objective is knowledge assimilation and intellectual and scientific training; the second comprises know-how, vocational and social training and preparation for employment; the third is personal development and overall education.

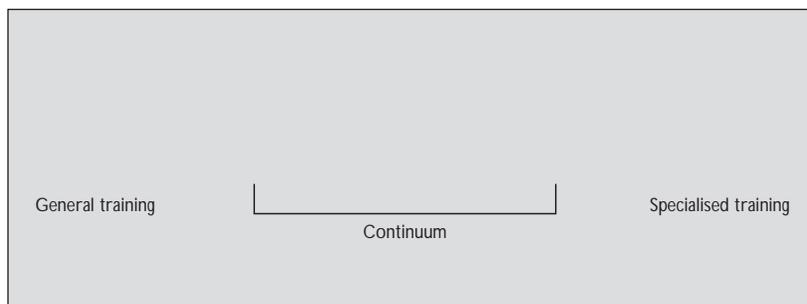
None of these three groups of objectives is to be disregarded or overestimated, so it follows that the attempt to achieve a balance between them, which is a difficult ongoing operation, must be a constant major concern of the main education agents.

The appropriate configuration in terms of the importance attached to each of these three first-cycle training objectives must therefore be identified by every university, for every first-cycle programme. The ideal is to achieve a perfect balance, not in theoretical but in practical terms, depending on the nature of each programme: on whether it is “paradigmatic” or not, academic or vocational,

◆ Figure 6. *Tension triangle showing the configuration of objectives of first-cycle training programmes*



◆ Figure 7. **Configurations for the degree of specialisation in first-cycle training**



Source: Authors.

complete in itself or leads to second- and third-cycle studies, whether it involves a full or part-time course, etc.

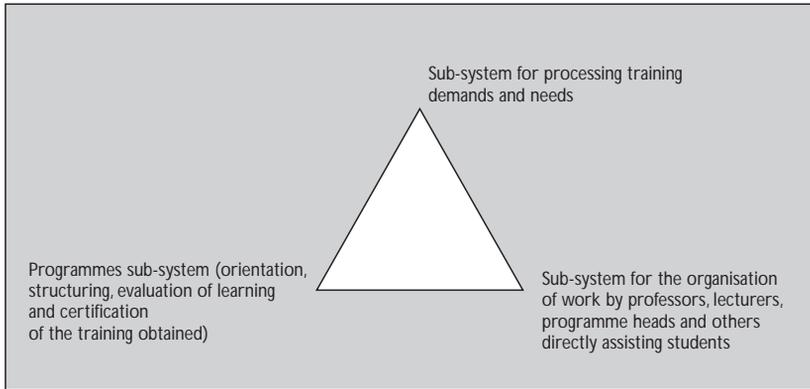
Figure 7 shows by means of a continuum the basic approaches which can be taken in first-cycle training with regard to the degree of specialisation: on one side, general training usually of the humanist and multidisciplinary type; on the other, specialised training in a particular subject or a particular professional field.

In the university world as a whole, in every university and especially in every programme and even in each of the specific services provided by each programme, a constant attempt must therefore also be made to find a satisfactory balance between these two poles defining the degree of training specialisation. It will therefore not be an ideal adopted for all programmes, but the outcome of deliberate choices and practical action specific to each programme or part of a programme.

The three components of the action mechanism within the first-cycle teaching system

Reproduced subject to a slight change from our recent work *Nouvelles balises pour la réorganisation de la fonction enseignement de premier cycle dans les universités québécoises francophones*,⁴ and again taking the form of a tension triangle, Figure 8

◆ Figure 8. *Tension triangle showing the configuration of the three sub-systems for action in first-cycle training*



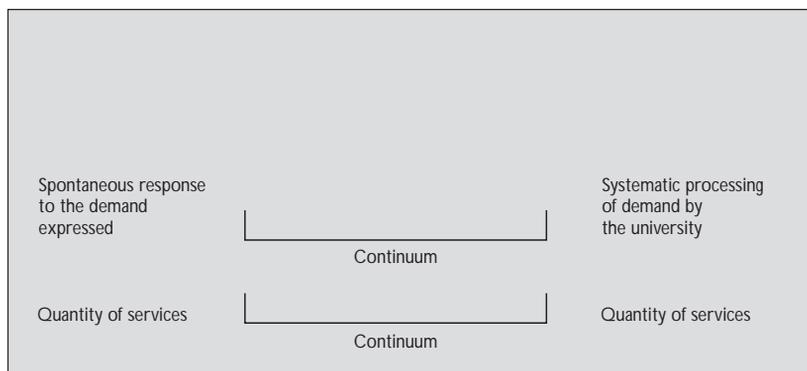
Source: Authors.

shows the three main sub-systems which, with the appropriate choices being made, constitute the first-cycle teaching function. These are the sub-system for processing training demand and needs, the programmes system (orientation, structuring, evaluation of learning and certification of training) and the sub-system for the organisation of work by professors, lecturers, programme heads and others who directly assist students.

Within each of these forces, we have isolated, on continua, various other basic choices open to education agents in first-cycle teaching.

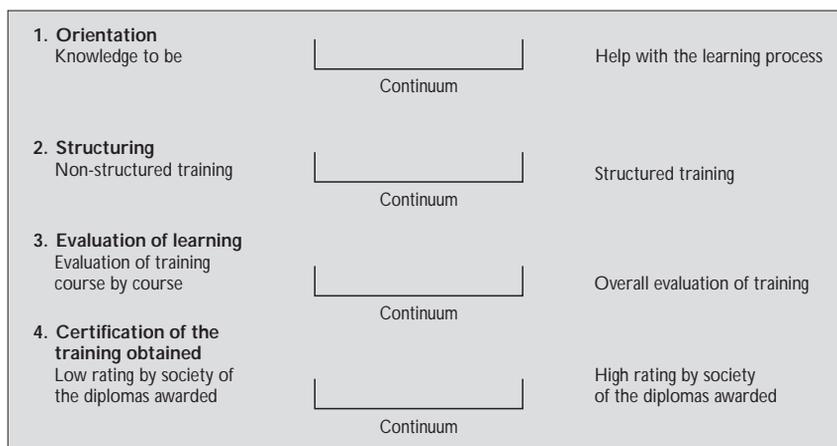
As regards the sub-system for processing training demand and needs (Figure 9), we have placed, on the left, the varying emphasis on reacting directly to demand as expressed by the universities' various "customers" and, on the right, on an active attempt by the university and its main education agents to identify real training needs, in an approach highlighting the role of the university in this area and broadening its action to include societal development and social criticism. We have then singled out the varying tendency of the university world to focus either on the quantity of the services provided or on quality.

◆ Figure 9. *Some configurations within the sub-system for processing first-cycle training demand and needs*



Source: Authors.

◆ Figure 10. *Some configurations within the sub-system for the organisation of first-cycle programmes*



Source: Authors.

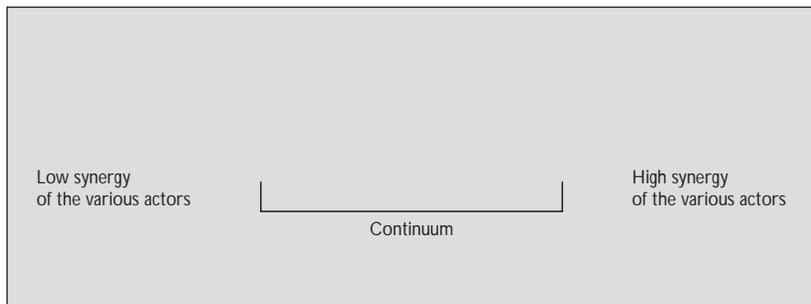
With regard to programme orientation and structuring, we have contrasted various characteristics on four continua:

- the tendency varying from university to university to organise training on the basis of the knowledge to be transmitted or the help students are to be given with the learning process;
- the tendency to structure or not structure programmes;
- the tendency to assess student course by course or to assess in overall terms how far they have attained the objectives set by their study programmes;
- the value attached by society to the diplomas awarded.

Lastly, with regard to the organisation of the work by the main direct education agents (Figure 11), we have placed on a continuum the varying importance attached by the university world to the synergy of work by the various partners: professors, lecturers, programme heads and other parties directly assisting students.

Once again, it is assumed that the education agents can select, via their action, the relative point of equilibrium they assign to each of these component parts of first-cycle teaching, none of which is to be overestimated or underestimated. Here again the balance found will not be universal, but contingent and specific to each programme or to each particular service provided by a programme.

◆ Figure 11. *Some configurations within the sub-system for the organisation of work by professors, lecturers, programme heads and other direct education agents*



In other words, we see the training programme as the basic unit in the structuring, quality and efficiency of first-cycle teaching. Those responsible for these units are the architects of the training provided and, accordingly, important education agents accountable for their action to the university, society as a whole and their peers from whom they have received their mandate. Accountability is essential for the existence of semi-autonomous operational teams within an organisation.

SOME DESCRIPTIVE MODELS FOR THE ORGANISATION OF FIRST-CYCLE TRAINING AND MAJOR UNDERLYING ISSUES

In *L'université québécoise du troisième type*, we defined a model as “a structured vision of a material or immaterial reality, a mental operation and a means of communication which has to be used to bring out the most significant, relevant and interesting aspects of a complex object”. We also defined the model as “a partial and particular view of the main characteristics of an object seen from a given angle, in a special light and from a selected viewpoint”. In the same work we distinguished between “descriptive models”, which we defined as intellectual constructs making it possible to understand and explain certain phenomena, and “prescriptive or normative models”, which we defined as objectives or ideals that could be used to guide human or organisational activities.

On the basis of these definitions, we could have taken a number of approaches to identifying the existence of different types of descriptive models for the organisation of first-cycle teaching. By opting for the geopolitical dimension, we could, for instance, have selected the UK, German and North American models as a basis for a classification. With reference to the various fields of knowledge, we could also have highlighted models applicable to fields of study and vocational training, as well as those specific to the fundamental and applied sciences, the social sciences, classics, arts subjects, fine arts, etc. Or by combining the information provided in the first part of this article, we could have worked out a classification making it possible to identify a great many ways of organising first-cycle training; but this choice would have made the analysis almost impossibly complex.

We therefore preferred to take a general, simple approach in which we used the main components of Figure 2 to define initially three particularly important general types of organisation for first-cycle teaching. From each of them we then derived particular sub-models by referring to the various components in Figures 3, 4 and 5.

Three basic descriptive models for the organisation of first-cycle teaching were initially selected:

- the model prioritising demand;
- the model prioritising spontaneous supply from the main direct education agents;
- the model streamlining training supply by using management processes.

Within each of these base models, we then identified particular sub-models which we briefly discuss below by considering their underlying issues, stating their limitations and defining their potential malfunctions.

These three models and the nine sub-models derived from them are not fully and mutually exclusive and probably do not exist as such, for they are intellectual constructs, or conceptual instruments that make it easier to understand and analyse practical situations, but also contribute to more effective action within the first-cycle teaching system.

Moreover, taken to their extreme, some of these sub-models could unfortunately lead to a kind of first-cycle teaching system that runs counter to the specific objectives and values of democratisation, excellence and truth expected of a university as an institution that works in the general interest and guarantees the dissemination and extension of knowledge which is so important for the development of individuals and for human and social progress.

Identifying these dangers is to take the view that “hybrid models” for the organisation of first-cycle teaching are better adapted to the specific nature of the university system and provide a better approach than “pure models” to ensuring that a university carries out its mission and main functions. It is also a way of bringing out the main characteristics of a prescriptive model for the organisation of first-cycle teaching that can provide guidance for the main actors.

The model prioritising demand

This first model for the organisation of first-cycle teaching assumes that the university is an institution which, mainly through first-cycle teaching, must primarily meet the many demands for services it receives from all sides.

As regards training objectives, the main characteristic of this particular model is its tendency to adopt component configurations focusing on the acquisition of knowledge and the integration of students into society, and its emphasis on specialised types of training, although the weight attached to them depends on the disciplines concerned and the environmental context.

The supporters of the neo-liberal university, many student representatives and a large number of those advocating wider and easier access to first-cycle

studies are some of the staunchest defenders of this general model for the organisation of first-cycle teaching.

This model theoretically takes three forms which we can identify by going back to Figure 3, since it reveals the following: the sub-model prioritising demand from non-students; the sub-model prioritising students' individual demands; the sub-model prioritising the specific demands of various sub-groups of students.

The sub-model prioritising demand from non-student customers

Scientific fields, professional bodies, employers and even society as a whole for which the university provides its training services have already been classified as non-student customers.

The focus in this first sub-model is usually on achieving the best possible balance between the quality and quantity of the services provided, but the extent to which programmes are structured varies; the model very often requires, however, the maintenance of a careful balance between individual course evaluation and overall evaluation of how far the general programme objectives have been attained; lastly, it usually emphasises the recognition by professional bodies, employers and society as a whole of the value of the diplomas awarded.

In such a sub-model, which as a rule is not very precisely defined, only a medium synergy effect is directly expected of the professors, lecturers, programme heads and other direct education agents.

Based on the full recognition of the service aspect and highlighting the social impact of higher education, this particular sub-model for the organisation of first-cycle teaching may, however, have serious consequences unless they are checked: unrestrained consumerism; attempts at planning that are not only pointless but restrictive and harmful; undue importance attached to so-called market forces; the detrimental effects of reduced access to university studies; the almost complete anonymity of students who are sacrificed to economic or societal objectives that are not consistent with the training they expect of a university; abandonment by universities of their basic role as institutions contributing to social mobility and renewal, etc.

The sub-model prioritising students' individual demands

In this second sub-model it is assumed that the specific characteristics of each student should be recognised and that the aim should be to meet his or her needs, and that at least first-cycle university education should be open to the largest possible number. Unfortunately, however, it may also lead to "permissive admissions", to focusing on the quantity rather than the quality of training services, to allowing and even encouraging personal courses of study which are

lacking in coherence, completed at varying speeds and very often result in a dispersal of energy at individual and organisational level. In this case the tendency may also be to do little to structure programmes of study, assess attainment only on a course-by-course basis and pay little attention to society's recognition of the diplomas awarded.

Because of a certain conception of academic freedom and professional autonomy, but also, more simply, because of current management deficiencies, the tendency in this model would also be to show little interest in the synergy effect produced by professors, lecturers, programme heads and other direct education agents.

Lastly, the sub-model prioritising the students' individual demands often leads to a patchwork of university studies and to a wide range of students with different motivations, kinds of preparation and objectives taking the same course. It must be realised that it also often leads to needless repetitions, waste of time, unsuitable and incomplete types of training, very high failure and drop-out rates and a substantial increase in training costs.

The sub-model prioritising the specific demands of various sub-groups of students with special needs

This sub-model focuses more on the quality than the quantity of the services provided; it may also encourage the provision of structured programmes, facilitate the overall assessment of how far training objectives have been attained, as opposed to a course-by-course approach, and promote the recognition by society of the diplomas awarded. It can also contribute to synergy in work by professors, lecturers, programme heads and other direct education agents. It is the best way of meeting the true needs of targeted customer categories as it provides them with specific types of service.

However, if it develops within universities without a sufficient counterweight, this particular sub-model for the organisation of teaching may become too demanding for both the university and the teachers, and may be detrimental to the innovative capacity of every teacher and to the professionalism of the various direct agents involved in first-cycle training.

The model prioritising spontaneous supply from the main direct education agents

This second model for the general organisation of first-cycle training, which gives the main education agents a central place in the training system and highlights their personal expertise and professionalism, tends to focus more on the direct transmission of knowledge by the teacher than on systematic learning

by students. Unless there is a counterweight to it, this model may also result in over-specialised training. As a rule it does not, however, promote carefully structured programmes or strong emphasis on the co-ordination of the work performed by the main direct education agents. As professionals, they know what is expected of them and it is assumed that there is no need to direct or even co-ordinate their work.

On the basis of this model, a university relies mainly on the acknowledged expertise of each direct education agent for the provision of specialised and updated training and for maintaining its standard.

This model is related to a significant line of educational thinking in which teaching is perceived as the transmission of specialised knowledge from the expert to the learner. This model is, moreover, staunchly defended, either directly or indirectly, by many university teachers, who more or less openly maintain that the learner needs masters, guides and intellectual social models, and that only the “master” can identify the students’ real needs and help to meet them.

From this model it is possible to derive at least three sub-models or different ways of organising first-cycle teaching on the basis of the components already presented in Figure 4. The three we have selected are: the Humboldt sub-model prioritising supply from professors/researchers; the sub-model for the division of labour between two groups of teachers, professors and lecturers; the sub-model for educational teams mainly comprising professors, lecturers, programme heads and other direct education agents.

The Humboldt sub-model prioritising supply from professors/researchers

This first sub-model is derived from the Humboldt university system in Germany. This model, which assumes that research has priority over teaching and therefore tends to deny the specific nature of first-cycle studies, was established throughout the world during the 20th century.

According to the model, the university professor is a specialist in a particular field of knowledge, an expert recognised by his peers and by society, and a master of innovation who, on these three counts, is expected to adjust his teaching continuously in order to impart the very latest knowledge in his special field. Through his teaching, he must therefore pass on directly to his students the unpublished results of his research, as well as the expertise he is continually developing. The focus in such a university is on its masters, researchers with international reputations and professorships.

In the predominant ideology, the reference is usually to this particular sub-model when all university professors are defined as teachers/researchers. However, according to many observers of the world university scene, 20 to 40 per cent

or even 50 per cent of these professors are not recognised by their peers as specialists who contribute systematically and significantly to the advancement of knowledge in their fields.

In a sub-model of this kind, the marked hierarchical structure of the staff means that relations among them are seldom based on equality, since eminent professors are the real masters on board and guarantee the quality of the training provided. The other education staff very often find that they are at the service of duly recognised masters.

In this sub-model, a university ruled by masters tends to see the processing of demand as a merely secondary issue and to focus more on the quality than on the quantity of the services provided. Nor is any great importance attached to programme structuring. The master who directs the work of the student, however, often provides an overall assessment of how far he has attained the learning objectives in his programme, as opposed to individual course assessments. Lastly, this evaluation process can enhance the value of the diplomas awarded.

It must be admitted that this sub-system has given excellent results in some countries, in particular in Germany and the United States. But in the educational systems in which it is taken over directly without an adequate critical review, it gives rise to the following question: are all teachers at university teachers/researchers? The fact is that, in many countries, some 40-50 per cent or more of first-cycle courses in today's mass universities are given by lecturers who are not paid by their university to conduct research and are therefore unlikely to be at home within this Humboldt-type sub-model for the organisation of first-cycle teaching.

More importantly, for a number of years many specialists in the organisation of university education have considered that, although this model meets second and third-cycle training needs quite well, it is poorly adapted to the particular needs of the more general, mass training provided for first-cycle students.

Lastly, the fact cannot be disregarded that a great many professors throughout the world have long since realised that it was impossible or difficult to make direct and extensive use of their research findings for their first-cycle courses, particularly at the start of a programme, without bypassing some basic stages in the learning process and without harming the interests of students who have to be helped in another way if they are to be trained to the level subsequently enabling them to benefit fully from Humboldt-type teaching.

In other words, despite some fine principles, this particular model for the organisation of first-cycle teaching upholds a particular view of the professors' individual interests, which are very often centred on their research projects and on second and third-cycle studies. Unless it is counterbalanced in some way, it can therefore result in devaluation of first-cycle teaching which, to quote the

Quebec Education Commission, is looked on as the “poor relation in the system”.⁵

The sub-model for the division of labour between two groups of teachers: professors and lecturers

This second sub-model is the outcome of serious unresolved ideological conflicts between the values of excellence and equality, and strict supervision and autonomy. But it is also, for example in Quebec, the result of twenty years of radical change in the organisation of first-cycle teaching owing to the combined effects of “permissive admissions”, unprecedented budget cuts and collective agreements between universities and lecturers’ associations. Under most of these agreements, courses not given by full professors are distributed among lecturers subject to certain rules: recognition of their qualifications to teach a given course, formal applications made by them to take responsibility for a particular course group, the unwieldy procedure of grading by seniority. Unfortunately, the system is bound to make it difficult to achieve synergy in the work by these two teaching groups.

In this sub-model, which is found in slightly different forms in various university systems, the first-cycle teaching staff, whether professors or lecturers, are seen more as personnel authorised by the university and therefore capable of teaching a course subject satisfactorily and helping the student to learn, than as experts recognised by their peers in the scientific community.

This is in fact a redefinition of the roles of first-cycle university teachers, which results in a serious conflict of values according to the basic Humboldt model, not only for professors but also for many lecturers.

Such a sub-system for the division of labour by the addition rather than the co-ordination of activities may not only compromise any synergy among the main direct education agents, but makes it difficult to meet the wide diversity of demand and focuses more on the quantity than on the quality of training services. Without being entirely responsible, it may also encourage a patchwork of courses and individual course assessment, and lead to diplomas that have little value in the eyes of the society in which their holders live.

When his studies are based on this sub-model for the organisation of first-cycle teaching, the student very often feels that he is just a number, an individual in an anonymous crowd who is left to his own devices, with no overview of his programme’s focus and components, and no guide or real intellectual supervision. In Quebec, for example, but also elsewhere in the world, this particular form of first-cycle teaching has been frequently criticised by student associations on the grounds that this organisational sub-model is far too concerned with protect-

ing the individual and corporate rights of professors, and lecturers too, often to the detriment of the quality of training to which students are entitled.

The sub-model pooling professors, lecturers, programme heads and other direct education agents

This third sub-model immediately acknowledges the basic requirement that these various types of intellectual workers should be able to function autonomously. However, it also defends the need for a formal organisation structure, mainly for teaching purposes, to ensure that the various direct education agents make a more satisfactory contribution to various types of training that are probably not linear but systematic and gradual.

This organisational sub-model for the co-ordination of work by all the direct education agents can provide support for the following objectives:

- contribute to the synergy of individual efforts;
- reconcile more effectively and easily the demand for training from the various customers with the expertise and main motivations of professors, lecturers, programme heads and other direct education agents;
- define more flexible and efficient training programme structures which will be more closely geared to students' needs, but at the same time respect the teachers' autonomy and be compatible with the current rapid progress of knowledge;
- make it easier to achieve a sound balance between course-by-course assessments of certain programmes and the overall assessment of how far the general programme objectives have been attained;
- promote the recognition by society of the diplomas obtained.

But this sub-model may also lead to serious malfunctions and negligence in the teaching field, if it is not based on real leadership by programme heads and on active and ongoing co-operation among all the direct education agents within an organisational system focusing on the recognition of the specific contribution by every individual and on the synergy of their work.

Moreover we believe that it is mainly due to the quality of such team work as well as the recognised individual expertise of every teacher that first-cycle programmes in universities with a mass student intake can, in the present context, achieve real credibility in the eyes of students and the community.

The model rationalising training supply by means of management processes

This third model is based on the assumption that, in first-cycle training as in any other service, it is not possible simply to meet the *ad hoc* demands which

come from every quarter; or for that matter to leave every direct education agent to his own devices once his duties have been defined, without backing him with appropriate means of support, assessment, planning and co-ordination. According to this model, first-cycle teaching is too important and complex an activity to be left entirely to the random pattern of *ad hoc* demands from many kinds of customers with unlimited needs, or exclusively to the initiative of professors, lecturers and other direct education agents. It is an activity which has to be organised, with due regard, however, for what it is and for the professionalism it calls for.

On the one hand, in universities with mass intakes, some courses are given more than thirty or forty times a year; because of the many groups concerned, this requires extensive horizontal planning so that quite different objectives and types of training will not be expected of the same course. On the other, a training programme is a set of interconnected courses which have to be vertically co-ordinated so that the specific, complex and complete types of training which society expects of a university in its capacity as a service body can be provided.

Owing to this inevitable co-ordination of teaching activities and necessarily limited resources, a university cannot provide appropriate and quality first-cycle teaching unless it takes action by simultaneously:

- taking firm control over the processing of the training demand and needs expressed by the various customer segments which it is to serve;
- clarifying the focus of programmes and structuring them, and defining the system for assessing training, the procedures for certification of the skills acquired and accordingly the relevance and quality of the diplomas awarded;
- ensuring that the work of professors, lecturers, programme heads and other direct education agents is well organised.

These basic activities must be managed systematically, but with due regard for the professional status of the various participants concerned. In the same vein, this organisational model based on appropriate management processes is, according to many observers, not only necessary to improve the synergy of all kinds of resources and at the same time reduce costs, but also to ensure the consistency of training objectives and help students to fulfil themselves as far as possible.

In this generic model we single out three main types of action, as was already done in Figure 5:

- the sub-model streamlining the supply of services via regulatory bodies outside the universities;
- the sub-model streamlining the supply of services in each university via institutional powers of a legislative or executive type;

- the sub-model streamlining the supply of services within each establishment mainly via the basic programming units.

The sub-model streamlining the supply of services via general regulatory bodies outside the universities

According to this first sub-model, first-cycle university teaching can be improved significantly and its costs reduced via various non-university bodies exercising planning, supervisory, co-ordination and organisational powers over the entire first-cycle teaching network covering a number of universities or over substantial parts of the network.

They are mainly concerned with assessing new draft programmes and the effectiveness of established programmes. Their action can lead to proposals, recommendations and even to direct measures for the opening, closure or adjustment of first-cycle teaching programmes.

In short, whatever the form it takes, this approach is mainly based on forces outside the universities which are in theory autonomous but still require a minimum of co-ordination with regard to the entire system of first-cycle teaching to ensure high teaching standards in the basic units. Such a model therefore defines, although not always precisely, a required or voluntary limit on the freedom of universities and programmes, on the grounds that government or related powers are appropriate or necessary, not only for the analysis of situations, but also for the decisions to be taken and implemented within the university network concerned.

On one side, this organisational sub-model for planning by non-university bodies meets obvious needs at a time of serious budget restrictions and may have a substantial streamlining impact. On the other, it may create discontent, interfere with the natural operation of the market, encourage the stealthy development of a costly bureaucracy within the system, and weaken the dynamism and accountability of universities, basic programming units and direct education agents. In our opinion, only these agents, along with the students, are still capable of directly improving training quality.

Some external supervision is probably necessary if the worst abuses are to be avoided. But it may also discourage initiatives by the basic units which will be reluctant to put their backs into activities that could be blocked at any time by decisions taken by other bodies.

We think that the most important problem confronting first-cycle teaching throughout the world is not so much the lack of networked programmes in the various institutions belonging to the same system of first-cycle teaching (although certain kinds of co-ordination may prove useful and even essential), as the lack of synergy in the activities of professors working in the same field and occupying

offices next door to one another, or in the activities of professors and lecturers whose courses for the students taking the same programme during one or more terms are not well co-ordinated.

The sub-model streamlining the supply of services in every university via institutional bodies with legislative or executive-type powers

This second sub-model brings in bodies of a legislative kind (studies committee, first-cycle sub-committee, etc.) or executive type (vice-rector, first-cycle dean, etc.) and is based mainly on institutional decisionmaking powers and on precise institutional guidelines, a strong organisational culture and joint regulations for action planning, the overall assessment of the training received and certification of the value of the diplomas awarded.

This organisational sub-model for first-cycle teaching is particularly important, in the absence of faculties, within certain university systems such as the general constituents of the Université du Québec. On the one side, it is at this organisational level, in this type of institution with its highly centralised management system, that the major guidelines are defined, conflicts are settled and any substantial change of programme is adopted. On the other, although this sub-model reassures universities by giving them the false impression that they plan, supervise and guarantee the quality of teaching, it often leads merely to formal planning, on paper, and hardly encourages real strategic planning that takes into account the changing requirements of markets and the different expectations of a wide range of customers; neither does it provide in any way for the real updated planning of practical training activities.

These are some of the reasons why we think that, in the absence of a sufficient counterweight, this model may encourage a joint but artificial approach, as well as complicated bureaucratic rules, within a university system. It could also result in the time needed for action being incompatible with the requirements of real first-cycle university training imparting the latest knowledge, and with the rapid increase in training demands now confronting universities.

As a body that serves the general interest and is to a large extent publicly financed, a university cannot rely mainly on centralised strategic planning: by its very nature, it is less a unitary organisation than a confederation of faculties or departments, each of which forms a semi-autonomous team as well as a “production unit” which, in various ways, serves many kinds of customers, in a specific competitive context different from that of the other production units required to operate within or outside the same university.

The sub-model streamlining the supply of services within each university mainly under the responsibility of the basic programming bodies

We consider that this third sub-model is the best way in which a university can provide appropriate services on markets, and on a practical and routine basis, even if counterweights have to be set up to ensure transparency on the part of the basic units, meaning that they must be fully accountable for their action to the various institutional and national bodies as well as to the various customer categories. This accountability principle is essential for responsible, democratic and efficient management of first-cycle teaching. At the same time, this sub-model in no way prevents national or institutional bodies from defining facilitation rules, evaluating programmes and encouraging initiative. That in fact is why we consider that this sub-model is generally speaking the most likely to ensure the best balance.

From these three models and the nine descriptive sub-models obtained from them, we finally derive a prescriptive-synoptic model via which the appropriate balance between the various forces on the services demand and supply sides is to be found for each programme. Our approach is intended to be action-oriented, but also contingent, flexible and decentralised. It synergises the various forces, but leaves the main initiative to the basic units which emerge naturally within a given context and which remain accountable for their action to their university and the society they serve.

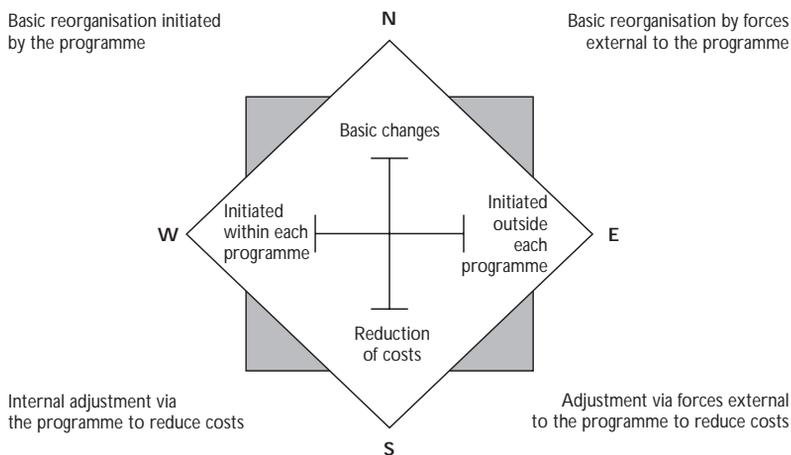
The formal identification of this prescriptive model contributes to the understanding of how the first-cycle teaching function is organised. In order to apply the model, however, the strategic approaches appropriate for each teaching system, institution and programme and the context applicable to them must be identified. It is this operation which is the subject of the third and final part of this report.

FOUR STRATEGIES FOR RENOVATING THE FIRST-CYCLE TEACHING FUNCTION

Adapted from an essay published in November 1993 by the Pew Higher Education Roundtable,⁶ Figure 12 provides universities with a compass to find their bearings on the uncertain seas of first-cycle teaching and to select one of the four possible theoretical approaches to reorganising first-cycle university training on a new basis. In practice the strategies will be hybrid. It is, however, important to have a clear grasp of the main choices open to the various actors.

This guidance system consists basically of two axes: the north-south axis points, in the north, to the basic reorganisation of the methods of processing

◆ Figure 12. *Compass marking the various strategies for reorganising first-cycle teaching*



Source: Authors.

training demands and needs, guiding and structuring programmes and reorganising the work of the main direct education agents and, in the south, to the measures aimed at reducing costs; the west-east axis points, in the west, to the responsibility devolving on each programme for the changes that have become necessary and, in the east, to a situation in which the same programmes are put on hold until external action is taken, possibly by government, the university system, the main parties involved in the renegotiation of collective agreements, etc.

Four major strategies for change are obtained by relating these two axes:

- basic reorganisation initiated by the programme;
- basic reorganisation initiated by forces external to the programme;
- internal adjustment via the programme in order to reduce costs;
- adjustment via forces external to the programme in order to reduce costs.

As we have already said, our own theoretical preference is for the thorough reorganisation of first-cycle teaching from within each programme. Reorganisation calls for new ways of guiding and structuring programmes, assessing what students have learnt and certifying the value of diplomas, as well as new methods of

processing training demands and needs and organising work by professors, lecturers, programme heads and other direct education agents. This strategic choice means that the basic units must be given priority, but it also requires a favourable context that can be provided only by the institutional bodies and through sound co-ordination at national level. In addition, we realise that a programme itself is subject to a particular environment and that one of the other three approaches may be more suitable for a given programme or even for one or more parts of a programme meeting special customer needs. There is nothing absolute in the choice of strategy; it is the outcome of a rational analysis based on the objectives set, the resources available, the particular context, etc. Here again it is the feasibility of action and achieving a balance that count.

Lastly, we also believe that this compass indicating the various ways of reorganising first-cycle teaching can be used to analyse the specific nature of the reform measures proposed or adopted within a higher education system, such as those aimed at national or regional streamlining of programmes, downsizing of staff, salary reductions, improving the pension scheme, increasing the number of students per course, the creation of new sources of income, the restructuring of programmes, the creation of teaching teams, etc.

This theoretical article was drafted following the publication by EROFEU (research team studying the organisation of university teaching) of two essays⁷ and a series of research periodicals and reports⁸ on how first-cycle teaching in the French-speaking universities of Quebec is and could be organised.

Throughout this research, we considered it useful and necessary – for our own understanding of this important subject and the advancement of knowledge concerning it – to study intensively the organisation concept behind first-cycle teaching and to make this theoretical work on the models and issues relating to the various organisation methods concerned accessible to the public.

In this report we have tried, in stage one, to update the theoretical framework which we had developed in recent years and which enabled us to interconnect the various components of the first-cycle teaching system. In stage two, we have discussed some descriptive models for the organisation of this system and from them we derived a prescriptive model based largely on the concept of a balance between various forces. In the third and last stage, we have identified four possible strategic approaches which could help the various education agents to apply this prescriptive or normative model. Of these four approaches, we have singled out the one based on action initiated within each programme as the most effective for a thorough reorganisation of first-cycle teaching. We acknowledge, however, that like the prescriptive model itself, this choice remains contingent and must be adapted to every situation.

In the course of the report we have also presented a number of issues underlying the models considered:

- whether or not first-cycle university teaching should be defined as a public service based on the autonomy of institutions, academic freedom and accountability;
- whether or not the student should be identified as the university's main "customer" and be central to the teaching/learning process;
- whether or not the widest possible access to first-cycle studies should be confirmed, but with the same and even greater requirements being imposed, and with the existence in first-cycle programmes of several types of students entitled to different types of services being acknowledged;
- whether or not teaching should be refocused on the expertise of professors, lecturers, programme heads and other direct education agents who, operating in unison as intellectual workers, are expected to pass on knowledge, and also to motivate students and guide them in their studies and in their intellectual and professional development;
- whether or not first-cycle teaching should be seen as a complex process which, in a favourable environment, has to be run efficiently in the basic programming units, with a fine balance to be achieved continuously between the following components: demand processing, programme orientation and structuring, and organisation of the work by the various direct education agents.

Considering the great importance of these issues, we realise that these new instruments for reflection and research should be further developed and refined in the years to come. We hope that our contribution will encourage other university researchers to go further into this subject. The university system is too important to society to remain outside the field of university research.

NOTES AND REFERENCES

1. We have already discussed the characteristics of this type of university in another publication: D. Bertrand, and G.G. Busugutsala, (1995), "L'université québécoise du troisième type. Dynamique vers l'an 2010", *Les Cahiers de la Recherche sur l'Enseignement Supérieur*, Université du Québec, 134 p.
2. CLARK, B. (1983), *The Higher Education System. Academic Organisation in Cross-National Perspective*, University of California Press, 315 p.
3. VANISCOTTE, F. (1994), "L'éducation et la formation des enseignants en Europe", *Revue des Sciences de l'Éducation*, XX, (2), pp. 331-350.
4. BERTRAND, D., BUSUGUTSALA, G.G. and RHÉAUME, D. (1997), *Nouvelles balises pour la réorganisation de la fonction enseignement de premier cycle dans les universités québécoises francophones*, Équipe de recherche sur l'organisation de la fonction enseignement à l'université (EROFEU), Université du Québec à Montréal, 82 p.
5. Les États généraux sur l'éducation (1996b), *Rénover notre système d'éducation : deux chantiers prioritaires*, Rapport final de la Commission des États généraux sur l'éducation, Québec, 90 p.
6. Pew Higher Education Roundtable (November 1993), *An Uncertain Terrain, Policy Perspectives*, Vol. 5, No. 2, Section A, 12 p.
7. BERTRAND, D., BUSUGUTSALA, G.G. and RHÉAUME, D. (1996a), *Oser revoir les modes d'organisation de l'enseignement de premier cycle*, Essay, Équipe de recherche sur l'organisation de la fonction enseignement à l'université (EROFEU), Université du Québec à Montréal, 28 p.

BERTRAND, D., BUSUGUTSALA, G.G. and RHÉAUME, D. (1996c), "L'organisation de la fonction enseignement dans les universités québécoises francophones. Témoignages d'étudiants et d'observateurs", *Les Cahiers de la Recherche sur l'Enseignement Supérieur*, No. 96-2, Université du Québec, 75 p.
8. RHÉAUME, D., BERTRAND, D. and BUSUGUTSALA, G.G. (1996b), "L'organisation de la fonction enseignement de premier cycle dans les universités québécoises francophones. Perceptions et opinions de responsables de baccalauréat", *Les Cahiers de la Recherche sur l'Enseignement Supérieur*, No. 96-3, Université du Québec, 46 pages and annexes.

THE FINNISH OPEN UNIVERSITY AS YOUNG ADULTS' TESTING ARENA

Ellen Piesanen
University of Jyväskylä
Finland

ABSTRACT

The Finnish open university system has expanded during the last few years because of measures undertaken in connection with recent social and educational policies in Finland. The abolition of the requirement that students must be at least 25 years of age changed significantly the structure of the open university student population. Nowadays more than a third of open university students are young adults, aged 18-25 years. The paper focuses on the background and life situation of these young adults and on the significance of the open university for their career perspective formation as a testing arena, discussing open university students' different interests and goals as well as the impact of open university studies on the students' educational and occupational careers.

INTRODUCTION: THE OPEN UNIVERSITY IN FINLAND

The Finnish open university is a decentralised system in which regular universities and other educational institutions, such as adult education institutes and summer universities, offer the adult population an opportunity to study parts of the basic university degree curriculum, irrespective of where they live. Since the late 1980s, the number of open university students has doubled. The open university offers an extensive range of courses and examinations but confers no degrees.

The Finnish open university is a part of the higher adult education system. The educational mission of universities is rapidly expanding to include adult education as well as the traditional degree programmes. This new task is carried out by centres for continuing education which are independent university departments financed largely by fees for services provided to a variety of clients.

The universities themselves arrange some 50 per cent of open university instruction; the remaining half is delivered by other educational institutions (adult education institutions and summer universities). Some 40 per cent of the instruction takes the form of multi-method teaching, such as audio teaching supplemented with written and taped material. A nation-wide tutor network is being built up to support this system. New information technologies are increasingly being used in instruction.

Regardless of their educational background, open university students can take modules that form part of the syllabus of a lower or higher university degree, but not the degrees themselves. After having completed approximately a third of a degree programme students have the option to enter university as regular students. However, a very small proportion of all university students take this route.

The highest number of courses is offered in education, social sciences and humanities. However, courses have now also been made available in engineering, natural sciences and economics. This expansion significantly enhances the usefulness of the open university in providing qualifications for specific professions.

Open university instruction has in recent years grown rapidly in popularity. The recession and unemployment have contributed to the trend, because students have more limited financial resources but also more time for education. The prestige of taking university examinations is clearly growing on the educational market.

The Finnish open university was originally established to promote educational equality and to give adults wishing to engage in tertiary-level studies more possibilities to do so regardless of their educational background. Because of labour policy reasons the scope of open university instruction was expanded significantly in 1993 by the abolition of the minimum age of 25.

After this expansion enrolment has increased and the range of available subjects has broadened. Today the Finnish open university has some 70 000 students, over a third of them young adults, aged 18-25 years.

However, this change in age structure has made it necessary to adapt instruction to the needs of younger students. The aim of the reform was to alleviate the problems of youth unemployment by offering young people who had matriculated but had failed to gain admission to a university the opportunity to take university courses (*Higher Education Policy in Finland, 1996*).

THE BACKGROUND OF THE STUDY

In the 1990s, open university students have come to form a group more heterogeneous than ever. The student population consists of students with ages ranging from 18 to as high as 70. There are students who simultaneously study full-time in some other educational institution and also students who are working or unemployed.

Because studying in the open university differs from the usual full-time studying, the students can make use of their studies in different life situations. However, many open university institutions teach academic subjects under the supervision of the regular university. Therefore, large numbers of people have access to the open university because they do not need to live in a university city or town or travel there for their studies. Many students also find learning easier because the Finnish open university makes extensive use of distance education as a learning method as well as of tutors to help the students with their studies.

Open university studies serve different purposes for people who work, are unemployed, study full-time in a university or conduct simultaneous studies in a vocational education institution. Furthermore, students may also see their open university studies as general education or as a hobby. Studies in the open university provide an individual with possibilities which other educational institutions are unable to offer.

THE AIMS OF THE STUDY

The main aim of the research project *The Effectiveness of the Open University and Young Adults' Careers* is to analyse, first, the significance of open university studies for the educational and occupational career paths of young adult students. The main starting point of this study is the assumption that young adults may take up open university studies in a situation where they must modify or specify their previous career goals, their career perspective: the study will examine how open university studies change young adults' career perspectives. Its hypothesis is that an opportunity to study in the open university gives students a broad range of possibilities for testing different dimensions of university studies such as the academic disciplines, their own personal abilities and the style of university studies. It is assumed that as an institution open university offers young adults a "testing arena".

Secondly, the study describes the significance of the open university for young adults' career perspective formation, analysing the changes taking place in

students' interests and careers and their occupational development during their open university studies. The different interests and goals of the heterogeneous group of open university students will also be examined.

Finally, the study will consider what kind of expectations higher education and labour market policies have set to the open university and how well they have been met. The paper focuses on the first two subjects.

METHODS

The research was carried out as a follow-up study. The data, representing a sample of open university students under 25 years of age, have been collected in 1994-96 in three Finnish open universities through questionnaires and interviews. In the analyses the follow-up group is divided into separate subgroups on the basis of the students' life stages, open university goals and career development.

To define the problems to be addressed, a number of open university students were interviewed at the first stage of the research in spring 1994. The first questionnaire was sent to the subjects in 1994 ($N_{1994} = 2\ 324$). In 1995, the second set of follow-up data were gathered with a questionnaire ($N_{1995} = 667$) while 34 open university students were also interviewed. The last follow-up data were gathered in autumn 1996 ($N_{1996} = 542$). The response rate was 66 per cent in 1994, 76 per cent in 1995 and 84 per cent in 1996 (Piesanen, 1996).

The questionnaires contained both structured and open questions. The open questions as well as the data from the interviews made it possible to examine the significance of the open university for young adults' career perspective in greater depth. The structured questions were used to provide information on students' background, their interests and their educational and occupational career paths. They also shed light on the significance of the open university in general as well as on students' working orientation and life situations.

The quantitative analysis of the questionnaire data was carried out using mainly frequency distributions, cross-tabulations, t-tests and factor and variance analyses. The interview tapes were transcribed into data files. The text was coded with a computer-aided text interpretation program and then subjected to a qualitative analysis.

THEORETICAL FRAMEWORK

The theoretical framework of the study is derived from social psychology. The concept of career perspective formation has links with Mezirow's (1977, 1991)

concept of “perspective transformation”. When young adults complete the upper secondary school, the basic education of most young open university students, their career perspectives are in many cases very unclear.

Unsatisfactory experiences of search for study places or jobs after leaving school do not help them to clarify their career perspectives. In this study their career perspective is assumed to change under the influence of studies in the open university.

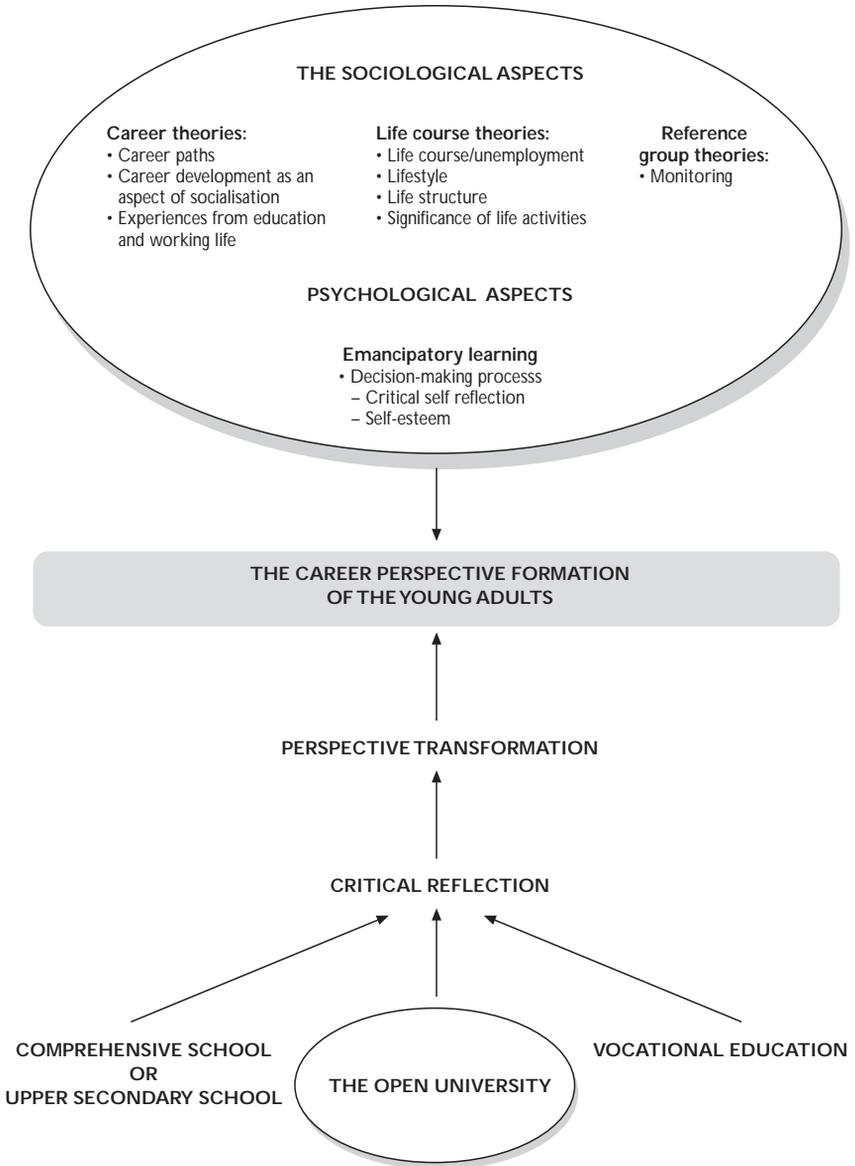
Secondly, the changes that take place in young adults' career perspectives can also be seen in the social context in which they live. The process is examined on the basis of career theories, life stage theories and reference group theories (Figure 1).

It will be assumed that when the original career perspective changes, a student must reconsider his or her former plans and modify the educational goals involved in them. Career perspectives and with them the career development process change as a result of a thinking process. Brookfield (1985, 1987) uses the concept of “critical thinking”, Mezirow (1977, 1981, 1985, 1990, 1991) that of “critical reflection”. When students fail to gain admittance to the vocational education or university programme they applied for, they must reconsider their own starting points and their former career perspectives from a new angle. They may also feel that their current occupation does not satisfy them. In a situation like this students must begin to seek new strategies which correspond with their expectations.

According to Mezirow, people in crisis become critically aware of the cultural and psychological assumptions that influence the way in which we see ourselves and our relationships and the way in which we pattern our lives. Failing in former situations changes previous meaning schemes, which in turn changes the meaning perspectives linked with them, and we begin to think about alternatives. Learning occurs through the changes that reshape meaning perspectives (Mezirow, 1977, p. 154). Mezirow calls this phenomenon “perspective transformation”, a transformation of an individual's meaning perspective accompanied by a new sense of being able to make effective decisions to shape one's life (Mezirow, 1977, 156).

A new meaning perspective has dimensions of thought, feelings and will, but Mezirow (1977, p. 158) emphasises that carrying out one's new plans may also require special support and assistance and that such processes take place in social contexts. Therefore, in this study the social context has been taken into account.

◆ Figure 1. *The theoretical frame of reference*



RESULTS

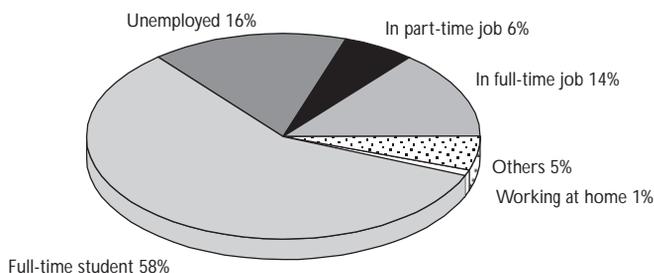
Young adults in the open university: background and life situation

The majority of open university students under 25 have a Certificate of Matriculation, but there are also some students who have only completed the comprehensive school and some who have dropped out of the upper secondary school. However, in the Finnish educational system almost all young adults want to continue in the upper secondary school or in vocational education after the comprehensive school. Those young adults who take up studies in the open university have often failed in an attempt to be admitted to a vocational education establishment or to regular university, or more often to both of them.

A third of the students have already finished their vocational training and have an occupation. Some of them are not satisfied with their earlier occupational choices and want to develop themselves further. Their career development has for some reason been interrupted or it has not stabilised. Such students are often still looking for their own career. Some who have already acquired an occupation wish to improve their occupational skills and thus their chances on the labour market.

An examination of the whole sample ($N_{1994} = 2\,324$), shows that 58 per cent of subjects studied simultaneously in another institution, most often in vocational education establishments, while 22 per cent pursued parallel studies in the regular university system. In the beginning of the study project, in autumn 1994, 16 per cent of these young adult open university students were unemployed while the rest of them (21 per cent) worked or were on maternity leave or in the army (Figure 2).

◆ Figure 2. *Students' studying and employment status in autumn 1994*
($n = 2\,324$)



The career perspective formation of the young adult

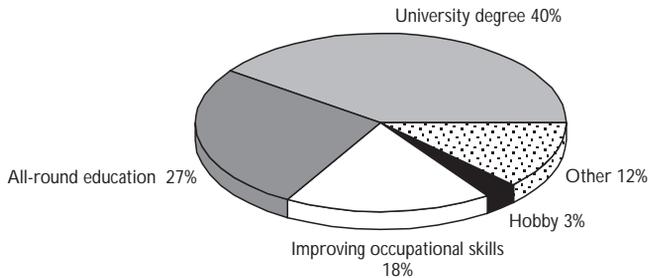
In this study young adults' career perspectives are defined empirically as the educational goals that the students have set themselves at the different stages of their educational and vocational career development. According to empirical findings, young adults' career perspectives almost always change after they have completed the upper secondary school (Piesanen, 1996).

In 1994 – when all subjects were studying in the open university – over 40 per cent of the young adult students were in the open university to obtain a university degree sometime in the future, while 27 per cent wanted to acquire an all-round/general education and 18 per cent to improve their occupational competencies. Only 3 per cent were studying as a hobby (Figure 3).

In autumn 1995 the main educational goal of the young adult open university students was a university degree, which was sought by 60 per cent of subjects (N = 667). Those who simultaneously studied in vocational education establishments usually wanted to improve their occupational qualifications, or to change their occupation, or intended to enter university some day. Those who simultaneously studied at a regular university studied in the open university to speed up their normal studies or were taking subjects not available in their own university or faculty.

This result is very significant both in individual terms and as regards higher education and labour market policy. Despite their different backgrounds, many young open university students have university in their mind from the very

◆ Figure 3. *The most important goals of open university studies*
(n = 2 236)



beginning of their studies or start to think about it after studying a while in the open university.

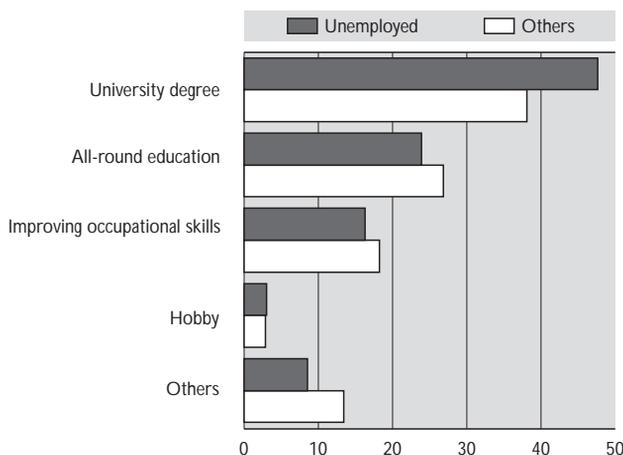
Some students feel it as important to gather together all the examinations and course work that they have completed earlier in the open university, especially if they have had little use of their grade certificate, for example in finding a job or in improving their occupational skills.

Taking the open university route to a regular university is often a very uncertain and long process. Therefore, most of the students who want to enter university try to gain admission via the regular student selection while relatively few actually want to use the open university route.

The socio-economic status of parents and students' academic skills correlate with the educational goals that students have defined for themselves. Students under 20 years of age and unemployed students (Figure 4) set themselves higher goals (usually wanting to gain admission to university) than other students.

As they began their open university studies, students' career perspective was often very unclear. Some students who aspired to a university degree did not even know the main subject they would have liked to study. In this decision-making process the open university has a major opportunity to influence a student's decisions.

◆ Figure 4. *The importance of open university studies among unemployed and other students in 1994*
(*n* = 2 292)



The career perspectives of young adults have often been modified in the course of a very long process, in which many factors play a role. In addition to individual starting points and personal self-esteem, students' decision-making process is also influenced by many external factors. The poor employment situation or local educational opportunities can affect it. If a young adult does not gain the education they want, or if the occupation in which they are employed does not correspond with their expectations, they must re-examine their plans and possibly modify their educational goals.

The open university in young adults' career perspective formation

The main hypothesis of this study was that the open university can help young adult students to change or confirm their career perspectives. Figure 5 illustrates the empirical results of the study, showing two prominent effects of open university studies.

The open university as an institution

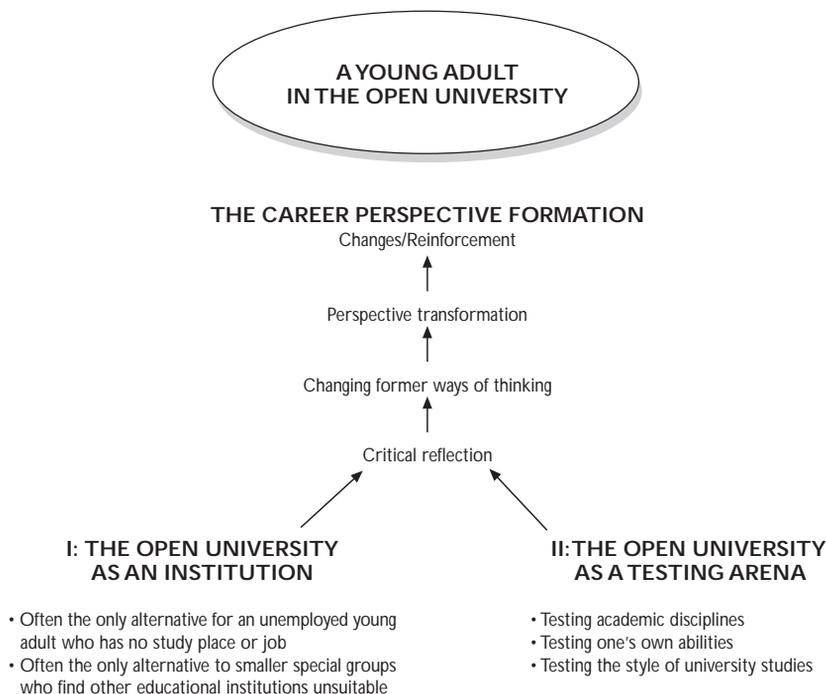
As an institution the open university influences the career perspective formation especially when a young adult who has completed the upper secondary school has failed to secure a further education place in a vocational training institution or university and even to find a job. In such a situation, when young adults have to change or re-examine their former career perspectives, the open university serves as an alternative solution, even if only a temporary one. In some cases the open university may be the only alternative, especially for unemployed young adults.

The empirical results suggest that studying in the open university may also structure an unemployed young adult's life, give it a target-oriented content and help the young adult to set himself or herself new educational goals. As for those who work, study in some other institution or are on maternity leave or in the army, they may similarly find the open university an unique learning environment where they may further specify or reshape their career perspectives.

The open university as a testing arena

Young adult students use open university studies also as a testing arena which they can exploit in many ways. The most important aspect of this function of open university studies is that in the open university students gain a good picture of the academic disciplines they study there. Making up one's mind about wanting to enter regular university is a long-term decision. If the chosen subject proves to be a wrong choice, one's studies may be delayed or one may drop out

◆ Figure 5. *The function of open university in a young adult's career perspective formation*



Source: Author.

of university altogether. This may in turn have consequences both on the individual level and on the level of higher education policy-making.

On the testing arena thus provided by the open university young people can also prove their abilities as university students. Feeling successful in open university studies may be due to three factors: students' personal abilities on the one hand and their finding the style of university studies and the nature of university education congenial on the other. Students are able to find out whether they really like university studies or not. They can also ascertain whether such studies would be too theoretical and demanding for them. The style of university studies does not suit everyone.

Seekers” and “knowers”

Most of those who start open university studies are “seekers”. Their educational goals are unclear or are only taking form. They are seeking for their occupational career and hope that open university studies will help them in the process. Only some seekers want to take up regular university studies. For some of them the open university is simply an opportunity to specify their educational and occupational goals.

“Knowers” are those whose educational goals are clear. They want to enter university or to improve their occupational qualifications. They make full use of the open university as a means of acquiring a university degree or a further vocational qualification, or they study to gain a general education.

According to the empirical results, the opportunities for getting a taste of university studies, trying out one’s abilities and experiencing the style of university education that are available on the testing arena influenced especially the career perspective of the youngest seekers. As regards the knowers, their career perspective could also be further reinforced by open university studies.

The open university in young adults’ career development

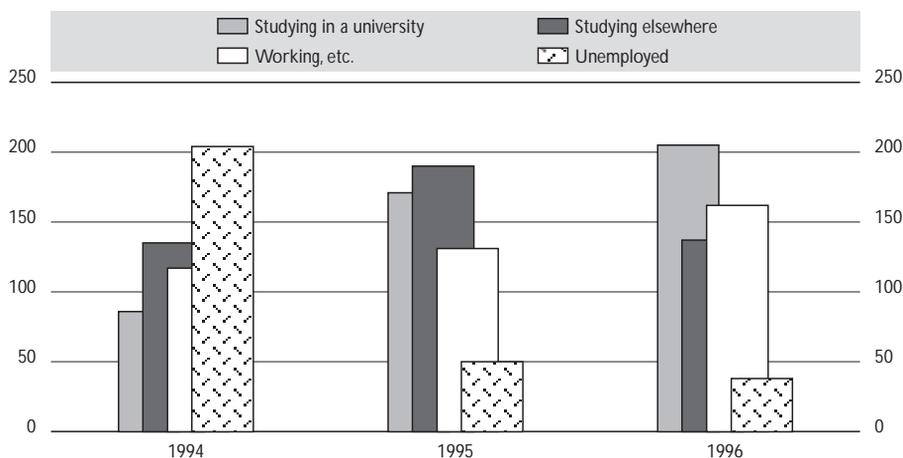
The results of the study allow us to draw the conclusion that open university studies have also exerted an influence on students’ educational and occupational career development.

An examination of the follow-up group (N = 542) reveals, in Figure 6, the trends characterising young adults’ educational and occupational career. After a year of studies the number of students simultaneously studying in another institution had grown from 41 per cent (1994) to 65 per cent (1995). However, after two years of studies the number of subjects continuing their studies was a little smaller because some had graduated.

It is gratifying to see that the number of unemployed students fell from 39 per cent (1994) to 9 per cent (1995) and even to 7 per cent (1996). It should be noted here that the follow-up group had more unemployed students than the first sample because all unemployed open university students in the 1994 data were included in the follow-up group (Figure 2).

In the course of an year, both the unemployed students (N = 207) and the students who also worked (N = 101) had successfully gained entry to different kinds of educational institution – and according to the study one of the reasons was their open university studies. In 1995, over half of those who had been unemployed in 1994 studied full-time in some educational institution – as many as 52 per cent of them in a regular university – while 30 per cent of the unemployed had found a job, the rest (17 per cent) being still unemployed. Of those

◆ Figure 6. *Subjects' educational and occupational career development 1994-1996*
(*n* = 542)



Source: Author.

who had worked in 1994, 42 per cent were still in work and 10 per cent were unemployed in 1995, but almost half of them had started university studies.

Thus the empirical results of the study suggest that open university studies have had a very strong impact on students' chances of gaining access to regular university. However, such studies have so far had less impact on their chances of finding a job. This is shown by the fact that only a third of the students had an occupation in which their open university studies could have fostered their occupational development.

CONCLUSION

The impact of open university studies on young adults' career perspective formation became evident on two levels. For many seekers, especially those who had failed to gain entry to any regular education institution or had no job, the open university as an institution served as a guardian angel. Perhaps the most important influence exerted by open university studies stemmed from their function as a testing arena, where students could test the academic disciplines, their

own abilities, the style of university studies as well as the nature of university education.

The empirical results of the study show that studies in the open university have changed or confirmed the career perspectives of many young adult students. The possibilities available on the testing arena affected many young adults' career perspective formation. The impact of open university studies was very important especially for the youngest seekers, whose career perspective had been quite unclear.

REFERENCES

- BROOKFIELD, S.D. (ed.) (1985), "Self-directed learning: From theory to practice", *New directions for continuing education*, No. 25, San Francisco, Jossey-Bass.
- BROOKFIELD, S.D. (1987), *Developing critical thinker – Challenging adults to explore alternative ways of thinking and acting*, San Francisco, Jossey-Bass.
- Higher Education Policy in Finland* (1966), Ministry of Education, Helsinki.
- MEZIROW, J. (1977), "Perspective transformation", *Studies in Adult Education*, Vol. 9, No. 2, pp. 153-164.
- MEZIROW, J. (1981), "A critical theory of adult learning and education", *Adult Education*, Vol. 32, No. 1, pp. 3-24.
- MEZIROW, J. (1985), "Concept and action in adult education", *Adult Education Quarterly*, Vol. 35, No. 3, pp. 142-151.
- MEZIROW, J. (1990), *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning*, San Francisco, Jossey-Bass.
- MEZIROW, J. (1991), *Transformative dimensions of adult learning*, San Francisco: Jossey-Bass.
- PIESANEN, E. (1996), *The Role of Open University in the Development of Young Adults' Career Perspectives*, University of Jyväskylä, Institute for Educational Research, Publication series A, Research reports 67 (English summary).

INFORMATION FOR AUTHORS

Contributions to the IMHE Journal should be submitted in either English or French and all articles are received on the understanding that they have not appeared in print elsewhere.

Selection procedure and criteria

Selection of articles for publication is carried out by the Editor of the Journal. In specific cases, however, articles are submitted to independent referees for review. If an article is rejected the author will be informed of the reason for the rejection.

The Journal is primarily devoted to the needs of those involved with the administration and study of institutional management in higher education. Articles should be concerned, therefore, with issues bearing on the practical working and policy direction of higher education. Contributions should, however, go beyond mere description of what is, or prescription of what ought to be, although both descriptive and prescriptive accounts are acceptable if they offer generalisations of use in contexts beyond those being described. Whilst articles devoted to the development of theory for its own sake will normally find a place in other and more academically based journals, theoretical treatments of direct use to practitioners will be considered.

Other criteria include clarity of expression and thought. *Titles of articles should be as brief as possible.*

Presentation

**** Three copies** of each article should be submitted, typewritten (1½ spaced) on one side of a page only.

Length: should not exceed 15 pages including figures and references.

The first page: before the text itself should appear centred on the page in this order the title of the article and the name(s), affiliation(s) and country/countries of the author(s).

Abstract: the main text should be preceded by *an abstract of 100 to 200 words* summarising the article.

Quotations: long quotations should be single-spaced and each line should be indented 7 spaces.

Footnotes: authors should avoid using footnotes and incorporate any explanatory material in the text itself. If notes cannot be avoided, they should be endnotes typed at the end of the article.

Tables and illustrations: tabular material should bear a centred heading "Table". Presentations of non-tabular material should bear a centred heading "Figure". The source should always be cited.

References in the text: Jones and Little (1986) or Jones *et al.* (1988) in the case of three or more authors. However, the names of all authors should appear in the list of references at the end of the article.

References at the end of the article: references should be listed in alphabetical order under the heading "References". Examples of the reference style used in the Journal are:

- For periodicals: TAYLOR, M.G. (1991), "New Financial Models -Summary Report", *Higher Education Management*, Vol. 3, No. 3, pp. 203-213.
- For books: SCHUSTER, H. (1988), *Changing Patterns of Finance of Higher Education*, Country Study, Germany, OECD, Paris.

Electronic text: articles should be retained in electronic form, since a diskette or electronic transfer will be requested if the article is accepted.

The Covering Letter

This should give full addresses and telephone numbers and, in the case of multi-authored papers, indicate the author to whom all correspondence should be sent.

Complimentary Copies

Each author will receive two complimentary copies of the Journal issue in which his article appears, in the original language.

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(89 98 03 1 P) ISBN 92-64-15965-7 – No. 50395 1998
ISSN 1013-851X