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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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Governance in Higher Education: the Viewpoint of France

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ABSTRACT

This article is the text of the opening speech that the author delivered at the experts' meeting, on Governance, 22 October 1999 at OECD. As the author points out, the changes that higher education is undergoing, in science and technology, towards lifetime learning and with an increasingly heterogeneous student body, require thought about governance. The changes should affect the internal organisation of institutions, the executive role of presidents, the modes and criteria of their appointment and training, and functions of administrative and financial staff. It will be necessary to remove internal inflexibility and aim for more transparency in decision making. Institutions need to be able to adopt appropriate statuses enabling them to forge strong links with the economy and with public authorities. In a context of internationalisation teacher as well as student mobility must be facilitated. In addition Universities must promote the exchange of knowledge inside institutions.

INTRODUCTION

The discussions that we are beginning today are important for two reasons, for it is clear that higher education is currently undergoing major changes under the impetus of two developments.

Firstly, there is the extremely rapid pace of change in science and technology, which schools must quickly incorporate into their curriculum; they can no longer afford to lag behind as they once did. They must be able to adapt to scientific change more rapidly than in the past, when they were not required to teach state of the art knowledge both to young pupils and to older students. This is a worldwide development that institutional structures must take into account.

The second development is that education now lasts throughout an individual's lifetime although, as has often been pointed out, not enough has been done in France to adapt the education system to this reality. "Lifelong learning" means that enrolments in higher education are going to expand considerably, since alongside pupils and students studying for a first degree there will be numerous adults returning for further training. The student population will be increasingly heterogeneous, with different needs to which institutions will have to learn to respond rapidly if they are to attain their objective of raising the level of knowledge of the majority of the labour force.

Taking these two developments as our starting point, what approach should we adopt in our discussions of the changing structures of governance?

We can start by focusing on the common ground of governance in our countries, given the diversity of our national systems. The aim is not to establish a single, standardised model along which all countries would operate in the same way; that would not only be undemocratic but completely unrealistic. Rather, it is to find what is comparable and compatible in these very differently organised national systems, each of which will conserve its own distinctive features, and to promote the development of these common elements.

In France's view, this approach will make it possible to see how we can achieve some harmonisation of the system. The term "harmonise" has a special connotation within the European Community, but the goal is to develop this idea that, whilst each of us maintains our own system, we will be able to discuss together so that we can reach common objectives despite slight differences between our national mechanisms.

THE INTERNAL ORGANISATION OF INSTITUTIONS

In this perspective, the first point on which we should focus is the issue of power and decision-making in universities, which concerns the internal organisation of institutions. University institutions are headed by an individual – a president or a rector. The issue this raises can be defined as follows: "Are these individuals real 'executive' in the modern sense of the term, *i.e.* someone who presides over a public or private organisation or enterprise, in the broad sense, that is free to make its own choices?"

Under the French system, university presidents have long been first among equals (*i.e.* they are excellent researchers with recognised academic standing). They have generally been people with outstanding academic reputations, such as the President of Nanterre, René Rémond, the President of the Sorbonne, Ricoeur, etc.

All these individuals were elected on the basis of their academic reputation rather than their competence as managers.

However, today, because of the expanding role of higher education institutions, we can no longer afford to elect university presidents solely on the basis of their academic standing, for they must also have the qualities of a good manager. There has been a shift in the role of universities, which has brought many universities, and French ones in particular, to a crossroads. They would like to continue to be headed by prestigious, well-known academics who may one day receive the Nobel Prize or be elected to one of the national academies, but they also want presidents who are good managers.

Consequently, the recruitment of leaders of higher education institutions raises some serious questions. Few major French researchers are ready to sacrifice five years of their life to manage an institution, as this would mean giving up their research, since being a manager is a full-time job. After five years, they will have lost touch with the international research circles to which they formerly belonged.

This poses a very real dilemma. What will happen at the end of these five years, given the rigidity of the French system? Should the head of an institution be elected for as little as five years (which is the case in France, but not in most other countries) or should we consider that these individuals will be starting a new career and will become institutional managers? This is an initial issue that we should discuss.

In France, we are very Cartesian and rationalist. We reason that it is democratic to elect presidents for five years, but think that they should not be allowed to make a habit of it. To prevent them from becoming all-powerful potentates, they are barred from immediate re-election. This makes it very difficult to build up a competent category of institutional leaders in France. For this reason, would it not be best to acknowledge that, when academics accept a position as manager of a higher education institution, they more or less give up their career as researchers in exchange for a new career as an administrator?

ELECTIVE OR APPOINTED STATUS

This initial question of how to ensure that university presidents are effective managers seems to be unrelated to the method of recruitment. Their effectiveness will no doubt be determined more by the role they play within the university than by whether they are elected or appointed. This said, we can look at the implications of how the head of a higher education institution is designated. The French system, in which they are elected by university boards or councils, is relatively democratic, but has two drawbacks (here, I am speaking for myself).

The first drawback is that this method is too inward-looking: the election will be focused on the internal concerns of the institution. There is a danger that presidents will become hostage to local interest groups and will find it difficult to elicit

support for an outside strategy that may be of relatively little concern to most teachers and students.

The second risk is that, since presidents are elected by the university community as a whole, they will tend to give priority to the internal objectives of the university rather than to outside ones. Today, this would be a disastrous policy for institutions, for it would promote narrow local interests at the expense of national and international strategies.

When presidents are appointed, the disadvantage, at least in France, is that they may not have sufficient legitimacy in the eyes of teachers and even the rest of the staff because they will be seen as the representatives of the State, if not of the government currently in power. So there is a real problem of legitimacy. In the French institutions where directors are appointed, they feel it very difficult to impose their authority because they are viewed as appointees of such and such a minister. Consequently, how the heads of universities are chosen is not unimportant but, whatever the method used, I believe that the fundamental issue is the role that they play.

THE ROLE OF INSTITUTIONAL LEADERS

The role that institutional leaders play today is totally new, and has been for the past ten years. We are moving towards greater autonomy for higher education institutions, even though in some cases, such as France, the system still remains highly centralised, reflecting political and bureaucratic traditions that go back to Napoleon.

Consequently, institutional leaders now have greater responsibility. Even if they turn to ministries for assistance, they have their own responsibilities and must prepare the overall institutional plan and strategy. The new element here is that industrial research, technology transfer and industrial innovation are becoming one of the main focuses for the strategies of institutions.

For many years higher education institutions and their governing bodies concentrated on fundamental research, education and teaching. Today, no institution can afford to neglect the link with enterprises, employment, technology transfer and economic innovation. This is a completely new role for institutions, including small ones, which initially were not concerned with these issues. Institutional leaders no doubt need appropriate training here. They are thoroughly familiar with research, since they are supposed to have done it themselves and in any case work in the world of research circles. And they know what education is, since they prepare and teach curriculum, but do they know how to master technology transfer or how to establish links with companies and reach out to the business sector?

Ten years ago, when I was myself president of a university, few of my colleagues were concerned with maintaining links with municipalities, local and regional

authorities or local businesses. The universities were "extraterritorial" bodies, cut off from their surroundings. Today, this is no longer possible: an institution that is not rooted in its local economic and social fabric will, sooner or later, become mediocre. This new role must be stressed, and managers must be provided with the necessary legal authority and the appropriate training. The French Minister of Education is currently working on this issue in the Innovation Act. It is important to realise that, compared to the way most institutional managers have traditionally behaved, this is a cultural revolution. The question here is a major one which other countries do not have to deal with in the same way: "how can public service, which comes under public law and has to comply with all the rules applying to government bodies, establish close links with the economy?". Many of these rules are not tailored to a public service which integrates well with the economy.

The solution that we recommend is to allow universities, and their leaders, to create an "industrial and commercial sector", which in France would operate under private law.

This issue is a genuine cause for concern, and must be given serious thought in operational as well as strategic terms. What should we do to establish stronger institutional links between the needs of businesses, the needs of the economy and higher education institutions? A real revolution seems to be under way and we must keep track of how the governing bodies of higher education institutions can respond to this challenge.

INTERNATIONALISATION

Another problem that we must address, even though it may seem more mundane, is internationalisation. Here too we need to emphasise operational mechanisms. As we all know, universities must develop ties at both local/regional and international levels. But what does the internationalisation of a higher education institution actually mean today?

First of all, it means increasing student mobility by making it possible for students to begin their courses in one country and then transfer to a university in another. But this can only be done if there are agreements between institutions. Institutional leaders must put on their walking boots, and go and negotiate with other foreign institutions in order to facilitate student mobility.

It also means that thought must be given to teacher mobility, and in particular within the French system in which teachers are employees of the state. They are required to carry out their teaching duties in their own university; any work at a foreign university is additional to that. We must consider how institutional managers can cater for teachers or researchers operating away from the university to which they are appointed. Otherwise internationalisation will have no real effect.

In France, we are particularly concerned because university teachers are not just employees of the state, but appointed to given universities. The inter-university exchanges known in our jargon as "exchanges of teaching services" are therefore exceptional, and extremely difficult to implement. Without appropriate mechanisms to facilitate teacher mobility, internationalisation will not happen. Institutional leaders have responsibilities here, and must show the way by seeking to promote teacher mobility in Europe.

EXCHANGE OF KNOWLEDGE

The third aspect, which perhaps operates best today thanks to new technologies and scientific progress, is the exchange of knowledge. This does work well, but it remains confined to researchers. The leadership of universities must make efforts to promote the exchange of knowledge within their institutions. In France, the difficulties are due to the fact that information is very poorly disseminated within universities. There is a core of well informed individuals, such as researchers who travel abroad, but little information filters through to the institution and the university community as a whole.

Our system is still opaque, not transparent. Once again, how can institutional leaders ensure that scientific results or the findings of international conferences are rapidly disseminated inside their institutions? What can be done to enable the entire university community to benefit from the achievements of its various members?

Today, at least in France, departments still remain highly compartmentalised. Computer specialists are not always aware of the achievements of the mathematics researchers across the corridor. In fact, some French universities suddenly discover that they have a Nobel Prize winner in their midst: people had no idea that their colleague on the floor below was eminent enough to be considered for the Prize, let alone win it.

We must overcome this enormous obstacle. But it is perhaps not up to the State to order the transmission of information. Institutions are autonomous. Private firms have already tackled internal communications, and it is well known that messages do not get through if a company is more than three-tiered. Universities quite often have as many as five levels of hierarchy, and each level acts as a barrier that impedes communication. Efforts must be made to improve communication and transparency. We need to look at the actual structure of the institution. How rigid should this structure be? How separate should one level be from another? This is particularly relevant in the case of large, multi-site organisations – those large universities, in Italy and elsewhere, with tens of thousands of students and vast numbers of teachers. This is a problem for the universities in Paris, for example, some of which are spread over as many as 17 different locations. How does leadership's

strategy filter down to these many locations? Large private corporations have addressed this issue, but higher education has yet to do so. This is why we have a highly structured and compartmentalised national system, in which individual heads of departments and laboratories pay no attention to the institution's strategy, since they pursue one of their own.

This obviously seriously compromises the international policy of an institution, for even if the President defines a specific course of action, the internal structures of the university will fail to follow. The time has come in France to give thought to how internal structures can be made more flexible. This should not be something imposed from above by the State, for here too is an area in which teachers must become used to being held accountable. In France today universities have an extremely rigid organisational structure, with many different levels, and with councils at each level, governed by rules that give priority to independent research, in which university presidents have no hierarchical power over teachers. They must convince their colleagues to go along with their policies since they cannot compel them to do so, and it will come as no surprise that this is a process to which they must devote a good deal of time.

RAPIDITY OF RESPONSE

This new challenge concerns institutions' ability to respond rapidly to international objectives, international assessment and the perception of their international standing. This will have consequences within the institution, and presidents and rectors are well aware of this fact. We must examine in depth which is the best approach to modernising universities, in the democratic and operational sense of the term, *i.e.* modernising university institutions in a way which will allow democracy to function, but will do away with a structure that imposes barrier upon barrier.

Today, to speak somewhat figuratively, a president's decisions can in many institutions be "voted down" by the various boards or councils. Of course, presidents should always use their powers of persuasion to the full, but the fact remains that in France, they can receive what amounts to a vote of no confidence on this or that decision, though they continue in office. Thus, French institutions have bodies that can block the governance process. These boards or councils are not merely bodies that make proposals, and there is a danger that, instead of being "facilitators" (*i.e.* people who contribute to the institutional plan or strategy), these administrative structures will act as "customs officers" (*i.e.* people who put up barriers and impede movement). All too often this is the only objective of the lower levels in universities: they are not concerned with the institution's strategy and think primarily in terms of their own department, and they say, "this is what we want, and we can vote down the rest".

There is no simple answer to this problem. The legislation cannot be easily changed. We should therefore promote a series of procedural changes that might help institutions to act more rapidly and collectively.

In general, if you ask French academics what they do, they will tell you that they are lawyers or mathematicians, rather than say that they lecture in a specific university. They think in terms of their field, rather than their university. The institutional role of the director or president is to build a university community in which all teachers, support staff and students will think of themselves as belonging to such and such specific university. The students and graduates of a prestigious engineering school such as P*olytechnique* are likely to describe themselves as *polytechniciens*, for they feel they belong to an institution, but the average university teacher, even if he teaches at a prestigious university, will be unlikely to do so. This may seem somewhat trivial, but it raises a fundamental problem, for institutional leaders do not seem to have succeeded in instilling a sense of common identity and purpose in many higher education institutions.

FINANCING

To conclude, we shall touch briefly on a vast problem. It is a commonplace to say that state higher education budgets have now more or less reached their limits, with a few exceptions. It is unlikely that there will be many substantial increases in the future, and institutional managers will have to take steps to augment their own resources.

There is an initial issue that you are all familiar with and that, from the French standpoint, is difficult to solve, which is the option of raising these resources through enrolment fees. You know that France is a country in which these fees are low. For the time being, there is no question of modifying this choice of domestic policy in France, where it is taken for granted that access to higher education is virtually free of charge. This is our culture, and it would be difficult to change. But in other countries universities are lucky enough to have greater resources of their own. This means that universities must then begin to think in financial, not just budgetary, terms. The budgetary issues are more or less settled, and budgetary autonomy and block appropriations are today the norm in most universities. Even France, which lagged far behind, has changed in this respect and institutions now have an autonomous budgetary policy.

However, the problem of institutions' own resources remains to be solved. And here it is clear that institutional leaders, unless they are financing or resource management specialists, must form a team and be assisted by competent staff. Universities must think in terms of a team and of how it can be recruited. It is very difficult to establish stable university management teams, at least in France, because they are linked to the president who appoints them, and they leave when the president

does. We must ask academics to give up their research for a number of years in order to assist presidents with implementing policies. French administrative problems are such that today it is very difficult for example for an outstanding budget manager to become the head of a university. In general, we have administrators who tend to manage their universities along overly conventional and traditional lines.

THE PRESIDENT'S TEAM

This leads us to another problem, the president's team. Will presidents or rectors be able to constitute their team as they see fit, not only with key university figures or academics, but also with senior government administrators? This is an impossibility in France today, and a president could not appoint an administrator from the Auditor General's office or from a regional government accounting office to solve problems, find resources, etc. The post of secretary-general of the president's office must be held by specific category of civil servant.

For presidents to have a free hand in building their teams, a rather different set of administrative rules seems to be required. When institutions are completely autonomous, they pay their own staff, which is a good thing, and this is the case in a number of countries. However, when they are bound by the rules of the civil service, which are relatively rigid, they do not have sufficient freedom. These rules make it difficult to establish overall institutional management by a closely knit team.

The topic that you have chosen has not yet been studied in depth. We are reluctant to talk about institutional leaders because we always seem to consider that there is no problem, when in fact there is a very real one. There are a number of contradictions that seem inherent in the position of institutional leader in the higher education system of developed countries today and that are relevant to this discussion of governance. We must be prepared to take a hard look at these contradictions if we wish to solve this problem and make progress towards establishing a system that is not only more effective, but also more democratic.

Towards "the Learning Organisation": Implications for Institutional Governance and Leadership

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ABSTRACT

In order to meet the challenges of the future, higher education institutions in many countries are expected to improve their own capacity for expansion and renewal. "The Learning Organisation" as a self-regulating organisation with strong leaders and engaged staff members is often launched as the ideal model of institutional governance and also adopted by many national agencies and international evaluation bodies as a norm against which the institutions and their quality work are evaluated.

The purpose of the article is to discuss the possibilities and constraints for higher education institutions to develop such a model of institutional governance.

Experiences from two higher education institutions (one large university and one specialised institution) are used in a comparative study.

Our comparison indicates that size (number of students), complexity (in commissions, activities, and categories of students and staff, stakeholders and funders) and earlier organisational models are important factors for understanding an institution's readiness, willingness, and possibilities to strengthen its institutional governance and to move towards a learning organisation.

In our opinion, there is a need for comparative empirical research into institutional governance. Both national and institutional, structural and contextual preconditions must be taken into account in order to get at better understanding of what might be the most appropriate model of institutional governance.

Key words: learning organisation, institutional governance, leadership, quality work.

PURPOSE OF THE ARTICLE

There is an international trend towards greater degrees of self-regulation in higher education institutions. The space of action is widening, a substantial amount of institutional autonomy is granted by the state and increased self-governance on the part of the institutions is expected. The underlying reason is obvious: higher education institutions must be sensitive to challenges for expansion and renewal and they must improve their capacity for change.

In this article we use our own experiences from two higher education institutions: Göteborg University, Sweden (Askling, 1997, 1998; Bauer *et al.*, 1999), and Copenhagen Business School, Denmark (Kristensen, 1996, 1997). The two institutions are compared with regard to strategies and measures concerning institutional governance, leadership and quality work. We also examine preconditions and constraints for the institutions to meet the expectations on strong institutional governance.

Our institutions are exposed to almost the same kind of expectations about changes towards more efficient management and leadership and, in particular, more efficient quality work. Such expectations, often launched in terms of "the learning organisation" are also codified in the criteria used by national and international audit teams when the governance and quality work of the institutions are evaluated. At the same time, our two institutions differ with regard to the range of their educational objectives, size, internal organisation, and composition of faculty – and in their responses to the expectations. Göteborg University (GU) is a comprehensive multi-faculty university and Copenhagen Business School (CBS) is a specialised higher education institution. They have both taken part in international and national evaluations and audits of their quality.

Our purpose is to contribute to the on-going discussion on how higher education institutions design their internal organisation and management and leadership in order to maximise their own capacity for meeting internal and external demands on efficiency and quality in all their activities. Inspired by, among others, Kogan (1996) and Teichler (1996), we want to use our own experiences and opportunities to get easy access to data for comparing and contrasting our institutions. On a more theoretical level, we intend to scrutinise common assumptions about "the learning organisation" and "leadership".

Our examination and comparison of the two institutions can, of course, not assess to what extent they are successful in meeting the demands of their many stakeholders (internal as well as external) on quality in their academic activities.

CAPACITY FOR CHANGE AND QUESTS FOR NEW MODELS OF INSTITUTIONAL GOVERNANCE

Most higher education systems are moving toward further differentiation and variation with regard to types of institutions, categories of students, kinds of programmes and courses, *i.e.* academic activities. This trend also reflects an increasing variation in purposes, goals and objectives and consequently also in expectations from external funders and stakeholders. The systems are also expected to produce more for less money.

The institutions have to meet these new challenges by using their own flexibility and creativity. They have to be proactive rather than simply reactive. They have to replace former, and nowadays withdrawn, state regulations with their own sets of regulations. They have to generate strategic plans and design their own institutional leadership and management.

This trend has paved the way for new models of institutional governance and organisation. Such concepts as the "entrepreneurial university" and the "innovative university" have been launched (Clark, 1998). Although the models differ in character (and theoretical underpinning) they have in common that they appeal to the capacity of the institutions to regulate themselves which, among other things, implies re-allocation of institutional, collegial and individual autonomy.

Evidently, there is a duality in the self-regulative model of governance between strong executive leadership and a collective consciousness. In almost all higher education institutions today there are mixtures of collegial, academic-based decision-making, and bureaucratic/hierarchical working (Kogan and Hanney, 1999). The widened space of action calls for a more pronounced institutional leadership, but a more pronounced leadership implies a reduction of the collective and individual academic autonomy. In his optimistic conclusion of the study of innovative universities, Clark emphasises the necessary recreation of the academic community:

> "Self-defining, self-regulating universities have much to offer. Not the least their capacity in different circumstances to recreate an academic community. Towards such universities, the entrepreneurial response leads the way." (Clark, 1998, p. 148.)

In spite of the frequent use of such concepts as "self-regulation" and some development of its implications, it is still rather unspecified what is required from a self-regulative higher education institution with regard to how its own governance is executed (Bauer *et al.*, 1999). A key issue in the transformation towards self-regulative governance is apparently by whom the "self" in self-regulation is defined, who is challenged by this reference and in what kind of institutional setting the "self" is located (Askling *et al.*, 1999).

In order to draw attention to the interactive transactions between a higher education institution and its environment, El-Khawas uses the concept "the university as a broker" when she brings to the fore the importance of making strategic choices.

> "How does the university selectively interpret a confusing array of external forces, some quite proximate, others distant?" (El-Khawas, 1999*a*, p. 6.)

The concern for quality is a central constituent in many steering strategies, both at the national level and within the individual institutions. The concern for quality includes issues of purpose and missions of higher education as well as issues of authority and autonomy (Barnett, 1992; Kogan and Hanney, 1999; Harvey and Green, 1993; Scott, 1995, 1997). The institutions' approaches to the quality issue and what measures they take reflect crucial aspects of the management strategies of the institutions (Harvey, 1997; Harvey and Knight, 1996). The management of the quality issues is of prime importance, if the institutions are to increase their capacity to act of their own free will. How to find a balance between enhancement and assurance and between development and control has been a delicate question both on national and institutional levels (Trow, 1995).

INSTITUTIONAL MANAGEMENT AND LEADERSHIP

Much concern has been devoted to the issue of leadership in higher education. The important difference between management (for creating order) and leadership (for producing change) has been pointed out (Ramsden, 1998). Ramsden uses "leadership" as shorthand for "leadership and management" when he argues that "leaders" are also "managers" and strong leadership without strong management is a failure. He also make a distinction between three levels of academic leadership: personal leadership development, leadership for academic work and leadership in the university as a help for understanding the close links between individual learning, organisational climate and leadership effectiveness (Ramsden, 1998). Kotter helps us to go beyond the clumsy notion that leadership is a difficult and noble art while management is a simplistic, unnecessary and bureaucratic process that damages academic endeavour when he argues that management is about "doing things right", while leadership is about strategic movement and change (Kotter, 1990).

Middlehurst provides some good thoughts about the relationship between leadership and organisational characteristics (Middlehurst, 1995) when she examines the array of external influences on leadership and relates them to organisational characteristics of the institutions. She identifies different organisational types of universities:

- Universities as communities of professionals.
- Universities as political bureaucracies.
- Systems perspectives of universities: cybernetic, electronic.

Table 1. **Type of organisation and type of leadership**

Type of organisation	Type of leadership
Universities as communities of professionals	Servant of the group or representative of the group's aspirations Transactional in nature Cultural expectations The leader as the provider
Universities as political bureaucracies	Controller of information and resources Diplomacy, persuasion, establishment of networks
Systems perspectives: cybernetic, electronic	Self-correcting organisational infrastructure Monitoring performance against priorities so that negative feed back is acted upon Steerage and guidance

Source: Based on Middlehurst 1955 (p. 80-82)

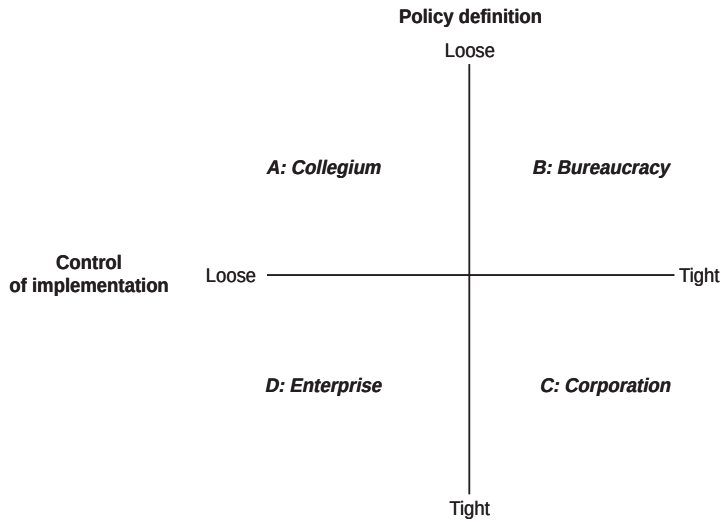
Middlehurst then presents different kinds of expectations on leadership styles that are congruent with the organisational typology (although she points out that such images of leadership and organisational characteristics rarely exist as pure models) (see Table 1).

McNay has provided another example of how type of organisational culture has to be considered in relation to type of institutional leadership (1995) (see Figure 1). He focuses on the tension between collegiality and environmental pressures for strong institutional management and identifies four different types of university organisational culture by estimating the degree of "tightness" or "looseness" on two dimensions: policy definition (*e.g.* mission) and control over implementation (*e.g.* institutional governance).

European universities have historically lacked institutional-level capacity for strategic choice making because of the decisive role of state ministers of education in programme approval and resource allocation (Dill, 1996, p. 36). Dill and Sporn (1995) argue that the strong leadership has to be counterbalanced by measures taken by the leaders towards a more network oriented model of institutional governance, aiming at encouraging the academic staff members to mobilise their own capacity for the best of the whole institution. Increased competition and uncertainty will require greater horizontal and vertical participation in decision-making, and more reciprocal, down-up, forms of communication and information sharing.

Dill uses three essential concepts of organisational design in his analysis of academic planning and organisation at a few American universities: differentiation, integration and contingency (Dill, 1996). In the expansion period in the 1960s, the academic structure was characterised by high differentiation and low integration. What is needed today is, according to Dill, much greater integration and collaboration

Figure 1. **Four models of university as an organisation**



Source: From NcNay, 1995, p. 106.

among different units. Differentiation will have to be matched by mechanisms promoting integration. Essential norms must both be articulated verbally *and* manifested visibly in the design of a planning process (Dill, 1996, p. 41).

After having examined recent trends of institutional reforms in Europe, Sporn summarises the development towards more adaptive and responsive universities in the following way:

> "The ideal academic organisation operates according to a change-oriented mission with collegial governance structures providing faculty support for adaptation. A professional management and entrepreneurial spirit assist the integration of activities and create adaptive structures. Visionary leaders like presidents, chancellors, or rectors display a consistent commitment to change, spreading it over the campus. Finally, through an incremental change process, adaptive responses are implemented." (Sporn, 1999, p. 23-33.)

Thus, one of the central problems of institutional leadership and management is the ambiguity between, on the one hand, the tendency towards centralism in order to cope with dynamic and demanding environments, and, on the other hand, the need for decentralisation and a respect paid to academic ideals of autonomy which are collegiate in nature.

THE "LEARNING ORGANISATION" AS A NORM OF INSTITUTIONAL GOVERNANCE

In the search for new models of institutional governance, such attributes as cybernetic perspective, feedback processes, transparency, collective consciousness, and common goals have frequently been emphasised and also brought together as characteristics of a "learning organisation" (Kells, 1992, 1993).

According to Senge in *The Fifth Discipline* "learning organisations" are organisations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together. Learning organisations can be built, when we give up the illusion that the world is created of separate and unrelated forces (Senge, 1990). In Senge's view of the learning organisation, the view of leadership as a phenomenon distributed through an organisation, rather than being concentrated among an executive group, is important. Two other axioms in the concept of the learning organisation are also crucial for academic leadership: the notion that organisational and individual learning are linked; and the premise that leadership in learning organisations focuses on building shared visions, challenging existing assumptions, and linking intrinsic goals such as setting one's own standards of quality with extrinsic ones such as finding new student markets (Ramsden, 1998; Senge, 1990).

Also in international and national evaluations quality work and capacity for adaptation and change, the conceptualisation of "the learning organisation" is evident and also often adopted as guiding principles for the audit teams.

By looking into "best practice" in the strategic management of quality, CRE (the Association of European Universities) institutional quality audits stimulate an institutional debate on what kinds of norms and experiences that have been implemented in the government of the institution. CRE has outlined the following requirements for a learning organisation:

- Experimenting and risk taking.
- Monitoring and evaluation.
- Openness, curiosity and willingness to admit mistakes.
- Built-in problem solving mechanisms.
- Absence of complacency.
- Internal and external benchmarking activities (CRE, 1996).

CRE invites member institutions to report and explain their internal quality management processes. CRE then responds by pointing to those norms and experiences that – as a result of international professional practice – are becoming standards for "good quality management" in European higher education. In this way, the CRE audits stimulate a benchmarking approach to institutional quality manage-

ment (CRE, 1995). By focusing on how strategic choices are made in practice, the audits confront the institutions with their more or less explicit operative processes of strategic management. The audits help the institutions to focus on their own strategic, future-oriented issues, as well as on the processes and organisational structures related to these choices. The audits offer support in helping the institutions to express their own identity.

The Swedish National Agency for Higher Education has expressed the expectation of institutions to take full responsibility for their quality work in the following way:

> "The approaches and methods applied by the National Agency are intended to further the commitment of Swedish academic institutions to self-regulation and improvement in their operations, starting from the goals set for these operations. Our aim is to strengthen the individual institution's own ability to *i*) formulate goals and choose strategies for its operations, and *ii*) make these goals and strategies manifest, evident, and openly communicable within the institution itself, as well as in its relations to the government and other interested authorities, organisations and bodies." (Högskoleverket, 1996, p. 13.)

In the instruction to the audit teams, the Agency also reflects influences from the "learning organisation". A point of departure is taken in notions of "excellence in the higher education institution" which are as characterised in its operations by:

– Self-regulation and learning.

– Long-range planning.

– An international perspective.

– Incisive leadership.

– Co-operation with external interested parties.

– Equality.

– Focus on the student (Högskoleverket, 1996, p. 14).

Such guidelines might, in themselves, contribute to the establishment of a norm. Referring to an evaluation of the Swedish model of quality assurance, Nilsson and Wahlén (1999) argue that:

> "… both the guidelines and the majority of the audit teams in their reports seem to be contributing to the establishment of a norm. The implicit norm involves two major features: emphasis on leadership and on goal-related strategies. And the interpretation of the norm (both by most institutions and audit teams) focuses on the role of the rector and his/her task of managing quality activities." (Nilsson and Wahlén, 1999, p. 13.)

OUR COMPARATIVE STUDY

Design and variables

A key question, and in our opinion not paid enough attention to, is how the higher education institutions respond to such signals from governments and intermediary bodies on strong institutional leadership and a more transparent and flexible internal organisation and how they turn these signals into practice within their own institutions.

With a reference to Clark's classical triangle of forces (the state, the market and the academic community), we assume that within each country's national framework, the internal power structure of each institution forms a unique pattern depending on the institution's internal and external "environment" of forces (Clark, 1983; El-Khawas, 1999*a*).

From the assumption that every higher education institution is a unique organisation with its own history and its own structural and contextual conditions also follows, in our opinion, that structural and organisational characteristics, such as student numbers, number of programmes and courses, number of decision-making bodies, as well as patterns of executive leadership and organisation of quality work, must be taken into account in an examination of institutional governance.

In our comparison, we rely on official presentations of our institutions, mission statements, annual reports, self evaluations and audits reports and final reports from the earlier mentioned CRE audits representing our national intermediary bodies and, of course, our own experiences.

The following topics are treated in our comparison:

- The national contexts.
- Structure and basic data.
- Funding.
- Internal organisation and devolution of authority.
- Mission statements.
- Quality work and leadership development.
- External monitoring and evaluations of quality work.

The national contexts

In Denmark, in 1992, the Conservative-Liberal minority government and parliament arrived at a number of compromises on higher education which constituted a reform of the entire education system. The stated objectives of the reform were to ensure a higher degree of institutional autonomy combined with a tightening of each institution's management structure, to secure an undisturbed working environment

through political compromises reaching several years into the future, to find a better balance between supply of, and demand for, study places and to improve the quality of the programmes offered to the highest international standards.

Accordingly, the principles of the reform stressed institutional freedom and autonomy. The intention was to formulate the main objectives for, and framework of, the higher education sector and to give higher education institutions the autonomy for internal development within this framework. Self-regulating mechanism, devolved responsibility and adaptation to market conditions were key issues. Consequently, the objectives of the reform as set out by the government, were deregulation and decentralisation, combined with mechanisms to ensure quality.

Key elements in the new University Act were a massive transfer of authority from the Ministry of Education to the universities, preservations of the institutional democracy, fewer members of the governing bodies and two external representatives in the senate and the faculty councils.

An important message in the reform was that the changes caused by the reform and the increasing number of students must not have a negative effect on the quality of programmes. Therefore, the Ministry of Education established general regulations for quality control and introduced external quality monitoring activities. The establishment of the Danish Centre for Quality Assurance and Evaluation of Higher Education in July 1992 was the most significant of the activities. The others, the reorganisation of the Danish system of external examiners and the introduction of external stakeholders in governing bodies, were meant to have a noticeable impact on the internal quality monitoring at Danish universities.

In Sweden, the higher education reform in 1993 implied a radical shift in governance by devolving authority for decision-making and action from the state to the institutions. The institutions were given increased autonomy in the organisation of studies, use of resources, their own internal organisation and for their quality work. Strong leadership at all levels within the organisation was emphasised by the government. A more management-like style of institutional governance was, at least partly, to replace the traditional collegial model of leadership (peer level decision-making according to a *primus-inter-pares* model of leadership).

> "The new situation gives the leaders of various levels a changed role, which is difficult to integrate with the other pronounced principle of leadership at universities and colleges, namely the traditional, collegial model of decision-making." (Gov. Prop. 1993/94:177, p. 38.)

The higher education reform also intended to strengthen both quality and efficiency in the operation of Swedish universities and colleges. A Secretariat of Assessment and Evaluations was established, later renamed the University Chancellor's Office, and in 1995 integrated into the National Agency for Higher Education. From the assumption that quality is a dynamic concept, these successive

intermediary bodies have taken a supportive role and declared their commitment to a soft approach to their evaluative tasks. The intention has been to strengthen the individual institutions own ability to formulate goals and choose strategies for its operations (Askling, 1998; Askling and Bauer, 1997). In particular this supportive role was evident in the evaluation of the institutions' quality work. In a recent review of the Agency's audits, Stensaker found that the audit teams adopted this approach and defined a professional institution as one which has good relations to society and has an well-organised administration and leadership (Stensaker, 1999).

When comparing the national contexts we find the following similarities:

– Increased institutional freedom and autonomy.
– Radical shift in governance and leadership.
– Allocation of state funding to institutions.
– Establishment of procedures for quality improvement.
– Participation of external stakeholders in governing bodies.

And the following differences:

– Greater participation of external stakeholders in the highest governing body in Sweden than in Denmark.
– A different role of the established national agency for evaluation in the two countries (a softer role in Sweden and a more accountability-oriented role in Denmark).
– No system of external examiners in Sweden.

Copenhagen Business School (CBS)

CBS was established in 1917 by the Danish Society for the Advancement of Business Education (FUHU) as a privately financed institution. In 1965, CBS was integrated into the national system of higher education as a specialised university. A unique feature of CBS as a business school is that it comprises two faculties – the Faculty of Economics and Business Administration and the Faculty of Modern Languages, the latter with its own degree programmes within languages for special purposes (LSP), *e.g.* professional and authorised translators and interpreters. The co-operation between these two faculties produces important synergy effects both in research and teaching.

Table 2 gives some basic data of CBS concerning number of students, staff and internal organisation. In 1998 about 15% of the total income came from so-called external sources (national and international research councils, regional and local authorities, private companies and tuition fees from Open University).

The financial situation of CBS is continuously strained and therefore a more diversified income structure is needed. The activities launched by CBS in 1997 to

Table 2. **Basic data of Copenhagen Business School (CBS) and Göteborg University (GU)**

Basic facts	CBS	GU
Students	13 700	36 000
(full-time equivalents)	(10 500)	(23 258)
Staff members		
Permanently	772	4 700
(full-time equivalent)	(772)	(2 430)
Academic staff	357	2 500
Full professors	37	255
Part-time	1 045	No equivalent
Organisation		
Faculties	2	9
Departments	17	70

Sources: Annual reports of CBS and GU covering 1998.

raise funds from companies and private bodies are part of this strategy. The fund raising office is located in the Office of the President and refers directly to him. The objective defined for the fund raising project is to provide the financial resources that are required in order to give CBS a top rank in the international league tables.

At CBS, the highest governing body, chaired by the president, is the Senate, with two external representatives (from the business community and appointed by the relevant Research Councils and the relevant National Educational Advisory Boards) and members elected among the academic and administrative staff and the students.

After 1993, CBS began to exhibit a greater systematic capacity to steer itself. Crucial for this development has been the role of the president himself in defining strategic issues for the institutional agenda. The role of the executive management group, composed of the presidency, the deans, the director of the central administration and the director of library services, has also been important. At faculty level, the two middle management groups, the heads of department and the directors of study boards support the deans. Thus, the evolving steering capability at CBS is neither centralised nor decentralised.

Since 1993, CBS has set goals, defined success criteria and outlined performance requirements for all major areas. Methods have been developed and applied for ongoing evaluation of research, teaching and administration, and key focus areas have been identified. In 1998, CBS published a "Strategic Update" in which CBS explains its targets and goals and how it will attain them.

The mission statement is formulated in the following way:

"CBS wants to be among the best institutions of higher education in Europe, thus meeting the goal of being a major contributor to value creation in busi-

ness and society, training graduates who are competitive in the international job market and developing new research-based knowledge in partnership with companies and other organisations." (CBS, 1998, Strategic Update '98.)

This mission statement for the institution as a whole builds upon mission statements and strategic goals of the various faculties. According to the "Strategic Update '98", in the years ahead CBS will focus on the following three overarching strategic perspectives when driving its core activities in order to prepare itself for global competition:

– An international profile based on a regional foundation.

– An expanded partnership with the business community.

– Becoming a "learning university".

The concept of the "learning university" originates from the combination of the classic notion of the university as a forum for learning and knowledge and the modern concept of the learning organisation. The concept was used for the first time in the CBS self evaluation report in 1995 for the CRE Audit.

Quality improvement, quality assurance, management for quality and staff development have since 1994 been embedded in the overall strategy for CBS. CBS has adopted the stakeholder-related definition of the concept of "quality" as defined by Harvey and Green (1993). Since 1994, when CBS started to co-operate with Lee Harvey, Director of the Centre for Research into Quality, at the University of Central England in Birmingham, CBS has launched projects within all four categories. In the same year, a teaching and learning advisory unit and an evaluation unit, were established.

The study boards are responsible for the quality of the programmes and courses while the heads of departments are responsible for the quality of research. In their annual reports to the deans, the study board directors at CBS must describe level and results of their quality improvement initiatives, which were taken by the study boards in the previous year. The heads must do the same with regard to research. Basing themselves on this information, the deans report to the Senate about the situation at faculty level. Once a year the vice-president with the overall responsibility for the quality development at CBS and with strong back up from the top management group, gives a picture of the quality development at CBS as a whole that year.

In 1994, CBS requested a CRE-Audit aiming at, among other things, a strengthening of the strategic process at CBS and an appropriate coupling of quality activities to the strategic process. The audit took place in 1996, and two years later, CBS invited the auditors for a follow-up visit. The follow-up audit took place in May, 1998.

The auditor's report appeared to be very useful for CBS because it provides an external view of the issues raised in the self-assessment. According to the auditors, CBS is in good shape, but still has some important strategic issues to address. The auditors felt confident, that the prevailing institutional culture and approaches to

problem solving (encompassed in the concept of the "learning organisation") equip CBS particularly well to respond to these challenges.

> "… CBS comes through as an institution certainly not short of ideas, but not as systematic as it might be in evaluating the potential, feasibility and realism of new developments, and ordering and phasing priorities. This is not unrelated to the cultural transition, which is taking place, and especially the move into a more entrepreneurial mode away from a rather traditional collegial mode." (CRE, 1996.)

There is no doubt that the audit in 1996 and the follow-up visit in 1998 have contributed significantly to thinking, dialogue, and genuine organisational evolution at CBS. The process effectively demonstrates how external stimuli can be directed at internal concerns when there is a consensus for undertaking an external study and setting an agenda for dealing with specific strategic problems.

Göteborg University (GU)

GU got its current structure in 1977, when a number of postsecondary institutions were brought into the new higher education system and incorporated into the Göteborg University. The former private School of Business had already been brought into the university in 1971. At that time, the university was in itself an amalgamation, since 1954, of the former City College of Göteborg (established at the end of the last century and a local alternative to the traditional and "academic" universities in Uppsala and Lund) and the much younger School of Medicine. In 1977, when all these former independent constituencies were united, they were kept together by the strong state regulation of that time. However, the geographical localities of the new parts in different parts of the city were not changed.

Table 2 gives some basic data of Göteborg. In 1998, about 30% of the total income came from so-called external sources (national and international research councils, regional and local authorities, private companies). The variation in such additional funding between faculties and department is substantial.

At GU, the first spontaneous reaction to the further decentralisation in 1993 was that the devolving of authority to the institution was to be followed by a similar decentralisation within the institution to the faculty boards and then further down in the organisation to the department and to the academics. Such a vertical devolution of authority would allow for an allocation of power on academic issues to the academics themselves. As a consequence, the faculty boards (some of them former boards of independent professional schools) established their own offices.

In 1993, in order to release the Vice Chancellor from an overload of duties, a few committees (so-called delegations), with an inter-faculty representation, were established for particular issues. However, in 1995 the deans objected to this additional overstructure and the committees were abandoned. Today, the Vice Chancellor and the two Pro-vice Chancellors (deputy) together with the University Director form the executive

leadership group at the university. In 1999, the Vice Chancellor also appointed five Vice Rectors and a few senior advisors with responsibilities for particular areas and issues (quality being one of them). In the university board, external representatives are in majority, and since 1999, the board is chaired by one of these representatives.

At GU, and as a response to a pilot version of the CRE evaluation in 1995 (see below), the former Vice Chancellor initiated a discussion about the future of GU, its purposes, goals and objectives. He invited everyone at the university to express his or her view on the future of the university (Bauer, 1995). The contributions from staff members and students in the following dialogue between the Vice Chancellor formed the starting point for preparing mission statements in terms of a vision for GU in the years to come. In the mission statements, taken by the University Board in 1997, the future of the university was outlined as "a University for People", "the University of Learning" and "an University of Openness".

The basic values, presented in the introductory paragraphs of the vision provides the starting points for creating

> "… the university of learning, where the formation of knowledge comes out of the energy of its activities, holds together the various parts. The university should develop new insights, new knowledge, the values of which is measured in what value it has for humanity, for all people. The university should develop the students' capability to handle new situations, new questions, and new issues which arise during the different stages of their professional life; it should develop their capability to learn, to be able to see others' perspectives and to give birth to their own ideas." (Göteborg University, 1997, p. 7.)

GU was early in establishing a quality unit and a quality programme. Focus was on the quality in teaching and student learning. Between 1993 and 1996 the government supported each higher education institution to develop its own quality work by a special grant. GU used the main part of this grant for encouraging teachers who wanted to improve their own teaching. Annually, teachers were invited to apply for internal project grants. The quality unit also arranged internal conferences for the presentation of on-going projects and results. The overriding purpose was to support the development of a common understanding of student learning and to develop a common consciousness on these issues (Bowden and Marton, 1998).

In 1995, a quality assurance system was prepared and taken by the university board. The system encompasses both evaluative and enhancing activities. The responsibility at each level for preparing its own assurance system was defined. As a necessary consequence of, and a prerequisite for, the internal devolution of authority, an interfaculty leadership training course for heads of departments, directors of study and other local managers has been accomplished. The aim of the course is to help the participants to construct a new social identity as leaders (Norbäck, Nordberg and Olsson, 1999).

John Bowden, from Australia, undertook an external evaluation of the work of the quality unit in 1995. Bowden argued that "the historical roots of Göteborg University make it a relatively fragile association of independently-minded constituent parts" (Bowden, 1995, p. 3). He noted the strong objections from the deans to an inter-faculty body like the quality committee and he questioned the extensive delegation of responsibilities. "The university does have responsibilities for quality which it cannot completely devolve to the Faculties" (Bowden, 1995, p. 5). Bowden also noticed the lack of close connection between the quality delegation and the university board.

As was mentioned earlier, GU participated in a pilot study of CRE institutional evaluation in 1994/95. CRE found the faculty boards and their offices were real centres of power and that the university was a gathering of independent teaching and research units, each with its own culture and development. In its summary, the CRE audit stated that the university lacked the institutional authority to define its academic profile. It also lacked a common quality culture. The formalised institutional structure for quality improvement was insufficient (CRE, 1995).

The vision (the mission statement) was prepared as a direct response to the CRE-evaluation. In 1998, when the National Agency's team audited GU and its quality work, the team found that all faculties were doubtful about the value of the vision. Most of the faculties agreed with the general ideas expressed in it, but maintained that interpretation, implementation and operationalisation must be the tasks of the faculties.

The audit of the National Agency also noted that the quality assurance system was implemented differently in the faculties. What GU lacks, according to the audit, is the efficient linkage of assessment and evaluative data from one level to another in the system. The delegation downward in the organisation was not followed by a strengthening of the feed back mechanisms. The audit team also echoed earlier standpoints when it recommended a re-establishing of a committee (or council) for quality assurance with representatives of faculties and students, with the task of co-ordinating, monitoring and providing information about quality improvement activities at central institutional level. In his conclusion of the audit report, the University Chancellor made a comment on the leadership at the university. The strong delegation of responsibilities and decision-making can work only if the central administration is efficient.

CBS AND GU AS LEARNING ORGANISATIONS POSSIBILITIES AND CONSTRAINTS

Institutional identity

Looking at GU and CBS, it is evident that the two institutions have very different starting points. GU is a merger of very heterogeneous and formerly independent institutions into one university. CBS is much more homogenous and much smaller.

CBS is a university specialising in economics and business administration and languages for special purposes. As already mentioned, CBS is different from most of the business schools in Europe, which either belong to a multi-faculty university (like GU) or are one-faculty institutions. Being a specialised university naturally gives it a much clearer identity.

At GU, each part of what later became GU formed its own identity in the 1960s when they were expected to expand and when the state was a generous but strict provider of necessary resources. The process exemplifies what Dill labels "growth and differentiation" (Dill, 1996, p. 39). The majority of these former independent schools were also, in Scott's terminology, typical national institutions (Scott, 1998). Their ties to the international academic community and to the local and regional private business sector were weak. The devolution of authority in 1993 released strong centrifugal forces at GU. In a quite different economic and organisational climate, each part was now expected to have merged into a large organisation. The former differentiation was now to be counterbalanced by, on the one hand, a radical devolution of authority, and, on the other hand, expectation of strong institutional leadership. However, each part's unique constellation of internal and external forces called for a unique series of manoeuvres and actions. With reference to El-Khawas, we can say that each dean became a powerful "broker", operating with a substantial amount of newly gained authority on his own markets.

Type of organisation and leadership

CBS has defined itself as a "learning organisation". At all levels the leaders are encouraged to lead through dialogue and communication in order to help the staff members s to expand their competence, improve their performance, and maximise their potential. Competence development therefore plays a crucial role at CBS.

At GU and with reference to Middlehurst's taxonomy, presented in Table 1, the former independent parts also represent different kinds of organisations (Middlehurst, 1995). The Faculties of Humanities and Social Sciences, which both have their roots in the former City College, and the Faculty of Medicine, are examples of a "university as a community of professionals", while the majority of the former non-university institutions which were integrated in the late 1970s are examples of "universities as political bureaucracies". Thus, each part of the university has its own unique expectations of, and also need for, type of leadership.

Measures towards institutional integration and differentiation

At CBS, as a learning organisation, integration and differentiation are not incompatible. On the contrary, the enhancement of the competence and potential (the professionalism) of the individual strengthens the organisation as a whole.

Academic leadership is multi-level in its operation. Organisational development and individual development become different aspects of the same picture.

GU has been successful in its attempts to follow a bottom up strategy for its quality work and leadership programme. The participants appreciate that their activities, their responsibilities, and their professional roles have been paid attention to. They have been invited to reflect on their own practice and to meet colleagues with the same kind of interest in improving their own instruction. The quality work and the leadership programme are measures that aim at empowering the individual staff member and improving a common framework of values and norms.

The quality work and the leadership development programme reflect a trust in personal professional development (to become a better university teacher and to become a better academic leader) but do not represent deliberate attempts to improve the executive institutional governance. With regard to their purposes of strengthening the individual professionalism (leadership training, courses for teachers, nomination of prizes, applying for grants), such quality measures can be looked upon as measures to promote further differentiation rather than integration. On the other hand, they also aim at creating collective values, and can from such a point of view be considered as measures towards integration. The preparation of the vision is a measure (although soft in character) which aims at integration. The last ten years' efforts to concentrate the localisation of the departments to the centre of the city have obviously resulted in a cultural and geographical integration (Rasmussen, 1999).

Referring to Ramsden's three levels of academic leadership (see section on Institutional management and leadership), one can say that CBS in its strategic development work deliberately tries to develop all three levels, while GU focuses on the first level (the personal leadership development) and on a more symbolic leadership from the top level.

The location of the "self"

In the CBS context, the "self" according to the above principle of academic leadership as multi-level in its operation and the earlier mentioned concept of "centralised decentralisation" is placed at all levels in the organisation.

At GU, there is no doubt that "self" of the institution is concentrated at the faculty board level, more precisely among the deans. Thus, the parts have got substantial autonomy relative to the university as a whole. On the other hand, the attempts to concentrate the localisation of departments to the centre (a tricky and expensive task in times of rapid expansion) have apparently contributed to a sense of "belonging" to the university.

The impact of audits

At CBS, the CRE-audit and the two-year later follow-up visit contributed significantly to dialogue and genuine organisational evolution. The result of this process is manifest in the "Strategic Update '98" (CBS, 1998). According to the Danish Evaluation Centre, the continuous quality improvement and the creation of a quality culture have put CBS in the lead in several areas.

The CRE-Audit in 1996 found that the use of an external consultant on an ongoing basis, and the establishment of four working groups on key aspects of quality improvement were promising, and CBS was encouraged to continue this process with vigour. On the other hand the audit team emphasised the establishment of a central Quality strategy group, although they found that it was not incompatible with the devolved nature of CBS not to have such a central group. CBS has not followed this recommendation. Instead, CBS listened to the advice of its consultant, Lee Harvey, who suggested that the Executive Management group is de facto the home of the quality strategy. Harvey argued that "to separate it out may run the risk of marginalising quality, rather than integrating quality into CBS strategy as is currently the case".

At GU, the preparation for the National Agency's audit gave the quality unit an opportunity to examine how well the quality assessment programme was implemented. Evidently, the self-evaluation report brought the federal structure of the university to the fore. However, as the audit in their report did not approach the quality of teaching and research (simply the institutional leadership and the quality work at the institutional level) the interest among academic staff members for the audit and its particular approach to quality issues (as mainly macro issues) soon faded. The audit report was not to be used for allocation of resources or anything else that might "hurt" the institution and, therefore, its impact was rather weak. At the Vice Chancellor's Office, the audit report gave rise to a reorganisation of the administration. After one year, the work is however, still going on.

A learning university and/or a university of learning

We would argue that neither CBS nor GU are today fully learning organisations. CBS expresses a deliberate will to initiate and to maintain such a process of focused strategic work at all levels. Referring to McNay's figure on changing cultures within university organisations (see section on Institutional management and leadership), we can say that the measures taken at CBS, among other issues concerning quality work, have contributed to a strengthening on both dimensions (policy definition and control of implementation). CBS leans towards "corporation culture" and "enterprise culture", while GU, as a whole, is still dominated by the "collegial culture" and "bureaucracy culture" (with some exceptions).

CBS has chosen to develop as a "learning university" with the two aspects – "forum for learning and knowledge" and "the learning organisation" – as focused areas (Strategic Update, 1998). The commitment to develop academic leadership at all levels in the institution is considered crucial for motivating staff and for setting the standards for academic culture in universities.

At GU, and following its vision, the concern for the basic activities of the university, knowledge formation in teaching, research and learning is a very essential aspect of institutional leadership and quality work. The metaphor of the "University of Learning" is emphasised as a catchword for calling attention to what all parts of the university have as their common concern. Compared to CBS this means that the learning – knowledge aspect is brought to the fore, while the organisational aspects (with its structural and system components) are less emphasised.

CONCLUSIONS

In this paper we have reported some observations from a comparative examination of two different higher education institutions which are both exposed to the "learning organisation" oriented expectations on institutional management and leadership.

What kind of measures a particular institution takes on the two dimensions in McNay's model, "policy definition" and "control of implementation" (see Figure 1) and how successful the measures will be depends, in our opinion, on the unique set of former and current internal and environmental conditions at each institution. Among the variables we used in our comparison, *size* (number of students), *complexity* (in commissions, activities, and categories of students and staff, stakeholders and funders) and *earlier organisational traditions* are important factors for understanding an institution's readiness, willingness, and possibilities to develop towards a learning organisation.

Clark (1998) has also pointed out overall scale and scope as decisive elements when an institution moves into entrepreneurial action. What is worth noting is that none of Clark's innovative universities are comprehensive, all-faculty universities. Most of them are rather young and also rather specialised.

> "Small to middle size universities – 6 000 to approximately 13 000 in our five cases – are still positioned to seek a unified character, even if they stretch from microbiology to folklore. An integrated identity has much to offer: perceivable gains outweigh apparent losses. But large universities of 20 000, 30 000, 50 000 and more, particularly when organised in large stand-alone faculties or schools – the dominant form in Europe and in much of the world – might well find that entrepreneurial habits do not spread well across their major parts." (Clark, 1998, p. 142.)

El-Khawas, in her study of 30 US institutions' descriptions of initiatives to improve teaching and learning, found that more than half of the institutions who characterised themselves as improving enrol between 4 000 and 10 000 students (El-Khawas, 1999*b*). Also Engwall *et al.* (1999) and Nilsson and Wahlén (1999) have, from Swedish experiences, observed and discussed the impact of structural characteristics on strategic institutional leadership and management.

Our study has convinced us that comparative empirical research into institutional governance has much to offer. Every institution is embedded in its own unique "environment" of national, internal and external conditions and has to find its own unique balance between influences from external and internal sources of power. Each institution has to learn about its own structural and contextual characteristics and must find its own way of translating the new state supervising model to fit the local traditions and context (Czaeniavska and Joerges, 1996).

So far, our study has raised more questions than offered answers. More in-depth and thorough observations have to be undertaken in order to get a better understanding of what is the most appropriate model of institutional governance and how appropriate is the notion of the "learning organisation" for all kinds of higher education institution. Our conclusion is that in order to find out what might be best practice of institutional governance, the rich array of experiences from institutions with varying national and institutional structural and contextual preconditions must be examined.

References

ASKLING, B. (1997),
"Quality monitoring as an institutional enterprise", *Quality in Higher Education*, Vol. 3, No. 1, pp. 17-26.

ASKLING, B. (1998),
Quality Work in Swedish Universities in a Period of Transformation, Report No. 1998, 04, Department of Education and Educational Research, Göteborg University.

ASKLING, B. and BAUER, M. (1997),
The Role, Function and Impact of a National Agency in the Evaluation of a Decentralised Higher Education System, Paper presented at the CHER conference in Alicante, Spain, 19-20 September, 1997.

ASKLING, B., BAUER, M. and MARTON, S. (1999),
"Swedish universities towards self-regulation: A new look at institutional autonomy", *Tertiary Education and Management*, Vol. 5, No. 2, pp. 175-195.

BARNETT, R. (1992),
Improving Higher Education. Total Quality Care, Open University Press, London.

BAUER, M. (ed.) (1995),
Universitetet – en framtidsresa med variationer – röster om Göteborgs universitet, Göteborgs universitet: Informationsavdelningen.

BAUER, M., ASKLING, B., GERAD MARTON, S. and MARTON, F. (1999),
Transforming Universities, Patterns of Governance, Structure and Learning in Swedish Higher Education at the Millennial Turn, Jessica Kingsley, London.

BOWDEN, J. (1995),
The Work of the Göteborg University Quality Delegation, Göteborg University, Internal report.

BOWDEN, J. and MARTON, F. (1998),
The University of Learning. Beyond Quality and Competence in Higher Education, Kogan Page, London.

CLARK, B. (1983),
The Higher Education System. Academic Organization in Cross-National Perspective, University of California Press, Berkeley.

CLARK, B. (1998),
Creating Entrepreneurial Universities, Organizational Pathways of Transformation, Pergamon, New York.

COPENHAGEN BUSINESS SCHOOL (1998),
Strategic Update '98, Copenhagen Business School, Copenhagen.

CRE (1995),
Audit of University of Göteborg, GRE, Geneva.

CRE (1996),
CRE *Auditors' Report. Institutional Audit of the Copenhagen Business School*, CRE, Geneva.

CRE (1998),
Copenhagen Business School. Follow-up visit, CRE Institutional evaluation programme, CRE, Geneva.

CZARNIAWSKA, B. and JOERGES, B. (1996),
"Travels of ideas", in B. Czarniawska and G. Sevon (eds.), *Translating Organizational Change*, de Gruyter, Berlin.

DILL, D. (1996),
"Academic planning and organizational design: lessons from leading American universities", *Higher Education Quarterly*, Vol. 50, No. 1, pp. 35-53.

DILL, D. and SPORN, B. (eds.) (1995),
Emerging Patterns of Social Demand and University Reform: Through a Glass Darkly, Pergamon, New York.

EL-KHAWAS, E. (1999*a*),
"How Institutions Respond to the Environment: Integrating Several Theoretical Views", Paper presented at the CHER-conference, 16-19 June, 1999 in Oslo, Norway.

EL-KHAWAS, E. (1999*b*),
"The Impetus for Organizational Change: Internal and External Influences on Universities", Paper presented at the EAIR Forum, August 23-25, 1999, Lund, Sweden.

ENGWALL, L., LEVAY, C. and LIDMAN, R. (1999),
"The Roles of university and college rectors", *Higher Education Management*, Vol. 11, No. 2, pp. 75-94.

Governmental Proposal 1993/94, 177, Fritzes förlag, Stockholm.

GÖTEBORG UNIVERSITY (1994),
Self Evaluation Report, Göteborg University.

GÖTEBORGS UNIVERSITET (1997),
A Vision, Göteborg University.

HARVEY, L. (1997),
"External quality monitoring in the market place", *Tertiary Education and Management*, Vol. 3, No. 1, pp. 25-35.

HARVEY, L. and GREEN, D. (1993),
"Defining quality, assessment and evaluation in higher education", *An International Journal*, Vol. 10, No. 1, pp. 8-35.

HARVEY, L. and KNIGHT, P. (1996),
Transforming Higher Education, Open University Press, London.

HÖGSKOLEVERKET (1996),
The National Quality Audit of Higher Education in Sweden, Högskoleverket rapport 1996, 10 R, Stockholm.

KELLS, H.R. (1992),
Self-Regulation in Higher Education. A Multi-National Perspective on Collaborative Systems of Quality Assurance and Control, Jessica Kingsley Publishers, London.

KELLS, H.R. (1993),
"Creating a Culture of Evaluation and Self-Regulation in Higher Education Organizations", Paper presented at the EEC Seminar on Total Quality Management, in Aarhus, Denmark, 11-12 October, 1993.

KOGAN, M. (1996),
"Comparing higher education systems", *Higher Education*, Vol. 32, No. 4, pp. 395-402.

KOGAN, M. and HANNEY, S. (1999),
Reforming Higher Education, Jessica Kingsley Publishers, London.

KOTTER, J.P. (1990),
A Force to Change: How Leadership Differs from Management, Free Press, New York.

KRISTENSEN, B. (1996),
"Increased Workload or Synergy in Evaluations and Audits – Quality Management at the Copenhagen Business School", Paper presented at the 18th Annual EAIR Forum, August 25-28, 1996, Budapest, Hungary.

KRISTENSEN, B. (1997),
"The impact of quality monitoring on institutions: a Danish experience at the Copenhagen Business School", *Quality in Higher Education*, Vol. 3, No. 1, pp. 87-94.

MIDDLEHURST, R. (1995),
"Changing leadership in universities", in T. Schuller (ed.), *The Changing University*? Open University Press, London.

MIDDLEHURST, R. (1997),
"Quality enhancement for accountability and transformation: A framework for the future", *Tertiary Education and Management*, Vol. 3, No. 1, pp. 15-4.

McNAY, I. (1995),
"From the collegial academy to corporate enterprise: the changing cultures of universities", in T. Schuller (ed.), *The Changing University*? Open University Press, London.

NILSSON, K-A and WAHLÉN, S. (1999),
"Institutional Response to the Swedish Model of Quality Assurance", Paper presented at the EAIR Forum in Lund, Sweden, August 1999.

NORBÄCK, L-E., NORDBERG, C. and OLSSON, L-E. (1998),
"National Devolution in Swedish Higher Education – A Quest for New Local Leadership. The Case of Leadership Development at Göteborg University", Paper presented at the EAIR Forum in San Sebastian, Spain, August, 1998.

RAMSDEN, P. (1998),
Learning to Lead in Higher Education, Routledge, London.

RASMUSSEN, J.G. (1999)
"Arbejdsrapport fra det fjerde casestudium", The University Governance Project, Aalborg Universitetet (internal report).

SCOTT, P. (1995),
The Meanings of Mass Higher Education, Open University Press, London.

SCOTT, P. (1997),
"The changing role of the university in the production of new knowledge", *Tertiary Education and Management*, Vol. 3, No. 1, pp. 5-14.

SCOTT, P. (1998),
"Massification, internationalization and globalization", in P. Scott (ed.), *The Globalization of Higher Education*, Open University Press, London.

SENGE, P. (1990),
The Fifth Discipline, Century Business, London.

SPORN, B. (1999),
"Towards more adaptive universities: Trends of institutional reform in Europe", *Higher Education in Europe*, Vol. XXIV, No. 1, pp. 23-33.

STENSAKER, B. (1999),
Dom, diagnose, dialog? En studie av Högskoleverkets gransknings-og bedömelserapporter 1995-1998, Högskoleverkets skriftserie 1999, 5S, Högskoleverket, Stockholm.

TEICHLER, U. (1996),
"Comparative higher education: potentials and limits", *Higher Education*, Vol. 32, No. 4, pp. 431-465.

TROW, M. (1995),
Two Essays on Quality in Higher Education, Kanslersämbetet 1995, 2, Stockholm.

The Administrative Structure and Systems of Korean Higher Education

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ABSTRACT

This article introduces the administrative structure and systems of Korean higher education and reviews the influence of traditional Korean and those ways of thinking adopted from other cultures on these structures and systems. The author firstly describes the legal foundation of the educational and administrative structure and then briefly examines its current situation. He discusses the impact of traditional and adopted ways of thinking on the administrative systems and culture in current Korean higher education. The paper concludes that the current administrative structure and systems in Korean higher education combine traditional and adopted ways of thinking, although they generally have a rigid and closed organisational structure, the heritage of traditional values.

THE LEGAL FOUNDATIONS OF EDUCATIONAL ADMINISTRATIVE STRUCTURES

The Constitution of the Republic of Korea claims to stand for the establishment of a democratic and independent state through a democratic education system. Article 16 of the Constitution, proclaimed on 17th July 1948, declares that all citizens are entitled to equal opportunities in terms of education. In addition, Article 1 of the Education Law passed on 3st December 1949 noted that the aims of Korean education were to improve a well integrated personality, to develop the abilities needed to lead an independent life, and to enhance qualities of citizenship in order to serve the development of a democratic nation.

Based on the Constitution and the Education Law, the laws underpinning Korean education stem from the democratic idea of guaranteeing equal opportunity in education. In order to put the principles of democratic education into practice, both basic laws prescribe specific systems for educational administration.

According to the Constitution and Education Law, the President of Korea has ultimate responsibility in governing the educational administration, but his authority is in practice exercised through policy-making and the appointment of executive governmental officials. The central agency of the educational administration is the Ministry of Education, which is headed by the Minister of Education, who has the responsibility for supervising the educational administration and education institutions, for formulating policies, for carrying out orders from the Ministry of Education and for drafting law bills or presidential decrees pertaining to educational personnel (KNCU, 1960, p. 118). Also, the Ministry directly or indirectly controls and supervises all higher educational institutions.

During the last half century, although the educational administrative system was frequently changed whenever a new regime, whether civil or military, gained political power, the basic structure of the educational system established by the 1948 Administration has been maintained until now, without great change. At present, the Framework Act on Education (Act No. 5437, Dec. 13, 1997) and the Higher Education Act (Act No. 5439, Dec. 13, 1997), based on the Constitution, constitute the main legal foundation for the administrative system of higher education in Korea.

CURRENT EDUCATIONAL ADMINISTRATIVE STRUCTURE AND SCHOOL SYSTEMS

Under the Dae-joong Kim Administration (1998-), the current administrative structure of the Korean education system is composed of three layers of administrative authorities: the Ministry of Education, local offices of education on the metropolitan and provincial level, and those on the county levels [Korean Overseas Information Service (KOIS), 1993; Ministry of Education (MOE), 1998]. The top educational agency is the Ministry of Education. It is the central authority responsible for enforcing the Constitutional mandates for education. The Ministry of Education formulates policies regarding education and science, takes actions for the implementation of policies and regulations, publishes and approves textbooks, directs and co-ordinates subordinate agencies for designing and policy implementation and finally, supervises and supports educational institutions and agencies (KOIS, 1993, p. 456; MOE, 1998, p. 38).

The Higher Education Support Bureau of the Ministry of Education governs and controls the following main areas with respect to four to six year colleges and universities: 1) the establishment and closure of colleges and universities; 2) student quotas for each college and university; 3) personnel management of national or public tertiary institutions, including the appointment of all university presidents and independent college and college deans; 4) qualifications of teaching staff whether employed by public or private institutions; 5) tuition fees for higher education institutions; 6) inspection of educational facilities; 7) admission fees and

procedures; 8) general standards for entrance and graduation; 9) curricula and degree requirements; 10) fiscal review, including all public and private tertiary institutions; 11) management of school affairs, etc. From the establishment of the Republic of Korea in 1948 to the present time, the Ministry of Education has been the principal agency in Korean educational administration, and the Minister of Education has guided and supervised all Korean post-secondary institutions.

In terms of educational systems, the basic Education Law adopted a 6-3-3-4 ladder system: primary school (1st to 6th grades), junior high school (7th to 9th grades), senior high school (10th to 12th grades) and two-year junior college, four to six-year college and university (MOE and KEDI, 1998). There are several types of higher education institutions: 1) colleges and universities with four-year undergraduate programs and graduate programs, including six-year medical colleges; 2) four-year teacher training colleges (university of education); 3) two-year junior vocational colleges; 4) miscellaneous schools of collegiate status with two to four-year courses, such as theological seminaries, nursing schools, etc.; 5) an air and correspondence university; and 6) industrial colleges or universities. The Air and Correspondence College was established in 1972 with the purpose of providing the opportunity to follow selected higher educational programs to those who, for economic reasons, cultural disadvantages or legal restrictions could not pursue their college education (KOIS, 1993, p. 467; MOE and KEDI, 1998; MOE, 1976, p. 54).

In 1999, there were 158 four-six year colleges and universities, with 1 587 667 undergraduate students, 204 773 graduate students and 41 226 teaching staff; 11 teacher training colleges (university of education) with 21 323 students and 708 teaching staff; 161 junior colleges with 859 547 students and 11 381 teaching staff; four miscellaneous schools with 6 126 students and 42 teaching staff; one air and correspondence university with 316 365 students and 109 teachers; and 19 industrial colleges or universities with 158 444 students and 2 252 teachers (MOE and KEDI, 1999*a*, pp. 584-85). In total, there exist 354 institutes, of which 336 co-educational schools, 17 women-only and one men-only, 51 national, 11 public, 292 private and at which a total of 3 154 245 students (1 189 103 women; 1 965 142 men) are registered, and which employ 55 718 teachers (8 505 women; 47 213 men) (MOE and KEDI, 1999*a*, pp. 584-85).

The degree of centralisation varies considerably within the internal administrative organisational structure of Korean tertiary institutions (Adams, 1965). Regardless of the different characteristics and size of the higher education institutions, the President of each university or independent college is a top administrator who is supported by deans of colleges or chairpersons of departments and division directors. In addition, to assist the President and to discuss major affairs, there exists a body composed of all university or college councils, as well as an administrative faculty headed by the President. This type of organisation is of course flexible

because each university or college is different in size, mission, philosophy, organisational culture and structure, and managerial leadership.

IMPACT OF TRADITIONAL AND ADOPTED WAYS OF THINKING ON ADMINISTRATIVE SYSTEMS AND CULTURE IN KOREAN HIGHER EDUCATION

Administrative systems and culture in Korean higher education have been formed by traditional ideas, and ideas or systems adopted from outside Korea.

Firstly, while the current Korean educational system, with its 6-3-3-4 ladder pattern, is mainly based on the American educational system, it also includes a dual school system alongside a democratic single system. A dual or caste school system does not provide equal chances for all irrespective of their politico-socio-economic status (KNCU, 1960, p. 122). Under the current educational system in Korea, higher education does not embrace all people equally because vocational school students are placed in a disadvantageous position if they wish to enter colleges or universities.

Secondly, although the current administrative structure in Korean higher education has been mainly based on those of American collegiate institutions, a highly centralised and formalised Japanese system, which was derived from both French and German ideas, is generally used instead of the American democratic or participative administrative system. Korean higher education maintains a highly centralised institutional hierarchy under a top-down system, whereas American higher education has a relatively decentralised institutional hierarchy under the faculty council system. The Ministry of Education in Korea offers the focal point for the articulation of group interest, in contrast to a dispersed points of control inherent in the American higher educational structure (B.R. Clark, 1992, pp. 231-32). Thus, a democratic or decentralised system in Korea exists only on paper, while in practice, a vertically centralised system dominates the administration of Korean higher education [Korean Council for University Education (KCUE), 1988*a*; Korean Educational Development Institute (KEDI), 1985]. Therefore the organisational structure in current Korean higher education generally appears to maintain a closed rational system and a Minzberg machine bureaucracy with its bureaucratic organisational structure.

Thirdly, many college or university administrators in Korea usually stress not only traditional values and norms, but also hierarchical order and authority. In other words, they generally use authoritarian leadership, which stems from confucianism or Japanese shinto-confucianism, and seldom or never allow participation and discussion in decision-making (KCUE, 1988*a*). In *Religion of China: Confucianism and Taoism*, Max Weber (1962) regards the confucian gentleman ideal as the harmonious regulation of his administration, whilst providing authoritative leadership (Hans H. Gerth, translator, 1962, pp. 131-133).

To be specific, college administrators who fulfil their roles as opinion leaders rarely give the opportunity to faculty members and students to participate in the innovation-decision process as agents of change, or aids thereto. On the contrary, they maintain the importance of a formalised hierarchical order between supervisors and subordinates or between the old and the young, according to the confucian ethico-political rules or shinto-confucian authoritative attitudes (Lee, 1997; 1999). In the *Philosophy of History*, Georg W.F. Hegel (1956) views the O-R*yun* (the five codes of confucian ethics) as the five main duties of the Chinese family, society and state (J. Sibree, translator, 1956, p. 121). Like China, Korea also regards the O-R*yun* as the basic ethical norms, which emphasise both the hierarchical and reciprocal relationships, of the Korean family, society and nation.

Although younger faculty members have more contemporary knowledge of western science and technology than senior faculty members, this seldom affects the traditional systems of authority and hierarchy. Therefore, we might assume that college or university administrators are familiar with hierarchical authoritarian leadership rather than reciprocal democratic leadership and that they do not yet exercise effective leadership based on contingency theories.

Finally, the relationships between faculty members and students usually follow the O-R*yun*. The O-R*yun* externally shows hierarchical relationships, but internally involves reciprocal obligatory relationships of love or benevolence, one of the major ethical concepts in confucianism. In practice, however, for the most part, college and university teaching staff show their students legitimate authority and compel them to obey their authority under rigid regulations and the traditional confucian norms. Of course, some members of the teaching staff maintain reciprocal relationships with paternalistic authority, such as benevolence in confucianism, charity in Buddhism, or love in Christianity.

In 1995, the number of religious people within the total Korean population (44 553 710) was 22 597 824 persons, amounting to 50.7% of the population: of which 10 321 012 Buddhists (45.7%); 8 760 336 protestants, (38.8%); 2 950 730 roman Catholics, (13.0%); 210 927 Confucians, (0.9%); and 354 819 of other religions (1.6%) (Ministry of Culture and Tourism, 1998). According to *The Condition of Korean Religion* (Ministry of Culture and Tourism, 1998), amongst 346 higher education institutions, there were 51 national, six public and 289 private in 1997. Within the 289 private institutions, there were 72 religious-founded institutions: 54 protestant, 11 roman catholic, three Buddhist, three Won-Buddhist and one other religion. Of 65 Christian-founded institutions, there were 54 protestant-founded (83%): 34 colleges or universities, 12 junior colleges and eight theological seminaries; and there were 11 roman catholic-founded (17%): eight colleges and universities, and three junior colleges (Ministry of Culture and Tourism, 1998, pp. 97-101). In 1997, approximately 25% of all formal tertiary institutions in Korea belonged to Christian-

founded institutions, and 90% of all religion-related tertiary institutions were Christian-founded schools.

In the case of confucianism, however, although there is now no purely organised confucian tertiary institution, almost all Koreans are affected by confucian norms, values, customs and manners. In other words, the Korean people are in practice Confucians, regardless of the religion they adhere to. Therefore, we may say that confucianism is one of the major factors affecting the organisational culture of Korean higher education as well as Korean society.

To synthesise, confucianism, Shinto-confucianism and American ideas are the main influences on the administrative systems and organisational culture of Korean tertiary education. In the history of modern Korean education, higher education has rapidly expanded alongside the industrialisation promoted by the Korean government since the late 1960s. Accordingly, post-secondary education became a means to achieve socio-political development under the uniform control of the Korean government and lost its diversity and autonomy. In fact, many original Christian missionary institutions as well as other private institutions lost their specific characteristics and missions. Nevertheless, higher education has contributed to the major economic success of Korea (Kihl, 1994; Korean Council for University Education, 1988*a* and *b*; Suhr, 1987). After this success, as N.P. Lee (1994) points out, Korean society is absorbed in materialistic and cornucopian trends (p. 53) which are contradictions in terms of confucian humanitarian traditions, and higher education merely becomes a tool for socio-economic enhancement.

Despite the fact that confucianism has been a strength in helping to produce the economic miracle in Korea, the traditional Korean ethical values and norms, based on confucianism, Buddhism, Taoism and other native religious and philosophical ideas, are gradually decreasing, while materialism and utilitarianism based on western thoughts are broadly increasing (Hart, 1993; Lee, 1994). In *The Religion of China: Confucianism and Taoism*, Max Weber asserted that confucianism was a hindrance to economic and scientific development in traditional Chinese society. On the other hand, some western theorists claim that confucianism has been a contributing factor in achieving an economic miracle in confucian countries (de Bary, 1996; Eckert *et al.*, 1990; Hofstede and Bond, 1988).

Clearly, in their positive aspect, Christian and western thoughts, and particularly American ideas, have affected the Korean people and its education system, and have brought about great economic and educational achievement. American democracy and scientific approaches especially have provided a great boost in achieving economic success and in broadening the scope of higher education both quantitatively and qualitatively. On the other hand, western ideas have also had a negative impact on Korean society and higher education. Mammonism and egoistic individualism are broadly pervasive and threaten traditional Korean ethical values

and norms. In addition, the role of higher education has been devalued to that of a tool to attain the individual's socio-economic aspirations and a means to develop national economy in the name of industrialisation and democratisation. Thus, current higher education is going against not only the humanitarian confucian or Buddhist tradition but also the Christian humanitarian spirit, in the name of capitalism and scientism.

To conclude, the current administrative systems and culture of Korean higher education combine both traditional and adopted modes of operating, although they generally have a rigid administrative structure and a closed organisational system affected by traditional values.

References

ADAMS, D.K. (1965),
Higher Educational Reforms in the Republic of Korea, US Department of Health, Education, and Welfare Office of Education, US Government Printing Office.

CLARK, B.R. (1992),
The Distinctive College, New Brunswick, New Jersey, Transaction Publishers.

DE BARY, W.T. (1996),
"Confucian education in premodern East Asia", in Tu Wei-ming (ed.), *Confucian Traditions in East Asian Modernity*, Cambridge, Mass, Harvard University Press.

ECKERT, C., LEE, K., LEW, Y.I., ROBINSON, M. and WAGNER, E.W. (1990), *Korea, Old and New, A New History*, Ilchokak, Seoul, Korea.

GANNON, P.J. (1985),
The Republic of Korea, American Association of Collegiate Registrars and Admissions Officers.

HART, D.M. (1993),
"Class formation and industrialisation of culture: the case of south Koreas emerging middle class", *Korea Journal*, Vol. 33, No. 2, pp. 42-57.

HEGEL, G.W.F. (1956),
The Philosophy of History, (J. Sibree, translator), New York, Dover Publications, Inc.

HOFSTEDE, G. and BOND, M. (1988),
"The Confucius connection: from cultural roots to economic growth", *Organisational Dynamics*, 16, pp. 5-21.

KIHL, Y.W. (1994),
"The legacy of confucian culture and south Korean politics and economics: an interpretation", *Korea Journal*, Vol. 34, No. 3, pp. 37-53.

KOREAN COUNCIL FOR UNIVERSITY EDUCATION (KCUE) (1988*a*),
Current Issues in University Education of Korea and Japan, Seoul, Korea.

KOREAN COUNCIL FOR UNIVERSITY EDUCATION (KCUE) (1988*b*),
Korean Higher Education: Its Development, Aspects and Prospect, Seoul, Korea.

KOREAN EDUCATIONAL DEVELOPMENT INSTITUTE (KEDI) (1985),
Korean Education 2000, Korean Educational Development Institute Press, Seoul, Korea.

KOREAN NATIONAL COMMISSION FOR UNESCO (KNCU) (1960),
UNESCO *Korean Survey*, The Dong-A Publishing Co., Ltd, Seoul, Korea.

KOREAN OVERSEAS INFORMATION SERVICE (KOIS) (1993),
A *Handbook of Korea*, Samhwa Printing Co., Ltd, Seoul, Korea.

LEE, J.K. (1997),
A *Study of the Development of Contemporary Korean Higher Education*, Unpublished Ph. D. dissertation, The University of Texas at Austin.

LEE, J.K. (1999),
"Historic factors affecting educational administration in Korean higher education", *Higher Education Review*, Vol. 32, No. 1, pp. 1-17.

LEE, N.P. (1994),
"Money culture and higher education", *Korea Journal*, Vol. 34, No. 2, pp. 48-56.

MINISTRY OF CULTURE AND TOURISM (1998),
Hankukui-Chongkyo-Hyunhwang (*The Condition of Korean Religion*), Seoul, Korea.

MINISTRY OF EDUCATION (MOE) (1976),
Education in Korea, Seoul, Korea.

MINISTRY OF EDUCATION (MOE) (1998),
Education in Korea, Seoul, Korea.

MINISTRY OF EDUCATION (MOE) and KOREAN EDUCATIONAL DEVELOPMENT INSTITUTE (KEDI) (1998),
Statistical Yearbook of Education, Seoul, Korea.

MINISTRY OF EDUCATION (MOE) and KOREAN EDUCATIONAL DEVELOPMENT INSTITUTE (KEDI) (1999*a*),
Statistical Yearbook of Education, Seoul, Korea.

MINISTRY OF EDUCATION (MOE) and KOREAN EDUCATIONAL DEVELOPMENT INSTITUTE (KEDI) (1999*b*),
Brief Statistics on Korean Education, Seoul, Korea.

NAHM, A.C. (1982),
"US policy and the Japanese annexation of Korea", in Tae-Hwan Kwak *et al.* (eds.), *US-Korean Relations* 1882-1992, Seoul, Korea, Kyungnam University Press.

SUHR, M. (1987),
Some Reform Politics for Korean University Administration and Management, Korean Council for University Education, Seoul, Korea.

WEBER, M. (1962), *The Religion of China: Confucianism and Taoism*, (Hans H. Gerth, Translator and ed.), The Free Press of Glencoe.

Specialisation and Cross-disciplinarity Patterns and the Design of New Higher Education Programmes

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ABSTRACT

In the last decade, Spanish universities have been reforming their teaching programmes on the basis of a set of common guidelines. Such guidelines determine 50% of the academic courses to be studied in the different programmes. They also assign each academic subject to one or several of the areas of scientific specialisation that the universities use to classify their teachers. The aim of the present work is to analyse the different ways that academic courses are distributed by scientific areas in terms of specialisation and cross-disciplinarity levels. The results are relevant for the efficient allocation of human resources and in the estimation of the costs involved in curricular reform.

INTRODUCTION

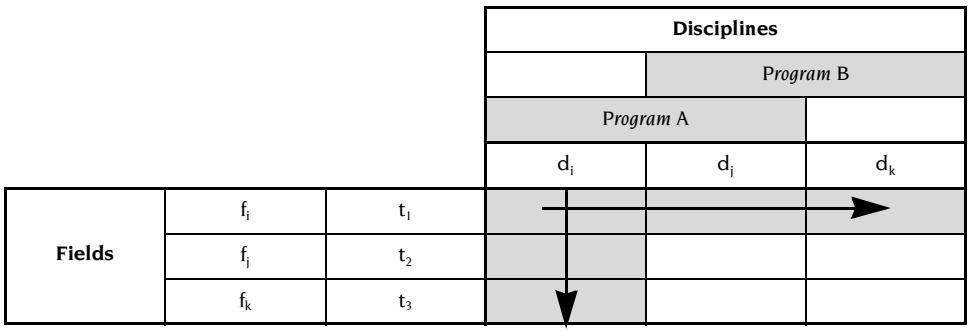
The starting point of this paper is the common idea that natural sciences are more specialised than social sciences and humanities (Braxton, 1996; Colbeck, 1998). These different levels of specialisation have many implications for the organisation of higher education programmes: from *curriculum* to human resources policy implications. We have had a look at Spanish University pro-

grammes to see if we can assume this hypothesis and to what extend this prejudices are present.

First, in this work, we make the distinction between *scientific fields* or *area* and *scientific disciplines*. A given researcher will consider himself to be a specialist in a particular scientific field but in order to work in that area he needs to master and to be able to use methods and results coming from several different disciplines. Specialists from other fields also use many such disciplines (sometimes all of them). One can therefore divide the whole set of scientific disciplines mastered by a specialist in a given scientific field into two classes: disciplines whose mastery and use he shares with specialists from other fields, and disciplines that only he has mastered and uses. For instance, S*tatistics* is a scientific discipline whose contents are shared with many scientific fields (Applied Mathematics, Research Methods, etc.).

This characteristic of the competencies of scientific specialists is of particular relevance in the organisation of higher education. A university programme aims at providing scientific, humanistic or technological training in a given scientific or professional area. The training of an undergraduate in any given field (Law, Economy, Physics, Electrical Engineering, etc.) requires that person to become adept in several scientific disciplines. Each of these in turn requires the participation of a specialist teacher. Thus, in view of the complex structure of scientific specialisation, the following situations can be entertained:

– A specialist teacher (t_1) in a field f_i may be competent to teach several disciplines $d_i \ldots d_n$.
– A discipline d_i can be taught by teachers ($t_1..t_3$) who are specialists in different fields $f_i \ldots f_n$.



In general, for an efficient allocation of human resources in higher education, two situations can be thought to be desirable:

1. The availability of teachers whose scientific specialisation allows them to master different disciplines.
2. The organisation of studies (programmes) comprising disciplines that can be taught by teachers having different specialities.

However, it would appear that powerful undercurrents act to hinder the emergence of such situations; currents that force scientific specialists to concentrate their efforts in disciplines exclusive to each area and that also force a monolithic design of also highly specialised graduate training programmes. These trends towards specialisation can be justified in terms of reasons inherent to the dynamics of science itself. A much cited example is the success achieved by the experimental sciences, which is due precisely to the concentration of efforts that specialisation has permitted, *versus* the humanities disciplines, apparently condemned to generalisation and a relative stagnation.

It would thus appear that the requirements of efficiency for the allocation of human resources in higher education are in contradiction with the demands deriving from the internal structure itself of science such that those principles of efficiency can only be applied in social science and humanities programmes but not in scientific and technological disciplines.

Our aim here is to offer empirical evidence in support of serious doubts about the pertinence of these prejudices concerning scientific specialisation. Our data, derived from the disciplinary organisation of the Spanish University system, point to a structure that to a certain extent can be considered the opposite of what would be expected. *It is in the humanities and social sciences – not in the experimental sciences or technologies – where the strongest trend towards specialisation and isolation emerges.*

DATA

The 54 Spanish universities impart some 134 training programmes that are recognised as official by the State. Each university has the freedom to organise its programmes as best it deems although certain legal requisites must be observed if the degree courses imparted are to benefit from State recognition. These requisites refer to the duration, structure and contents of the programmes. For example, with respect to duration current legislation establishes two types of university programme depending on whether it leads to a Diploma, a technical degree in Engineering or a technical degree in architecture (the minimum duration for these is three years) or whether it leads to a full degree as a licentiate or a full degree in engineering or a full degree in architecture (minimum duration 4 or 5 years except in the case of medicine, where it is 6 years).

Regarding structure, programmes must meet certain requirements *vis à vis* the type of subjects involved (obligatory or elective), the type of teaching (theoretical, practical, etc.) and the "credit load" (unit of measurement convertible into class hours: in general one credit is equal to 10 hours of academic activity). Finally, as regards contents, the law stipulates a series of "core" subjects which must necessarily be imparted in each programme or degree for it to be recognised by the State. The directives that specify these core subjects also indicate the number of credits each of them "is worth" and offer a brief description of their subject content. Generally, the number of credits assigned to these core subjects ranges between 40% and 60% of the total amount of credits of each program, although in technical degrees these limits are upgraded. For the whole set of 134 official degrees that students can opt for in Spain, the directives of each degree establish a total of 1 048 different core subjects.

Another characteristic of the Spanish university system is that tenured lecturers, who are all civil servants, are classified within what are known as "areas of knowledge": that is in scientific fields depending on their own specialisation. Currently, the complete coverage of Spanish university encompasses 174 scientific areas, ranging from humanities disciplines to scientific and technological specialities. It must be pointed out that this classification has no level, so that these 174 "areas of knowledge" are independent.

The directives that stipulate the core materials of each programme also specify the requisite scientific specialities that allow teachers to impart those core materials.

We have used this catalogue of core materials and areas of knowledge to analyse the disciplinary structure of higher education in Spain. The data scrutinised only cover about half of the effective programmes taught in the universities but we consider this part to be significant in the sense that it is precisely the part that all universities must respect if their degrees are to be recognised by the State. Although no definitive data are available, one can readily assume that the complete structure of the programmes to a large extent reproduces the structure imposed by current legislation as regards core subjects. In fact when conflict arises in university departments concerning teaching programmes it is a common practice to apply criteria analogous to those relating to government-imposed core materials.

Tables 1 and 2 depict the most relevant overall data. There are 134 official degree courses available in Spanish universities. Overall, official directives specify 1 048 different core subjects for these 134 degrees. Lecturers are classified into 174 areas of knowledge. In most cases (69%) any given core subject, belonging to one or several programmes, can be taught by lecturers *from more than one area of knowledge*.

Table 1. **Description of programmes**

Branches	A	B	C[1]	D	E	F (%)	G (%)	H
Humanities	26	201	1.61	1.10	133	42	66	783
Experimental and natural sciences	12	126	4.44	3.01	22	7	17	1 489
Social sciences and law	28	237	2.30	1.37	84	26	35	881
Technologies	60	381	3.24	1.99	47	15	12	1 625
Health sciences	8	103	2.91	2.16	34	11	33	364
Total	**134**	**1 048**	**2.83**	**2.08**	**320**	**100**	**31**	**5 146**

1. Significant differences, $p < 0.01$.
A = Number of different programmes.
B = Different courses per KA.
C = Mean of different KA per course.
D = Standard deviation (C).
E = Courses assigned to only one KA.
F = Percentage of column (E).
G = Percentage E/B.
H = Number of assignations to areas.
Source: Authors, based on data from the Spanish Council of Universities.

Table 2. **Course per cycle**

Cycle	B	C[1]	D
First	579	2.81	2.08
Second	469	2.85	2.09
Total	**1 048**	**2.83**	**2.08**

1. No significant differences, $p = 0.78$.
Source: Authors, based on data from the Spanish Council of Universities.

METHOD OF ANALYSIS

Using the data available, we compiled the profile of each scientific area on the basis of three characteristics:

1. **Its inclusion within one of the five branches**, or major areas of knowledge, traditionally seen in Spanish universities (Humanities, Social sciences and Law, Mathematical and Natural Sciences, the Health Sciences and Engineering).

2. **Its polyvalence**: *i.e.* the number of different core materials that can be taught by lecturers who are specialists in that area.

3. **Its exclusivity:** the percentage of core materials that can be imparted exclusively by lecturers belonging to the area with respect to the overall core materials that *those same lecturers* can teach.

The **classification into branches** was done *in a purely conventional way* following the practices established by the Spanish universities and the Spanish University Council. This classification is in general use in official programmes and is an extension of the former classification into "Schools" or "Faculties". Its application to areas of knowledge can be accomplished either as a function of the branch in which each area of knowledge has the most "competencies" (more core subjects assigned) or using other, also conventional, criteria linked to academic tradition (for example the area of Mathematical Analysis has traditionally been assigned to Faculties of Science although it has more core subjects in degrees pertaining to the branch of Engineering). Although in this a certain degree of randomness is inevitable, this does not invalidate the results obtained.

Polyvalence in an area of knowledge is measured *by the total number of assignations of core subjects that the area receives in the directives relating to official degrees*. As specified in Table 1 (H), there are 5 146 assignations to 174 areas, giving an average of 29.5 assignation per area. In fact, this magnitude includes two data items that may refer to different properties: one area of knowledge may have a polyvalence value of n either because it has been assigned n different core subjects in a single degree (or in degrees from a single branch) or because it has been assigned a single core subject that is repeated with the same name in n degrees of one or several branches, etc. Although the different possibilities certainly respond to significantly different disciplinary situations, for the issues addressed here they can be considered to be equivalent: teachers from an area of knowledge with polyvalence n can cover n possibilities of teaching in core subjects in university programmes either because the (few) subjects they master in their speciality are of very general interest for many different programmes or because their speciality allows them to master many different teaching subjects.

The **exclusivity of an area of knowledge** was measured by the percentage of core materials assigned exclusively to that area with respect to the total amount of core materials assigned to it. This may be understood as a measure of the irreplaceable nature of specialists in each area of knowledge. Indeed, if a core subject is assigned exclusively to one area of knowledge, this means that in order to be able to impart the programme(s) that include that subject the university must have teachers who are specialists in that area. Reciprocally, if one area of knowledge is not exclusively assigned any core subjects then this means that the university will be able to organise any kind of programme without having to have specialists in that area. In the case examined, the range of this magnitude is between 0% and 100%; in particular there are 56 areas that do not have any exclusively assigned core subjects and only 6 areas for which more than 50% of the subjects assigned are exclusive to those areas.

Polyvalence and exclusivity can be considered to be relatively independent properties. Within certain limits, an area of knowledge may be highly polyvalent but not very exclusive and *vice versa*.

To analyse the differences in polyvalence and exclusivity among the areas of knowledge of the five major branches, we replaced the direct measurements of polyvalence and exclusivity by their normalised scores (their differences with respect to the mean, in units of standard deviation). This allowed us to group the areas of knowledge in four groups corresponding to the four quadrants depicted in Figure 1, depending on whether their respective scores on polyvalence and exclusivity are positive or negative. The asymmetric distribution of both variables is reflected by the fact that approximately 2/3 of the areas of knowledge have a polyvalence lower than the mean while another 2/3 also have an exclusivity value lower than the mean.

The areas of **Group I** are those showing both polyvalence and exclusivity above the mean. They are therefore areas that have competence in more core subjects than the mean of the areas and for which the percentage of subjects assigned exclusively to them is also above the mean.

The areas of **Group II** are those displaying high polyvalence and low exclusivity. They are therefore areas fulfilling the desideratum of the university manager: lecturers who are specialists in these areas are good at doing many things and are readily interchangeable.

The areas of **Group III** are less polyvalent than the mean but also less exclusive than the mean. This is the most numerous group in the Spanish university system (37% of the total number of areas of knowledge).

Finally, the areas of **Group IV** are the nightmare of any university management team: specialists in these areas only teach a very few core materials and, furthermore, cannot be substituted by others. The implementation of programmes in which this type of lecturer is required may lead, in the absence of a suitable scale dimension, to the typical situation of underexploited teaching capacity.

RESULTS

The different types of behaviour of the several large areas or branches into which areas of knowledge can be divided are significant. In particular, as may be seen in Tables 3 and 4, the areas of both experimental and technological sciences are characterised by low exclusivity (more than 90% of the areas have an exclusivity lower than the mean) and a high degree of polyvalence (more than 60% of these areas have a polyvalence higher than the mean). In contrast, humanities have an inverse pattern: high exclusivity (70% higher than the mean) and low polyvalence (70% lower than the mean). The health sciences are characterised by low exclusivity

Table 3. **Number of areas of knowledge per scientific branch and group**

Branch	Group				
	I	II	III	IV	Total
Experimental sciences	2	18	12	0	32
Humanities	13	0	13	17	43
Heath sciences	0	0	18	6	24
Social sciences and law	4	6	14	15	39
Technologies	0	25	8	3	36
Total	**19**	**49**	**65**	**41**	**174**
	Group (Percentage)				
	I	II	III	IV	Total
Experimental sciences	6	56	38	0	100
Humanities	30	0	30	40	100
Heath sciences	0	0	75	25	100
Social sciences and law	10	15	36	38	100
Technologies	0	69	22	8	100
Total	**11**	**28**	**37**	**24**	**100**
	Group (Percentage)				
	I	II	III	IV	Total
Experimental sciences	11	37	18	0	18
Humanities	68	0	20	41	25
Heath sciences	0	0	28	15	14
Social sciences and law	21	12	22	37	22
Technologies	0	51	12	7	21
Total	**100**	**100**	**100**	**100**	**100**

Source: Authors, based on data from the Spanish Council of Universities.

and low polyvalence. The social sciences and law show low polyvalence and a fairly balanced situation as regards exclusivity.

It is also possible to characterise the four groups by the type of area of knowledge prevailing in each. Group I is the least numerous (11% of the total of areas) and 68% of all the areas in it belong to the field of the humanities. These, together with the social sciences and law, represent 89% of the total in group I. By contrast, in group II, 51% are technological areas and together with the exact and natural sciences cover 88%. Group III is the most numerous (37%) and also the one in which the areas of knowledge of all the branches are the most homogeneously distributed. Finally, group IV also features a predominance of the area of humanities and social sciences. The humanities cover 41% of the total and, together with the social sciences and law, represent 78% of the group total.

Table 4. **Distribution of areas of knowledge**

Exclusivity	Polyvalence –	Polyvalence +
+	IV	I
–	III	II

Experimental sciences

Exclusivity	Polyvalence (Percentage) Low	High	Total
High	0	6	6
Low	38	56	94
Total	**38**	**63**	**100**

Humanities

Exclusivity	Polyvalence (Percentage) Low	High	Total
High	40	30	70
Low	30	0	30
Total	**70**	**30**	**100**

Health sciences

Exclusivity	Polyvalence (Percentage) Low	High	Total
High	25	0	25
Low	75	0	75
Total	**100**	**0**	**100**

Social sciences and law

Exclusivity	Polyvalence (Percentage) Low	High	Total
High	38	10	49
Low	36	15	51
Total	**74**	**26**	**100**

Technologies

Exclusivity	Polyvalence (Percentage) Low	High	Total
High	8	0	8
Low	22	69	92
Total	**31**	**69**	**100**

Table 4. **Distribution of areas of knowledge** (*cont.*)

All fields			
Exclusivity	Polyvalence (Percentage)		
	Low	High	Total
High	24	11	34
Low	37	28	66
Total	**61**	**39**	**100**

Source: Authors, based on data from the Spanish Council of Universities.

CONCLUSIONS

It is possible to draw some interesting conclusions from the foregoing considerations, both as regards the understanding of certain striking aspects of the disciplinary organisation of knowledge and the organisation of teaching in the Spanish universities.

First, the need emerges to revise the most usual clichés concerning the specialisation that is assumed to be characteristic of the experimental sciences as compared with the globalising nature of humanities disciplines. In view of the data analysed, it would appear that in the Spanish university system the "virus" of hyper specialisation affects the areas of the humanities and social sciences much more than experimental sciences and engineering. It would be interesting to analyse the origins of this situation and its existence in other higher education systems (Huisman, 1995 and 1997). This phenomenon could be crucial for the development of these disciplines, the planning of higher education and the design of new curricula (Jones, 1991).

Some of these consequences seem evident with respect to the organisation of university studies. Traditionally, university teaching costs have been assumed to increase with the increase in the degree of experimental or technological complexity of the programme: it is more expensive to train a physicist than a mathematician and more expensive to train an engineer or doctor than to train a physicist. In any case, humanities degrees have always been considered to be "cheaper" than scientific or technological degrees. Two factors may alter this traditional idea: student numbers and the functional flexibility of the teaching staff. According to studies carried out by some Spanish universities, the combined effect of student scarcity and staff resource inflexibility means that the most "expensive" degrees, per student, are to be found in the humanities. As a hypothesis, one could envisage a situation where making the humanities and social sciences teaching staff more flexible could help to reduce such costs, not only as a result of greater efficiency in the allocation of human resources, which that flexibility would enable, but also due to the greater attractiveness to students of programmes that would be truly generalist in these branches of knowledge, at least as general as most of the programmes of the experimental sciences and traditional technological degrees.

References

BRAXTON, J.M. and HARGENS, L.L. (1996), "Variation among academic disciplines: analytical frameworks and research", in J.C. Smart, *Higher Education: Handbook of Theory and Research* (Vol. XI, pp. 1-46), New York, Agathon Press.

COLBECK, C.L. (1998), "Merging in a seamless blend. How faculty integrate teaching and research", *The Journal of Higher Education*, 69(6), pp. 647-671.

HUISMAN, J. (1995), *Differentiation, Diversity and Dependency In Higher Education*, Enschede, University of Twente, CHEPS.

HUISMAN, J. (1997), "New study programmes and specialisation's: The effect of governmental funding and paradigmatic development", *Research in Higher Education*, 38(4), pp. 399-417.

JONES, E.A. and RATCLIFF, J.L. (1991), "Which general education curriculum is better: core curriculum or the distributional requirement?", *The Journal of General Education*, 40, pp. 69-101.

Strategic Management of Universities: Evaluation Policy and Policy Evaluation

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ABSTRACT

The last CRE *and* IMHE *seminar on management tackled the question of the strategic management of universities at a time when these are taking an interest in entrepreneurial models. Because of the changes in the universities' environment and the pressure exercised by third parties, the main question relates to the applicability of the strategic model to universities and the role their leaders must play. This issue brings up the question of the organisational nature of universities and underlines their specificities as social, inter-generational institutions, whose principle members benefit from its wealth of freedom and research. Furthermore, under pressure to restrict spending these last few years, states have limited expenditure available for the financing of teaching and are questioning the performance of educational systems. However, the missions, structure and culture of universities bring up issues regarding the definition and use of evaluation indicators for the policies they put in place. Evaluation policies not yet being a university tradition, thoughts, debates, and exchanges of experience are not wasted.*

THE CONTEXT

With all the changes that have affected universities since the mid 1980s, their environment is becoming ever more complex, diverse and hostile, and especially less affluent.

This new environment, with the added uncertainty it brings, poses something of a challenge to the traditional university functions of education and research. It also raises questions as to the organisational, functional and managerial capacity of universities to meet the requirements of massification, competitiveness and financial restrictions.[2]

The widely held view, be it that of the public, political authorities or experts, is that universities should adopt a new, more entrepreneurial form of organisation to acquire the strategic capacity to adjust and meet the needs of the outside world in an independent, dynamic, structured and coherent manner.[3]

However, what is at stake and what are the challenges underpinning a strategic approach to management for organisations such as universities? What style of leadership should university leaders adopt with regard to this process? What objectives and strategic policies should universities draw up to tackle the "major" issues facing higher education today? What are the mechanisms, for instance, to enhance quality in the various fields of university work? Most of all, what capacity do universities have to identify and put into practice their own strategic vision? And finally, what is their aptitude for self-evaluation?

These are the practical, topical issues that were raised at the joint *Management Seminar for University Leaders* held in Brussels in September 1999, by the Association of European Universities (CRE) and the Programme on Institutional Management in Higher Education (IMHE) of the Organisation for Economic Co-operation and Development (OECD).

The seminar brought together leaders of many different universities. Its main purpose was to offer an opportunity to reflect together on university management in an international context, and hence on the role of university leaders and how they draw up strategies for their universities. By inviting participants from different countries and backgrounds, the seminar fostered theoretical thoughts and the exchange of practical experience via plenary presentations, workshops and case studies.

Two topics central to current developments in universities – strategic evaluation and indicators for strategic management – clearly emerged from the discussions. They also highlighted the opportunities and dangers stemming, for instance, from financial restrictions, the massification of higher education and the internationalisation of university policy, along with the challenges that these issues raise in terms of strategic management.

As the seminar "tutors"[4] made clear, each of these issues is developing all kinds of ramifications while at the same time remaining firmly rooted in reality. Each issue drew a host of questions, some general, others more specific (geographically, politically, legally and otherwise). The participants were accordingly able to make some (provisional) observations and leave with a list of new questions to put to their universities.

This paper summarises the main outcomes and viewpoints to have emerged from the exchanges and discussions. Section I addresses the issue of strategic management within universities: is the entrepreneurial model applicable to this type of organisation? What are the incentives to adopt such an approach, and its limita-

tions? What role should university leaders play in the process? Section II addresses the issue of indicators in strategic management. What indicators should be used? How should they be built? What precautions should be taken? What are the dangers to be avoided? The Seminar also identified a series of paradoxes associated with the strategic management of universities. Those with the greatest significance for strategic policy-making are included in this summary.

STRATEGIC MANAGEMENT OF UNIVERSITIES

Given the changes affecting the university environment and the pressure exerted by outside players, university management needs to take on an increasingly strategic dimension. While this is almost unanimously acknowledged as a prerequisite if universities are to adapt and survive, how they are to go about it has still largely to be determined.

The main question is whether the classic strategic model that emerged in the United States in the 1960s is applicable to universities. The model looks at an organisation's position in its environment and at the challenges that this raises, challenges to which the organisation will respond by adopting a particular strategy.

The many responses that bear witness to an organisation's capacity to adapt to changes in its environment over a given period may thus be viewed as forming the organisation's strategy, especially since it endeavours to meet every challenge while trying to minimise costs. However, a challenge does not automatically trigger a response.

The classic strategic model also assumes, first, that the organisation implementing the process has an explicitly defined mission and, second, that its environment is systematically monitored and analysed. However, what becomes of the model when transposed, as it stands, to universities? This question relates to the organisational side of the university: does it resemble the kind of organisation in which strategic management was originally nurtured?

The organisational nature of universities

Both in theory and in practice, universities are often described as professional bureaucracies[5] or organised anarchy,[6] in which the link between players and structure is relatively weak and the organisational goals somewhat intangible.

Such descriptions are a sign that there is some scope for self-organisation, and that divisions and hence conflicts of interest are to be found between the various entities and categories of player, either in the allocation of internal and external resources or in prioritising for the university's development policy. This aspect of university dynamics also reveals an initial paradox, that while universities like to

think they are open to the outside world and society at large, their internal organisation is usually highly compartmentalised.

According to contingency theory, the organisational configurations referred to above will only suffice if the environment is stable and therefore sure, which does not seem to be the case in universities today.[7] Consequently, the organisational nature of universities has yet to be defined, and it remains uncertain whether or not their structure fits today's world.

Universities do, however, appear to be societal institutions, having been an integral part of society for many years now, and can be distinguished from entrepreneurial organisations by the nature of their objectives. Other features not commonly found elsewhere make universities even more distinct. They are fed on all sides by research and allow their members substantial freedom. They have a multidisciplinary dimension and their main feature is their intergenerational mix. Universities are also communities in which knowledge is built up and transmitted to new generations. And they are singular living environments. Moreover, each university has its own historic identity distinguishing it from all others.[8] Finally, the best guarantee for universities as institutions is their autonomy, something also sought by their constituent entities.

Strategy-building: a combined model

The second point for discussion is how motivated university members are to participate, where necessary, in strategy-building for the institution as a whole, inasmuch as internal divisions are usually very marked.

In this kind of situation, strategy is not discussed and planned solely by strategic planners; strategies will also come from the bottom up. Organisations such as universities cannot function along the lines of a top-down strategic management model.

The reason for this is that, without a modicum of co-operation from faculties and departments, it would be difficult, if not impossible, to put plans into practice. The top must therefore play a major role in providing incentives and regulating the process. The model is therefore a combination of "top-down" and "bottom-up". The idea is to try to balance broad, high-level projects with local interests. Hence too the need for a mix of reactive and proactive strategies.[9]

Where do university leaders fit into this multidirectional process? In other words, what is a university leader's role?

The role of university leaders in a strategic approach

Are they pilots, keeping the institution on course? Are they conductors striving for harmony, or jugglers balancing all kinds of different interests and emerging strat-

egies? Are they arbiters? Or university policymakers? According to most of the participants at the seminar, their roles are certainly not that of managers.

It seems nevertheless a good idea for university leaders to draw up a basic strategic framework, provided that it leaves players some room for innovation. Could the university then become a kind of network enterprise, with core players using incentives and arbitration to manage a network of fully fledged entities?

In this network, university leaders would also be there to put over a message for the community, and generate ideas. Their input to the community would depend on their perception of all the parameters shaping their institutional environment, but primarily on their leadership skills. Their input would also be contingent upon time and length of mandate.

University leaders have to work with various corporations. More and more new occupations and functions are springing up in universities, in fields such as strategic management, intake and internal marketing policies, continuing education, internationalisation, and new information and communications technologies. These posts are held by the leader's advisers. The new functions are bound to involve the development of new training policies for members of the institution and appear to be based on more than one process of internal organisational change. One aspect of that change is the development of strategic evaluation.

Coupled with strategic management, a university-led evaluation exercise always takes place in a specific environment and is usually held because of the institution's determination (or need) to adapt to changes in that environment. The purpose of the exercise should accordingly be clear to all those taking part. It should be forward-looking, and seek to prepare for future developments. Moreover, it should be a highly iterative and formative exercise.

Closely associated with strategic management, it is not to be confused with an *a posteriori* exercise commissioned externally. On the contrary, a strategic evaluation process is devised, prepared and negotiated with the players concerned and will be followed up by a package of measures and initiatives. In fact, if there is to be no follow-up to a strategic evaluation, then players will not become involved in the first place.[10]

What are the factors that have persuaded and encouraged universities to become part of the trend towards strategic management and evaluation?

Motivation for strategic management

It would appear that the involvement of university leaders here may be more than decisive. Leaders will decide on the resources to allocate to the process. Furthermore, universities are under all kinds of pressure from society to devise evalu-

ation procedures that measure the quality of their service provision and performance.

There are increasing demands from stakeholders, and from the government authorities financing universities, for them to justify their needs and demonstrate transparency. Universities are also under indirect pressure from institutions such as the OECD or from the media.

At the same time, the changes directly affecting various aspects of their environment are making universities alter some of their internal management policies. Such changes include the shortage of traditional financial resources, the massification of higher education, and internationalisation in the wake of global trade. These three areas may be the subject of a strategic evaluation process, as well as acting as powerful incentives for universities to introduce increasingly strategic management. The dangers and opportunities inherent in all three, and the challenges they involve in strategic terms, were discussed at length during the seminar.

Three challenges for the strategic management of universities

The university funding crisis is an enormous challenge for universities, and one that is certainly affecting all their other policies. It is also forcing them to face more than one paradox in terms of their strategic management.

The problem stems from government policy to cut expenditure, based on decisions made in high places. The problem is compounded by the increase, and intrinsic change, in demand. In other words, while demand is increasing, diversifying and becoming more international, government funding for universities is declining. This is especially paradoxical since university education and research are increasingly acknowledged both as factors of equity and economic efficiency and as major sources of positive externalities.[11]

To solve this problem, several approaches can be combined to improve university funding. On the one hand we have alternative and complementary funding mechanisms involving private partners, on the other scope for enhancing management within the institution, enabling it to find ways to cope with external restrictions and to finance projects and priority activities. In some cases, universities also need to be restructured to meet public expectations. A new, more dynamic type of relationship with the private sector and third parties may, for instance, act as a catalyst for new initiatives and sources of funding. A university may prefer other courses of action, depending on its political, legal and regulatory environment.[12]

All these new methods of funding, however, generate new rules of the game for university management. The traditional university functions are more greatly affected by a contractual market rationale based largely on the short-term. The autonomy that universities enjoy and which acts as their safeguard may be increasingly eroded by the conditions and constraints imposed by outside parties and pri-

vate partners. The university funding crisis also raises a variety of questions, including shared responsibility when there is a contractual commitment between universities and the private sector; the calculation and negotiation of overheads; the adjustments, or even reform, required in human resource management; and student contributions to funding.

Another major challenge for universities is to ensure that strategic decision-making covers the massification problems they have been experiencing for a number of years now. One of the outcomes of mass education has been the broadening of student backgrounds. It also changes the way courses are organised, and has a significant impact on the layout of university campuses.

The consequences of massification in higher education are all too often seen solely on the debit side, in the failure rate, the inhuman scale of university premises and the deterioration in student-staff relations. But massification is also having some beneficial effects, for instance on the number of teaching and research posts and, more importantly, on society as a result of the positive externalities generated by an increasingly skilled population.[13] Moreover, university failure is not always synonymous with wasted time or resources. Once such students have been redirected to a course that suits their profile, they usually perform very well.

It is important to note that universities today are having to cope with a dual form of massification. The first aspect involves traditional students leaving compulsory education. These attend university to seek either education or social status. The second aspect stems from career fragmentation. The hazards of the labour market are making some of those already in employment return to education and update their skills. Given the demographic evolution of some countries, this second form of massification could expand if it becomes necessary to raise the age for retirement: the labour market would require that an increasing number of older people be retrained. Universities must be in a position to meet both types of demand, one general and the other vocational, and gain recognition as the regulatory agency for education.

When drawing up their strategic policy, universities should consider the implications of this dual massification against the backdrop of what is currently an ongoing decline in their traditional sources of funding. This immediately raises issues such as the possibility of selective entry, people returning from the labour market to education, the professionalisation of curricula, distance learning, the relationship between students who are increasingly "consumers" and institutions in transition, and the clear presentation of courses available. In the view of those attending the seminar, recourse to selective admission is not the best answer to the massification of higher education, given the waste of human capital involved. Participants preferred to recommend that students be the focus of the university's mission and that solutions to the problem be sought by the university community as a whole.

Internationalisation is another significant challenge for universities. As Knight and de Wit[14] point out, there is increased interest in the international dimension of higher education, coupled with some confusion of terms or ideas. Internationalisation and globalisation are incorrectly held to be the same. "Globalisation is the flow of technology, economy, knowledge, people, values, ideas … across borders. Globalisation affects each country in a different way according to a nation's individual history, traditions, culture and priorities. Internationalisation of higher education is one of the ways a country responds to the impact of globalisation yet, at the same time, respects the individuality of the nation."[15] The two terms are in fact different concepts, dynamically linked.

Internationalisation concerns all university functions, and raises numerous questions about comparison and evaluation, in both research and teaching. How can two courses in two different countries be compared? How can the quality of training or courses attended by students in different countries be verified? Internationalisation forces universities to face another paradox, in that they are implementing internationalisation policies in response to globalisation, and more specifically European integration, yet they should also be safeguarding the local features specific to them, particularly in certain parts of Europe. Furthermore, although many EU co-operation programmes (*e.g.* Erasmus and Socrates) encourage the formation of cross-border training networks and offer opportunities for highly enriching partnerships, such programmes also step up the competition between universities. On the one hand they increase the mobility of students and staff, who now enjoy far more choice than before, particularly with the facilities offered by information and communications technologies. On the other hand, they are new sources of university funding, albeit of an irregular and short-term nature (scholarships, grants, etc.).

To meet this challenge, universities should put in place a dynamic policy with a network of partners. The network will bring together universities, a variety of public interlocutors, *i.e.* ministries (Education, Research, Culture and so on), regions, local government, the European Union and other major international organisations.

These three challenges – the funding crisis, the massification of higher education, and internationalisation – are forcing universities to rethink their strategic policies and encouraging reflection on the building and use of indicators.

INDICATORS IN STRATEGIC MANAGEMENT

Under the pressure of budget restrictions over the past few years, governments have limited public expenditure on education. And, in the lean years, it is often legitimate to reflect on the level of educational investment and how the education system is performing.

The building and use of indicators to evaluate the strategies implemented by universities as a means of achieving their goals, and to evaluate university performance, have now come to be seen as indispensable.

This has long been the practice in the business world, but not in universities. It would appear that, to date, little systematic use has been made of special indicators for internal strategic management, as opposed to the indicators required by external players. University institutions appear to have been using only the more implicit, trivial types of indicator.

But strategic indicators raise a series of questions about the dangers of their use and misuse.[16] There are also problems relating to their use in organisations such as universities, namely their importance and relevance for strategic management, and the limits and impediments to building and using such indicators in organisations which are, on the whole, non profit-making.

Using indicators: dangers and precautions

Indicators can measure a parameter as would a thermometer; they can provide information and thus be instrumental in the decision-making process; they can evaluate whether objectives have been met and be used as a key, perhaps the key, for allocating resources (within a university or among them all). In short, they can serve many purposes.

Which indicators should universities opt to use? Stock indicators, offering a snapshot of the situation, flow indicators, evaluation indicators, monitoring indicators, indicators denoting initiatives or effects? At the same time, should internal (autonomous management) indicators be distinguished from external ones, *i.e.* indicators imposed by politics, the media and external stakeholders?

All this leads us on to the issue of indicator volatility,[17] indicator ethics,[18] and the relevance of some types of indicator to decision-making. For example, there are the purely quantitative indicators that do not really cover the more qualitative aspects such as skills or knowledge, yet these are just as vital to decision-making.

In any case, these issues are crucial: they highlight the care required when building indicators and the implications that their use and interpretation may have for organisational and internal management policies, and for the institution's development policies.[19]

It is therefore absolutely vital that an institution wanting (or obliged) to develop indicators should begin by defining a strategic plan and objectives, and integrating its own structural and functional characteristics.

This probably explains the scepticism sometimes noted about certain types of indicator, and the harsh criticism of "rogue" indicators – which usually fail to allow for the diversity of inputs, processes or outputs, or for the environment specific to

each university (geographical, institutional, legal, political, cultural and other features). Yet all these factors affect the strategic management of universities to some degree.

Thus, according to most of the university leaders attending the seminar, the very existence of external indicators, and the pressures they exert, are enough to explain why universities feel the need to respond by building and publishing more relevant and more independent indicators.

In fact, academics view indicators as appropriate for their institution if, and *only if*, they are in line with the university's plans, its culture, its method of decision-making, the legal environment, and so on. As Professor Morrill pointed out, indicators should above all "reveal an institution's special identity, as found in its distinctive capacities and core competencies".

Within this management framework, three axioms or principles clearly emerge regarding the building and use of indicators:

1. There are no universal indicators for universities. Hence the dangers of rankings and, more broadly, comparisons.
2. As a corollary to the above, an indicator does not exist in the absolute. On the contrary, each indicator has its own frame of reference and interpretation. For instance, indicators may vary with the university's missions, with its teaching cycles, with each faculty, or more generally with the times.
3. No decision should ever be based on a single indicator. On the contrary, given the inadequacies of most qualitative and quantitative indicators when it comes to decision-making, it is better to take a set of indicators and interpret them as a whole.

Indicators, yes but why?

When adopting a strategic management approach and taking into account the demands and challenges of the current market and the complexity of an organisation such as a university, three major categories of indicators should be used, bearing in mind the above precautions. The categories are as follows:

- Indicators as management tools. These should be drawn up in line with the university's strategic objectives.
- Indicators as a corollary to the university's functions and therefore as a means of positioning and differentiating the institution in a transitional environment. Increasingly popular are quality indicators for each activity (teaching, research and service to the community), based on three measurements (inputs, processes and outputs).
- Indicators as the driving force behind new processes. The challenge here is to strengthen and where possible enhance the efficiency and effectiveness

of mechanisms that are essential to the smooth running of the university, including:

- Internal communications policy and internal dialogue, based on comparative documents including indicators.
- External communication with various stakeholders, through information and feedback.
- The policy strategies of university leaders and their room for manoeuvre, backed up by statistics.

Nevertheless, the leading challenge for most universities is still to have and manage an *ad hoc* information system.

Limits and impediments to the building and use of strategic indicators

A range of technical, ideological, cultural and structural factors – the common lack of reliable and relevant information systems and, more importantly, the existence of strong cultural values and practices such as academic freedom or peer evaluation, but also the classic structural form of universities – appear to explain the relative "incapacity" of universities in this field.

In fact, as pointed out in Section I, universities are often described as a patchwork of widely differing, independent entities whose individual interests generate conflict more than anything else.

Against this background, indicator-building is a process requiring the involvement of all concerned and is a long, difficult and tension-ridden process. It is a necessary move, and one that is resource-intensive. Moreover, the current context of budget cuts does not generally make it easy to implement.

All this raises questions as to the capacity of universities to meet the new challenges in a structured and coherent way. It is probably within this framework that the role of university leaders as players who generate ideas, act as arbiters and provide leverage is absolutely crucial if projects are to emerge, and if there is to be a strategic framework for constructive collaboration and internal dialogue.

CONCLUSION

Universities are regarded as institutions rather than as enterprises, and have always shown a certain sense of tradition, whether with regard to structure and function or culture and mission.

However, this traditional image no longer seems to equate with reality. Today, universities have to adopt a strategy that will constantly adapt its main thrust to suit market needs. Moreover, the attention granted to image and market suitability seems to be an increasing preoccupation within universities.

Furthermore, stakeholders require proof, or at least guarantees, from the universities of the quality and efficiency of their activities, which means that universities must have the capacity to self-evaluate and take market requirements into account in a dynamic and innovative way.

The current structural form and modes of management of universities are being called into question by the many exterior constraints and the challenges they face.

Transformation of this kind is not easy to undertake given the nature of the universities' missions. Since these missions generate important social consequences, the universities must remain institutions whose civic role is to strive for excellence and equity. On the other hand, these institutions must respond to the direct expectations of students and employers as well as fund providers, which means they must adopt a spirit of enterprise and react to market requirements.

However, in an institution such as a university, which has strong cultural values, much freedom of action, conflicting objectives and which is frequently characterised by a "step by step"[20] strategy, the application of an entrepreneurial model is not that easy. Furthermore, if one looks beyond the benefits that this change would bring in terms of organisational development, clarity of policies for quality evaluation and efficiency, there is a risk of allowing universities to be regulated mainly by market needs.

The question of university management therefore appears fundamental when it comes to objectives, challenges and opportunities for their future development. This question requires much more thought and discussion, within each university, between universities and with government bodies. Future CRE and IMHE initiatives will contribute to further discussion of this issue.

Notes

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2. See articles by Davies, 1997*a*, Aaviksoo, 1997 and Shattock, 1997.
3. See for instance Clark, 1998 and Davies, 1997*b*.
4. The Seminar's Academic Director was Professor Françoise Thys-Clément, former R*ecteur* and P*rorecteur* of the U*niversité L*i*bre de* B*ruxelles*. The rest of the team consisted of Professor Régis Ritz, President of the P*ôle universitaire européen de* B*ordeaux* and former President of the U*niversité* M*ichel de* M*ontaigne de* B*ordeaux*, Professor Luis Sousa Lobo, Rector of the U*niversidade* N*ova de* L*isboa*, Professor Richard L. Morrill, Chancellor of the University of Richmond, Virginia, and Professor Gilles Bertrand, former President of the U*niversité de* B*ourgogne*.
5. Mintzberg, 1982.
6. Cohen and March, 1974.
7. Santos, Heitor and Caraça, 1998.
8. Morrill, 1999.
9. Feola, Thys-Clément and Wilkin, 1999.
10. Gueissaz and Häyrinen-Alestalo, 1999.
11. Thys-Clément, 1995.
12. Thys-Clément, Weber *et al.*, 1997.
13. "Technically, an externality is the benefit to society that exceeds private gain to the individual. This concept is used to compare the private and social benefits of a particular action. It is well known that environmental pollution has negative externalities, whereas health and education generate positive externalities that are hard to quantify but undeniable". Thys-Clément, 1995.
14. Knight, 1999.
15. Knight and de Wit, 1997.
16. See also article by Trinczek and West, 1999.
17. Are universities in a sufficiently stable environment for indicators to remain reliable over time?
18. For instance, the figures produced by indicators (notably completion rates) can be "massaged" internally. As another example, the fact that there are no evaluation exercises or

indicators on research into the human sciences might give the impression that no research is carried out in this area, and research budgets may be cut accordingly.

19. Dejean, Bourassin and Mortreux, 1998.
20. Clark, 1983.

References

AAVIKSOO, J. (1997),
"Priorities for higher education in central and eastern European countries", *Higher Education Management*, Vol. 9, No. 2 (July), pp. 19-26.

CLARK BURTON, R. (1983),
The Higher Education System, Berkeley, University of California Press.

CLARK BURTON, R. (1998),
Creating Entrepreneurial Universities: Organizational Pathways of Transformation, Oxford, New York, Pergamon Press.

COHEN, M.D. and MARCH, J. (1974),
Leadership and Ambiguity: The American College President, New York, Mac Graw Hill.

DAVIES, J.L. (1997*a*),
"A European agenda for change for higher education in the XXIst century", *European Regional Forum* (CRE-CEPES), 24-27 September, Palermo.

DAVIES, J.L. (1997*b*),
"The evolution of university responses to financial reduction", *Higher Education Management*, Vol. 9, No. 1, pp. 127-140.

DEJEAN, J., BOURASSIN, V. and MORTREUX, K. (1998),
"Culture de l'évaluation et fascination pour les indicateurs", *Politiques et Management Public*, Vol. 16, No. 2, pp. 161-174.

FEOLA, C., THYS-CLEMENT, F. and WILKIN, L. (1999),
"Le management des universités: entre enseignement et recherche", in P. Praet and F. Thys-Clément (eds.), *L'Économiste dans la Société*, Brussels, Éditions de l'Université de Bruxelles, pp. 181-191.

GUEISSAZ, A. and HAYRINEN-ALESTALO, M. (1999),
"How to integrate contradictory aims. The configurations of actors in the evaluation of universities", *European Journal of Education*, Vol. 34, No. 3, pp. 283-297.

KNIGHT, J. and DE WIT, H. (1997),
Internationalisation of Higher Education in Asia Pacific Countries, Amsterdam, European Association for International Education.

KNIGHT, J. and DE WIT, H. (1999),
Quality and Internationalisation of Higher Education, OECD.

MINTZBERG, H. (1982),
Structure et dynamique des organisations, Paris, Éditions d'organisation.

MORRILL, R. (1999),
"The Use of Indicators in the Strategic Management of Universities", Brussels, Paper for the CRE and IMHE-OECD Management Seminar, 3-8 September.

SANTOS F., HEITOR, M.V. and CARAÇA J. (1998),
"Organisation of First-cycle Teaching at University: Models and Issues", *Higher Education Management*, Vol. 10, No. 3, pp. 87-108.

SHATTOCK, M. (1997),
"The Managerial Implications for Human Resources", *Higher Education Management*, Vol. 9, No. 2 (July), pp. 27-34.

THYS-CLEMENT, F. (1995),
"The Crisis of University Funding", *Revue de l'Association des Universités européennes*, CRE-*Action*, No. 106, pp. 19-24.

THYS-CLEMENT, F., WEBER L. *et al.* (1997),
Five Ways to Improve University Funding, Standing Conference of Rectors, doc. No. 2 (February).

TRINCZEK, R. and WEST, A. (1999),
"Using Statistics and Indicators to Evaluate Universities in Europe: aims, fields, problems and recommendations", *European Journal of Education*, Vol. 34, No. 3, pp. 343-356.

Towards a Model of Institutional Effectiveness in Higher Education: Implications of a Hong Kong Study

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ABSTRACT

Over the past two decades, higher education worldwide has become increasingly preoccupied with performance measurement. Faced with pressure from Governments espousing the doctrine of public accountability and 'value for money' education, higher education has responded by embracing the quality movement. Despite some ambiguity, the quality movement has given rise to some useful initiatives, not least the practice of institutional self assessment which is a common approach to institutional performance measurement in higher education. However, there is a tendency for institutional self assessment exercises to employ criteria which represent an untested view of institutional effectiveness.

The Competing Values Model or Framework (Quinn and Rohrbaugh, 1981, 1983) has been proposed as "a general paradigm of organisational effectiveness". This paper describes a study that examined the applicability of the Model to higher educational institutions in Hong Kong. A set of scales suitable for the valid and reliable self assessment of the effectiveness of higher educational institutions in Hong Kong was developed. The scale development method was designed to maximise validity and reliability and to test the relevance of the Competing Values Model to Hong Kong higher education. The Hong Kong study suggests an approach to the development of a general model of organisational effectiveness for higher educational institutions that would be a useful addition to the array of quality assurance mechanisms in higher education.

INTRODUCTION

A feature of higher education worldwide these days is the emphasis on performance measurement, particularly at the institutional level. This emphasis may

be viewed as a consequence of three interrelated factors. First, various national governments continue to promote a value for money approach to public spending on education, stressing the need to link funding to performance. This public sector accountability focus appears to be continuing an emphasis which began in Europe as a result of the political inclinations of the various conservative governments in power in the 1980s (Goedegebuure *et al.*, 1990). Secondly, a general trend towards increased public access to information, particularly information relating to institutions engaged in spending public money appears to have heightened demand for higher educational institutions to demonstrate the efficiency of their performance (Lucier, 1992; Liaison Committee of Rectors Conferences, 1993). Finally, the growth of mass education seems to have intensified societal concern about the amount and direction of public spending on higher education and this concern has thrown the spotlight on institutional performance (Liaison Committee of Rector's Conferences, 1993; Koo, 1996).

The worldwide pressure to demonstrate value for money performance has led to what may be termed a quality movement in higher education with higher education funding bodies and institutions concerned to develop quality assurance mechanisms capable of demonstrating the required performance. Research assessment exercises, teaching and learning quality process reviews, course and teaching evaluations and performance indicators are examples taken from an array of mechanisms that have been amassing in recent years. One such mechanism, namely institutional self assessment, is highly regarded as a means of both evaluating, and stimulating improvements to, institutional performance (Kells, 1988; Peace-Lenn, 1992; Liaison Committee of Rectors' Conferences, 1993). It is also an important mechanism because, typically, it is at the centre of an institutional review process designed to establish the potential of higher educational institutions for accreditation by an external body, or to determine the eligibility of already accredited institutions to continue enjoying that status. However, institutional self assessment in higher education is largely based upon criteria which reflect a view of effectiveness which is implicit and therefore untested (Pounder, 1997). Higher education needs the solid theoretical base for institutional performance assessment that a generally accepted model of effectiveness could provide. The Competing Values Model of Organisational Effectiveness (Quinn and Rohrbaugh, 1981, 1983) may meet that need.

The Competing Values Model has been viewed as a "general paradigm" of organisational effectiveness (Quinn and Rohrbaugh, 1981). Its general paradigmatic status is based on the fact that the Model makes explicit major perspectives on organisational effectiveness taken by acknowledged experts in the field. Furthermore, the extent to which the Model has been employed in organisational and management studies provides support for that status. The Competing Values Model has provided an analytical framework for over 40 studies (Pounder, 1997).

This paper describes a study which sought to test the applicability of the Competing Values Model (Quinn and Rohrbaugh, 1981, 1983) to higher educational organisations. The study was conducted in the Hong Kong higher educational system and was completed in 1997. At the time of the field work, the Hong Kong higher education system comprised only nine accredited higher educational institutions which facilitated a high degree of participation in the study. Thus, Hong Kong provided a suitable base for an initial examination of the applicability of the Competing Values Model of Organisational Effectiveness to higher education. The relevance of the Model to higher educational organisations was tested through a method designed to produce scales capable of the valid and reliable self rating of institutional effectiveness. The scales were based on the effectiveness dimensions contained in the Competing Values Model.

METHOD

What follows is a summary of the method employed in the study to develop the rating scales. (Full details of the method can be obtained from the author of this paper.) The method of scale development was a version of the procedure for constructing Behaviourally Anchored Rating Scales (BARS) (Smith and Kendall, 1963), modified to maximise validity and reliability.

Generation of examples

A pilot study, involving a small number of senior academics and administrators in Hong Kong higher education, gauged the feasibility of generating behavioural examples for BARS in sufficient numbers for the main study to be feasible. Participants were requested to provide examples of good, average and poor organisational behaviour, for each of the nine effectiveness dimensions (*i.e.*, productivity-efficiency, quality, cohesion, adaptability-readiness, information management-communication, growth, planning-goal setting, human resources development, stability-control) contained in the Competing Values Framework (Quinn and Rohrbaugh, 1981, 1983). Definitions of these effectiveness dimensions are contained in Appendix A. These definitions took the descriptions employed in an earlier experiment by Edwards (1986) conducted in a commercial context, and slightly modified them where necessary for a higher educational setting.

The results of the pilot study indicated the feasibility of the main study and all the nine accredited higher educational institutions in Hong Kong were then invited to participate in developing the instrument. Seven institutions accepted the invitation. Thirty-two senior academic and administrative staff in Hong Kong higher education agreed to provide behavioural examples as in the pilot study. The rationale for inviting only senior staff was the need for participants to occupy positions affording

them an overview of organisational performance in order for them to provide examples of behaviour at the organisational level. A total of 592 examples was generated.

Screening of examples

The behavioural examples generated above were subjected to an initial screening by a panel of four judges at senior institutional management level [*i.e.*, Vice-President, Dean of Business Faculty, Institutional Consultant/Former Associate Vice President (Academic) and Head of Management Department] in one of the accredited institutions of higher education in Hong Kong. Panel members were advised to screen out any examples which fell into one or more of the following categories:

- Did not describe behaviour at the organisational level.
- Expressed sentiments similar to another example perceived to be better constructed.
- Was a description of an intangible trait rather than a tangible illustration of behaviour.
- Was worded ambiguously.
- Described behaviour associated with more than one dimension of effectiveness.

Retranslation

A randomised list of the examples remaining after screening and a list of the nine effectiveness dimensions with descriptions enabled 162 academic and administrative staff in the seven participating institutions to undertake retranslation. This involved the reallocation of examples to relevant dimensions. A 60% agreement criterion (*i.e.*, for each example, 60% of participants in the retranslation exercise agreeing that the example related to a particular effectiveness dimension) was employed which permitted the retention of sufficient examples to form scales in all the nine effectiveness dimensions of the Competing Values Framework. Bernardin *et al.* (1976) have recommended the 60% criterion based on a comprehensive examination of the effects of procedural variations on the psychometric properties of BARS scales.

BARS Scaling

One hundred and thirty academic and administrative staff in the seven participating institutions engaged in the BARS scaling. BARS scaling involved each behavioural example being given a numerical rating by each participating staff member. This rating reflected the participant's perception of the level of performance in a particular effectiveness dimension conveyed by the example in question. Thus, for instance, an example judged by a staff member to represent good

performance in a particular effectiveness dimension was given a higher numerical rating than an example considered by that same staff member to represent average or poor performance. The objective of the scaling was to form rating scales in each of the nine effectiveness dimensions from only those examples with the lowest standard deviations consistent with retaining enough examples to form the scales. The BARS procedure required that those examples then be located as scale anchors according to the mean of their numerical ratings.

Landy and Farr (1980) concluded that the decision rules for scaling are often arbitrary and a survey of literature for the Hong Kong study did reveal variations in the number of scale points used for the numerical rating of examples and the standard deviation criteria employed for scaling. It was felt that numerical scales exceeding five points would tend to make the rating of behavioural examples too complex by requiring participants to make excessively fine judgements on levels of performance represented by the examples. Additionally, BARS literature contains a study which developed scales capable of valid measurement based on a five point scaling of anchors and a standard deviation of 1.00 or less (Dickinson and Zellinger, 1980). In developing the BARS for the Hong Kong study, a five point scale for rating behavioural examples was employed together with a more stringent standard deviation criterion than in the Dickinson and Zellinger study, namely 0.9 or less. This standard deviation criterion was applied to ensure that the scales developed in the Hong Kong study were at least comparable, and potentially superior, to Dickinson and Zellinger's scales.

Multidimensional scaling

Valid rating requires that rating scales be logically ordered (scalable). The scalability notion, originating with Guttman (1944), requires that scales produce response patterns "in which endorsement of the item reflecting the extreme position results also in endorsing all items which are less extreme" (Emory and Cooper, 1995, p. 223). Hence, scales should be ordered in such a way that a rater will not be faced with the dilemma of finding two anchor descriptions on the same scale which seem equally representative of a subject's performance where one description purports to depict good performance and the other, poor performance.

Multidimensional scaling was employed in the Hong Kong study as a means of validating the ordering of scale anchors. Dissimilarity matrices were prepared for each of the nine effectiveness dimensions to enable pairwise dissimilarity judgements to be made for all the behavioural examples retained as scale anchors after BARS scaling had been completed. Dissimilarity judgements were made using a five point numerical scale. The selection of a scale confined to five points was to avoid the need for participants to make excessively fine judgements on degrees of dissimilarity between pairs of behavioural examples. For example, a participant

might record a score of 1 in the appropriate cell of the matrices when a pair of behavioural statements was judged to be very similar and in the case of a pair of examples judged to be very dissimilar, a score of 5 might be given. It was recognised that multidimensional scaling requires careful attention to the task on the part of participants. This led to the selection of a panel of twenty five judges to undertake the exercise on the basis that they occupied senior academic or administrative roles in Hong Kong higher education, or they had an academic background in organisational analysis and were currently involved in research or teaching in an area related to the study.

It was reasoned that a validly ordered scale would exhibit a pattern of anchor ordering such that anchors representing *clear differences* in level of performance according to BARS scaling would be judged to be *clearly different* according to multidimensional scaling. It followed also that anchors representing *clearly similar* levels of performance should be judged to be *clearly similar*. Correlation analysis was used to compare the ordering of anchors produced by the BARS and multidimensional scaling methods. Those scales which were judged to possess relatively weak correlations between the rank ordering of examples produced by both scaling methods, were eliminated from the study.

Multitrait-multirater analysis

Valid measurement requires that measurement scales be unidimensional. This means that descriptive scale anchors should be statements capturing the content of the trait, or in the case of the Hong Kong study the effectiveness dimension, to which they relate *and only that trait or effectiveness dimension*. This aspect of validity is frequently examined with reference to Campbell and Fiske's (1959) multitrait-multimethod analysis. The multitrait-multirater variant of Campbell and Fiske's analysis was employed in the Hong Kong study given that the analysis remains current as a tool for gauging the construct validity (unidimensionality) of human performance measurement scales (Henderson *et al.*, 1995; Kinicki *et al.*, 1985; Lascu *et al.*, 1995; Schreisheim and Eisenbach, 1995; Spreitzer, 1995; Sullivan, 1995). Furthermore, psychometricians continue to confirm the efficacy of multitrait-multimethod analysis as a thorough approach to validating measurement employing rating scales (Cronbach, 1990; Murphy and Davidshofer, 1991; Gregory, 1992).

Multitrait-multirater analysis requires the production of a matrix which presents all intercorrelations when each of a number of traits (in the Hong Kong study, organisational effectiveness dimensions) is measured by more than one source of ratings. The pattern of intercorrelations indicates the presence, or absence, of construct validity. For the purpose of multitrait-multirater analysis, the scales remaining after the scaling stage of the procedure were formed into an institutional self assessment instrument and completed by 151 academic and administrative staff at

various levels of responsibility within the seven participating institutions. Two categories of respondents were identified: Assistant/Associate Professor and Others. The first group was viewed as largely homogeneous in job nature, with a primary emphasis on teaching and research. The second group was considered less homogeneous than the former but commonly, those falling into this category, tended to perform organisational roles with a high administrative content. This categorisation and the spread of responses across institutions permitted the development of multitrait-multirater matrices for four out of the seven participating institutions (Pounder, 1997).

Tests of reliability

The inter-rater reliability and test-retest reliability of rating employing each of the scales was gauged against the Nunnally and Bernstein (1994) recommended reliability coefficient of around 0.70. Scales which did not meet the recommended reliability coefficient were eliminated.

RESULTS AND DISCUSSION

The method of scale development resulted in institutional self assessment scales in four of the nine effectiveness dimensions contained in the Competing Values Model (Quinn and Rohrbaugh, 1981, 1983), namely, Information Management-Communications, Planning-Goal Setting, Productivity-Efficiency and Cohesion. Each of these scales were found to be scalable, and capable of valid rating measured in terms of convergent and discriminant validity. Given the nature of the BARS procedure which requires experts to provide the scale anchors, the scales were also content valid. Additionally, each of those scales met Nunnally and Bernstein's (1994) threshold requirement for reliability. The four scales are reproduced in Appendix B. The method of scale development also served to establish the applicability of Information Management-Communications, Planning-Goal Setting, Productivity-Efficiency and Cohesion effectiveness dimensions across institutions of higher education in Hong Kong. Given the rigour of the scale development method and the high degree of participation in the study, these effectiveness dimensions are possible core dimensions of a model of institutional effectiveness applicable to Hong Kong higher education. Thus, employment of these scales as part of any future institutional self assessment exercises in Hong Kong higher education will place these exercises on a firmer theoretical footing than has hitherto been the case.

The opportunity exists to build on the model of effectiveness developed for Hong Kong institutions of higher education. For example, the method of scale development employed in the Hong Kong study could be replicated in higher educational systems in a number of countries with the possible result of moving

research towards the development of a generally agreed model of institutional effectiveness in higher education. From an institutional performance assessment viewpoint, a generally agreed model of institutional effectiveness in higher education would anchor performance assessment to a theoretical base that would enable, for example, comparative assessments of the effectiveness of higher educational institutions to be made. Equally, a generally agreed effectiveness model would mean that such comparisons need not be confined within national boundaries. Given current experiments with credit unit and credit transfer systems, it is likely that the future provision of higher education will become increasingly competitive and internationalised, with students completing programmes of study in totally different institutions and, possibly, in different countries, from the institutions and countries in which they commenced these programmes. One factor which could influence students' decisions on where to commence, continue or complete their studies may be the extent to which particular higher educational institutions are able to demonstrate their overall institutional effectiveness when compared with other institutions. In such circumstances, a generally agreed model of institutional effectiveness in higher education is likely to be of strategic importance.

Appendix A

- **Productivity-efficiency:** This aspect of an institution's performance has to do with behaviour that reflects the extent to which it is concerned with the quantity or volume of what it produces and the cost of operation.
- **Quality:** This aspect of an institution's performance has to do with behaviour that reflects the extent to which it is concerned with the quality of what it produces.
- **Cohesion:** This aspect of an institution's performance has to do with behaviour that reflects the extent to which it is concerned with staff morale, interpersonal relationships, teamwork, and sense of belonging.
- **Adaptability-readiness:** This aspect of an institution's performance has to do with behaviour that reflects the extent of its ability to readily alter or adapt its structure, programmes, courses, etc., in response to changing demands. In other words, the extent of the institution's readiness to adapt to change.
- **Information management-communication:** This aspect of an institution's performance has to do with behaviour that reflects the extent of its ability to distribute timely and accurate information needed by its members to do their jobs.
- **Growth:** This aspect of an institution's performance has to do with behaviour that reflects the extent of its ability to secure external support, acquire resources, and increase its capabilities.
- **Planning-goal setting:** This aspect of an institution's performance has to do with behaviour that reflects the extent of its ability to set goals and objectives and systematically plan for the future.
- **Human resource development:** This aspect of an institution's performance has to do with behaviour that reflects the extent to which it is responsive to the individual needs of its staff. It also has to do with the extent to which the institution facilitates participation in decision making. Additionally, this aspect is concerned with behaviour relating to the hiring, training and development of staff.

– **Stability-control:** This aspect of an institution's performance has to do with behaviour that reflects the extent of its ability to control the flow of work, to direct the behaviour of its members, and to maintain the institution's continuity particularly under periods of pressure or threat.

Performance Dimension: Cohesion

Définition: This aspect of an institution's performance has to do with behaviour that reflects the extent to which it is concerned with staff morale, interpersonal relationships, teamwork, and sense of belonging.

5 — Typically, in this institution, one would expect senior management to have taken positive steps to create a climate in which employees at all levels are made to feel valuable members of the institution.

4.5 — Typically, in this institution, one would expect staff to regularly refer to their sense of commitment to the institution.

4 — Typically, in this institution, one would expect mechanisms to exist for staff to share problems and to work together.
Typically, in this institution, one would expect the senior management team to visit academic and administrative units regularly and talk freely and informally with members of staff.

3.5 — Typically, in this institution, one would expect there to have been an effort either to foster allegiance to parts of the organisation in the face of growth or to limit expansion so as to maintain a sense of belonging.

3 — Typically, in this institution, one would expect staff to demonstrate greater allegiance to the parent faculty or department than to the institution as a whole.
Typically, in this institution, one would expect senior management to express a commitment to the maintenance of staff morale but not to do sufficient to ensure that people at all levels have a sense of belonging.

2.5 — Typically, in this institution, one would expect there to be frequent conflicts between the centre and sub-units, between academic and administrative units, between one academic or administrative unit and another, and between individuals.

2 — Typically, in this institution, one would expect feelings of loyalty and sense of belonging to be undermined by an approach to human relations issues (*e.g.*, to contract renewal) which generates insecurity.

1.5 — Typically in this institution, one would expect there to be a general lack of informal contact amongst staff members demonstrated by inadequate staff common room life and too many closed office doors.

1

This space below is provided for raters to write down their own example (optional – see rater's instructions):

_____

_____ Numerical Rating

Performance Dimension: Information Management – Communication

Définition: This aspect of an institution's performance has to do with behaviour that reflects the exten of its ability to distribute timely and accurate information needed by members to do their jobs..

5 — Typically, in this institution, one would expect mechanisms to have been introduced for the express purpose of cascading information systematically from top to bottom of the organisationa hierarchy.

4.5 — Typically, in this institution, one would expect a management information provision unit to hav been established which is constantly consulting information users on their present and futur needs.

4 — Typically, in this institution, one would expect minutes of governing body meetings (*e.g.*, Boar of Governors/Council/Academic Board) to be made available to all staff, and actively circulate to those who need them.

3.5 — Typically, in this institution, one would expect information bulletins from management, and meetings, to focus primarily on developments that have already taken place, as opposed to developments in the pipeline.

Typically, in this institution, one would expect there to be both formal and informal channels

3 — for information but information provision to be not always timely.

Typically, in this institution, one would expect there to be widespread use of the "confidentia and "restricted" stamp on documents and reports.

2.5 — Typically, in this institution, one would expect information produced centrally to be consigne to the waste bin frequently by recipients because it is thought to serve no useful purpose.

2 — Typically, in this institution, one would expect information provision to be *ad hoc* in the sense of being provided when requested if one happens to know that it is available and the relevar party to contact.

1.5 — Typically, in this institution, one would expect little or no publicity to be given to major developments such as the setting up of a new unit or the introduction of a new facility.

1

This space below is provided for raters to write down their own example (optional – see rater's instructions

_____

_____ Numerical Rating

Performance Dimension: Productivity-Efficiency

Définition: This aspect of an institution's performance has to do with behaviour that reflects the extent to which it is concerned with the quantity or volume of what it produces and the cost of operation.

5

Typically, in this institution, one would expect there to be regular meetings at all levels in the organisation devoted to improving productivity and efficiency.

4.5

Typically, in this institution, one would expect that rationalisation of the organisation (*e.g.*, grouping of departments into faculties or schools) and establishment of budget centres, have been carried out with a view to improving productivity and efficiency.

4

Typically, in this institution, one would expect departments and individuals to have been provided with incentives to use resources efficiently.
Typically, in this institution, one would expect periodic reviews of support units to be made with a view to establishing the extent to which the units give value for money. One would also expect appropriate action to be taken in cases where value for money is not established.

3.5

Typically, in this institution, one would expect that in new programme/course design, a great deal of emphasis would be placed on demand for the programme/course and economy in the use of resources.
Typically, in this institution, one would expect it to have been made clear to all unit heads and above that productivity - efficiency is a major criterion used to judge the worth of their decisions.
Typically, in this institution, one would expect evening and extension programmes/courses to be approved on the understanding that they cover costs.

3

Typically, in this institution, one would expect there to be a constant drive to achieve low unit costs.

2.5

Typically, in this institution, one would expect resources to be under-utilised in the evenings or weekends.

2

Typically, in this institution, one would expect that, so long as externally established norms are met, little attention is paid to efficiency.

1.5

Typically, in this institution, one would expect there to be a notable absence of mechanisms for assessing productivity and efficiency.

1

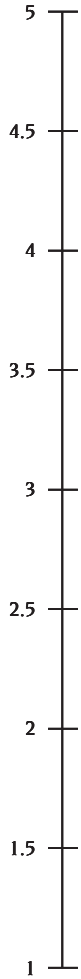
This space below is provided for raters to write down their own example (optional – see rater's instructions):

_____

_____ Numerical Rating

Performance Dimension: Planning – Goal Setting

Définition: This aspect of an institution's performance has to do with behaviour that reflects the extent of its ability to set goals and objectives and systematically plan for the future.



Typically, in this institution, one would expect the institutional plan to be coherent, in the sense of moving from mission statement to broad aims and then to specific objectives, and action oriented, in the sense of providing a framework which allows each lower level unit to define its own objectives and action plans.

Typically, in this institution, one would expect long term goals to have been established that are consistent with the institution's traditions and the likely future of society, and mechanisms for regular review to have been set up.

Typically, in this institution, one would expect an institutional plan, comprising mission, goals and strategies to be revised and updated each year and circulated widely amongst members of staff.
Typically, in this institution, one would expect academic and administrative unit heads to prepare their own budgets which reflect their plans for the coming year.

Typically, in this institution, one would expect a planning committee to have been established, comprising members of the senior management team, which regularly reviews the institution's mission, objectives and strategies.

Typically, in this institution, one would expect there to be an approximate plan or view on future direction but with implementation not fully worked out.

Typically, in this institution, one would expect management to exhibit a reluctance to deal with open ended aspects of planning, preferring to plan within a framework which limits strategic options.

Typically, in this institution, one would expect management not to have given direction on priority areas for the present and future.
Typically, in this institution, one would expect powerful members of the senior management team to display little understanding of, or interest in, long term development. Consequently, one would expect such committees as are established to deal with change to have no obvious goals or functions.

Typically, in this institution, one would expect different committees to deal with different planning related activities in an uncoordinated way.

This space below is provided for raters to write down their own example (optional – see rater's instructions):

_____ Numerical Rating

References

BERNARDIN, H.J., LASHELLS, M.B., SMITH, P.C. and ALVARES, K.M. (1976),
"Behavioural expectation scales: Effects of developmental procedures and formats", *Journal of Applied Psychology*, 61, pp. 75-79.

CAMPBELL, J.P. and FISKE, D.W. (1959),
"Convergent and discriminant validation by the multitrait-multimethod matrix", *Psychological Bulletin*, 36, pp. 81-105.

CRONBACH, L.J. (1990),
Essentials of Psychological Testing, New York, Harper-Collins.

DICKINSON, T.L. and ZELLINGER, P.M. (1980),
"A comparison of the behaviourally anchored rating and mixed standard scale formats", *Journal of Applied Psychology*, 65, pp. 147-154.

EDWARDS, R.L. (1986),
Using Multidimensional Scaling to Test the Validity of Behaviourally Anchored Rating Scales: An Organisational Example Involving the Competing Values Framework, State University of New York at Albany.

EMORY, C.W. and COOPER, D.R. (1995),
Business Research Methods, Boston, Irwin.

GOEDEGEBUURE, L.C. J., MAASSEN, P.A. M. and WESTERHIEJDEN, D.F. (1990),
"Quality assessment in higher education", in. L.C.J. Goedegebuure, P.A.M. Maassen and D.F. Westerheijden (eds.), *Quality Assessment in British and Dutch Higher Education*, Utrecht, Lemma.

GREGORY, R.J. (1992),
Psychological Testing: History, Principles and Applications, Boston, Allyn and Bacon.

GUTTMAN, L. (1944),
"A Basis for scaling qualitative data", *American Sociological Review*, 9, pp. 139-150.

HENDERSON, F., ANDERSON, N. and RICK, S. (1995),
"Future competency profiling: Validating and redesigning the ICL graduate assessment centre", *Personnel Review*, 24(3), pp. 19-31.

KOO, B.R. (1996),
"Developments in the Quality Assurance of University Education in Korea: Major Issues and Future Prospects", Paper Presented at the International Conference on Quality Assurance and Evaluation in Higher Education, Beijing, Chinese Society of Higher Education Evaluation, People's Republic of China/Hong Kong Council for Academic Accreditation.

KINICKI, A., BANNISTER, B., HOM, P. and DENISI, A. (1985),
"Behaviourally anchored rating scales *vs* summated rating scales: Psychometric proper-

ties and susceptibility to rating bias", *Educational and Psychological Measurement*, 45, pp. 535-549.

LANDY, F.J. and FARR, J.L. (1980),
"Performance rating", *Psychological Bulletin*, 87, pp. 72-107.

LASCU, D.N., ASHWORTH, N., GIESE, T. and OMAR, M. (1995),
"The user information satisfaction scale: International applications and implications for Management and Marketing", *Multinational Business Review*, 3(2), pp. 107-115.

LIAISON COMMITTEE OF RECTORS' CONFERENCES (1993),
Quality Assessment in European University and Higher Education, Brussels.

LUCIER, P. (1992),
"Performance indicators in higher education: lowering the tension of the debate", *Higher Education Management*, 4, pp. 204-214.

MURPHY, K.R. and DAVIDSHOFER, C.O. (1991),
Psychological Testing: Principles and Applications, New Jersey, Englewood Cliffs, Prentice-Hall.

NUNNALLY, J.C and BERNSTEIN, I.H. (1994),
Psychometric Theory, McGraw-Hill, New York.

POUNDER, J.S. (1997),
Measuring the Performance of Institutions of Higher Education in Hong Kong: An Organisational Effectiveness Approach, Brunel University/Henley Management College.

QUINN, R.E. and ROHRBAUGH, J. (1981),
"A competing values approach to organisational effectiveness", *Public Productivity Review*, 5(2), pp. 122-140.

QUINN, R.E. and ROHRBAUGH, J. (1983),
"A spatial model of effectiveness criteria: Towards a competing values approach to organisational analysis", *Management Science*, 29(3), pp. 363-377.

SCHREISHEIM, C.A. and EISENBACH, R.J. (1995),
"An exploratory and confirmatory factor-analytic investigation of item wording effects on the obtained factor structures of survey questionnaire measures", *Journal of Management*, 21(6), pp. 1 177-1 193.

SMITH, P.C. and KENDALL, L.M. (1963),
"Retranslation of expectations: An approach to the construction of unambiguous anchors for rating scales", *Journal of Applied Psychology*, 47, pp. 149-155.

SPREITZER, G.M. (1995),
"Psychological empowerment in the workplace: Dimensions, measurement and validation", *Academy of Management Journal*, 38(5), pp. 1 442-1 465.

SULLIVAN, D. (1996),
"Measuring the internationalisation of a firm: A reply", *Journal of International Business Studies*, 27(1), pp. 179-192.

New Endeavours for Higher Education Quality Assurance: Results from the Pilot Institutional Evaluation in Bulgaria

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ABSTRACT

This article gives an account of findings of three pilot institutional evaluations undertaken jointly by the National Evaluation and Accreditation Agency and the PHARE Project team between 1998 and 1999. It offers some thoughts on the idea that if Bulgarian universities want to benefit from the audit process, this audit should be designed in a way that assists them to identify areas where quality needs to be strengthened. For this to take place a strong sense of commitment on the part of university staff is necessary. How much still remains to be done is evident from the analysis which reveals several types of difficulties.

The discussion of the effectiveness of training and briefing for the three pilots identifies insufficient training for key change agents at the universities and the lack of a well-balanced staff development policy. Further analysis of the interview and questionnaire material shows that the self-evaluation institutional committee has to be given a clear role for the self-evaluation report to be of high quality. The quality of the documentation provided by the institution is evaluated in relation to the need for greater emphasis on analysis than on description. In spite of the positive attitude shared in general by the various groups of respondents, the overall effectiveness of the pilot evaluations has been challenged in two aspects: i) the relationship between institutional and programme evaluations criteria, and ii) the institutional mission and goals set as a starting point for evaluation.

INTRODUCTION

The National Evaluation and Accreditation Agency in Bulgaria was established in August 1996. Immediately after its inception, a feasibility study "Accreditation of higher education institutions in Bulgaria" started.[1] The project helped the Agency to design its method for evaluation and accreditation and has been a valuable starting point in establishing a quality assurance system in Bulgaria. Although the prevailing part of activities dealt with the NEAA design and establishment, the project team ran the first seminar on institutional accreditation and made efforts to train universities' staff on self-evaluation in one of the largest and most prestigious institutions. This was an enormous task, considering the state of awareness and acceptance by academic staff and all stakeholders of the modern concept for quality assurance at that time.

The QSC team endeavours to put the quality assurance system in Bulgaria on a European track had been continued by the follow-up team of the "Universitas Consultants" in 1998-99. Thus, one of the main objectives of the second year of the National Evaluation and Accreditation Agency project PHARE BG 95.06 – 05.01.001, was to make concrete recommendations and action steps for establishing internal systems in universities towards a national institutional accreditation process comparable to EU countries. The following text considers the results of the preparation, organisation and implementation of the Pilot Institutional Evaluation in several Bulgarian universities.

BACKGROUND

One can describe the situation with the national quality assurance system before the start of the second phase of the PHARE Project as dominated by external actors. The Agency concept for quality assurance expressed at that time greater concern for external procedures rather than for internal quality assurance mechanisms. Similarly, external assessors were given greater attention than quality providers in universities (Georgieva, 1998). Institutional evaluation was assumed to be a form of an extended programme assessment and accreditation. The evaluation process itself has been defined as a check for compliance with the uniform state requirements (HE Act, 1995). Moreover, the fees paid to the Agency for each accreditation have made it difficult for institutions to find additional financial resources for developing internal quality assurance mechanisms. The Agency itself also faced problems with funding developmental activities (*e.g.* training seminars for academic staff, methodological support for programme and institutional self-evaluations, site-visits, etc.) outside the formal accreditation procedure.

The Pilot Institutional Evaluation initiated by the PHARE Project team was based on a less formal approach to evaluation of the institution.[2] It aimed at mobilising management resources of the institution to facilitate progress through objec-

tive analysis of strengths and weaknesses. Therefore the overall preparation and implementation of the evaluation in the three Bulgarian Universities aimed at ensuring conditions for critical analysis, which would help identify weaknesses and overcome obstacles in their activities. This had to be done in the conditions of open and constructive dialogue, in the process of which, there had to be exchange of ideas and positive experience, first between the internal self-review Committee and the staff and students, and later on, between the external Peer Committee and the visited institution.

The idea was to create proper conditions in which to test the possibility for further development of the evaluation method of the National Evaluation and Accreditation Agency, through the introduction of working standards closer to the European ones. At the same time, the inclination of Bulgarian higher education institutions to adopt the European approach in assuring higher education quality had to be assessed.

On this basis, together with the organisation of the pilot institutional accreditation in three Bulgarian universities, the Project Team developed a conceptual framework for a study of its results.[3] This included: *a*) direct observations of the preparation and training for the institutional evaluation, also during the site visits; *b*) inquiry amongst the participants (peer evaluation teams and universities' staff involved in evaluations) immediately after visits; and *c*) post-evaluation interview with the participants in the three pilots.

The reliability of the information received has been ensured through a double intersection of the results from the three groups of respondents: staff of the pilot institutions; external peers, who have participated in the Peer Evaluation Committees, and experts from the National Evaluation and Accreditation Agency (NEAA). The analysis of results from the questionnaire data collected from the three groups of participants in the pilot evaluation, have been verified against a series of in-depth interviews structured in advance.

The evaluation of the results is based on six criteria:

1. Relevance and efficiency of the received training and briefings for the pilot institutional evaluation.
2. Efficiency and appropriateness of the Peer Evaluation Committee.
3. Quality of the documentation supplied.
4. Efficiency of the site-visit.
5. Adequacy and objectivity of the evaluation conclusions.
6. Effectiveness of the PHARE approach to evaluation and accreditation in Bulgaria.

While the efficiency of the Peer Evaluation Committee (2), its work during the visit at the university (4) and the objectivity of its conclusions (5) did not raise

discussions and have been accepted well enough by academic staff, peers and the NEAA, the data on the other three criteria revealed a number of serious problems. The following text, therefore, comments on the results dealing with these three criteria: training received; documentation submitted and effectiveness of the chosen evaluation and accreditation approach.

PREPARATION AND TRAINING ON INSTITUTIONAL ACCREDITATION

The interviews give a thorough and complete picture of the efficiency of the preliminary training and briefings on the pilot institutional evaluation and the different means of improvement which the interviewees offer.

The questionnaire data on this criterion, preceding the interviews, measure only the most important aspects of the training efficiency through two variables showing the following:

- Whether the purpose and nature of the pilot institutional evaluation have been clarified by the trainers of the seminar.
- Whether the participants feel prepared enough for their roles in the pilot evaluation.

The analysis of questionnaire responses revealed that in the three universities almost everybody unanimously agreed that they have a clear idea about the purpose, nature, criteria and the processes of institutional evaluation, while with regard to the second question the answers vary considerably. A tendency pointing at insecurity with regard to the roles that have to be taken is noticeable. A further interview study throws light on the possible sources for such discrepancy between the strong agreement with the efficiency and relevance of the 'information submitted' at the seminars and, at the same time, the insecurity regarding readiness for action after the training. It also shows the eventual sources of this insecurity. The following discussion reveals serious gaps in the current context in which the PHARE approach to institutional evaluation is fighting to take place, pointing to the possible sources for the lack of confidence to take action.

Source 1: Insufficient training for key change agents at the universities

At an earlier stage of the Project, with the help of a questionnaire, some information was collected from 28 universities (over 60% of universities in Bulgaria), regarding internal quality assurance systems. The analysis stressed the important role the Deans and the Heads of Departments play with regard to change in Higher Education and the need for their preparation for their future responsibilities, related to the institutional quality audit and the succeeding institutional accreditation. When assessing the pilot institutional accreditation, these conclusions were confirmed and completed with new details.

The interview with the Provost in one of the Pilot Universities confirmed on one hand the important role these executives play in the preparation of the institutional accreditation, and on the other, the lack of care about their preparation for the new roles and responsibilities awaiting them. The seminars in Yundola[4] on performance indicators and their role in the institutional self evaluation, were not efficient enough, due to the fact that on the whole, only representatives of the University Information and Computing (IT) Centres were present, and that no provosts/registrars, faculty administration staff and other supporting staff were invited. The Student Affairs departments serve as focal points for information exchange between the faculties and the Vice-chancellor's office and are in effect an important factor in refining the set of institutional performance indicators and the overall design of internal institutional information management system. In the future, therefore, they will also have to receive training relevant to their new tasks.

This is even more valid for the Deans and their Deputies, since the interviews showed that Deans were not well prepared for the institutional accreditation. During the visit of the external evaluation committee, Deans and Deputy Deans attended the meetings, and then shared that they had felt "as if fallen from the sky" and that it was only during the panel discussions that they had started to comprehend the meaning of this type of evaluation. The one such training seminar organised for deans and their deputies from pilot institutions appeared to be insufficient as they did not have any other opportunities to gain the relevant knowledge and experience before they themselves became subject to evaluation and accreditation.

The regular teaching staff should also be included in such seminars in future, since in order to ensure quality higher education, the whole academic staff needs to be engaged in the process. Therefore the appeal of one of the interviewed Deans who says: "More people from HEIs should be brought to these seminars. They have to get used to the idea that this is a permanent process in which everybody is engaged", sounds reasonable. Otherwise, the accreditation will be anything but an instrument for improving quality.

Source 2: Insufficient time

As already mentioned, among evaluated and evaluators the questionnaire survey showed discrepancy between the strong agreement concerning effectiveness and relevance of the initial training received, and the lack of confidence in carrying out the functions assigned during the evaluation process. The results from the follow-up interviews showed that during the seminars, more time had to be devoted to comprehending the situations given in the practical materials and to "practising" the roles within the scheduled seminar time. The participants in these seminars acknowledged that during the workshops they did not manage to get to the core of the submitted material. They could not get to the difficult issues, being left without

sufficient time to discuss them and to identify relevant questions and answers, depending on the roles given at that moment.

At first the "role play" included in the programme of the seminar were not taken seriously and valuable time was wasted in irrelevant discussion. The poor translation of the material from English to Bulgarian, and therefore the need for clarifications of terms, also contributed to this. The evaluation language of the materials, as well as the language of the British lecturers, related to aspects unfamiliar in our system, organisational and procedural deficits and working rules – these also present difficulties in comprehending the ideas, approach and the procedures to be followed during the seminars and workshops.

It is a common opinion that in order to be efficient, an evaluation seminar should last two and a half to three days, and not a day and a half, as was the case. The importance of simulations and games, through which the circumstances of a site-visit are created, were realised only after the training seminar. It turned out that role-play was neglected by the participants in almost all the seminars under the Project.

Source 3: Differences in the approach to the preparation and training for institutional accreditation.

In the course of the preparation and training for institutional accreditation, conceptual differences were revealed concerning its nature and content between the Project team and the NEAA. According to the PHARE approach, it is very important to ensure *preliminary preparation for the self-assessment committees and the university staff*, while the Agency underestimated this issue.

The reconstruction of the preparation process for the pilot institutional accreditation in the three universities, showed that they had received different instructions to follow during the self-evaluation and the preparation of the institutional report. They received some preparation at the training seminars and some working materials,[5] which directed the self-evaluation to the SWOT-analysis (Strengths, Weaknesses, Opportunities and Threats) and with the opening of the accreditation procedure – guidelines for the preparation of the self-evaluation report. The latter has been designed in the same conceptual framework. However, the Agency warned them, that if they wanted the results of the pilot accreditation to be legally recognised and receive full institutional accreditation from the accreditation council, their self-evaluation report should contain information on the Agency criteria set before the second stage of the PHARE Project (NEAA, 1998, pp. 36-56). It was the wish of both the Agency and the Project Team to achieve symbiosis between the two approaches in the process. It turned out that it is hard to put it into practice due both to the time factor and to considerable differences between the two approaches. Under the PHARE approach, the length of the self-evaluation report is

limited to 25-30 pages and the requirement is for it to be analytical, while the Agency requires information on more than 100 indicators, which makes the report bigger with every structural unit within the institution. Necessity dictated that the self-evaluation report required by the Agency *is definitely more descriptive than analytical*. The description aims at supplying information on each set of state requirements for every single programme taught in the evaluated institution. Thus the *analysis of quality* is left behind.

These differences in approach are hard to overlook, especially bearing in mind the efforts of the Agency, in the course of the seminars, to unify at all costs the work with the practical materials developed by the British consultants with its own guidelines. For many of the participants, as the interview material revealed, these two approaches are incompatible.

These conclusions are indirectly supported by those participants in the pilot accreditation, who have not received any other training but that provided by the Agency for teaching assessors in programme accreditation. They consider the institutional accreditation mostly as simultaneous accreditation of all programmes and courses at the university, and relate its use to rational documentation of all activities. According to the words of one of these evaluators "this is a giant initiative aiming at putting some order into the archives of all HEIs in Bulgaria".

At the same time, the interviewees, and especially the external auditors, clearly realise the shortcomings and omissions in the preparation, and manage to define them clearly enough to avoid repetition in the future. The more significant ones can be summarised as follows:

> "The seminars are too short. One should be well prepared in advance to make good use of the seminar. The practical role-play should be longer. It is necessary to organise more seminars."

Source 4: Unclear status of the self-assessment committee

The interview data also showed that the unclear status of the self-assessment committee at the university might have a negative impact on the self-evaluation process and the preparation of the self-evaluation report, and finally on the outcome of the institutional evaluation.

Here is what a chair of a self-evaluation committee shared:

> "…In a large institution, the information is disseminated among many people. It is difficult to collect and analyse a huge database. Apart from that, some analyses have to be made by an authorised person – in this case, by the Chancellor. This self-evaluation committee has no status and rights at the moment. The requirements (expectations) for it are too big."

If the self-evaluation committee is established *ad hoc* for a particular evaluation case and its authorisation expires at the end of the formal evaluation procedure, its members have no power to request co-operation from other members of university staff and could easily fall into an information gap. This is reflected later on in the final institutional report in the form of serious omissions. Such was the case in at least two of the three pilot universities, where, after the completion of the accreditation procedure, essential omissions in the report were noticed.

Positive effects of the training seminars and briefings for the development of quality culture

Together with the above mentioned omissions and shortcomings in the organisation and content of the institutional accreditation preparation in the course of the Project, the Team collected data on the positive effect on the formation of evaluation and accreditation culture in the Bulgarian Academic circles. One of the important results of the preparation and implementation of the pilot institutional evaluation and accreditation is a widespread and deeper understanding of the approach suggested by the PHARE Project and its potential advantages for the higher education system in this country.

All three groups of participants in the study noted that the PHARE proposal is relevant to quality. Both the peers and the university staff share the opinion that if this approach to the institutional accreditation is implemented, rather than the existing formal approach of the Agency, this will have a positive impact on institutional quality improvement and its compatibility with European standards.

The interviewees base the grounds for such a conclusion on the principles on which the new approach is based. As one member of the university staff remarked: "it stresses the link between all management levels at the university; control over the education process; allowing the possibility of different systems, not uniform ones, since in that case answers are only formally sought, and that is not the essence of the approach."

The congruence between institutional evaluation criteria and contemporary concepts of quality in higher education is another substantial feature, pointed out by the interviewees. One of the chairmen of a self-evaluation committee stressed the advantage of the regular request for feedback in the quality management process in order to find adequate solutions to the problems that have been detected. This applies also to the attempt to perform an analysis of the processes instead of their mere identification. For instance, the attempt to analyse the availability and the quality of the university staff has not only uncovered unexpected facts, but also helped to initiate concrete action to improve the situation.

The participants in the pilot institutional evaluation have also been convinced of the necessity to introduce continuous quality monitoring within the institution on

the basis of their firm conviction that this will be beneficial for the Bulgarian higher education system in the following aspects:

- It goes more deeply into the substance related aspects of quality.
- It helps the development of the institution itself within a market environment. The model aims *to mobilise the self-organisation of the university.*
- It tries to build a *system for the monitoring of quality.* It does not intend to obtain an accreditation from any authority.
- It avoids *uniformity.*
- It provides food for thought and an *environment for analysis and appraisal.*

These views of the evaluators and of the universities' staff show that the academic community in Bulgaria is not closed to the idea of the implementation of a quality relevant approach to evaluation and accreditation. The pilot accreditation not only helped to provide a deeper understanding of the problems connected with quality assurance, but also served as a good example for the way in which this can be implemented in Bulgarian conditions.

DOCUMENTATION OF THE INSTITUTIONAL ACCREDITATION

Documentation is an important element of the quality assurance system, because it contains in an explicit form both the evidence supporting the assertions of the persons being assessed (the self-evaluation report), and the assertions of the evaluators (the evaluation report of the peer committee). On this basis, the Accreditation Council takes the final decision for the granting or refusal of an accreditation.

By means of the interview, representatives of the three groups of participants in the project expressed their views concerning: *a*) the timely provision of documentation and *b*) the advantages of self-evaluation in relation to the two approaches to institutional evaluation – the approaches of the Agency and of the PHARE project. An important aspect of the interviews dealt with their opinion about *c*) the degree in which the self-evaluation report complies with the requirements of the PHARE project. Opinions were also invited with respect to *d*) the efficiency of the self-evaluation committee.

The documentation issue was initially checked by eight questions in the questionnaire. The three groups of participants in the project, after answering the above-mentioned questions during the interview, indicated whether they had difficulties, or on the contrary, whether it was easy, to implement the self-evaluation of the university according to the requirements of the PHARE project.

Some measure of the degree in which the project has attained its goals with respect to the structure of the self-evaluation may be obtained by using the following, acquired from the interview data:

– Adequacy of the self-assessment with respect to the requirements of the PHARE project: the self-assessment is rather out of compliance with the requirements of the PHARE approach (15 of 24 responses in favour of the negative answer).

– Clarity, precision and integrity of the self-evaluation report: these qualities of the self-evaluation tend to be missing from the self-assessment report (the number of hesitant participants is equal to the number of those who believe that the listed qualities are present, while the negative answers outnumber the two groups taken together – 16 out of 24).

– Defined mission and goals as a starting point for the evaluation: half of the answers are positive, the other half is negative (12 "yes" and 12 "no").

– Does the self-evaluation report provide a good basis for the site-visit? In spite of some hesitations and disagreement, most of the participants in the process consider that the self-evaluation report laid a good basis for the work of the auditing group (18 "yes", 5 "no" and 5 hesitant).

– Was the factual information attached to the self-evaluation report useful for the evaluation; (20 "yes", 4 "no").

– Has a SWOT analysis been conducted? (7 "yes", 16 "no" and 9 hesitant).

The results of the survey point to the high degree of hesitancy in the answers of the university staff: many had difficulties in providing any answer whatsoever. There is a certain level of inconsistency between the answers of the peers and the staff with respect to some specific points of the self-evaluation, where the respective university has gone through obvious difficulties. In the first case, we identify a problem with the preparedness of universities to implement a self-evaluation procedure of the type proposed by PHARE project, and more specifically, with the lack of knowledge and skills to carry out a SWOT analysis. In the second case, we have a problem with the natural limitations of the peer review method with respect to objectivity when evaluating the quality of higher education (Paardekooper *et al.*, 1990).

Concerning the bimodal distribution of the responses to the "mission and goals of the organisation as a starting point for the self-assessment" indicator, several explanations are possible.

First, bi-modality of responses with respect to that indicator signals that the philosophy of the PHARE approach may not have been well grasped by part of the participants in the pilot process. The management traditions of universities in Bulgaria also place their evaluation in a context which does not permit the institution to establish independently its aims and mission and carry out a self-evaluation related to them. Traditionally, or at least in the last 50 years, those aims and mission have always been set from the outside or from "above".

Second, this peculiarity is most frequently left unnoticed by the evaluators and the evaluated who have not received prior to the pilot any other preparation than that provided by the Agency. This is especially valid for those university managers who have not been able to observe or to participate directly in programme and institutional evaluation organised by European partners.

What is then the degree in which the results of the analysis of the questionnaire survey are confirmed or refuted by the data collected through the interviews with the representatives of the three groups?

Qualities of the self-evaluation report: analysis *vs*. descriptiveness

The staff of the evaluated institution pointed out tradition ["Why should we disclose our weaknesses ourselves"] and fear ["We shall be punished if they understand" "This may be used against us", "And what if they refuse the accreditation because of this"] as the reasons for the low degree of application of the SWOT analysis – it is applied mainly in its "strengths" part. However, during the process of the interviews it became clear that:

– To begin with, Bulgarian academic circles are not very familiar with this type of analysis.

– The majority of deans and deputy-deans have not been acquainted in due time with the task for the preparation of the self-evaluation report, as sent by the co-ordinator of the PHARE project.

Some deans pointed out that they only received it after the submission of their self-assessment report.

They are, however, unanimous in their opinion concerning the usefulness of such an analysis of the strengths and the weaknesses, "even when it is left outside of the institutional report". Their argument was that this is important because the very process of the critical self-evaluation provides a picture where "unexpected strengths and weaknesses" are found, and this mobilises people to take an action.

The peers had no hesitations to state that in the self-evaluation report, descriptiveness overwhelmingly predominates over analytical approach. Some peers even maintained that no true analysis had been undertaken at all. Other peers found elements of analysis in separate documents that accompanied the report or that were requested during the visit and the institution.

For the peers of the external evaluation committees, the reasons for the absence of an analytical self-evaluation report of the institution are the following:

– The understanding that the report should comply with the requirements of NEAA, and not with those of the task prepared within the PHARE project framework.

– The effort to fill the report with formal information without relevance to quality, in order to comply with the criteria of the Agency.

– The fact that opportunities made available by the SWOT analysis were not used, because of inherited mental attitudes: no reserves are sought, no freedom for initiative is given, lack of business approach to higher education.

The NEAA experts join the evaluators in their responses, admitting that self-evaluation reports have been weak on the analytical side. As a substantial weakness, they point out the lack of connection between the description of facts presented in the report, and the deductions and conclusions, whenever and inasmuch as such conclusions were present. This is due to lack of experience, as well as of skills for the correct formulation of the mission and the goals of the institution. According to them, the only real achievement of accreditation in Bulgaria until now has been in the improvement of the status of the documentation of higher education institutions as a result of the procedure.

The data collected from the interview with the three groups of participants in the pilot evaluation confirm the results of the questionnaire survey: the PHARE project has not attained its goals completely as far as self-evaluation is concerned. The interviews disclosed in greater depth and certainty the reasons that led to this result:

– The lack of tradition with respect to mutual trust between universities and the central authorities and to encouragement of open and constructive dialogue, as well as of tolerant attitudes in the relationship between the evaluators and evaluated.

– Insufficient knowledge of the application of the analysis of strengths and weaknesses for institutional and programme evaluation purposes.

– Poor presentation of the mission, goals and priorities. As a result, the data provided in the text and in the appendices of the self-evaluation report stand alone; different parts of the report content lack consistency and trustworthiness for the visiting committee.

– Insufficient relevance of the self-evaluation report to the aims of the PHARE project, and more particularly, lack of analysis because of the low degree of compliance with the task.

– Hasty preparation, lack of adequate thinking and a piecemeal approach of the self-evaluation report, both because of insufficient time for its preparation, and because of the strict observance of the formal criteria of the Agency.

The interviews led to the assumption that institutional management bodies are not able to make explicit the aims, the mission and the priorities of the institution, and on this basis, to analyse the extent and the aspects of their achievement. This assumption confirmed data obtained from the questionnaire survey. One

reason for that is the lack of understanding of such a "philosophy" of evaluation. This philosophy proceeds from the acknowledgement and the encouragement of the institutional and programme (substantial) heterogeneity or diversification in higher education, which, together with the university autonomy, supposes that each institution should pursue different aims and missions from the others. Therefore, it is natural that the evaluation of the efficiency of the institution should proceed from the specific aims, missions and priorities, formulated by the institution itself, and not on the basis of external aims and priorities. Otherwise, all universities would be completely alike, and the lack of "variance" within the population of universities would lead to their self-destruction (Hannan and Freeman, 1976).

EFFICIENCY OF THE SELF-EVALUATION COMMITTEE

In the end, the quality of the report is determined by the quality of the work of the institutional self-evaluation committee at all stages of the internal audit.

The staff of the audited institutions reported their satisfaction with the committee, first of all because it had not disturbed them unnecessarily and had not assigned tasks to them. It was obvious from the interviews that the committee took on itself the whole work of collecting information, processing it, and preparing the report. According to some of the members of the committee, in some of the pilot institutions this was just a single person – the chairman of the committee.

However, the issue with the visiting peers was different. They believed that the self-evaluation committee did only half of the job, while the remaining half had to be done on the spot by themselves. In many cases, the self-evaluation committee did not include in the report important evidence material that the peers subsequently tracked and reported as such. In some respects, the peers qualified the self-evaluation committee as "victims assigned to be responsible for impossible tasks". The lack of status of the committee within the university was considered as an important factor leading to its poor efficiency.

To recapitulate, as concerns the "documentation used" criterion, the lack of quality culture and, most of all, of critical and open self-evaluation culture, together with the marginal character of the self-evaluation committee determine to a great extent the insufficient quality of the report. This made the institutional accreditation strongly dependent on the level of the preparation of peers from the external evaluation committee.

EFFECTIVENESS OF THE EUROPEAN APPROACH IN BULGARIAN CONDITIONS

The effectiveness of the proposed PHARE approach has been defined in the questionnaire as a "relevance to Bulgarian higher education". Items 41 to 46 intended to check the suitability of the entire organisation, goals, criteria and procedures of institutional evaluation. The appropriateness of fixing the institutional

mission as the starting point for both internal and external review has also been checked. The possibility of inter-relating institutional review with teaching quality assessment has had to be examined too.

Quality relevance and applicability of the approach in Bulgarian conditions

The questionnaire material revealed that most of the peers and of the university staff consider both the overall approach, and its purposes, criteria and procedures, as relevant to Bulgarian higher education.

It is worth noting that the greatest hesitation in the answers is visible under question No. 46, where it is asked whether it is appropriate to inter-relate institutional review with teaching quality assessment (seven respondents out of 32 had difficulties to give either a positive or a negative answer). This required a further careful study of the material gathered through the interviews with respect to this question: how do they see the interconnection between institutional evaluation and teaching assessment, if they see it at all.

Special attention is to be given to the different levels of knowledge and skills between the two groups of interviewed persons – the university staff and the visiting peers – with respect to the comments the two groups provided for this question. I believe this requires the attention both of the National Evaluation and Accreditation Agency and of the Ministry of Education and Science in their policy for the further development of the methods of assessment and evaluation of Bulgarian higher education.

The opinion of the three groups of participants has been sought with respect to the connection of this approach with the programme assessment and accreditation and whether it is applicable for Bulgaria at the moment or in the near future.

Questions 39 to 42 of the interview provided a more in-depth explanation of the problems raised in the questionnaire concerning the *relevance* of the proposed model. The latter is defined with respect to the extent to which this approach permits the analysis of quality aspects of the institution, whether it can serve as a catalyst for internal change and innovation, and whether it provides the necessary management information for the implementation of a national policy. Answers disclosed the following:

– The staff of the evaluated institutions, the external peers, and experts of the Agency are unanimous in their positive consideration of the possibilities of the approach proposed by the Project Team to discover qualitative aspects of the institutional activity. What makes this approach particularly efficient, according to them, is that it is based on the SWOT analysis and has a great development potential for the institution.

– The three groups consider the approach as appropriate for the Bulgarian system of higher education and applicable as early as now. The insistence of peers is even stronger: they regard the delaying of the process of affiliation with European standards and quality assurance methods as harmful for Bulgaria.
– The following obstacles for the introduction of this approach are identified in the answers: *a*) the present statutory framework and the lack of a higher education market; *b*) the existence of a huge number of institutions; *c*) the difficulty to restructure within a short period of time a large university with a complex activity and decentralised faculty organisation.

Possibilities of exchanging useful experience between institutions

The expectations that the approach proposed by the PHARE project would also be considered as a good opportunity for the exchange of useful experience between the Bulgarian universities were not confirmed. In this respect the group of university staff was sceptical, while visiting peers were more enthusiastic. The latter group considered that even the negative examples they had observed had enriched their experience which they hoped to put in practise in their institution. On the other hand, it was pointed out that this is the only way to exchange experience between higher education institutions. Therefore, there is an obvious lack of open public debate on the issues of interest to the universities in Bulgaria.

Connection of the institutional audit with the programme assessment and accreditation

One of the important advantages of the approach is its connection with programme assessment and accreditation. This has been noticed and appreciated positively both by the peer and university staff groups. The latter regarded the programme assessment as a detailed variant of the institutional audit and pointed out the consistency of the principles applied. In addition, they noted that the criteria of institutional review are much more easily applied to the assessment of the quality of teaching. Considering the present context, the interconnection between the two types of evaluation was seen in the possibility of organising subject assessment in order to save money, by applying the organisation principles of the institutional audit to similar programmes in different universities. Taking into account future development, the interconnection between programme assessment and institutional evaluation, proposed by the PHARE approach, is seen as an opportunity to gradually eliminate the need for an external programme accreditation through the introduction and the development of internal university systems for quality assurance. Then, external intervention will only be necessary when a new course or a programme is introduced.

Evidently, the representatives of the academic community personified by peers and by the staff of the institutions are overwhelmingly possessed by the desire to see the implementation of the necessary changes in order to place Bulgarian higher education on European "tracks". This is evidenced by the approval of the pilot approach in spite of the difficulties accompanying its application and the lack of sufficient time for preparation.

CONCLUDING REMARKS

Even though the aims and the purposes of the one-year PHARE project concerning the National Evaluation and Accreditation Agency were not only achieved but also exceeded many times over, the data from the evaluation of the pilot institutional accreditation show that there is potential for a much faster progress. This potential exists within the academic community itself, and it is also found in the presence of goodwill among the policy leaders of the sector to assist the development of this potential through the introduction of changes into the legislative and statutory framework of higher education.

The three pilot institutional accreditations have outlined a clear perspective for the optimisation of evaluation methods in Bulgarian higher education with the view of achieving greater relevance with respect to qualitative attributes. The pilot accreditations serve as an unprecedented example in this respect for most of the representatives of the institutions being reviewed, for the peers that visited them, as well as for the experts of the Agency.

The main proactive actors of institutional policy in the higher education institutions themselves – rectors, deans, heads of departments, chiefs of different administrative units and centres, directors of libraries, representatives of the students unions, etc. – also had a unique opportunity to observe and to take part in an open and constructive dialogue with the visiting committee with respect to the strengths and weaknesses in the work of their respective institution, as well as to consider the opportunities to ensure a sustainable development of higher education.

As a result of what has been seen, heard and experienced, the initial scepticism with respect to the opportunity to adapt to Bulgarian conditions an institutional review approach similar to the widely spread European practice was overcome. According to most of the participants in the three pilot evaluations, the preparation and the organisational work for this should be immediately initiated and should not take more than two years.

The evaluation of the results of the three pilot institutional accreditations in Bulgaria discloses the important role played in the process of integration with European approaches and standards by peers and experts of the National Evaluation and Accreditation Agency. Those involved in the pilot accreditations support the further development and implementation of a method of institutional evaluation

that would be similar to the approach demonstrated within the framework of the PHARE project.

The implementation of this recommendation, however, will depend in future on the policy that will be pursued by the National Evaluation and Accreditation Agency with respect to this issue. The Agency has already used the visit programme proposed by the PHARE team for the institutional audit in its programme assessment visits. The Agency is now keen to hear the opinion of students and employers concerning the quality of education in the assessed programme. The leadership of the Agency could also be looking for possibilities to reduce considerably the cost of programme assessment if it used the proposed methods to combine the institutional accreditation with the programme accreditation in a way appropriate to local conditions.

Notes

1. Funded by PHARE (Project BG 95.06-05) and initiated by the Quality Support Centre of the UK Open University.
2. In January 1998, just before the start of the second phase of the PHARE Project, the National Evaluation and Accreditation Agency published its method for institutional evaluation and accreditation (NEAA Bulletin No. 2, 1998). The method is based on 11 formal criteria and over 100 indicators, thus preventing larger universities from undertaking institutional self-evaluation because of the enormous amount of paper work implicitly requested by those indicators.
3. A shorter version of this text was presented at the National Conference for Discussion of the Pilot Institutional Accreditation Results, under the PHARE Project BG9605.01.001, National Agency for Higher Education Evaluation and Accreditation, held on February 9-11, 1999 at the Park Hotel Moscow in Sofia.
4. In September 1998, under the PHARE Project and the National Evaluation and Accreditation Agency, a series of seminars were organized for the representatives of the information and computing centers of the universities. They were dedicated to the use of information management statistics and a set of key performance indicators in institutional self-evaluation.
5. The resource materials, prepared by the Project Leader, Dr. David Billing, deal with definitions of quality, international experience in using different methods for quality assurance and descriptions of the main components of the quality assurance systems (Practical Materials, 1998).

References

BILLING, D. (1998),
Practical Materials for Quality Management in Higher Education, PHARE *Project* BG 95.06-05.01.001 – *National Evaluation and Accreditation Agency* (Pomoshtni materiali za upravlenie na kachestvoto vav visheto obrazovanie), Balkan Press Publ., 56 p.

GEORGIEVA, P. (1998),
"The national evaluation and accreditation system in Bulgaria: one year after" (Nacionalnata sistema za ocenjavane I akreditacija v Balgaria: edna godina po-kasno), *Science and Higher Education Management and Administration*, *Ministry of Education and Science Bulletin*, No. 1 and 2, pp. 18-28.

HANNAN, M.T. and FREEMAN, J. (1976),
"The population ecology of organizations", *American Journal of Sociology*, Vol. 82, No. 5, pp. 929-964.

Higher Education Act (1995),
(Zakon za visheto obrazovanie), *State Gazette*, 112/27,12.1995.

NEAA (1997),
A *Framework for the National Evaluation and Accreditation System in Bulgaria* (Koncepcia za nacionalnata sistema za ocenjavane I akreditacia na vischite uchilishta v Balgaria), Sofia, National Evaluation and Accreditation Agency, 24 p.

NEAA (1998),
"Requirements and criteria for programme and institutional evaluation in higher education" (Iziskvania I kriterii za ocenjavane na specialnosti I instituzii vav visheto obrazovanie), *Bulletin No.* 2, Sofia, National Evaluation and Accreditation Agency, Burgas State University Press, 70 p.

PAARDEKOOPER, C.M.M. and SPEE A.A.J. (1990),
"Peer review versus performance indicators?", in L.C.J. Goedegebuure, P.A.M. Maasen and D.I. Westerheijden (eds.), *Peer Review and Performance Indicators. Quality Assessment in British and Dutch Higher Education*, Lemma, pp. 48-49.

Research at Regional Universities in Australia: Visions and Realisation

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ABSTRACT

Regional universities in Australia consist mainly of former colleges of advanced education which did not have a research base. The development of a viable research profile to justify their new university status has been a very rocky process. Changes in government policies resulting in a competitive research environment which inherently disadvantages regional universities, have also created an unusually fast turnabout of their visions and missions. These sudden changes of direction have caused serious tension between institutional leaders and academic staff who carry out research at grass root level, as well as widened the gap between rhetoric and actual achievements. This paper seeks to understand this phenomenon by analysing the sources of these visions, together with their feasibility and sustainability. It also deals with a number of major issues such as the range of research activities, and the focus of research on industry, business and regional needs, which will have serious impacts on the nature and directions of research at these institutions.

INTRODUCTION

The Australian higher education system has undergone tremendous change during the last two decades. Although the number of tertiary students and universities in Australia is growing steadily, the most dramatic growth was due to the "Dawkin's reform" to remove the binary system which differentiated universities from colleges of advanced education and institutes of technology, and to form a unified national system of thirty six universities (Dawkins, 1987 and 1988). This move has drastically changed the nature and ethos of universities and has seen the emergence of a number of new small regional universities. As universities have to cater

for a mass clientele while trying to reduce cost, educational approaches need to be revamped. Competition between universities has resulted in a more client-based approach to education and more flexible learning methods. Political and economic pressures have also forced universities to adopt a more outward-looking attitude. Interactions and collaborations with industry and community are encouraged and indeed expected as normal functions of a university. Applied research which may lead to technology transfer has in some circles become more favoured than basic research. Recent cuts in funding for universities have compounded these effects further. The impacts of these changes on universities have been discussed by a number of authors (Beanland, 1996; Coaldrake and Steadman, 1998). A survey on the perception of academic staff from three representative universities of these changes during 1991-96 has also shown that there were serious concerns on reduced quality of students, courses and mounting pressures and constraints on their core activities and academic freedom (Taylor *et al.*, 1998).

Unlike regional universities in the United Kingdom which are of a very diverse nature, ranging from those of considerable international or national standing to former colleges whose primary interests are local or regional, regional universities in Australia consist mainly of former colleges of advanced education, teaching colleges or TAFE colleges. In a competitive environment where Australian universities are funded on a uniform basis and expected to maintain a high performance level in both teaching and research, regional universities have found themselves at a disadvantage due to a few inherent difficulties. It is a struggle for them to retain capable local students who believe larger universities and cities can offer better study and employment opportunities. The small scale also results in the lack of critical mass of staff in any specific area, which is a crucial factor for the development and sustaining of new activities. Such problems are even more prominent for research than teaching, since the majority of staff at these new universities have little or no research training or experience in publishing and attracting competitive research grants. Recent proposed changes to the research funding model outlined in a Discussion Paper on Higher Education Research and Research Training (Kemp, 1999) have emphasised further the competitive nature of research. Fewer and larger research grants would induce further concentration of resources, and the funding formula which is based mainly on the number of postgraduate student completions and the amount of external research income would certainly favour established and research-oriented universities. Another factor that has significant impact on regional universities is the emphasis expressed in the paper on the need for universities to align their activities with the economic development of their region: "Institutions will need to be more assertive in the way they involve themselves with the economics of the region in which they are located, and contribute more to their own and to national objectives through their teaching, research, leadership, information and networking." A somewhat vague promise for a one-off structural adjust-

ment package has been perceived as an incentive for regional universities to embrace this view.

Against this background, it is understandable that regional universities need to adopt new strategic directions in order to respond quickly to external pressures and opportunities. This has resulted in an unusually fast turnabout of visions and missions in some regional universities, which sometimes have not been thought through properly, and thus appeared conflicting or inconsistent. These sudden changes of direction have also created serious tension between institutional leaders and staff at a grass root level. While senior management appear to enthusiastically embrace and broadcast the rhetoric of a new vision, many staff feel that their work and environment have been undermined without any obvious benefits. In an attempt to understand this phenomenon, a few questions spring to mind. What are the real driving forces behind these visions? How can we judge if these visions are realisable and sustainable? Can we predict future benefits to the institution and its region? Do they cause adverse effects on current activities and staff morale? Is staff's resistance to adopt a new vision justified, given the instability of the higher education sector due to pressures from external forces? And if a new vision is urgently needed, what could make it more palatable?

This article examines the above questions within the context of the development of research at regional universities, before presenting a critical analysis of some specific issues such as the range of research activities and the focus of research on industry, business and regional needs, that will have serious impact on the nature and directions of research at these institutions.

SOURCES OF VISIONS

A vision may arise from a number of sources. It may come from a dream to achieve something different or unusual. In this case, attention is placed more on hopeful outcomes, rather than what to do and how to get there. Thus, the road to realisation may be hazardous. The Government has made it clear that all universities are expected to improve accountability and quality assurance. Yet, regional universities are burdened with large proportions of students with lower socio-economic background and academic ability. Furthermore, how can former college staff compete with researchers at institutions with more established tradition, expertise and infrastructure for research? Faced with such unfair competition, it is natural that regional universities have to look beyond traditional means to ensure their existence and to make their presence felt. To quickly raise the profile and performance of research, a common initial attempt is to import researchers with established track records. This has resulted in a small flow of academic staff from traditional to new universities, who either view the move as an opportunity to do something different and challenging, or as a way to achieve a promotion not avail-

able at their old institutions. The impetus to find distinctive strategic directions that differentiate a regional university from others has created opportunities for a number of viable niche areas to be successfully developed and taken advantage of (for example, environmental management, land and water utilisation, rural health, farming and education). However, there are also numerous examples of unrealistic and unfulfilled dreams that dilute research funding and human resources which are already scarce.

Another type of vision is based on an ideology with the wish to redefine academic activities and reformulate them in a more formal or another formal framework. An obvious question is whether this intention is driven by the true belief that the new framework would bring about new waves of productivity and quality enhancement urgently needed, or just by the wish to be seen as being different. Is the mere fact of appearing different sufficient to make services offered by the institution be perceived as being distinct, of better quality and more attractive than those provided by other universities? Another observation is that the ideology-driven approach tends to be rather dogmatic and overlooking practical issues which underlie and ensure a successful transformation. It also takes the attitude that "the end justifies the means" and easily dismisses any resistance to the new framework, whether it is justified or not.

At a more practical end, a vision may arise from the need to address some problems which may be inherent within the institution (*e.g.* lifting level of expertise, performance or funding) or thrust upon the institution by external forces (*e.g.* changes of government policies). A vision may also come from the recognition of some opportunities to be captured. By the inherent nature of these types of vision, there is more likelihood of some analysis of the status quo having already been thought out explicitly or implicitly. Hence the risk of failure is considerably lower than the first two types of vision. Yet, a general concern exists among staff that there appears no deliberate attempt from senior management to ensure that any vision is coherent, feasible and sustainable. Low staff morale, it seems, is often due to the failure of the instigator of the vision to convince staff that coupled with the vision is a thorough consideration and analysis of the way it should be implemented to ensure successful outcomes and to minimise adverse effects on staff and current activities. Is the rush for a quick response the main reason for this neglect, or could it be the lack of a systematic framework for evaluating the feasibility of a vision? And if such a framework is required, which factors should be considered?

FEASIBILITY AND SUSTAINABILITY OF A VISION

A plethora of visions occurring within a short time does not give an institution adequate time to reflect and to properly plan how to manage the changes. Academic workload also needs to be adapted or stretched to cover the multitude of

expectations imposed as a result, even without fully understanding the need for change or having much confidence in the potential benefits of these changes. I believe that to have a proper evaluation of the feasibility and sustainability of a vision, it is crucial to examine the following four aspects: the capacity of staff, capacity of the university, capacity of the region, and the recognition of the value of the proposed activities by other institutions, organisations and community outside the region.

CAPACITY OF STAFF

In an analysis of the way universities have responded to financial reduction, Davies (1997*a*) has noted that there is a definite move from a loose policy control and a collegiate environment to a tight policy control of a corporation. As the control over research directions has been gradually shifting from researchers to administrators, the linkages between the vision of the institution and its implementation has been weakened. Researchers tend to be left out of the decision-making process, yet they are expected to be instrumental to the success of the vision. A sense of frustration and helplessness is perceived by staff when there is a mismatch between their capacity and the directives from institutional leaders to perform. Issues concerning staff such as expertise and critical mass are even more pertinent at regional universities than at their more established counterparts. It is a long term process to train former college staff to become active researchers, even in combination with the scheme to import senior researchers with good track records to act as mentors and to drive the change. Apart from the length of time required to acquire necessary skills, the old attitude and culture which only value teaching efforts also significantly hinder progress in the development of a research and innovative culture, and cause tension among staff. In addition, some staff simply do not have the aptitude for research and it is a futile exercise to demand them to attempt to become involved in research.

The core business of a university is the pursuit of knowledge and scholarship and to impart new knowledge to future generations. In order to do so effectively, it should encourage and support a broad range of intellectual activities. Such worthwhile academic principles and values which could be sustained in a large and established university are impractical, if not completely out of reach, for new small regional universities. If regional universities wish to achieve some national and international recognition for their research efforts, it is unavoidable that they have to concentrate on niche research areas that have more likelihood to succeed given staff profile and the circumstances of the institution. However, niche research areas cannot be developed and sustained without a critical mass. Thus, an unavoidable hard decision that regional universities have to make is to shift resources to support a very small number of designated areas. How niche research areas are identified and selected also raises a concern. Institutions, in an attempt to be entrepreneurial,

sometimes choose research areas of focus based on the appeal of "fads" or "buzzwords", without examining if there are any research opportunities of substance.

Another problem that slows down research progress is that insufficient time is allocated for this activity. The teaching style of former colleges which involves more contact hours and small classes has not changed much since institutions have transformed their status to being universities, partly due to staff's resistance to modify the way they teach but also due to the small size of the institutions. The rapid change of strategic directions has compounded this problem further. New initiatives with some promise are often started, but then are not allowed to follow through until their completion because staff subsequently have to drop them in order to begin other initiatives which align more with the new vision. Institutional leaders may argue that new directions are only intended to bring added values, and not to deny or damage existing activities which are progressing well. However, in practice, once support has been implicitly taken away from an activity, especially one that is still at a developing stage, the activity would simply die as a natural result. Staff's confidence and commitment would be gradually eroded in such a working environment.

CAPACITY OF THE UNIVERSITY

At a higher level, the success of a vision depends on available funding and infrastructure facilities to support new initiatives, and also on the leaders' abilities. When these universities operated as colleges, the majority of operating grant from the government was devoted to support teaching activities, while research funding and infrastructure facilities were non-existent. To address this problem, some institutions started to specify a fixed percentage of their operating grants which must be used for the purpose of developing research. While some schools or departments are able to take advantage of this source of funding to effectively give leverage to their research development, many others fail to know how to do so. This is due to lack of capable leadership with some knowledge of research. The lack of leaders with appropriate skills is a serious problem that needs to be tackled urgently because it has caused a bottleneck in the development of research at new regional universities. Most senior staff in the chain of governance have reached their current positions based on their ability in teaching or administration, and have little or no experience in research. They are now expected to add to their portfolio the responsibility for management of research, without any training to help them to appreciate the value of research and to understand the requirements for a productive research environment. This lack of understanding causes research to be perceived as a threat to existing senior staff, and consequently creates tension and conflicts between senior management and staff who wish to do research, especially younger

and newly recruited staff. As a result, it is difficult to attract and to retain staff with an aptitude for research.

CAPACITY OF THE REGION

The push to link higher education with regional economic development is not a new trend. Similar development has been seen in the US and Europe, noticeably the United Kingdom, as university funding from governments was reduced (Davies, 1997*b*). Since each region has its own characteristics in terms of its geography, demography, natural resources, history, culture and economic growth, its capacity to support or become involved with research activities is very different. Neave (1979) categorised regions into four quadrants depending on whether the regional growth rate is stagnant or growing, and whether the income level per capita is low or high. Davies (1997*b*) extended this model further to analyse the different roles of regional universities in each type of region, to match the region's characteristics and priorities. For example, there is little prospect of developing a research culture in a region with slow economic growth and poor employment prospects. In this case, the priority of the institution should be to lift the level of general and continuing education. On the other hand, a region which has stable old industry as well as new hi-tech industry would be more receptive to collaborations with a university on research and technology transfer. Thus, to judge which types of research activities and partnerships a regional university can initiate and successfully sustain, it is crucial to seek answers to a few pertinent questions. What are the key industries in the region and the skill level of its workers? Which industries are stable and which are growing? Is there a niche for exploiting cutting edge knowledge in industry and business in the region? What are the attitudes of the local government, industry, business and community towards new development and strategic alliances? Are they willing and capable of contributing resources and efforts to such ventures? Do they recognise that knowledge is a global commodity, and have a broad outlook beyond the immediate needs of the region in order to facilitate both the inward and outward flow of knowledge as well as to use global standards as guidelines for development?

RECOGNITION BY OTHER INSTITUTIONS AND RESEARCH ORGANISATIONS

As a regional university is one of the largest employers in the region, it must endeavour to provide service to the local community. However, one major role of universities is to disseminate knowledge and skills which must be acceptable nationally and internationally. This is especially true of research activities. A vision cannot be so exclusive and narrowly focused that its research activities are only applicable to the local community and are of no interest to people outside the region. Such an approach may provide some leverage for a claim of devoted service

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to the region in order to attract local funding or to justify a good one-off adjustment package from the federal government for the institution in the short term, but would certainly have serious adverse effects in the long term. It would gradually isolate the institution and its staff from the academic community at large and also goes against the globalisation trend which is happening in all aspects of life. This would disadvantage active researchers from regional universities further because being newcomers to the national and international scene, it is already difficult for them to gain recognition and establish collaboration with their peers in more established universities.

One argument that might have some merit is that perhaps it would be more realistic to concentrate on developing partnerships with other regional universities instead of more established universities. As the "sandstone" universities and the universities of technology have formed their own groups in order to support activities of common interest and create stronger political forces with the intention to exert influence on government policies, it is certainly politically wise for regional universities to do likewise. A pertinent question is whether the current so-called unified national system would then be transformed into a three-tiered system in reality? Would that subsequently restrict the movement of staff between institutions of different tiers? And if so, would research active staff be better off to move to institutions with a broader and stronger approach to research? This trend would certainly dampen the efforts to raise research profile at regional universities.

The above discussion has focused on major factors that should be considered when new strategic directions are created at regional universities in order to ensure their chance of success in both short and long terms. The next two sections analyse the pros and cons of specific issues that would significantly change the nature and direction of research and are the subjects of current heated debate.

RESEARCH WITH AN INDUSTRY, BUSINESS AND COMMUNITY FOCUS

Research is perceived by the government as an aid to wealth creation and it is hoped that strategic linkages between universities and private companies would result in mutual advantage and national benefits. As a way of fostering the transfer of knowledge resulted from university research to commercial sector as well as encouraging institutions to seek other external income to supplement reduced government funding, the Australian government has introduced granting schemes such as the CRC (Cooperative Research Centres), SPIRT (Strategic Partnership with Industry Research & Training) and AusIndustry programs. Some benefits have certainly been observed. A number of large projects would have not been achieved without available funding and mutual efforts resulted from such collaborations. Collaborative projects with industry have also offered an attractive training venue for postgraduate students and created interesting employment opportunities for

recent graduates. Students have a better sense of appreciation of the relevance of research through having opportunities to link and apply theoretical knowledge to real-world problems. A few innovative products have also been developed and commercialised as results of such collaborations. It is hoped that this would reverse the "brain drain" trend in the past that had seen innovative ideas having to be commercialised overseas. Yet, some serious problems exist that cannot be ignored.

Australian industry is well-known for being very conservative. Many companies believe that it is quicker and more profitable to adopt whatever has been produced overseas for the local market. They have little faith in the ability of local researchers and professionals to come up with new ideas that can bring cutting edge elements to enhance their core business. Negotiations for collaborative research with industry often form a very time-consuming process that demands a lot of effort, tact, persuasion and patience on the part of researchers who, in many cases, do not have any training or aptitude to be able to carry it through. Sometimes contracts may be approved at a number of levels up to the Manager of R&D Department in a company, only to be vetoed by its CEO or Board of Management at the last minute. Some companies even view university staff and students as a cheap source of labour to assist with their development, hence there is little opportunity to pursue innovative basic research. It is therefore understandable that many researchers find that this type of linkage does not give sufficient returns and are reluctant to participate. At the heart of this problem are the conflicts in values and missions between industry and the university research sector. While the former is mainly concerned with making profit with minimal risk and in the most efficient way, the latter is more interested in discovering new knowledge and ideas, and accepts that risks form an unavoidable component in their core business. Historically, many companies in small countries in Europe (for example, Finland and Sweden) are more receptive than those in Australia to incorporate research to their own business to increase competitiveness. A reason could be that Europe, which, unlike Australia, does not have natural resources in abundance, relies more on human resources, thus endeavours to make the best of what researchers can offer. Another cause of serious concern is the instability of industry. When companies change hands or go out of business, researchers and postgraduate students are left in the lurch, with nothing to fall back on.

At a regional level, the conservatism and insularity of local industry, business and community is even stronger. Efforts have been made by some institutions to develop technology parks and incubators to foster applied research, consultancy and technology tranfer that are relevant to the local economy. These initiatives have brought some good results such as providing part-time working experience and employment for students, joint student projects, and staff exchange between university and industry. However, the main benefits still remain at the undergraduate teaching level, while the impacts of such linkages on research activities and

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support are much less noticeable. Local companies are either unwilling or incapable of committing some of their resources towards research and development. In their analysis on the participation in regional economic development of universities in the South West and North East of England, Court (1997) and Atkins *et al.* (1999) also reported similar experiences. They found that development such as the establishment of regional education and training networks which required significant efforts and resources, improved the regional role of an institution, but did not necessarily enhance the quality of teaching or opportunities for collaborative research and technology transfer.

RESEARCH WITH A REGIONAL FOCUS

Research activities are increasingly viewed not as the pursuit of new knowledge for its own sake, but as a means to promote economic growth, while researchers are required to be more entrepreneurial and responsive to industry, business and community needs. It is not surprising therefore that regional universities are expected to play a stronger role in economic, social and cultural development of their regions. Applied research of direct relevance to the local economy has already happened in certain areas, noticeably via CRC, SPIRT and AusIndustry grants with local companies. There is no doubt that these collaborations have brought many benefits: close partnerships between the universities and local community, relevant and interesting projects for students and staff, and enhancement of skills and opportunities for local companies. Such work therefore should be encouraged and supported.

Since the inception of new regional universities, many efforts have also been made to introduce research activities which have more universal flavour, and are nationally or internationally competitive. The latest move by some regional universities to change directions by abandoning such efforts and focusing instead only on research activities with regional impacts and benefits has caused a lot of concern. Firstly, while regional focus is very apt for disciplines such as mining and environmental studies, it is not so for many other disciplines. For example, the very essence of research in information technology is globalisation, where technical knowledge is used to remove geographical barriers to allow access to resources around the world. While technologies can be applied to set up appropriate infrastructure to enhance local business, education and raise the level of skills, it would be unwise to restrict research activities to the level dictated by the needs of the region. Such restriction may induce research projects to adopt a parochial nature or encourage the replication of work that had been carried out elsewhere. The level of expertise in regional areas, which is already low compared to national and international standards, would no doubt be lowered further by such inward looking approaches. Further side effects for the institutions would be the loss of research

active staff due to limited potential career development as well as the loss of potential collaborations at national and international levels.

Kanter (1995), in her book *World Class: Thriving Locally in the Global Economy*, analysed the effects of globalisation pressures on organisations. The increasing mobility and outreach of capital, people and ideas have necessitated organisations to integrate best and most up-to-date knowledge to their core business to improve their quality. They also need to maintain connections with people and organisations elsewhere around the world in order to tap into resources and potential markets. At the same time, Kanter argued, "world class" companies should become stakeholders within the region where they operate. Thus, in order to succeed, companies, regardless of their location and size, are required to meet global standards and to be able to connect to global networks. If that is the case, regional universities would not help the regions' economic development in the long term by adopting an inward-looking approach and letting the local industry, business and community dictate their research agendas. Instead, it is the responsibility of the institutions to seek out latest knowledge and ideas, and to convince local companies to adopt a more proactive attitude to expand new skills and broaden their horizons.

Goddard (1997) examined the relationships between universities in the United Kingdom and their local region and found that while a large percentage of old universities view themselves as "international institutions seeking to provide support", most new universities take the role of "seeking to serve the local community and develop international strength". He also noted that while a small number of projects have a very narrow local focus, most projects involved the universities providing intellectual input and analysis within a national or international context. Perhaps the source of funding for these projects, such as STRIDE (Science and Technology and Regional Industrial Development in Europe), helped to promote the view that globalisation and localisation are complementary and not exclusive of each other. This prevented these universities from having a parochial approach, a serious risk that Australian regional universities currently face. Another issue that surfaced from the UK experience is that fierce competition between regions has not only hindered progress in regional development but also deterred university staff from sharing knowledge with the wider academic community (Court, 1997). Regional universities in Australia are certainly in a danger of following this path.

CONCLUSION

The concept of increasing the involvement of regional universities with the regions within which they operate is, by itself, not of concern. The problem lies mainly with the way an institution chooses to interpret this role. It is not difficult to form productive linkages with local industry, business and community via teaching, training, employment and building infrastructure networks. It is much harder to

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incorporate research activities and research consultancy into such relationships due to the conservative and insular outlook of local companies and community. Furthermore, by adopting a narrow and inward-looking research agenda governed by the immediate needs of local companies and community, an institution would help to isolate itself and its local community from global networks, and at the same time, face the risk of losing research active staff. A more optimal approach would be to consider regionality and globalisation issues in a complementary fashion, and to take advantage of both aspects for long term development. The challenge to regional universities, therefore, lie with their ability to select a small number of sustainable niche areas of research within which various aspects of research can be embedded: basic and applied research, industrial and business linkages, regional and global issues. Only then, by giving adequate support to form a critical mass in these niche areas, can they hope to achieve recognition by national and international research communities, as well as assisting local companies to enhance their competitiveness in the long term.

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References

ATKINS, M., DERSLEY J. and TOMLIN, R. (1999),
"The engagement of universities in regional economic regeneration and development: a case study of perspectives", *Higher Education Management*, Vol. 11, No. 1, pp. 97-115.

BEANLAND, D.G. (1996),
"The new universities", *International Conference on Higher Education in the 21st Century: Mission and Challenge in Developing Countries*, Hanoi, Vietnam, pp. 25-27.

COALDRAKE, P. and STEADMAN, L. (1998),
"*On the Brink: Australia's Universities Confronting their Future*", University of Queensland Press.

COURT, S. (1997),
"The development of a regional role for UK higher education institutions with particular reference to the south west region of England", *Higher Education Management*, Vol. 9, No. 3, pp. 45-65.

DAVIES, J.L. (1997*a*),
"The evolution of university responses to financial reduction", *Higher Education Management*, Vol. 9, No. 1, pp. 127-140.

DAVIES, J.L. (1997*b*),
"The regional university: issues in the development of an organisational framework", *Higher Education Management*, Vol. 9, No. 3, pp. 29-43.

DAWKINS, J. (1987),
Higher Education: a Policy Discussion Paper (Canberra, Commonwealth Government).

DAWKINS, J. (1988),
Higher Education: a Policy Statement (Canberra, Commonwealth Government).

GODDARD, J. (1997),
"Managing the university/regional interface", *Higher Education Management*, Vol. 9, No. 3, pp. 7-27.

KANTER, R.M. (1995),
"*World Class: Thriving Locally In The Global Economy*", Simon and Schuster Publishers, New York.

KEMP, D. (1999),
"*New Knowledge, New Opportunities: A Discussion Paper on Higher Education Research and Research Training*", DETYA No. 6236.HERC99A.

MCNAY, I. (1994),
"The regional dimension in the strategic planning of higher education", *Higher Education Quarterly*, Vol. 48, No. 4, pp. 323-336.

NEAVE, G. (1979),
"Education and regional development: an overview of a growing controversy", E*uropean* J*ournal of* E*ducation*, Vol. 14, No. 3, pp. 207-231.

TAYLOR, P.G. (1998),
"Institutional Change in Uncertain Times: lone ranging is not enough", S*tudies in* H*igher* E*ducation*, Vol. 23, No. 3, pp. 269-279.

TAYLOR, T., GOUGH, J., BUNDROCK, V. and WINTER, R. (1998),
"A bleak outlook: academic staff perceptions of changes in core activities in Australian higher education, 1991-96", S*tudies in* H*igher* E*ducation*, Vol. 23, No. 3, pp. 55-268.

Financing Lifelong Learning, Trends and Patterns of Participation and Financing in US Higher Education

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ABSTRACT

In many ways, the US higher education system is the envy of the world. However, the US experience provides a number of clues as to what not to do as well as what to do while educational opportunities are expanded. In particular, the relative decentralization of the US higher education system leads to a variety of outcomes that educational leaders in the United States are increasingly recognizing as being less than optimal.

In a first section this article presents some basic information describing the US higher education system. By any measure it is an enormous system, with its college and universities and its students both characterized by an enormous amount of heterogeneity. A second section provides an overview of changes over time in the finance of American colleges and universities, focusing on the role of governments, institutions and families in meeting college costs.

A third section considers the implications of these recent financing trends for the issue of access to college for people of all economic backgrounds, the focus is on the bearing of these recent trends in enrollment and pricing on our understanding of the impact of prices and student aid on the demand for college enrollment.

A fourth section examines evidence on the enrollment destinations of students from different income groups.

The article concludes with a review of some recent policy developments, including the remarkable changes in federal tax support for higher education, and some speculations about the future.

THE US HIGHER EDUCATION SYSTEM

There are 3 395 non-profit colleges and universities in the United States. Half are public institutions (owned by state and local governments), with 613 public four-year schools (18% of all non-profit colleges and universities) and 1 088 public two-year community colleges (32%). The other half consist of 1 510 private four-year colleges and universities (44%) and 184 private two-year schools (5%). In addition there are an even larger number of private for-profit four-year and two-year schools.

The average public institution is considerably larger than the average private school. Of the 14.4 million students enrolled in American higher education, 11.1 million (77%) are at public schools 5.8 million (40% of total enrollment) at public four-year institutions and 5.3 million (37%) at community colleges. The remaining 23% of students are divided between private four-year schools [3.0 million (21%)] and private two-year schools [250 000 (2%)]. Eighty-five per cent of total enrollment (12.3 million students) is at the undergraduate level with the rest of the students pursuing post-baccalaureate degrees, with 1.7 million students (12%) in graduate programs and 300 000 students (2%) in professional schools. Fifty-eight per cent of total enrollment is full-time.

White students comprise 72% of college enrollment (compared with 74% of the US population) with Blacks (10% of enrollment versus 12% of the population), Hispanics (8% of enrollment versus 10% of the population), and Asian-Americans (6% of enrollment versus 3% of the population) the next largest groups. There are also 460 000 foreign students (3% of enrollment) studying at America's colleges and universities. Non-whites are disproportionately enrolled at two-year institutions: they represent 22% and 24% of enrollment at private four-year and public four-year schools versus 32% and 31% of enrollment at private two-year and public two-year colleges. Women constitute 56% of all students.

Twenty-seven per cent of all adults in the United States have a degree from a two-year or four-year college or university, with an additional 19% having some college but no degree. Rapid increases in the percentage of high school graduates who enroll in higher education (now over 65%) along with a significant decline in high school dropout rates (now around 10%) imply that the percentage of adults with at least some college experience will increase sharply in the future. (Total enrollment in US higher education rose from under 11 million in 1976 to the current level of over 14 million, with enrollment projected to exceed 16 million by 2008.) The rise in enrollment has been accompanied by an increase in the number of faculty, from under 700 000 in 1980 to 932 000 in 1995. Fifty-nine per cent of all faculty are full-time, down from 70% in 1975. The total number of full-time employees (including faculty) in US higher education is 1.8 million, with an additional 860 000 working part-time.

Turning toward financing, tuition and fees at private four-year schools average about USD 14 000 compared with USD 3 000 at public four-year institutions and USD 1 500 at community colleges. Room and board for resident students runs roughly USD 5 000 extra. During the 1996-97 academic year, expenditures at private colleges and universities were USD 82 billion while public colleges and universities spent USD 143 billion. Total higher education expenditures of USD 225 billion constituted 3.0% of US gross domestic product. State appropriations (mainly to cover operating expenses at public schools) were around USD 50 billion while local governments provided USD 6 billion. The federal government spent USD 25 billion mainly in research support and also provided about USD 40 billion in financial aid [three-quarters of which is in the form of student loans; the largest federal student aid grant program (the Pell grant) allocates about USD 6 billion per year].

With this overview in mind, we now take a detailed look at US higher education financing and on the resulting educational outcomes.

FINANCES

Tables 1 and 2 present a long-run view on college finance, containing data from selected years between 1939 and 1995. Table 1 shows how colleges' principal sources of revenue have changed over the past half century. For public institutions, state and local government spending has been the primary revenue source (accounting for more than half of revenues), with tuition providing a much smaller share (no more than a quarter of revenues). On the other hand, for private institutions, tuition has by far been the principal source of revenue (accounting for between 43% and 57% of revenues).

This long view allows us to put recent changes in historical perspective. For public institutions, the contribution of state and local government spending has been declining for more than a decade, reaching its lowest post-war level (52%) in the most recent years for which we have data. While there has been a slight increase in the contribution of gifts and endowment earnings (from 3% to 6%), a much more important change has been the increased role of tuition (from 13% to 24%). Tuition at private institutions has also taken its largest role in forty years (going from 45% in 1955-56 to 55% in 1994-95) as the contribution of federal funding has declined to its lowest level since the late 1950s (falling from a peak of 30% in 1965-66 to 19% in 1994-95).

The pattern here is clear: tuition has been replacing government spending at both public and private institutions. Indeed, the pattern of revenue shares in the 1990s looks more like that of the late 1940s than of any intervening decade.

Table 2 reports revenue shares for the major categories given in Table 1, averaged over public and private institutions, and also breaks down gross tuition by its sources – showing the share paid by families directly and the shares paid by various forms of student aid.

Table 1. **Shares of higher education revenue, by source, by sector, selected academic years, 1939-1995**

Percentage

Year	Gross tuition	Government		Gifts and endowment earnings	Other
		Federal	State and local		
Public institutions					
1939-40	0.20	0.13	0.61	0.04	0.01
1949-50	0.25	0.13	0.56	0.03	0.03
1955-56	0.13	0.17	0.62	0.04	0.04
1959-60	0.13	0.21	0.59	0.04	0.03
1965-66	0.14	0.23	0.54	0.03	0.05
1969-70	0.15	0.19	0.57	0.03	0.05
1975-76	0.16	0.18	0.61	0.03	0.02
1979-80	0.15	0.16	0.62	0.04	0.03
1985-86	0.18	0.13	0.61	0.05	0.03
1989-90	0.20	0.13	0.58	0.05	0.04
1991-92	0.22	0.14	0.55	0.06	0.03
1992-93	0.24	0.14	0.53	0.06	0.04
1993-94	0.24	0.14	0.52	0.06	0.04
1994-95	0.24	0.14	0.52	0.06	0.04
Private institutions					
1939-40	0.55	0.01	0.03	0.38	0.03
1949-50	0.57	0.12	0.04	0.23	0.05
1955-56	0.45	0.18	0.02	0.28	0.06
1959-60	0.43	0.25	0.02	0.25	0.05
1965-66	0.43	0.30	0.02	0.18	0.06
1969-70	0.44	0.26	0.03	0.19	0.08
1975-76	0.48	0.25	0.04	0.19	0.04
1979-80	0.47	0.25	0.04	0.19	0.05
1985-86	0.50	0.22	0.03	0.19	0.06
1989-90	0.51	0.21	0.04	0.18	0.06
1991-92	0.53	0.20	0.04	0.17	0.06
1992-93	0.54	0.19	0.04	0.17	0.06
1993-94	0.55	0.19	0.04	0.17	0.06
1994-95	0.55	0.19	0.03	0.17	0.06

Notes: 1994-95 data are preliminary. Figures do not include revenue from auxiliary enterprises or from sales and services. Government figures do not include student aid (which is included under gross tuition).

Source: See McPherson and Schapiro, 1191*a*, p. 21, plus, for data after 1986, Table 325 (p. 341) and Table 326 (p. 342) of the *Digest of Education Statistics* 1997, National Center for Education Statistics (December 1997).

Table 2. **Shares of higher education revenue, by source, selected academic years, 1939-95**

Percentage

Year	Gross tuition	Tuition paid by:				Non-tuition revenue		
		Families	Institutions	Government		Federal	State and local	Gifts and endowment earning
				Federal	State			
1939-40	0.37	0.35	0.02	0.00	0.00	0.07	0.33	0.21
1949-50	0.40	0.37	0.03	0.00	0.00	0.12	0.32	0.12
1959-60	0.26	0.22	0.03	0.00	0.01	0.23	0.34	0.13
1965-66	0.26	0.21	0.04	0.00	0.01	0.26	0.33	0.09
1969-70	0.25	0.20	0.04	0.00	0.01	0.22	0.38	0.08
1975-76	0.26	0.16	0.04	0.04	0.02	0.20	0.43	0.08
1979-80	0.26	0.14	0.04	0.06	0.02	0.19	0.43	0.09
1985-86	0.29	0.17	0.05	0.05	0.02	0.16	0.41	0.10
1989-90	0.31	0.19	0.05	0.05	0.02	0.16	0.37	0.10
1991-92	0.34	0.22	0.05	0.05	0.02	0.16	0.35	0.10
1992-93	0.35	0.23	0.05	0.05	0.02	0.16	0.33	0.10
1993-94	0.35	0.22	0.06	0.05	0.02	0.16	0.32	0.10
1994-95	0.35	0.23	0.06	0.04	0.02	0.16	0.32	0.10

Notes: 1994-95 data are preliminary. Both veteran's educational benefits and social security benefits paid to qualified college students are excluded from federal tuition payments.

Source: See McPherson and Schapiro, 1991*a*, p. 23, plus, for data after 1986, Table 324 (p. 340) of the *Digest of Education Statistics* 1997, National Center for Education Statistics (December 1997) and Table 1 (p. 6) of *Trends in Student Aid: 1987 to 1997*, The College Board (September 1997).

The most striking trend is the steady decline through 1980 in the overall share of tuition paid by families, the result of an increase in the enrollment share of public institutions, the growth of federal grants and contracts, and the rise in financial aid. However, the decline in the share of higher education revenues provided by families came to an abrupt halt in the 1980s, with the family share increasing by 9 percentage points in the 1979-80 to 1994-95 period (reaching the highest level – 23% – since before 1959-60).

Table 2 also underscores that it is the states rather than the federal government whose role is changing most dramatically. As late as 1979-80, state governments contributed 45% of all of higher education revenues, almost all of it through direct support of state-run institutions. By 1994-95 that share had fallen to 34%. The share of higher education revenues supplied by federal student aid has remained roughly constant since the mid-1970s, but the share provided by federal research support has declined substantially (from 26% to 16%) from its high in the mid-1960s. Since research support is concentrated in a fairly small number of institutions, this decline is of major importance for that subgroup.

Before 1975, a fairly modest total of "generally available" aid was divided between guaranteed loans and the so-called "campus-based" programs, which provide funds for institutions to use for student aid in the form of grants, loans and work. From 1975 to 1980, the generally available federal aid budget grew rapidly (doubling in real dollars between 1975-76 and 1980-81), with substantial expenditures on the newly introduced Pell program, the means-tested grant program put in place under the Nixon administration in 1974. From 1980 to the early 1990s, both the Pell program and guaranteed loans increased at a slower rate (with around a 50% real increase in each). Since that time, growth in guaranteed and direct loans has been enormous (a 100% real increase between 1990-91 and 1996-97) but expenditures on the Pell program have fallen by 3% in real dollars. Thus, while federal aid in 1996-97 totaled USD 40.0 billion, up from only USD 24.9 billion in 1990-91 (in 1996 dollars), virtually all of the increase was in the form of loans rather than grants.

The real value of state grants has followed a positive trend throughout the entire period but the absolute increase has been dwarfed by the growth in institutional grants. The real value of institutional grants has more than tripled over the past fifteen years, going from USD 2.9 billion in 1980-81 (in 1996 dollars) to USD 10.4 billion in 1996-97.

These aggregate aid numbers provide only limited insight into how student aid has helped particular groups of students meet the costs of college. One useful bit of insight into this question is provided by changes over time in the targeting of the federal Pell program.

While, in the early years of the program, the bulk of grant recipients were traditional-aged college students supported by their parents (in 1973-74 only 13% of recipients of student aid grants from the main federal source – the Pell grant program – were independent students), by 1985-86 the majority of recipients were independent students. That percentage has been fairly stable at around the 60% level during the 1990s.

Equally striking changes have occurred in the distribution of Pell funds between the non-profit and for-profit (proprietary) sectors. From 1973-74 to 1987-88 there was a remarkable increase (from 7% to 27%) in the share of Pell funds going to students attending proprietary vocational and technical institutions, most of which offer non-degree programs of less than two years (while proprietary institutions enrolled fewer than 7% of undergraduate students in 1988, their students received more than a quarter of all Pell grant funds). Since that time, however, a tightening of federal aid guidelines has lowered that share all the way to 12.5%, the lowest level since around 1980. Although fully comparable data are not available for federal loans, it is clear that there has been a similar reversal of the trend toward an increasing share of loans going toward proprietary institutions. This is a quite striking turn-

about in a situation which had garnered enormous attention in public discussions of higher education finance in the early 1990s.

The tables discussed above provide an overall picture of changes over time in the financing of US higher education. What is missing is an analysis of the different prices faced by students from different income backgrounds, along with the federal, state and institutional aid available to them. Fortunately, the National Postsecondary Student Aid Survey (NPSAS), covering the 1986-87 and 1992-93 academic years, provides detailed student-level data on higher education financing. The top panel of Table 3 presents information on the distribution of gross tuition costs (in

Table 3. **Financing undergraduate tuition, 1986-87 and 1992-93**
In 1992-93 dollars

		Net tuition	Fed. grant	Fed. loan sub.	State grant	Inst. grant	Gross tuition
		Private non-profit institutions					
Low income	1986-87	1 372	1 585	958	1 354	1 780	7 049
	1992-93	3 619	1 628	1 141	982	2 942	10 312
Middle income	1986-87	4 048	355	840	582	1 754	7 579
	1992-93	7 704	184	750	328	2 919	11 886
High income	1986-87	7 390	117	317	92	719	8 635
	1992-93	11 622	23	304	55	1 388	13 391
		Public institutions					
Low income	1986-87	–439	980	370	355	168	1 434
	1992-93	360	1 051	489	352	267	2 520
Middle income	1986-87	1 030	97	278	102	154	1 661
	1992-93	2 113	84	220	85	263	2 765
High income	1986-87	1 721	37	73	18	83	1 932
	1992-93	3 112	11	84	38	193	3 437
		Private for-profit institutions (proprietary schools)					
Low income	1986-87	1 124	1 546	1 233	266	70	4 238
	1992-93	4 155	1 254	1 102	122	69	6 702
Middle income	1986-87	3 281	180	1 245	207	105	5 018
	1992-93	5 842	94	784	69	110	6 898
High income	1986-87	4 630	33	349	27	62	5 102
	1992-93	6 852	7	188	0	25	7 071

Note: Members are averages across all full-time, dependent students attending a particular institutional type. Income brackets: 1986-87 – < $23 500, 23 500-54 900, > $54 900; 1992-93 – < $30 000, 30 000-70 000, > 70 000.
Source: Calculated from 1986-87 and 1992-93 NPSAS data bases.

1992-93 dollars) for full-time, dependent students attending private non-profit colleges and universities during each of the survey years.

There was a considerable real increase in gross tuition charges (sticker prices) facing students from all income backgrounds, with the largest absolute increase for high income students. However, increases in the net tuition price actually paid by students were somewhat smaller than increases in sticker prices: USD 4 232 versus USD 4 756 for high income students, USD 3 656 versus USD 4 307 for middle income students, and USD 2 247 versus USD 3 263 for low income students.

Federal grants remained approximately constant in real value for low income students attending private institutions, which in light of the considerable real increase in gross tuition, means that the percentage of tuition covered by federal financial aid for low income students has decreased considerably over time – from 22% in 1986-87 to only 16% in 1992-93. The real value of federal grants for more affluent students fell over the period, although federal grants account for a very small percentage of gross tuition for these students.

The subsidy value of federal loans computed at 50% of the total loan amount (McPherson and Schapiro, 1991*a*) changed little over time, implying once again that federal financial aid accounts for a declining share of gross tuition. State grants not only contribute a decreasing share of gross tuition, they have declined significantly, especially for low income students.

Institutional grants, on the other hand, have increased rapidly for students from all income groups, particularly for low and middle income students. The percentage contribution of institutional grants to gross tuition has increased for students from all income groups.

Analogous information is provided for students attending public colleges and universities. As for privates, sticker prices increased in real terms for all groups. Again, increases in the net tuition price actually paid by students were somewhat smaller than increases in sticker prices for each income group. For the average low income student attending a public institution, the contribution of federal, state, and institutional aid exceeded the gross tuition price in 1986-87, implying a negative net tuition payment. This reflects the difference between gross tuition and gross total costs of attendance, with the latter including room, board, and other charges. Thus, the excess of financial aid over gross tuition is applied against other costs of attendance.

Federal grants for low income students attending public colleges and universities increased slightly in real terms, but not enough to maintain the percentage contribution of these grants to gross tuition. The subsidy value of federal loans, while increasing for low income students by USD 119 in real dollars, also failed to grow enough to maintain its share of gross tuition (which fell from 26% to 19%). The contribution of state grants also declined. Institutional grants, on the other hand,

increased for students from all income groups, although the percentage contribution of institutional grants to gross tuition is relatively small in public higher education.

Finally, for students attending private for-profit (proprietary) schools, sticker prices increased in real terms for all groups, although in this case increases in the net tuition price actually paid by students were larger than increases in sticker prices for each income group. This reflects the decline in the real value of financial aid from all sources, most notably the fall in the real value of federal grants for low income students and the real decline in the subsidy value of federal loans for more affluent students. Whereas the sum of federal grants and loans in 1986-87 accounted for 66%, 28%, and 7% of gross tuition for low income, middle income, and high income students attending proprietary schools, those contributions fell to 35%, 13%, and 3% in 1992-93.

The most striking change since 1992-93 is the spectacular run-up in federal loan volume. Probably the most important explanation for this growth is a set of changes in needs analysis methodology introduced in the 1992 reauthorization of the basic higher education legislation. Students receive interest subsidies on their loans only to the extent that they can be shown to have financial need. Congress, which some years ago decided to write the needs analysis rules themselves, rather than leaving them to student aid experts, made those rules significantly more lenient for middle and upper-middle income students in the 1992 legislation. Most strikingly, a family's home equity was no longer counted as an asset. These changes imply that many families at public institutions who would not have qualified as needy under the old rules can now get subsidized loans. Other factors contributing to the loan run-up probably include the rising costs at public institutions, which also qualify more students for loans, and the introduction of federal direct loans, which have simplified the process of obtaining a loan considerably.

This recent pattern of declining real funding for federal grants coupled with rapid expansion in subsidized loans seems not to reflect a deliberate policy shift, but rather the working out of budgetary pressures.

But intended or not, this shift has significant implications for the targeting of federal aid subsidies, since Pell grant funds are very effectively targeted on low income students, as the NPSAS data reviewed above show, while federal loan subsidies are distributed much more broadly to middle income as well as lower income students, the shift of funding toward loans clearly moves support away from low income students and toward the middle class.

ACCESS

Our review of pricing and aid makes clear that recent years have seen a substantial run-up in the costs to students of attending college, even after allowing for the effects of financial aid. These cost increases are widespread across types of

institutions and family income levels of students. It is natural to expect that these substantial increases in college costs should produce a decline in rates of college attendance, yet, as we will show in a moment, enrollment rates of high school graduates are actually at an all-time high. The question before us is whether and how we can reconcile these trends with the econometric evidence that higher prices or lower aid levels tend to discourage college attendance.

First, we examine the college enrollment rates for high school graduates from different races. Due to high variability reflecting small sample sizes for Blacks and Hispanics, we have calculated three year moving averages for those groups.

Beginning with Whites, there was little trend between 1960 and 1980, with enrollment rates hovering at around the 50% level (note that the denominator is the number of people aged 16 to 24 who graduated from high school within the preceding 12 months, while the numerator is the subset of that group enrolled in college). These rates are substantially higher than the enrollment of all high school graduates aged 16 to 24, an alternative enrollment rate that is often used. After that time, however, enrollment rates climbed to the 60% level in the late 1980s, continuing to rise to around 66% in 1996. The moving average for Blacks was around 45% in the late 1970s, fell to around 40% during the first half of the 1980s, then regained that loss before ending the period with enrollment rates above the 50% level. Rates for Hispanics were generally slightly below 50% from 1977 to 1984, fell during the mid-1980s, before averaging in the mid-50s over the subsequent period.

Thus enrollment rates for all three racial groups are at or near record rates, with a notable gain beginning around 1988 and continuing to the present. Yet we should also note that the gap between the enrollment rate of Whites and those of Blacks and Hispanics is larger now than it was in the late 1970s. At that time, White enrollment rates were about 5 percentage points higher than those for Blacks and about 3 percentage points higher than those for Hispanics. In the 1980s that gap widened, and in the early 1990s it was around 10 percentage points for Blacks and 7 or so for Hispanics.

Which factors have contributed to the observed trends? Have changes in tuition and financial aid had an impact? Have government policies played a positive role?

The question of how pricing and aid influences student enrollment decisions has received much attention from economists and policy analysts over the last decade. One school of thought, led by Lee Hansen, has focused on the difficulty of discerning much impact of changes over time in prices and in federal student aid policy on national enrollment trends. Certainly the coincidence of higher prices and higher enrollment rates in recent years that we have just noted could be used to buttress these arguments. Another school of thought has focused on econometric

studies, relying mostly on cross-section data, that show significant negative effects of price on enrollment and significant positive effects of aid on enrollment.

Our own econometric work (McPherson, Schapiro and Winston, 1993, Chapter 8; McPherson and Schapiro, 1991*a*, Chapter 3; McPherson and Schapiro, 1991*b*) presented new empirical results in an attempt to reconcile differences in the literature. Our results indicate that increases in net cost over time lead to decreases in enrollment rates for lower income students. While our findings corroborate the presence of a significant price or aid effect for low income students, we found no evidence that increases in net cost inhibited enrollment for more affluent students. Is it possible to reconcile these econometric results with the recent growth of enrollment rates in the face of rising net costs? We think so, for several reasons.

First, of course, prices are not by any means the sole determinant of enrollment rates. There is strong evidence that the economic returns to investments in college have grown substantially in recent years, and this is an obvious explanation for the growth in college attendance. According to Census data (Bureau of the Census, 1994), a worker with a Bachelor's degree earned 1.54 times as much in 1975 as a worker with a high school degree; in 1992 that ratio had risen to 1.74. Unfortunately, this growing labor-market advantage for the college-educated came about mostly because of declines in the real incomes of recent high school graduates, rather than because of large real gains for college-attendees (Katz and Murphy, 1992). As Kane (1995) argues, this change in returns can go a long way toward explaining the increase in enrollment rates.

Moreover, the increase in enrollment rates has not been uniform across income groups. Kane (1995) notes that the gap in enrollment rates between students from the lowest income quartile and those from the other three quartiles grew by 12 percentage points between 1980 and 1993 (p. 6). We noted above that the gap between the enrollment rate of Whites and those of Blacks and Hispanics have likewise grown over that period, a fact that is consistent with the lower average socioeconomic status of Blacks and Hispanics. These results support the evidence in our econometric work that price sensitivity to enrollment is concentrated among low income students, with little or no price response observed among higher income students.

On the other hand, the growing gap between enrollment rates for lower and higher income students noted above suggests that increases in the net cost facing low income students do discourage college attendance. Kane's (1995) evidence that the gap between low income and high income enrollment rates by state is positively related to rates of growth in public tuition strongly suggests that the increases in net cost for low income students shown in Table 3 are having an impact on their access. In an updated analysis, Kane (1998) argues that with overall college enrollment rates rising since 1980, it is common to observe states both raising

tuition at high rates and experiencing increases in enrollment. But, as he demonstrates in the case of the state of Massachusetts, which had especially dramatic increases in tuition coupled with cuts in grant aid during the late 1980s and early 1990s, the gap in enrollment between that state and other states grew substantially. To simply look at changes in enrollment in a particular state without comparing it with what is happening elsewhere may incorrectly imply that increases in net tuition have little or no effect on enrollment. In his new manuscript, Kane (1998) also uses multivariate statistical analysis to isolate the effect of tuition on enrollment. He finds that a USD 1 000 increase in tuition charges at public four-year institutions reduces enrollment in that sector by 13.7% for whites and by 21.4% for blacks. Again, this substantiates the contention that certain groups are more vulnerable to tuition hikes than others.

These facts make the trend of the last few years to reduce real funding of Pell and increase funding for loans all the more unsettling. As we noted earlier, expanded loan funds since 1992-93 have probably gone largely to middle and upper-middle income students at public colleges and universities. While they no doubt welcome such support, there is little evidence that it is essential to enabling them to attend college. Yet federal grant dollars are very effectively targeted on low income students, and there is evidence that changes in support for low income students do influence their college going. So the recent redistribution of federal dollars appears to be going the wrong way both from the standpoint of social equity and the standpoint of efficiency in promoting college enrollment.

One final point with regard to overall enrollment patterns is worth noting. For-profit colleges have endured the largest impact on the net prices facing low income students, as their tuitions have gone up and both grant and loan support have declined. It seems very likely that this dramatic change in their financial situation has had an important impact both on attendance levels and the financial well-being of many of these establishments. Unfortunately, there is no reliable database to draw on in order to study the fate of this intriguing sector.

Thus far our discussion of access has concentrated either on the link between race and enrollment or between income and enrollment. But perhaps an even more important question relates to how student ability enters the story. Low income students on average are less likely to participate in American higher education, but what about the most talented low income students? It has long been a goal of federal policy to break the link between family background and college enrollment, especially for students with the motivation and ability to succeed in college.

In 1994, 38% of students from the bottom ability group attended higher education compared with 63% of students from the middle ability group and 87% from the upper ability group. That finding by itself need not cause much worry – most people would agree that students with the highest demonstrated ability should have the

greatest chances to participate in further education. But it is striking that 64% of the low ability students from high income families proceed to colleges and universities versus only 29% of their low income counterparts. Much more worrying is the finding that only 49% of middle ability students from low income families and 75% of high ability students from low income families advance to postsecondary training – compared with 81% and 95% of students from the high income group. It is worrying enough that 5% of high ability, high income students and 14% of high ability, middle income student do not enroll in college. But it is of greater concern that one out of four high ability students from low income backgrounds find no place among our more than 3 000 colleges and universities.

Is this getting better or worse over time? The enrollment rate for low income students in the highest ability group failed to increase from its 1961-63 level (60%) to 1972 (58%) or to 1980 (58% again). In 1980, a high income student with less than average ability (in ability category 2) was more likely than a low income student with high ability to enroll in college (68% versus 58%). Note that in 1994, a high income student with average ability was also more likely to pursue higher education than a high ability student from a low income background (81% versus 75%). We clearly have a long way to go before we reach the situation where academic talent rather than family background determines who enrolls in higher education.

This analysis is supported by the statistical analysis in Kane (1998). Controlling for race, he finds that the enrollment rate for a student from a family in the top fifth of the income distribution is 34 percentage points greater than for a student from the bottom fifth. Controlling for student ability as well, he finds that affluent students still have enrollment rates that are around 22 percentage points greater than students from the bottom income group. This corresponds very closely with the finding discussed before – that family income has a powerful effect on college enrollment, even among students with similar talent. When one recognizes that measured ability (test scores, etc.) is itself partly determined by family income, the relationship between family background and college enrollment is even stronger.

CHOICE

When we consider the topic of educational opportunity, we take into account both the issue of the accessibility of higher education to lower income students and the overall distribution of students across institutional types. Despite the concerns we have noted about the impact on access of the recent rise in college costs facing low income students, the high overall rates of college attendance in recent years point to considerable success in making some form of postsecondary education financially accessible to a very wide range of Americans. Although continuation of recent trends could easily threaten the nation's achievements in providing "access" to college, it is important to stress the considerable success of the US system in

making it possible for so many Americans to continue their education beyond high school.

Yet the existing financing system may be much less successful in providing a suitable postsecondary experience for many disadvantaged students. The range of alternatives available to students appears to be quite sharply constrained by their incomes under existing arrangements. In most states community colleges are the cheapest and most accessible alternative for low income students, a fact which is reflected in their disproportionate representation in these institutions. Although the issue of "choice" is often expressed in terms of public versus private alternatives, opportunity to attend a flagship public university or indeed any four year public institution is importantly constrained by income in many states.

It is interesting to note that much of the popular discussion regarding where students go involves middle income students, not lower income students. It is often suspected that students from middle income backgrounds have been most affected by the considerable real increases in tuition at private colleges and universities. Students from lower income backgrounds qualify for need-based financial aid, lessening the chance that these students experience an affordability problem. Students from upper income backgrounds receive a different but analogous form of financial aid – parental contributions that do not require major proportions of available annual incomes. But, the story goes, when tuitions rise faster than other economic indicators, students from middle income backgrounds are forced to switch to less costly educational alternatives. In fact, for years the view that middle income students – too rich for financial aid but too poor to afford private school tuitions – are increasingly showing up at public institutions has been stated as truth in the national media (Kuttner, 1989).

In this section we examine changes over time in the higher education destination for students of different economic backgrounds. This allows us to consider not only the "middle income melt" topic, but also to examine the broader question of who goes where and how that compares with more than a decade ago.

Our analysis relies on data from an annual survey of first-time, full-time college freshmen, The American Freshman Survey. These data are self-reported by students, thereby undoubtedly introducing measurement error. Nevertheless, we use these data for several reasons. First, they are the only consistently reported annual data on the college choices of students from different income backgrounds. Second, there is no reason to expect the biases in student reporting of income to vary systematically over time. Hence, while the data may be inaccurate in a particular year, their variation over time should be more reliable. Therefore, while we discuss the distribution of students by income at a given time, we concentrate more on changes over time in that distribution.

Our first step is to disaggregate income distribution data into reasonable groupings that can be traced over time. The most recent available survey data are from the Fall of 1997, during which time students were asked to report parents' income for 1996. We have created six basic income brackets from those data (lower, lower-middle, middle, upper-middle, upper, and richest) and computed their constant dollar equivalents in a previous survey year, 1981. 1981 was selected in order to have income bands that match up as closely as possible with the constant-dollar equivalents for those used in 1997. The precise income groupings are described in the table.

Table 4 concerns the distribution of students from different income backgrounds across institutional types. The institutional types are private universities (typically large institutions with substantial graduate and research programs), private four-year colleges (typically small, liberal arts colleges), private two-year colleges (a collection of mainly religious, business, and art colleges), public universities (again, large graduate universities), public four-year colleges (typically branches of public universities other than the "flagship" campus – for example, the branches of the California State University system, the University of Michigan at Dearborn, the University of Wisconsin at Stout), and public two-year colleges (community colleges). Figures for all private institutions and all public institutions are also provided. In addition, categories are sub-divided based on institutional selectivity.

In 1997, 25.4% of students attended private institutions, almost exactly the same as in 1981. Looking within the private sector, the share of all students attending private universities increased from 4.8% to 5.8% while the share at private four-year colleges rose from 16.2% to 17.1%. The share attending private two-year colleges fell from 4.3% to 2.5%. The same pattern took place in the public sector. The percentage of students attending public universities rose from 17.7% to 19.4% and the percentage at public four year colleges rose from 21.4% to 23.3%. On the other hand, the share of all first-time, full-time freshmen at public two-year colleges fell from 35.6% in 1981 to 31.8% in 1997.

Turning now to the income breakdowns, it is clear that the percentage of students attending private schools in 1997 varies considerably with income: 18.9% of lower income students attended private colleges and universities, a figure that rises to 22.8% for middle income students, and to 51.0% for the richest students. Only 2.5% of all lower income students enrolled in higher education are at private universities, with 12.6% at private four-year colleges. On the other hand, 21.1% of the richest students enrolled in higher education are at private universities and 26.6% are at private four-year colleges. Middle income students had intermediate enrollment percentages of 3.8% and 16.5%. Thus, the probability of a student attending a four- year private college or university depends critically on his or her parent's income. However, the relationship between income and attendance at a public

Table 4. **Distribution of freshman enrolment by income background across institutional types, fall of 1981 *versus* fall of 1997**

Percentage – Income in 000 $

	Lower < $20	Lower middle $20-30	Middle $30-60	Upper middle $60-100	Upper $100-200	Richest > $200	All groups
				1997			
Private university	**2.5**	**3.1**	**3.8**	**6.2**	**11.9**	**21.1**	**5.8**
Low selectivity	1.0	1.3	1.6	2.3	3.4	4.5	2.0
Medium selectivity	0.6	0.7	0.9	1.5	3.1	5.7	1.5
High selectivity	0.9	1.1	1.4	2.3	5.4	10.9	2.4
4-year colleges	**12.6**	**14.9**	**16.5**	**17.8**	**21.1**	**26.6**	**17.1**
Low selectivity	10.1	11.8	12.3	12.1	12.2	12.2	11.9
Medium selectivity	2.0	2.4	3.2	4.2	5.9	8.5	3.8
High selectivity	0.6	0.7	0.9	1.4	3.1	6.0	1.4
2-year colleges	**3.9**	**2.7**	**2.5**	**1.8**	**2.3**	**3.3**	**2.5**
All private	**18.9**	**20.7**	**22.8**	**25.8**	**35.3**	**51.0**	**25.4**
Public university	**11.9**	**14.2**	**17.5**	**23.5**	**27.9**	**24.5**	**19.4**
Low selectivity	5.0	5.4	6.7	8.6	8.9	8.2	7.2
Medium selectivity	4.2	6.1	7.7	9.6	10.4	7.6	7.9
High selectivity	2.7	2.7	3.1	5.3	8.6	8.6	4.4
4-year colleges	**22.0**	**24.4**	**24.5**	**24.8**	**20.5**	**12.6**	**23.3**
Low selectivity	20.7	22.4	21.2	20.6	15.9	9.7	20.1
Medium selectivity	1.3	2.8	3.3	4.1	4.6	3.0	3.2
2-year colleges	**47.1**	**40.7**	**35.2**	**26.0**	**16.3**	**12.0**	**31.8**
All public	**81.1**	**79.3**	**77.2**	**74.2**	**64.7**	**49.0**	**74.6**
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	Lower < $10	Lower middle $10-15	Middle $15-30	Upper middle $30-50	Upper $50-100	Richest > $100	All groups
				1981			
Public university	**2.2**	**2.7**	**3.2**	**5.4**	**11.3**	**18.6**	**4.8**
Low selectivity	1.3	1.4	1.5	1.8	3.0	4.6	1.7
Medium selectivity	0.5	0.7	0.9	1.6	3.1	4.4	1.3
High selectivity	0.4	0.6	0.9	2.0	5.1	9.6	1.7
4-year colleges	**13.6**	**15.0**	**14.9**	**16.3**	**21.9**	**32.4**	**16.2**
Low selectivity	11.6	12.2	11.3	10.8	12.6	17.1	11.7
Medium selectivity	1.6	2.3	3.0	4.2	5.8	9.5	3.5
High selectivity	0.4	0.5	0.6	1.3	3.4	5.8	1.1
2-year colleges	**6.2**	**5.5**	**4.2**	**3.6**	**3.5**	**3.0**	**4.3**
All private	**22.0**	**23.2**	**22.3**	**25.3**	**36.7**	**54.0**	**25.3**

Table 4. **Distribution of freshman enrolment by income background across institutional types, fall of 1981 *versus* fall of 1997** (*cont.*)

Percentage – Income in 000 $

	Lower < $10	Lower middle $10-15	Middle $15-30	Upper middle $30-50	Upper $50-100	Richest > $100	All groups
				1981			
Public university	**10.1**	**12.9**	**16.1**	**22.0**	**25.9**	**22.8**	**17.7**
Low selectivity	4.2	5.0	6.2	8.2	9.7	9.2	6.8
Medium selectivity	3.7	5.4	6.5	8.9	10.0	8.4	7.1
High selectivity	2.2	2.6	3.3	4.8	6.3	5.1	3.8
4-year colleges	**23.4**	**22.5**	**22.2**	**21.6**	**16.9**	**10.0**	**21.4**
Low selectivity	22.2	20.8	18.9	17.9	13.7	8.5	18.5
Medium selectivity	1.2	1.7	3.3	3.7	3.2	1.5	2.9
2-year colleges	**44.6**	**41.4**	**39.3**	**31.2**	**20.4**	**13.2**	**35.6**
All public	**78.0**	**76.8**	**77.7**	**74.7**	**63.3**	**46.0**	**74.7**
Total	**100.0**	**100.0**	**100.0**		**100.0**	**100.0**	**100.0**

Note: The survey of freshmen in 1997 reflected family income in the 1996 calendar year while the survey of freshmen in 1981 reflected family income in the 1980 calendar year. Inflation between 1980 and 1996 equalled 90.4%. Inflation-adjusted income brackets for the 1981 survey would be as follows: < $10.5, $10.5-15.8, $15.8-31.5, $31.5-52.5, 52.5-105.0 and > 105.0. The selectivity definitions vary somewhat across institutional categories. We define low selectivity as having the following SAT ranges: < 1 050 for private universities, < 1 025 for private nonsectarian 4-year colleges, > 1 050 for Protestant 4-year colleges, < 1 025 for Catholic 4-year colleges, < 1 000 for public universities, and 1 025 for public 4-year colleges. We define medium selectivity as having the following SAT ranges: 1 050-1 174 for private universities, 1 025-1 174 for private non-sectarian 4-year colleges, > 1 049 for protestant 4-year colleges, > 1 024 for Catholic 4-year colleges, 1 000-1 099 for public universities, and > 1 024 for public 4-year colleges. We define high selectivity as having the following SAT ranges: > 1 174 for private universities, > 1 174 for private non-sectarian 4-year colleges, and > 1 099 for public universities.

Source: Calculated from results from the American Freshman Survey.

four-year college is more mixed – rising slightly from lower income to upper-middle income and falling for the two more affluent groups.

How have these proportions changed over time? Comparing 1997 to 1981, the percentage of upper income students who attend either private or public universities rose from 37.2% to 39.8% while the percentage of the richest students who attend a university rose from 41.4% to 45.6%. These increases were shared by universities in both the public and the private sectors – contrary to popular belief, the proportion of upper income students and of the richest students that attend private universities actually increased over the period. The increased attractiveness of public universities to affluent students is also noteworthy: their share of upper income students rose from 25.9% to 27.9% and their share of the richest students rose from 22.8% to 24.5%.

It was private four-year colleges that have suffered the loss of affluent students in recent years – the proportion of upper income students who enrolled at these schools fell from 21.9% to 21.1% while the proportion of the richest students fell more dramatically from 32.4% to 26.6%. That fact undoubtedly accounts for the intense financial pressure that private four-year colleges have appeared to be under over the past decade, as no-need students have become increasingly rare. Interestingly, affluent students have found public four-year colleges increasingly attractive, with the proportion attending these schools rising from 16.9% to 20.5% for upper income students and from 10.0% to 12.6% for the richest students. Middle income students have similarly increased their share going to public four-year colleges, from 22.2% to 24.5%, with a smaller increase in their share attending public universities (from 16.1% to 17.5%). The share of middle income students attending private universities increased slightly (from 3.2% to 3.8%) while the share attending private four-year colleges rose from 14.9% to 16.5%. The share of lower income students attending different institutional types generally changed little over time, except for the decline from 6.2% to 3.9% in the share attending two-year private colleges and the increase in the share attending community colleges from 44.6% to 47.1%.

Of all the institutional types, the most striking changes over time were at two-year public colleges. There were considerable changes between 1981 and 1997 in the attractiveness of public two-year colleges to students from different income backgrounds. While the percentage of lower income students attending community colleges increased over time, the share of students in all other income groups fell (especially noteworthy are the declines from 39.3% to 35.2% for middle income students; from 31.2% to 26.0% for upper-middle income students; and from 20.4% to 16.3% for upper income students). Thus, the flight of students from more affluent backgrounds away from public two-year colleges from 1981 to 1997 was in marked contrast to the experience of students from lower income backgrounds.

These findings raise doubts about some common impressions concerning "middle income melt". There is no evidence in our data of a redistribution of middle income students from either private universities or private four-year colleges.

The most striking movement among middle income students has in fact been within the public sector, with a sharp decline in the share of middle income students at public two-year institutions, mostly offset by growth in the share of middle income students at public four-year institutions. Indeed, one of our most interesting findings is the increase in the representation of low income students at public two-year colleges as opposed to the declining representation of middle and upper income students there. It is of course important to remember that the relatively young, first-time, full-time freshmen represented in our survey are not the predominant clientele at community colleges. Nonetheless, these data do seem worrisome. They suggest that the combined effects of tuition increases and limitations

on federal student aid may be impairing the relative ability of lower income students (relative to their more affluent counterparts) to gain access to institutions other than community colleges.

A particularly illuminating discovery concerns changes in the representation of students in the upper income and richest income brackets at private four-year colleges. Although leaders at these schools have been vocal in talking about middle income melt, it appears that what they have experienced is in fact upper income melt. It seems likely that this loss of full-pay students is a significant part of the explanation for the growing interest of these schools in reviewing their student aid policies and entering into merit aid competition.

These results raise the interesting question of why there hasn't been middle income melt in the sense of movement of middle income students from more to less expensive institutions. These data do not speak directly to the causes of the patterns we observe. But we would suggest two factors that may be at work. First, many middle income students get substantial tuition discounts at private institutions. Second, many public colleges and universities have experienced serious budgetary problems over the past decade, raising doubts about future quality, imposing obstacles to students getting the classes they need to graduate on time, and so on. These factors may have tended to push students, including middle income students, toward private institutions, working to offset middle income melt.

But what about the finding that the most affluent students have been leaving private four-year colleges for private and public universities? Again, we can conjecture about possible explanations. Perhaps the phenomenon of "brand-name" identification that became such an important part of American consumerism in the 1980s also took hold in higher education, with students leaving small, usually regional private colleges for larger and better known universities. In fact, it is interesting to note that the breakdowns by selectivity included in Table 4 show that it was the low selectivity private four-year colleges that absorbed the loss of the richest students – their percentage fell from 17.1% to 12.2%. The decline for medium selectivity private four-year colleges was much smaller, from 9.5% to 8.5%. The share of the richest students attending high selectivity private four-year colleges actually rose slightly over the period (from 5.8% to 6.0%). Even for private universities, which did better in attracting the richest students in 1997 than in 1981, the increases were all at medium and high selectivity schools rather than at low selectivity universities. This explanation, that there has been a flight to perceived quality, may also help account for the decreased attractiveness of community colleges among middle and upper income students.

Stepping back from the details, we find that two broad trends of special importance are revealed in these data. First is the loss of affluent students at private four-year colleges. Second is the increasing concentration of lower income students in

community colleges. Although community colleges may offer excellent opportunities to many young people, there is no reason why they should be disproportionately attractive to low income students. The increasing stratification of public higher education by income suggested in these data is a cause for concern.

This stratification has made clearer the relationship between the income background of students and the selectivity of the colleges or universities (regardless of whether it is private or public) they attend. In 1981, only 10.0% of all lower income and 13.8% of lower-middle income first-time, full-time freshmen were enrolled at medium or highly selective four-year institutions. Comparable figures for upper income and the richest students were 36.9% and 44.3%. By 1997, the proportion of students from the low income groups that were enrolled at medium or highly selective schools rose to 12.3% and 15.7%, but those increases were smaller than for their affluent counterparts whose percentages rose to 41.1% and 50.3%. Thus, we are now in the situation where only one of eight lower income students enrolled anywhere in American higher education is at a medium or highly selective four-year institution as opposed to one out of two of the richest students.

Attendance at a prestigious college or university carries with it a number of advantages. Winston, Carbone and Lewis (1998) for example, show that in 1995 the average higher education institution spent USD 12 209 while charging a "sticker price" of USD 6 135. That implies that all students – regardless of whether they received financial aid – were awarded a general subsidy of USD 6 074. The average financial aid award was USD 2 251, leading to a total subsidy of USD 8 324 – the difference between educational costs of USD 12 209 and net tuition of USD 3 885. But, the amount of the subsidy varies greatly. Two year publics (the destination of almost half of all lower income students) provide a subsidy of USD 7 371 and private comprehensive universities (which are considerably less selective than research universities) provide a subsidy of USD 5 862. On the other hand, subsidies at private liberal arts colleges average USD 9 622 and subsidies at both public and private research universities are well over USD 10 000 per student. The pattern is clear: more selective colleges and universities – which disproportionately attract affluent students – provide the largest subsidies in US higher education.

CONCLUSION

The current situation in American higher education has been shaped by two overarching trends. The first is the rising economic value of education, reflected in the widening earnings gap between those with less and those with more education, and resulting in college enrollment rates at or near historic highs. The second is the increasing fiscal squeeze felt by American governments at both the federal and state levels, which has led to governments contributing a declining share of higher education revenues. In one sense, and at least momentarily, this might be seen as

the best of both worlds: government's share of higher education costs is lower than it has been since the 1950s, and enrollments are higher than ever.

Yet beneath the surface are signs of a less encouraging reality. Higher net prices for college education have produced a widening gap in enrollments of more and less affluent students. Low income students are increasingly rare at four-year colleges and universities in both the public and private sectors, and are heavily concentrated in the community colleges. Meanwhile, four-year private colleges are increasingly starved for high income, full-pay students and are engaged in price-discounting competitions that threaten to be financially destabilizing.

In 1997, the federal government introduced a discontinuous change in policy through the introduction of two new programs of tax credits for college tuition. These new tax benefits, focused on middle and upper-middle income families, instantly became the largest federal program supporting higher education – larger than outlays on Pell grants and larger than the federal cost of subsidized loans. The same legislation also expanded federal tax subsidies for college savings and introduced tax deductions for college loan repayments.

But the most important part of the new law is the creation of the so-called "Hope Scholarship" credit, which allows families to exclude 100% of tuition expenses, less any grant aid, up to USD 1 000 and 50% of any remaining tuition expenses up to USD 2 000 from the taxes they are required to pay. The credit is for tuition only – room and board do not count – and it applies only to the first two years of college. The credit is phased out for families with incomes above USD 80 000-100 000 (USD 40 000 to USD 80 000 for single filers). In addition, the "Lifelong Learning Tax Credit" program allows qualifying taxpayers to deduct from the taxes they owe 20% of the tuition they pay for any form of postsecondary education beyond the first two years of college, up to a maximum of USD 5 000 of tuition (scheduled to rise to USD 10 000 in 2003). Income limits are the same as they are for the Hope Scholarship.

Both of these tax credits are "non-refundable" – that is, the credit is available only to the extent that a family has a net tax payment to offset. ("Refundable" credits like the Earned Income Tax Credit include net payments to families whose tax payments fall short of the amount of credit for which they are eligible.) This rule sharply reduces the value of the credit to low income families. A further provision which reduces the available Hope Scholarship tax credit by a dollar for every dollar of Pell grant received further reduces low income eligibility. The largest benefits from both credits will be obtained by families with incomes from USD 60 000 to USD 80 000 with members attending expensive private colleges and universities. In the year these tax provisions took effect, about half of the benefits were realised by families with incomes over USD 50 000.

The introduction of these credits – and extensions proposed by President Clinton in his January 2000 State of the Union address – represents a sharp shift in the direction of federal policy. On two previous occasions – in the mid-1960s and the late 1970s – the US Congress gave serious consideration to tax credits for college tuition. In each case, Congress finally came down in favor of modifying the system of student aid expenditures instead of resorting to the tax system. The decision in 1997 to turn to the tax system instead is hard to understand on public policy grounds, but is easier to make sense of in political and institutional terms.

From a policy perspective, using the tax system to subsidize the college costs of middle and upper-middle income students is highly inefficient. Much empirical evidence shows, as we noted above, that low income students are much more sensitive to the price of college attendance than are students from more affluent backgrounds. A very large fraction of the tax dollars expended on these credits will take the form of economic rents to families who would have made the same educational choices without the credit. Virtually all public policy analysts agree that rational goals for promoting investment in higher education could be better achieved through expanded grant programs than through these tax credits.

Why, then, did the tax credits succeed? Institutionally, rules in place in the US Congress bias spending decisions in favor of tax expenditures rather than direct expenditures. The so-called "balanced budget" rules require identifying a specific offset to any increase in spending in any discretionary government program, but do not similarly require specific offsets for tax expenditures. From a pragmatic point of view, large increases in spending on student aid grants would have been nearly impossible to achieve, whereas building consensus for tax credits was relatively straightforward.

Politically, the tax credits were designed to appeal to middle income voters. Democrats, led by President Clinton, proposed these credits as an alternative to reductions in the capital gains tax, favored by Republicans. From the standpoint of higher education lobbying groups, the issue was not presented as tax credits versus increases in grants, but as tax breaks for higher education consumers versus tax breaks for somebody else. Framed in this way, the major lobbying groups were eager to support the credits.

The increase in returns to higher education noted earlier in this article no doubt also contributed to the political popularity of the tax credits. These high returns motivate families to encourage their children (or themselves) to invest in further education, even in the face of rising prices. But the large numbers of middle and upper-middle income families investing in college increase the political payoff to easing the financial burden of those investments. During the late 1980s and early 1990s, public colleges, which enroll almost 80% of American college students, raised prices as state legislative funding fell. It is perhaps ironic that the effect of the new

federal tax credits is largely to substitute federal expenditures for these reductions in state spending on higher education – a peculiar example of "reverse federalism".

The decision by Congress and the President to open the federal tax code to higher education subsidies may prove fateful. In the US system, direct expenditures, as indicated, are subject to relatively close annual scrutiny, while tax expenditures are much more loosely overseen. Under current arrangements, tax credits are heavily targeted toward relatively affluent families, who are more likely to vote and are more politically influential than the low income families who are the major clients for Pell grants. It seems probable, therefore, that Congress will over time expand the generosity of tax credits and be increasingly less forthcoming in funding Pell grants. This combination of policies, if it materializes, will weaken both access to and choice of higher education alternatives for low income families. At the same time, such a development would ease the financing burden on middle and upper-middle income families without increasing the national investment in higher education.

Looking beyond the specific issue of tax credits, what is the future likely to hold? It seems likely that the economic returns to education will remain high, as technological developments and an expanding service economy will continue to put a premium on more educated workers. It seems likely as well that the fiscal crisis of American governments will continue. It will be hard for lawmakers at either the state or federal levels to accord a high priority to spending on higher education.

Against this backdrop, we must consider the echo of the baby boom, which will produce an increase of about one-third in the size of the traditional college-age population over the next decade. With growing demand for places and limited fiscal resources, it seems likely that state institutions will respond by raising tuitions and by increasingly restricting admission to the more prestigious public campuses to students with better academic preparation and therefore, on average, more affluent backgrounds.

Increasingly restricted state funding is beginning to have another interesting consequence for public colleges and universities. As states come to provide a smaller share of the dollars needed to finance public colleges, their leaders are more and more reluctant to cede control over their activities to state governments. The idea of state universities bargaining for more autonomy from state control in exchange for guaranteed but limited financial support from the state is gaining currency. Presidents calculate that greater freedom to set tuition, revise curriculum, and recruit aggressively may more than make up for a limitation on state funding. The resulting trend toward a sort of "semi-privatizing" of public colleges may, if it materializes, result in improved quality at some public institutions. It may also, however, reduce the accessibility of these institutions for less affluent students.

All these trends point to the urgency of using increasingly scarce public dollars for higher education well. As we have argued here, recent experience confirms the prediction based on theory and econometric evidence that raising prices for middle and upper income students in public higher education will not discourage enrollment. For the same reason, using federal dollars to subsidize the lending costs or to reduce the tax bills of middle and upper-middle income students is probably not effective in promoting college enrollment. It is important to distinguish the goal of providing access to capital markets for students, by insuring or guaranteeing loans or by direct federal lending, from the goal of subsidizing interest costs, as by the current practice of having the federal government pay the interest (or forgo collection of interest in the case of direct lending) while the student is in school. It is desirable for the government to provide all students with access to capital. We argue however that there is no reason to offer middle or upper income students interest subsidies beyond those implicit in guaranteeing the loan. It seems attractive on public policy grounds to husband government resources that are now being devoted to subsidies for relatively affluent students and to target them instead on student aid grants for qualified low income students. The goal should be to provide grants that are adequate to allow qualified low income students to attend the flagship public university in their home state.

What does the future hold for private colleges and universities? Certainly the expected growth in demand for college enrollment will ease some of the competitive pressures private colleges have been experiencing. Higher prices and tougher admissions standards at public institutions will similarly bolster demand for enrollment at private institutions. Yet not all the trends are positive for the financial health of private institutions. First, the trend toward increasing price competition through student aid discounts and merit aid may prove difficult to reverse even after the decline in demand that touched off the "price war" reverses. Second, while demand for private higher education will be bolstered by higher public tuitions, the trend at public colleges toward greater independence from state control may be threatening to some private institutions.

The mixed system of higher education finance in the United States has many accomplishments to its credit. It is a system which includes some of the finest research universities and liberal arts colleges in the world, and which at the same time offers at least some postsecondary opportunity to as many as two-thirds of American high school graduates. Costs of this system have been shared among families, governments and private donors in a way that has proved affordable, and which to some degree adjusts family payment expectations to levels of parental resources.

Particularly in recent years, however, that system has shown signs of increasing strain. These include increasing stratification of postsecondary opportunity by income and an increasing reluctance of Americans to support the principle of pay-

ment according to ability to pay. Strong middle-class demands for relief from college expenses have in the last two years produced major changes in federal higher education finance, with large and probably growing reliance on tax credits as a means of federal support for higher education. The impact of these changes on the future distribution of college opportunity in the United States have yet to be determined, but there are evident reasons for concern.

References

AKERHIELM, K. *et al.* (1998),
"Factors Related to College Enrollment: Final Report," Mathtech, Inc.

Bureau of the Census (1994),
Statistical Brief, "More Education Means Higher Career Earnings", August.

Eureka Project (1988),
The Critical Difference: Student Financial Aid and Educational Opportunities in California, Sacramento, CA.

KANE, T.J. (1995),
"Rising Public College Tuition and College Entry: How Well Do Public Subsidies Promote Access to College?", National Bureau of Economic Research Working Paper No. 5164, July.

KANE, T.J. (1998),
"Taking Stock at the End of Three Decades of Federal Financial Aid", unpublished manuscript.

KATZ, L.F. and KEVIN, K.M. (1992),
"Changes in Relative Wages, 1963-1987: Supply and Demand Factors", *Quarterly Journal of Economics*, 107, pp. 35-78, February.

KUTTNER, R. (1989),
"The Squeeze on Young Families", *Washington Post*, September 8, p. A23.

MCPHERSON, M.S. and SCHAPIRO, M.O. (1991*a*),
Keeping College Affordable: Government and Educational Opportunity, The Brookings Institution, Washington, DC.

MCPHERSON, M.S. and SCHAPIRO, M.O. (1991*b*),
"Does Student Aid Affect College Enrollment? New Evidence on a Persistent Controversy", *American Economic Review*, Vol. 81, No. 1, pp. 309-318, March.

MCPHERSON, M.S. and SCHAPIRO, M.O. (1998),
The Student Aid Game: Meeting Need and Rewarding Talent in American Higher Education, Princeton University Press.

MCPHERSON, M.S., SCHAPIRO, M.O. and WINSTON, G.C. (1993),
Paying the Piper: Productivity, Incentives, and Financing in US *Higher Education*, The University of Michigan Press.

WINSTON, G.C., CARBONE, J.C. and LEWIS, E.G. (1998),
"What's Been Happening to Higher Education? Facts, Trends, and Data: 1986-87 to 1994-95", Williams Project on the Economics of Higher Education Discussion Paper DP-47, March.

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