

The academic profession all over the world has experienced substantial and rapid changes of its societal, institutional and academic environment. The gradual move towards the knowledge society provided opportunities for a growth of the number of academics but the challenges to reconsider the professional role were by no means without any hardship. The authors of this volume address four areas of key challenges to the academic profession. What do the rising expectations to generate and disseminate relevant knowledge mean: a leap from "scholarship of discovery" to "scholarship of application" or new combinations of discovery with social, economic and cultural implications? How does internationalisation affect academics: as a step towards a cosmopolitan academic world or as localistic competition on world scale? How does the growing power of institutional management shape the academic role: Does the dependent "knowledge worker" substitute the "republic of scholars", or is there a new space for academic freedom and responsibility? What does the expansion of graduate education mean: an extension of school-type learning towards the doctorate, or an increased chance of open discourse between senior academics and academics in their formative years?

The papers comprised in this volume were presented to a workshop held on 5- 6 September 2006 in Kassel, Germany. It was initiated and supported by the Regional Scientific Committee Europe and North America of the UNESCO Forum for Higher Education, Research and Knowledge, jointly prepared with scholars collaborating in the international comparative survey "The Changing Academic Profession" scheduled for 2007, and locally organized by the International Centre for Higher Education Research, University of Kassel. The authors addressed the challenges named both comparatively and with emphasis on the experiences from their countries.

ISBN: 978-3-934377-59-2

WERKSTATTBERICHTE 65



Published with support  
from the UNESCO Forum for  
Higher Education, Research and Knowledge

Maurice Kogan  
and  
Ulrich Teichler  
(eds.)

## Key Challenges to the Academic Profession

INCHER-KASSEL  
International Centre for  
Higher Education Research Kassel

UNESCO FORUM on Higher Education, Research and Knowledge

Maurice Kogan

Ulrich Teichler

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UNESCO Forum on Higher Education Research and Knowledge

International Centre for Higher Education Research Kassel  
INCHER-Kassel

Paris and Kassel 2007

WERKSTATTBERICHTE - 65

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Research and Knowledge /  
International Centre for Higher Education Research Kassel  
at the University of Kassel

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[http://www.uni-kassel.de/incher/v\\_pub/cap1.pdf](http://www.uni-kassel.de/incher/v_pub/cap1.pdf)

#### WERKSTATTBERICHTE

Editor: International Centre for Higher Education Research Kassel  
(INCHER-Kassel)  
University of Kassel  
Mönchebergstraße 17, 34109 Kassel  
Germany  
<http://www.uni-kassel.de/incher/>

Assistant to the Editor: Christiane Rittgerott  
Printing: Druckwerkstatt Bräuning + Rudert GbR, Espenau  
ISBN: 3-928172-XXXXXXX  
Verlag Jenior, Lassallestr. 15, 34119 Kassel, Germany

## Content

Foreword <i>Mary-Louise Kearney</i>	7
1. Key Challenges to the Academic Profession and its Interface with Management: Some Introductory Thoughts <i>Maurice Kogan and Ulrich Teichler</i>	9
 I THE ACADEMIC PROFESSION AND THE INCREASING EXPECTATION OF RELEVANCE  	
2. The Academic Profession and Increasing Expectations of Relevance <i>John Brennan</i>	19
3. Reflections on the Changing Relevance of the Academic Profession in Japan <i>Akira Arimoto</i>	29
4. The Increasing Expectation of Relevance for Higher Education and the Academic Profession: Some Reflections on the Case of Mexico <i>Jesús Francisco Galaz-Fontes, Laura Padilla-González and Manuel Gil-Antón</i>	49
 II INTERNATIONALISATION AS A CHALLENGE TO THE ACADEMIC PROFESSION  	
5. Internationalisation of Higher Education and the Australian Academic Profession <i>V. Lynn Meek</i>	65

- |    |   |    |
|----|---|----|
| 6. | Challenges of Internationalization of Higher Education and Changes in the Academic Profession: A Perspective from Japan<br><i>Futao Huang</i> | 81 |
| 7. | Challenges of Internationalization for the Academic Profession in Norway<br><i>Agnete Vabø</i>  | 99 |

### III

#### THE CHANGING ROLE OF GRADUATE/DOCTORAL EDUCATION, TRAINING AND WORK AS A CHALLENGE TO THE ACADEMIC PROFESSION

- |     |   |     |
|-----|---|-----|
| 8.  | The Changing Role of Graduate and Doctoral Education as a Challenge to the Academic Profession: Europe and North America Compared<br><i>Barbara M. Kehm</i> | 111 |
| 9.  | Challenges on the Academic Profession Development Posed by the Changing Doctoral Education in China<br><i>Hong Shen</i>                                     | 125 |
| 10. | The “New” Look of Academic Careers in the United States<br><i>Martin J. Finkelstein</i>   | 145 |

### IV

#### MANAGEMENT AND ITS INTERFACE WITH THE ACADEMIC PROFESSION

- |     |   |     |
|-----|---|-----|
| 11. | The Academic Profession and its Interface with Management<br><i>Maurice Kogan</i> | 159 |
| 12. | Transformation of Academic Work: Facts and Analysis<br><i>Christine Musselin</i>  | 175 |
| 13. | Shifting Boundaries and the Academic Profession<br><i>Mary Henkel</i>             | 191 |
|     | List of Contributors  | 205 |

## Foreword

The UNESCO Forum on Higher Education, Knowledge and Research is pleased to present the publication, entitled *Key Challenges to the Academic Profession*. Edited by two celebrated academics, the late Professor Maurice Kogan (United Kingdom) and Professor Ulrich Teichler (Germany), this volume emanates from an experts' workshop on the subject hosted by the International Centre for Higher Education Research (INCHER-Kassel) at Kassel University, Germany, in September 2006.

First and foremost, it is appropriate to situate this publication to the aims of UNESCO Forum and, thus, to contextualize the specific issues related to the academic profession.

The UNESCO Forum focuses on the role and status of national research systems and international trends in this domain in relation to the challenges posed by the Knowledge Society of the 21<sup>st</sup> century. Located at UNESCO and supported by the Swedish International Development Agency (Sida), the UNESCO Forum provides a platform for researchers, policymakers and relevant stakeholders to engage critically with the key elements unpinning research systems: *policy trends, infrastructure, human capacity, and investment*. This project has assured follow up action for two major UNESCO conferences, the *1998 World Conference on Higher Education* and the *1999 World Conference on Science*, and links closely to the intergovernmental programme for the *Management of Social Transformation (MOST)*, located in the Sector of Social and Human Sciences.

Since 2001, the UNESCO Forum has consolidated its efforts to bridge research and policy in a number of ways through facilitating and broadening the space for critical debate and through revisiting the established and dominant views so as to reconceptualize future directions. To date, its various components for attaining these goals - *mobilizing experts, stimulating global and regional debate, producing and disseminating research, promoting strategic partnerships, facilitating communication, and strengthening the systemic approach* – have yielded creditable results. The UNESCO Forum believes that it is central to reaffirm the importance of research at the current moment given the rapid developments since 2000 in knowledge production and management and their ramifications for social change and progress. *Research on research* has become, therefore, even more crucial and is now well recognized as a major field of enquiry for international organizations, charged with advising their member states about the questions involved. In this regard, the World Bank and the OECD are key partners of the UNESCO Forum.

The UNESCO Forum pursues a systemic approach to the analysis of research so as to address strengths and weakness, as well as specific issues and concerns, in a critical manner. This work will embrace research and in both industrialized and



emerging contexts, as well as researchers whether reputed or at the start of their careers. The central objective is to promote ongoing research and to place significant results in the public eye. Consequently, research may be more original, innovative and effective, thus leading towards more sustainable human development.

Today, unprecedented emphasis is being placed on research as key motor for advancing the knowledge society and its offspring, the knowledge economy. Consequently, “research on the state of research” has moved high on the priority agendas for governments, for their specialized agencies and bodies devoted to this area, and for higher education institutions. Thus, it becomes essential to map and analyse systems to acquire an understanding of their functioning and of their future requirements.

This systemic approach necessitates the study of specific issues arising from the various areas involved. In this regard, the current status of the academic profession and its challenges merit serious actual and forward-looking analysis. The present publication focuses on four major areas: *the increasing expectation of relevance in higher education teaching, training and research, internationalization, the changing role of graduate education, training and work, and the interface between management and the academic profession*. The experts writing in this volume depict academia as a domain in transition which is characterized by tensions. These are both significant and legitimate as our era of globalization unfolds and demands innovative responses from its most powerful institutions. Thus, universities and their academic communities face numerous dichotomies: academic freedom vs. institutional autonomy, the academic vs. managerial professions, the goals of teaching vs. those of research, and the steering role of institutional leadership vs. the disparity of scholarly priorities and concerns.

The tensions demonstrated in the industrialized world will surely find their counterparts and variants in the developing countries. It is the role of the UNESCO Forum to present emerging trends and issues so that systems of higher education, knowledge and research may be reconfigured and grow stronger so as to fulfil their role as key actors in the Knowledge Society. This endeavour contributes both to the work of UNESCO and, more widely, to that of the United Nations system in the Third Millennium.

The UNESCO Forum wishes to thank both the editors for their dedicated efforts to produce this timely volume and the distinguished scholars whose papers explore issues of prime importance to knowledge systems today. In particular, we pay tribute to the long and illustrious academic career of Professor Maurice Kogan who died in January 2007. He will be deeply missed by his many friends and colleagues worldwide.

Mary-Louise Kearney  
Secretariat

The UNESCO Forum for Higher Education, Research and Knowledge

## **Key Challenges to the Academic Profession and its Interface with Management: Some Introductory Thoughts**

Maurice Kogan and Ulrich Teichler

### **1. The Changing Role of the Academic Profession**

Early descriptions of the universities focussed on academics, students, teaching, learning and research. And early descriptions of university organisation took for granted the dominance of academic ways of working. It was assumed that academics constitute the main production units and their ability to produce required considerable freedom. The academy's desired state was one in which 'autonomy' or 'academic freedom' was thus the necessary safeguard for the discharge of the university's primary duty, which was to permit intellectual non-conformity as the means of advancing knowledge. The picture of academe as being organised through 'organised anarchy' or the 'garbage can model of management' was perhaps an exaggeration applicable to only a few privileged institutions, but it was the role model affecting to different degrees academics working under predominantly collegial arrangements irrespective of the strength of other actors involved.

A glance on the only major international comparative survey on academics undertaken, hitherto, the Carnegie Study on the Academic Profession (surveyed in 1992 and published between 1995 and 1997, among others by Ernest Boyer, Philip G. Altbach, Frans van Vught and Peter Maassen, Akira Arimoto and Takekazu Ehara, Jürgen Enders and Ulrich Teichler), suggests that the ideal of academic freedom and predominantly collegial coordination was upheld, but that the academic profession has come under enormous pressures potentially endangering the survival of the core identity of academics and universities. Expansion of student enrolment was identified as the major driver of change moving intellectual discourse of the teachers and learners to organized curricula and instruction techniques, leading to a separation of the teaching and research function for many academics, undermining a social exclusiveness of the professoriate, increasing pressures for efficiency and thus elevating the status of university management and possible government as forces of

establishing a compromise between the traditional ideals and the new pressures of efficiency and coordination. But management did not show up the 1992 Carnegie study as the single major force of shaping the institutional character, and there it did not seem to be any convergent trend of university management, but rather a multitude of models.

The preparatory team for the second international comparative survey on the academic profession to be undertaken in 2006–2007 (coordinated by William K. Cummings and Jürgen Enders) observed significant and more rapid changes of higher education affecting the backgrounds, specialisations, expectations and work roles of academics. Increased expectations from society and notably the perception of knowledge as the most vital resource of contemporary societies have both expanded the role of the academy and challenged the coherence and viability of the traditional academic role.

## 2. Recent Realignments

According to the scholars preparing the new comparative survey, three new emphases have become particularly persuasive: relevance, internationalisation and management. Thereby, convergent forces seem to be underway in economically advanced societies, and newly emerging economies and developing countries intend to speed up a process of modernization by putting an even stronger emphasis on these directions of development. The subsequent paragraphs had been formulated by the project theme in order to point out the current key challenges of the academic profession.

*Relevance:* Whereas the highest goal of the traditional academy was to create fundamental knowledge, what has been described as the ‘scholarship of discovery’, the new emphasis of the knowledge society is on useful knowledge or the ‘scholarship of application’. This scholarship often involves the pooling and melding of insights from several disciplines and tends to focus on outcomes that have a direct impact on everyday life. One consequence is that many future scholars, though trained in the disciplines, will work in applied fields and may have options of employment in these fields outside of the academy. This provides new opportunities for more boundaryless forms of academic career and knowledge transfer while it may also create recruitment difficulties in some places, and especially in fields such as science, technology and engineering.

There are strong interdependencies between the goals of higher education, the rules for distributing resources, and the nature of academic work. The changes associated with movement from the ‘traditional academy’ with its stress on basic research and disciplinary teaching to the ‘relevant academy’ are largely uncharted and are likely to have unanticipated consequences. The task of the project is therefore to understand how these changes influence academic value systems and work practices and affect the nature and locus of control and power in academe.

*Internationalisation:* National traditions and socio-economic circumstances continue to play an important role in shaping academic life and have a major impact on the attractiveness of jobs in the profession. Yet today's global trends, with their emphasis on knowledge production and information flow, play an increasingly important role in the push towards the internationalisation of higher education. The international mobility of students and staff has grown, new technologies connect scholarly communities around the world, and English has become the new lingua franca of the international community.

The economic and political power of a country, its size and geographic location, its dominant culture, the quality of its higher education system and the language it uses for academic discourse and publications are factors that bring with them different approaches to internationalisation. Local and regional differences in approach are also to be found. Therefore, questions are raised about the functions of international networks, the implications of differential access to them and the role of new communication technologies in internationalising the profession.

*Management:* In academic teaching and research, where professional values are traditionally firmly woven into the very fabric of knowledge production and dissemination, attempts to introduce change are sometimes received with scepticism and opposition. At the same time, a greater professionalisation of higher education management is regarded as necessary to enable higher education to respond effectively to a rapidly changing external environment. The control and management of academic work will help to define the nature of academic roles – including the division of labour in the academy, with a growth of newly professionalised “support” roles and a possible breakdown of the traditional teaching/research nexus. New systemic and institutional processes such as quality assurance have been introduced which also change traditional distributions of power and values within academe and may be a force for change in academic practice. The project will examine both the rhetoric and the realities of academics' responses to such managerial practices in higher education.

A number of views can be discerned about recent attempts at the management of change in higher education and the responses of academics to such changes. One view would see a victory of managerial values over professional ones with academics losing control over both the overall goals of their work practices and their technical tasks. Another view would see the survival of traditional academic values against the managerial approach. This does not imply that academic roles fail to change, but that change does not automatically mean that interests and values are weakened. A third view would see a ‘marriage’ between professionalism and managerialism with academics losing some control over the goals and social purposes of their work but retaining considerable autonomy over their practical and technical tasks. The desirability of these three different positions is also subject to a range of different views.

### 3. The Changing Functions of Academics in Their Administrative Context

#### 3.1 Functions of an Academic

The professoriate, traditionally and nowadays in a different mix, has both external and internal roles. Professors figure in the invisible colleges which are largely informal arrangements through which academic norm-setting is maintained and assessments are made for senior academic posts, fellowships of academies and research grants. Academic contents of both teaching and research is moderated through conferences and publication systems maintained by trans-institutional systems. They lend authority to quality assurance systems. The decisions made within the invisible colleges are transmuted into allocative decisions by the management systems, often through the operations of a co-opted elite of academics.

In their external roles, professors are, or used to be, acknowledged leaders in their subject field. Whether a head of department or dean or not, they are expected to set the norms for teaching and research in their subject area. They should, but do not in all systems, take a key role in the curriculum development as well as in setting the themes and standards for research and scholarship. They should actively mentor junior staff. They should be responsible for ensuring that new areas of their subject are covered and that new teaching methods and advances in subject knowledge are pursued.

From this base, related to expertise, they take a role in institutional government. They should participate in decisions on promotions and resource allocations in the wider institution, which includes the review of the institutional profile. The operation of the professoriate or, more widely, the academics makes them part of a system. This is apparent when the curriculum or the rules of assessment, examination or evaluation are decided. These take on a formal legislative aspect and also require a bureaucracy to implement them. They thus have functions that link them with the managerial system of the university.

The managerial system is headed by a rector, president or vice-chancellor but is serviced by administrators who may be professional managers, or may be recruited from academics. Administrative structures vary according to country. In the English speaking countries, the vice-chancellor or president is seen as both the chief academic and the chief executive. The chief administrative officer is accountable to him/her in his chief executive role. Vice-chancellors have been appointed until retirement ages, although some term contracts are now being made in the United Kingdom and Australia. In some countries, a director, appointed by the Ministry of Education, has been parallel to the rector who is elected by the *collegium*, but, in most countries, the director is now explicitly subordinate to the rector, although still appointed by the Ministry. The rector is elected for a period from two to five years, and is therefore politically vulnerable, whilst the director is a permanent appointment which may still affect the power relationships between the two lines.

### 3.2 Functions of the Administrator

Administrators are concerned with both regulatory and developmental issues. These include advice to the vice-chancellor/rector on the development of institutional policy, strategy and tactics; policy execution; preparation of papers and reports to committees; development, monitoring and coordination of systems and procedures; management of non-academic staff and the physical and service resources of the university responsibility for the university's estate.

Some of the tasks listed above are regulatory while some are developmental. The *collegium*, through senate and its infrastructural echoes at faculty and departmental levels, creates rules on matters that are inherently academic but these rules have to be administered to ensure conformity and legality throughout the whole institution. The administrators, then, whilst not concerned with the intrinsic academic judgements that might be made within the rules, monitor and ensure conformance to policies on modes of academic appointment, admission of students, assessment of students, and recent policies such as non-discriminatory practices.

They provide the expertise on the plethora of employment, safety and anti-discriminatory law. They may have a fiduciary role in ensuring that resources are spent with propriety. They enforce institutional and national legal rules on the spending of money. There is a Company Secretary role which provides a legal and ethical check upon the activities of the rest of the senior management. It would be their duty to warn a vice chancellor if he/she infringes regulations or council or senate policies. There have been cases when chief administrators have felt it necessary to act as 'whistle blowers' when their senior colleague acts outside powers.

### 3.3 Normative Basis of Administration

The administrators act within an institution which places responsibility mainly on individuals of high academic quality functioning within a comparatively non-hierarchical and pluralistic structure. Administrators have to act in a corresponding normative mode and need a high level of expertise of the structures which provide for continuity.

Altogether, the dominant descriptions depict university organisation as dual: the *collegium* (an ascription which often occluded the great power of the *ordinarius*) and the hierarchy/bureaucracy which constitute the *Janus* face of university organisation. The changing tasks of higher education have led to changes in internal power relationships.

### 3.4 The Main Changes

Observation in most economically advanced societies suggests that academics perceive a substantial change of their job roles. They see a gradual loss of professional autonomy, a stronger pressure to take into account external societal expectations, a decline of possibility to shape their organisational environment,

tations, a decline of possibility to shape their organisational environment, and an increasing control of their performance.

Authority at the head of the institutions seem to become stronger everywhere. A strong level of authority is viewed indispensable to hold together disparate concern and priorities. In continental Europe decentralisation has reduced formalistic central power in favour of market behaviour and normative control through evaluation. In the UK, the change has been from decentralisation to more decisive planning and quality assurance. In the U.S., the authority of the head of the institutions has a long tradition and often has served as a role model for recent changes in Europe.

The role of academics further changed as a consequence of the expansion as well as of the increasing status of powers of “new higher education professionals”, “professional administrators”, “middle-level managers” or similarly termed university trained persons in higher education whose prime roles are managerial support or service provision and have to be both highly qualified in their domain of shaping the institution and highly knowledgeable in the core functions of the academics. Academics have to adapt in communication with these professionals to the fact that they are professionals in academic matters but amateurs in matters of shaping the university and have to cooperate with a new group of experts who are amateurs in academic matters but professionals in shaping the university.

Observation suggests that considerable differences in value positions have emerged between these various groups of actors. They might be shared territories of value, but obviously each group has specific views of the functions of higher education to be given priority, about the virtue of ‘academic freedom’ vs. ‘institutional autonomy’, about the legitimacy of various external expectations, about the criteria, validity and the consequences of the performance assessment, etc.

However, simple diarchical assumptions do not hold. There are mixtures of collegial, academic-based decision making and bureaucratic/hierarchical working. Academics take over roles of higher education professionals or administrative leadership. Evaluation systems are partially steered by academics and partially by others. Research is to a lesser extent the successful target of managerial activities in higher education than teaching.

#### **4. Themes Addressed in this Volume**

The authors of this volume had been invited to identify the extent to which convergent lines in the development of the academic profession can be found within various countries. Are forces such as relevance and internationalisation similar, and does the increasing power of management pose similar challenges to the academic profession?

They also were encouraged to shed light on the interaction of the academics, the higher education professionals and the university leaders. How do the power

structures change? To what extent do we note coexistence of collegial, participatory and top-down modes? How often do we note mobility between these different roles, and what is the effect of this mobility? How are they affected by macro-steering, by training, by recruitment, by activities of institutional development and by the position of the individual university in the national system of higher education and the global map of institutions? How do the bureaucratic values of predictability, conformity to set rules, due process and collective productivity, the entrepreneurial values of institutional gain, mistrust in colleagues as competitors etc., and the individualistic and creative values assumed for academic work interact and reshape each other?

This volume comprises the papers presented to a workshop held on 5-6 September 2006 in Kassel, Germany. It was initiated by the Regional Scientific Committee for Europe and North America of the UNESCO Forum for Higher Education, Research and Knowledge. The ENA Scientific Committee was convinced that the theme of the workshop was among the most salient ones in higher education in economically advanced countries at present and that similar challenges were visible in other parts of the world as well. The workshop was supported as well by the members of the international team preparing the survey "The Changing Academic Profession", i.e. the second comparative survey in this domain subsequent to the Carnegie survey in the early 1990s. Most of the papers were presented by members of this CAP team. The workshop, attended by about 60 scholars from more than 20 countries, was arranged and hosted by the International Centre for Higher Education Research of the University of Kassel. INCHER-Kassel also took care of the editing and publication procedures of this volume. A first conference of the CAP survey team had been held in spring 2006 in Hiroshima, Japan (cf. *Reports of Changing Academic Profession Project Workshop on Quality, Relevance, and Governance in the Changing Academia: International Perspectives*, Research Institute for Higher Education, Hiroshima University 2006). Further, a third volume comprising country reports on the changing conditions for the academic profession will be published by INCHER-Kassel (Locke, W. and Teichler, U. eds. *Changing Conditions for the Academic Profession*. Kassel: INCHER-Kassel 2007).

P.S. As it turned out, the workshop in Kassel was the last one Maurice Kogan put on his intellectual stamp. He died on 6 January 2007. His colleagues will remember him as one of the key researchers in higher education of the last few decades who substantially contributed to the quality enhancement of this field.





I

THE ACADEMIC PROFESSION AND THE INCREASING  
EXPECTATION OF RELEVANCE



## **The Academic Profession and Increasing Expectations of Relevance**

John Brennan

### **1. Introduction**

The claims made for higher education's role in the emerging knowledge society have perhaps inevitably been accompanied by growing public and political interest – and interference – in the inner workings of higher education institutions. As higher education has expanded, so the cost to the public purse has increased (even if costs per student have tended to decrease), again heightening external interest in the extent and the kinds of benefits that are accruing to the public in return for this growing taxpayer investment. And in many parts of the world, the implementation of neo-liberal political and economic policies has empowered “consumers” of public services, including education, to increasingly shape what is taught and what is researched in higher education. Words such as “client” and “customer” are heard increasingly within our universities.

These trends are seen by some as a threat to academic autonomy as one of the central tenets of university life (e.g. Maskell and Robinson 2001; Barnett and Griffin 1997). At the very least, they seem to suggest a decisive shift in emphasis from what Boyer termed the “scholarship of discovery” for its own sake towards more utilitarian considerations, in Ernest Boyer's terms the “scholarship of application” (Boyer 1990). They also raise questions about the management and control of academic work, with a shift in the locus of authority from the academic community to the wider society with a consequent loss of freedom for the individual professor.

This chapter will suggest, however, that pressures for greater relevance are not all that new and that they are not necessarily always maligne. But it will also attempt to unpack what is meant by relevance (to whom? about what?), consider its implications at different levels within the academic community and discuss the nature of the academic response to the increased, and perhaps different, pressures for relevance facing universities at the present time.

## 2. What's New?

There is a powerful argument that claims for relevance having always been central to academic activity. In many ways, it would be strange to hear the opposite claim – the claim for *irrelevance*. Especially with regard to its educational or teaching function, the training of professionals – whether to run churches, empires or public services – has long been central to the concept of the university. More so at some times and in some places than others and the content of such „training“ may not always have been very relevant to actually performing the professional tasks for which it was preparing and qualifying, but nevertheless it entailed a justification for the university in relation to the requirements (for human resources) of other social institutions. To this extent, some notion of relevance has been central to the traditional concept of the university.

The strength of this tradition has varied between countries and, in particular, between subjects. Professors of business or of engineering or of medicine would be unlikely to have much difficulty with pressures for relevance. It is perhaps mainly in the arts and social sciences, and some areas of the natural sciences, where pressures for relevance are either new or felt to be increasing.

However, to claim relevance is one thing, to prove it is another. Pressures for greater accountability and “performativity” bring with them new types of requirements for relevance and in particular the need to find measures of it. This means that it has become more necessary to “talk” about relevance, to explicitly make the “claim” for it and, to varying extents, to find evidence with which to provide some justification for the claim (e.g. Bok 2004).

To be more concrete, if you want to obtain a research grant it is probably more important today than in previous periods to be able to make a serious claim for the potential societal relevance of the proposed research. On the other hand, there may be more research monies available to be applied for today – precisely because research is perceived to be “relevant”, to a variety of societal needs and contexts. Similarly, if you want to have students on your courses, you may need to make claims about the vocational relevance of what you are teaching, at least in very broad terms. In mass systems of higher education, students have more choices. Obtaining a place at university is no longer of itself a guarantee of a successful future. It depends on where and what you study. A greater instrumentalism among today's students is understandable and it can translate into greater competitiveness for academics, departments and institutions to attract students onto their own particular courses.

One consequence of new and greater pressures for relevance may be some shifting of boundaries within the academic profession. Increasingly, academics find themselves working not within groupings defined by their original discipline but in theme-based interdisciplinary groups whose organising rationale is to serve some external constituency. Thus, many economists, sociologists, psychologists

and statisticians find themselves working not within departments of economics, sociology, psychology or statistics but in schools of business and management, of education, of European Studies and elsewhere. And alongside them may be colleagues whose expertise and experience lies mainly in the business or professional rather than the academic world. Thus, with changing boundaries within the academic profession come changing boundaries between academic and other professional worlds. And as boundaries change, they tend to become more permeable.

A further change is the increasing differentiation of higher education, both in terms of types of institutions and of professional roles. On the whole, it is academics in older, more elite institutions who are better able to resist pressures for change, including pressures for greater relevance in both teaching and research. In particular, the excellence card can be used to “trump” the relevance card in these institutions.

A central argument of this paper is that there is not a lot that is new in the idea of pressures for relevance in the academy but that there are new trends in “who” is able to define relevance and in the mechanisms through which the pressures for relevance come to impact upon individual academics.

### **3. Whose Relevance?**

The notion of relevance invites the question of “relevance to whom”. There are many candidates. Here we briefly consider the question of relevance from the standpoint of governments, of academics and the institutions in which they work, and of their students.

A recent colloquium of academic and business leaders reached an eloquent conclusion about the “relevance” of universities to the building of the new knowledge economy.

“Let there be no doubt, however. In a global, knowledge-driven economy the keys to economic success are a well educated workforce, technological capability, capital investment, and entrepreneurial zeal – a message well understood by developed and developing nations alike throughout the world that are investing in the necessary human capital and knowledge infrastructure. Key in this effort will be building strong relationships between universities, as the source of new knowledge and the well-educated graduate, and industry, with the goal of adding value to the knowledge and human capital necessary to produce competitive products, processes and services to achieve profit and social prosperity in a global economy.” (Duderstadt and Weber 2006)

It is the needs of the economy and industry – as interpreted by governments and international organisations - that are generally at the centre of pressure on universities to achieve greater and new forms of relevance. From Bell’s notions of the “post-industrial society” (published way back in 1973) to more recent notions of knowledge societies and economies, the idea that knowledge is replacing capital as the key driver of economic growth has been central to debates and to policy in both developed and developing worlds. In these debates, knowledge is a “competi-

tive business”, it is global and it is changing rapidly. The notion of “mode 2” knowledge (Gibbons et al. 1994, Nowotny, Scott and Gibbons 2001) finds its production to lie in the context of its application, directing the university researcher to join forces with researchers and practitioners in industry and business if he/she is not to be left on the margins of knowledge production. The perceived growth of entrepreneurial universities (Clark 1998) – generally “benign” – or of academic capitalism (Slaughter and Leslie 1997) – generally “malign” – imply for most academics a greater engagement with and responsiveness to the needs of the world outside the university walls.

Ideas about the importance of knowledge in modern societies and the role of universities in producing and transmitting it can be found in countless statements from government ministries and international organisations. A recent UK example can be found in a publication on the “higher education workforce” by the Higher Education Funding Council for England. People who work in higher education are important, so the argument goes, because

“Increasingly, governments view higher education as an important driver of economic growth, both through the graduates that it develops and the new knowledge created by research. With increasing competition from developed and developing nations, and given the possibility of locating business operations anywhere in the world using communications and information technology, nations will need, through investment in people, to equip themselves to compete at the leading edge of economic activity.” (Higher Education Funding Council for England 2006)

Pressures on higher education for greater responsiveness are not, however, limited to the economic sphere. The UNESCO World Conference on Higher Education in 1998 produced seven senses of “responsiveness” that could be applied. They were: political responsiveness, responsiveness to the world of work, responsiveness to other levels of the education system, responsiveness to culture and cultures, responsiveness to “all”, responsiveness everywhere and all the time, responsiveness to students and teachers. What actions are required of the individual academic in order to deliver all this responsiveness are not altogether clear!

Institutional leaders cannot afford to ignore such statements and sentiments. Whatever the mechanisms for institutional funding and support, some mixture of claims for “excellence” and claims for “relevance” is generally required. The nature of the mix varies across time and place although in most jurisdictions “relevance” is more generally required of the “mass” elements of higher education than of the “elite”. If higher education is to be made more widely available in society, its utilitarian credentials usually have to be stronger. Elite institutions are generally under less pressure to demonstrate immediate utility providing they can continue to make convincing claims for “excellence”.

Elite forms of higher education bestow social status upon those who participate in them and this is the source of the strength of their “market” position, i.e. why people strive to gain admission to them. Mass institutions have less status to dis-

tribute (though they always have some) so are more dependent on claims of relevance – especially to careers and economic success – if they are to attract the requisite numbers of students. And even if students are less instrumental than is popularly believed, the need to demonstrate relevance to national funding bodies places considerable pressures upon institutions to demonstrate relevance to economic goals through indicators such as graduate employment data. There is competition between both elite and mass institutions in exploring “knowledge transfer” and “mode 2” research activities. For the former, it is part of supporting the critical mass, increasingly perceived to be a necessary pre-requisite for research reputation. For the latter, it provides possibly the only means of research engagement and fits well with a university mission which emphasises employability and relevance in its teaching function. And for all types of institution, applied research and knowledge transfer are increasingly important sources of income generation.

While the above pressures on academics come ultimately from governments, there are other actors who increasingly cannot be ignored. Concerns about value for money frequently link to concerns about relevance and have given rise to a growth in a wide range of evaluation mechanisms within higher education. In many of these, students acquire the status of consumers whose needs and satisfaction levels have to be gauged repeatedly. The curriculum is then designed to meet those perceived needs and regular surveys of student opinion are undertaken in order to make sure that there is reasonable satisfaction with what has been provided. And not just satisfaction among existing students. Universities must ensure that their courses are attractive to future students if they wish to recruit them and a lot of time is today being spent in designing new courses and redesigning old ones in order to ensure the steady supply of new student cohorts.

Academics themselves of course have their own conceptions of relevance as well as being affected by the conceptions of others. Academics will have their own fields of interest in teaching and research that provide one kind of conception of “relevance”. They will also have their aspirations for career success and recognition that will provide another kind of conception of “relevance”. Such conceptions are partly individual and partly field-specific. They might be entirely compatible with external conceptions of relevance, especially where they are part of wider professional communities that stretch beyond the boundaries of the academy. Or there might be considerable tensions between them and external conceptions, especially in those fields where economic “pay-off” – socially and individually – is less easily demonstrated.

Claims to relevance in teaching do not necessarily carry over into research. For many academics, research remains their “private business” even when their teaching is subjected to increasing consumerist and instrumentalist pressures. The main exception is when research costs money – in the sense that resources are required beyond the individual academic’s time commitment. Many public funders of research apply some criteria of relevance or public good to their consideration of



grant proposals. And in some fields, a growing proportion of funding comes directly from “users” of the results of the research. Thus, the rise of the “entrepreneurial academic” has been widely reported (e.g. Slaughter and Leslie 1997; Bok 2004), if rather less widely celebrated.

Thus, governments, higher education institutions, students and academic staff all have conceptions of relevance and these conceptions drive, to some extent, their behaviour. Their behaviour, of course, is influenced by the behaviour of others so the conceptions of relevance of the others – even if not shared – cannot safely be ignored.

#### **4. Mechanisms through which Relevance Intrudes**

Relevance claims serve different functions at different levels within higher education and a principal function of them is to make the case to a superior level for better financial support. Thus, education ministries emphasise the importance and relevance of educational investment to the public good, variously defined, as part of their case to finance ministries for greater investment in universities. University leaders make similar arguments to the agencies and ministries that provide their funding. Researchers make claims of relevance for their research in order to secure funding for it. And in increasingly consumerist times, claims to future clients – whether students or research users – may be vital in securing necessary financial support. It may be necessary for institutional leaders and managers and research entrepreneurs to ‘talk the talk’ of relevance but the talk does not necessarily echo down the corridors of the universities themselves and it does not necessarily result in changed behaviour among the ‘grassroots’ academics who may be relatively insulated from the cold financial winds which blow around their institutions.

Insofar as behaviour does change, it is more likely to be in response to the introduction of new institutional mechanisms of control and a greater marketisation of institutional context. National and institutional mechanisms of evaluation are a prime example of the former although it should not necessarily be assumed that they favour pressures towards greater economic and social relevance. In some forms, they may be extremely conservative in their impact, reinforcing the values of the disciplinary peer group and curbing tendencies to innovate or to respond to external demands. However, in many cases, societal relevance is something which is required as part of evaluation processes. For example, the UK Quality Assurance Agency has issued a series of “subject benchmarks” which are intended to specify the learning outcomes of different kinds of higher education courses. The benchmarks are meant to inform “consumers” – in this case both intending students and the employers of graduates – of the sorts of skills and competencies which are acquired from particular courses. Informing “consumers” is essentially about informing the “market” and more generally universities find themselves

having to make claims about the individual and social benefits of university to ensure that a steady supply of customers keep knocking at the institutional door.

Another mechanism aimed at delivering greater relevance to “user needs” can be found in the emphasis placed on links between universities and “business and industry”. While many calls are heard for more and closer partnerships between universities and industry, differences in the nature of the two kinds of institutions create difficulties for their achievement. Jones (2006, p. 93) has specified some of the reasons:

- “industry is typically focused on the short-term development of the next product; universities are focused on discovering new knowledge for its own sake;
- university researchers seek the reward of recognition by their peers in the larger research community based on rapid and open publication of their research findings; industry researchers are rewarded by the corporation when they advance corporate products and services;
- industry is often unwilling to pay more than incremental research costs, while the university researchers attempt to amortize laboratory recapitalisation across all research activity;
- industry needs to protect its ability to appropriate, perhaps uniquely, the ideas that derive from research; university researchers want to publish ideas broadly; wrangling over intellectual property is routine; and
- university researchers want to protect their ability to team with multiple corporations; industry needs to protect its proprietary information.”

Thus, actions that would be “relevant” to one set of interests may be in direct conflict with the interests of the partner institution. However, talk and brave sentiments of co-operation and partnership between university and industry do not necessarily lead to action. They may sometimes serve a function of relevance claims which justify funding and public support by shaping perceptions rather than provide a basis for new collaborative activity.

A further “mechanism” – to be found in many countries and not just in the developing world – comes through the effects of the relative “poverty” of academics. In many parts of the world, academics must have recourse to additional work in order to achieve a decent wage. For some, this means looking for consultancy opportunities through which to apply their expertise and increase their income. The effects of such activities upon African universities have been discussed by Mkandawire who writes that “usually consultancies create enclaves within the university and remove from university oversight a whole range of disciplines through the sheer weight of financial resources” (Mkandawire 1998, p. 7). Similar processes have been described in relation to universities in Central and Eastern Europe (Reeves 2004; Tomusk 2003).

## 5. Claiming Relevance in the United Kingdom

Within Europe, the United Kingdom has perhaps gone further along the utilitarian road both in terms of justifying the receipt of public monies and of diversifying funding sources beyond the public purse.

Relevance claims to justify the receipt of public monies for the teaching function impact upon universities and individual academics through the specification of national subject benchmarks and programme specifications for individual courses, both of them couched in terms of “learning outcomes”, generally interpreted as the skills and qualities that graduates bring into the labour market. A national agency, the Quality Assurance Agency for Higher Education, has been established to ensure institutional compliance with these and other features of a national “quality infrastructure”. Quality is not to be entirely equated with relevance, of course, but it is a significant part of it. A further external requirement on universities related to the teaching function has been the recent introduction of an annual national survey of final year students. Ostensibly about student satisfaction, this nevertheless has the potential to shift authority away from the academic over matters of relevance and quality. Something quite clearly to do with relevance is the question of whether graduates get jobs. Data have been collected from graduates six months after their graduation for many years but these data are assuming greater importance as successive governments emphasise an “employability” agenda for higher education. This agenda has seen many initiatives, both national and institutional, in recent years. Many universities include often compulsory employability modules in their curricula, dealing with things like “career management skills”, “enterprise”, “communication skills” and suchlike.

Relevance requirements in relation to research can be seen in the various ways in which research funding is dispensed in relation to perceptions of “public need”. Much emphasis is placed upon the views and needs of “user groups” for research and upon “dissemination strategies” to ensure maximum practical impact of research findings. Many externally funded projects (whether by the national research councils or charitable foundations) will include users and policy makers on their project steering committees. There are, however, strong counter pressures to the emphasis on relevance in the case of research. These manifest themselves through the regular Research Assessment Exercises conducted by the higher education funding council and which determine the amount of core funding for research received by universities in the UK. The assessment is conducted through a process of peer review in which notions of research “excellence” are supposed to be given primacy.

If relevance cannot be ignored if universities are to maximise their funding from the state, it becomes even more important if institutions are to attract additional resources, public or private. Thus for institutions anxious to maintain or increase their student numbers (and the funding which consequently flows through

fees), attention must be given to the subject mix offered (and how it is “presented” in attractively packaged programmes), to interdisciplinary programmes, to workplace learning, to generic skills and other “employability” features. These are all things which academics need to embrace to ensure adequate funding. They are particularly important in attracting international students, whose enrolment in substantial numbers provides a crucial element of revenue for many universities.

Other ways in which relevance claims enter into the search for additional sources of revenue come through the contributions that universities can make to regional development, both through “knowledge transfer” and meeting local and regional skills needs. As well as regional economic needs, the claims of a “global knowledge economy” can be utilised, through partnerships and various entrepreneurial activities, to secure additional revenue for research-related activities.

## **6. Conclusion: Higher Education and the Public Good**

If these are some of the pressures that academics face to become more ‘relevant’ to society’s various needs, how do they respond? In fact, responses inevitably range from resistance, subversion and compliance to enthusiastic embrace. There are large subject and institutional differences in response. And responses can take many different forms.

For those who would stress the autonomy of universities and academics and their “apartness” from the problems of the day, the various pressures to become more relevant to society may indeed be worrying. However, for those who would stress the important contribution that universities can make to the “public good”, these pressures – reflecting growing political and public awareness of the “uses” of universities – may actually be welcomed by many academics. In a recent paper, Calhoun (2006) has somewhat chided the academic profession for too often looking inwards in relation to its management and use of knowledge:

“We store knowledge in inaccessible academic journal articles written for the approbation of a handful of colleagues or simply a line on a vita....Too much research is undertaken for purposes of advancing or reproducing prestige and standing – of universities as well as individuals – rather than for more beneficent purposes.”

Calhoun essentially argues that academics have a responsibility to be “relevant”, to take knowledge beyond the walls of the academy into all kinds of public domain. It is perhaps a call for engagement rather than responsiveness, for academics to help set agendas as much as to respond to the agendas of others. From this perspective, relevance may be no bad thing!

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## Reflections on the Changing Relevance of the Academic Profession in Japan

Akira Arimoto

### 1. The Drivers of Relevance

#### 1.1 The Shift to the Knowledge Society and New Demands for Universities to Contribute to its Development

(1) *The relationship between social change and reform of the higher education system:* Reform is becoming a very important aspect of the relations between society and higher education. It involves demands from society on the higher education system and the system's response. Social conditions are affected by the spheres of politics, economics, science and technology and religion. The structural transformation of these spheres determines the interaction between them and their effects upon other systems including, naturally, the effects upon the higher education system.

For example, globalisation proceeds in the fields of politics and economics, bringing about the transformation of the social structure worldwide including detente, the dissolution of the former Soviet Union, the formation of an interconnected world, etc. In turn, it has also caused transformation successively in the worlds of education and culture through its unifying influence.

On the other hand, higher education also serves as a vehicle for influencing society, including a conservative function which reproduces social relations and an innovative function which reforms them. These two functions, which are inherent in both research and teaching, tend to conflict. Nevertheless, higher education is expected to initiate changes in society rather than simply being subject to social pressure.

Social change is influenced by the growth of the knowledge society, globalisation and marketisation and at the same time the higher education system reforms and transforms society to respond to those pressures. Higher education conforms with social change and it is remarkable that it induces social reform as well. In other words, it has a progressive role in promoting the knowledge society, global-

isation and marketisation based on a logic that is intrinsic to academia. Academia is apt to become isolated, rather like an “ivory tower”, in so far as it ignores social change, causing society to dissipate its energy. The university, which is a part of the social system, is expected to play a positive role in promoting social change. The function of knowledge production, which both society and the university are engaged in, becomes part of the program of social change in the “knowledge society 2” in which knowledge is indispensable and exists not only in the university (where “knowledge society 1” solely existed) but also in society (Arimoto 2004a, b). The university is essentially a learning organisation in which the differentiation of knowledge is actually forming multifaceted relationships.

As Burton Clark pointed out, the university is a complex organisation consisting of various kinds of disciplines such as biochemistry, philosophy, nursing, classics and mathematics. It is not a single organisation, but a loosely coupled organisation (Clark 2002, p. 339). In this context, research and teaching there are at the frontier, leading knowledge production and social change.

(2) *Enhancement of scientific productivity or academic productivity* is necessary if academia is to promote its own scientific and academic development (Shinbori 1973). Academic productivity theoretically consists of three elements: research productivity, teaching productivity and service productivity. The first two elements are especially important in academic work.

First, research productivity is a factor in the extent to which research outcomes contribute to social development as well as the academic community’s development. The exploration of the frontiers of knowledge in leading edge research areas is necessarily connected to industrial and economic development. Actually, huge amounts of research money have been intensively invested in applied rather than development research with a focus on the areas of science and engineering.

Second, teaching productivity means that teachers concentrate their energy on the teaching and learning process and develop excellence so as to train and produce high quality human resources. Today, the massification of higher education has brought about the diversification of students’ learning abilities and achievements so that the quality assurance of university education is necessary to ensure the standard of human resources and also the vitality of society. With increasing international competition, various sectors including industry, the academic community and the bureaucracy are paying more attention to recruiting the best and brightest human resources to the extent, more or less, of provoking a crisis in national society. The university, which trains and produces human capital for these sectors, emphasizes the teaching and learning process and the teaching ability of the academic community which is considered to be a key profession. In other words, they are expected to be trained by various means including Faculty Development (FD) so as to improve the abilities and achievements of the diverse range of students to a certain level (Arimoto 2005a).

In the 21<sup>st</sup> century higher education system where massification is progressing and universal access is gradually being realized, the university's role in developing human resources is becoming more and more important, and at least equivalent to the role of research - and possibly more important than it.

(3) *The concept of the knowledge society* was first used officially by the national government in its policy and planning around the late 1990s in Japan. A proposal relating to higher education policy was made in the report drafted by the Central Education Council (CEC) in 2005, in which the knowledge society was regarded as a key concept in developing a vision for 21<sup>st</sup> century higher education. Strictly speaking, the CEC used the term "knowledge-based society" rather than "knowledge society" (CEC 2005).

The term "knowledge society" is applicable to both society and the university when we compare them retrospectively. Historically, the university has been regarded as a knowledge community given its knowledge function, but this is different from the knowledge society emerging worldwide today. The history of higher education reveals four stages of development: the University of the Middle Ages; the Modern University; the University Today; and the emerging Future University. If we consider in more detail the relation between the characteristics of knowledge and the types of university, the University of the Middle Ages, when the integration of science within the university was not yet realized, belonged to the pre-knowledge society; the modern university, once the integration of science was achieved, belonged to the knowledge-based society 1 (KBS1); and finally the university today, where science is integrated not only within the university but also with the rest of society, belongs to the knowledge-based society 2 (KBS2) (Arimoto 2002).

These types of university, i.e. pre-knowledge, knowledge 1 and knowledge 2, have shifted in relation to the changing character of knowledge. The pre-knowledge society is characterized by the fact that it is related to the teaching oriented university. This model of the university has been gradually succeeded until we arrive at the collegiate university of today.

KBS1 is associated with the period from the age of the scientific revolution, where scientific society, or the scientific community, was first established within the university, to the age of the German model of the university, where the integration of science within the university formed an academic discipline (Merton 1973). The university today derived from this type of institution is categorised as the "Research University" (Geiger 1993; Clark 1995). On the other hand, KBS2 is associated with the emergence of the total knowledge-based society where knowledge is distinguished as either Mode 1 or Mode 2 (Gibbons et al. 1994) and the distinction between the university and society as a whole - both of which are associated with these two modes - is becoming blurred. The character of the university at this stage has not yet been clearly established. Just like the university today, which is a mixture of the collegiate university, the research university and the



service university, as a reflection of the traditional university models of the past, the future university will construct a new model out of the various existing forms, including the virtual university.

(4) In the emerging knowledge society, the government *harbors substantial expectations of universities* as follows: high productivity in teaching, research, and service; high productivity in administration with a shift from a 'bottom-up' form of governance to a more 'top-down' management style.

First, a policy of developing a creative country with the intensive promotion of scientific and technological productivity (Kagaku Gijutsu Souzou Rikkoku) was introduced as part of the Basic Law of Science and Technology (Kagakugijutsu Kihon-hou) passed in 1995. Based on this law, the Science and Technology Basic Plan ("Aiming at a nation based on the creativity of science and technology") was put in place in 1996.

Second, the Ministry of Education and Science (MEXT) proposed the future direction of scientific research by indicating three goals: "promoting the world's highest levels of research," "creating new scholarship" and "contributing to society." Based on the Science and Technology Basic Plan approved by the Cabinet Meeting in March 2001 and the discussions in the Council for Science and Technology (2003), the MEXT has pushed ahead comprehensive science promotion measures that include (a) respect for the independence of researchers; (b) evolution across a wide spectrum of disciplines, from the humanities and social sciences to the natural sciences, and (c) promotion of education and research in more unified ways.

Specifically, measures taken by the MEXT include: (a) increasing Grants-in-Aid with the aim of facilitating a major development of scientific research based on liberal and open ideas, (b) recruiting and fostering young researchers through various support measures such as the Fellowship Program implemented by the Japan Society for the Promotion of Science (JSPS), (c) improving research organizations, including university faculties and graduate schools, research institutes attached to universities and Inter University Research Institutes (IURI), (d) improving the research infrastructure: to implement more advanced high-speed networks and improved and expanded databases in universities; (e) insisting on achieving the world's highest levels of research in the fields of astronomy, neutrino research, accelerator science, space science, fusion research, informatics, global environmental research, antarctic research, life sciences and area studies; (f) promoting partnership between industry, academia and the public sector, commissioned research from private corporations and centres for cooperative research; (g) promoting international scientific cooperation and exchanges through the Japan Society for the Promotion of Science (JSPS).

Third, in the "National University Corporation Law", issued in 2003, the government outlined the following direction: (a) a dramatic reform of university since the era of Meiji; (b) universities were to be expected to develop distinctive educa-

tional and research missions on the basis of management autonomy and independence; (c) the government would support national universities by promoting academic research and producing professionals with the highest capabilities.

The key features of this new system were summarised by the MEXT as follows: (a) the incorporation of each national university; (b) the introduction of management techniques based on private-sector practice; (c) people from outside the university participating in university governance; (d) improvements in the process of selecting university presidents; (e) university personnel no longer to be classed as civil servants; (f) thorough disclosure of information and the evaluation of university performance.

## 1.2 The Changing Economy of Higher Education in which Universities Receive Less Public Support

(1) Economic changes in higher education have been related to the emergence of the national university corporation and also *national and public budget cuts* to universities. National university corporations are now receiving approximately 70 per cent of their total annual funding from the government, while private universities generally receive less than 30 per cent from this source.

At the University of Tokyo, for example, the proportion of government funding of the total revenue for the Fiscal Year 2003 was 70.5 per cent (153,018 million yen, made up of 60.5 per cent operating grant and 10.0 per cent subsidies for facilities), while income from the attached hospital comprised 18.9 per cent and student tuition and fees 10.6 per cent (University of Tokyo 2003).

There is a gap between the public funding of national universities and private universities. For example, of the general account budget in the Fiscal Year 2004, the total amount of "operational grant", facilities subsidies, etc. to the national university corporations was as much as 1,386.9 billion Yen, while the amount of national government subsidies for private universities and colleges was as small as 326.3 billion Yen. National universities received as much as 26 times the support per student as private four-year universities (Kiyonari 2004, p. 21).

In the long run, support for the national sector is expected to decline until it is closer to the level of private sector. Currently, Japanese national universities are retaining their traditional levels of national expenditure. However, other countries such as Korea and the U.S., for example, have already moved towards levelling the public funding for public and private universities.

(2) Survival under such circumstances is becoming big issue for almost all higher education institutions. Pressure is increasing on the national as well as the public sector towards incorporation and privatisation. The national sector has now shifted nearer to the boundary between the public and private sectors and it is possible that it will move still closer to the private sector in future. In the process of incorporation, the number of national universities was reduced from 99 to 87 as

a result of merger. In this sense, there is a great deal of pressure on the national sector. On the other hand, the pressure on the private sector is also severe because some of these institutions are apparently facing closure. In particular, more than 40 per cent of all private institutions (220 institutions out of 550) are now facing lower than expected student enrolment which may be an important factor leading to the closure, as well as merger, integration and linking up, of institutions.

## 2. The Actual Scene

### 2.1 Pressure to Generate New Revenues through Relevant Teaching and Research

(1) Emerging pressure has caused the academic profession to *shift its orientation from research to teaching*. This was illustrated by the differences between the findings of the Carnegie International Survey (1992) and Japanese national survey (2006), which reveal a gradual change from a research orientation to a combined research and teaching orientation. The Japanese academic profession is changing its stance from the German model to the Anglo Saxon model, although not yet to the Latin American model. This change may have been caused by the national policy of the MEXT in introducing, between 1991 and 2004, a series of increasingly binding requirements for Faculty Development (FD) for the whole academic profession across the national, public and private sectors. It has been argued that the institutionalisation of FD and the academic profession's reorientation towards teaching are closely related (Arimoto 2005a).

(2) There have also been pressures to *change the nature of research in academia*. A typical response is to increase research collaboration between the university and other partners. Priority has been given to the fields of science, engineering and medicine over the humanities and social sciences as a result of the Science and Engineering Basic Law (1995) previously mentioned. The ensuing Science and Engineering Basic Plan (1996) has invested a huge amount of money (67 trillion Yen) during its three phases between 1996 and 2006 (1996–2000: 17 trillion Yen; 2001–2005: 24 trillion Yen; 2005–2006: 25 trillion Yen (MEXT 2005a; Arimoto 2005b)). It targeted the fields of science, engineering and medicine, including various cutting-edge areas. Also, funds were provided for fields that lie between the humanities and social sciences and the natural sciences and engineering. Perhaps the increasing number of university presidents from the fields of science, engineering and medicine etc. also has something to do with this trend.

(3) Altogether, the enhancement of teaching and research has been promoted to the extent that many institutions ask their faculty members to pay *attention to new national programs* of the Centres of Excellence (COE) in connection with excellent research activity. This was started in 2002 as a national government project alongside several Good Practice (GP) programs such as special GP, modern GP,

and graduate GP, mainly in connection with teaching, which were started in 2003. All of these were conducted by the MEXT (MEXT 2005b). The institutions that were successfully selected as COEs in these programs enjoy high reputation and prestige in the competition to survive among institutions. As a result, the evaluation system was transformed in this kind of environment from a pre-evaluation orientation to post-evaluation which focuses on substantial achievements and the outcomes of teaching and research. In other words, the policy of deregulation has shifted government control from inputs to outputs.

## 2.2 Shifts in the Composition of Students by Subject

The distribution of university students by major field of study shows that, in 2004, the highest proportion took social science (44.8 per cent), engineering (17.5 per cent) and humanities (16.3 per cent). There has been no substantial change in the distribution of students across the most popular fields of study since 1970 (MEXT 2005b). However, engineering has decreased from 21.1 per cent to 17.5 per cent, despite being promoted so strongly by government policy on higher education and science. The same holds true for agriculture, medicine and dentistry. In Japan, students' dislike of engineering and science has become a social problem. Many faculties of engineering in national universities are now facing a decline in enrolment.

## 2.3 The Emphasis on Relevant Projects

(1) *Short-term projects* of two or three years' duration have become popular among researchers as a way of attracting attention from outside academia. Usefulness, efficiency and accountability are also stressed as important. The market demands useful research outputs with high visibility. In the massification stage of higher education development, universities and professors have to be more responsive to market mechanisms than in the previous elite stage. They are also responding to student consumerism: the names of faculties and departments are revised to attract students rather than to suit universities' traditional academic concerns; new terms are added, such as: environment, international, global, human being, information, welfare, nursing, pharmacology, psychology, etc.

(2) As far as *research on higher education* is concerned, it is interesting to note that almost all institutions have changed their names to reflect a more practical orientation rather than their research function. Among national universities, about thirty institutions have joined the "National Association of Institutions of Higher Education" and many of its members have changed their names from 'research institute for higher education' to 'centre of university education' or similar. Basic research faces difficulties in surviving in an environment with an increasing emphasis on efficiency.

#### **2.4 Corporations or Other Actors: New Deals Between Universities and Industry**

(1) As mentioned above, the links between university and society are growing, although this trend was thought to be a kind of taboo among most students, academic and non-academic staff about thirty years ago when turmoil prevailed in many campuses nationwide.

(2) A renewal of the service function is also necessary at a time when the renewal of the research and teaching functions is gathering pace. In particular, the link between universities and industry, which was once unthinkable, has been re-evaluated and has led to a sudden growth in collaboration. For example, the Center for Collaborative Research (CCR) at the University of Tokyo announced in December 2006 as many as 1,699 “themes which have the potential for developing collaborative research links between the university and industry” (CCR 2006).

Responding to such a growth, some new ‘donated’ or ‘capstone’ chairs were established in universities through sponsorship and many grants, assets and human resources were invested in universities. As a result, the blurring of the boundary between university and industry has led to a narrowing of the distinction between academic and non-academic staff, since their traditional separation is hardly appropriate for engaging with these new and emerging areas of work.

#### **2.5 Universities set up Special Vehicles to Incubate Research**

(1) Catching up with the advanced countries’ research productivity has been an important issue since the establishment of the modern university in Japan. Improvement in this area is an important goal for the Japanese university today. For example, if we look at the relative citation index for scientific papers in selected countries, it is still true that Japanese research productivity does not belong in the top class. “The Relative Citation Index (RCI) shows the number of citations per scientific paper from Japan divided by the number of citations per scientific paper for the world as a whole. Japan’s RCI value is less than 1.0, putting it in a position relatively lower than other major selected countries. While the RCI for Japan and the United States has stayed relatively stable since 1981, it has risen in the other major countries, with particularly strong increases in recent years for the United Kingdom, Canada and Germany.”(MEXT 2005a)

(2) Our earlier research indicated that the following conditions were necessary for promoting the “research university”: the climate of the department; a reward system; graduate education; a communications network among researchers (Arimoto 1994, pp. 230-231). Graduate education is the key among these factors, because the centres of excellence around the World have a strong graduate education system that should be studied by other countries including Japan.

Burton Clark, who undertook an international comparative study of graduate schools in Germany, France, England, U.S. and Japan, observed the early devel-

opment of graduate schools in the U.S. compared with other countries (Clark 1995). He highlighted the characteristics of these systems: the German Institute University; the French Academy University; the English Collegiate University; the American Departmental Graduate University; and the Japanese Applied University, noting that the relationship between the department and the graduate school in the U.S. higher education system was remarkably distinctive among these systems.

If we look carefully at the U.S.'s historical development, its success was in introducing the graduate school based on a modified German model with its strong focus on research. Johns Hopkins University, which was largely indebted to the personal contribution of President Gilman, was successful in building this basic system in the following ways (Clark 1995; Pierson 1952; Arimoto 1981):

- a) maintaining a departmental system instead of introducing the chair system and apprenticeship;
- b) institutionalizing a two-tier system with undergraduate and graduate courses;
- c) introducing schooling in the degree system;
- d) seeking a nexus of research and teaching;
- e) introducing decentralisation and competitiveness or diversification of the higher education system;
- f) controlling insularity among faculty members.

As a result, the U.S. became the centre of learning in place of Germany. In fact, various accounts testify that the U.S. had replaced France, the UK and Germany at the top of the hierarchy by the late 19<sup>th</sup> and early 20<sup>th</sup> century (Ben-David 1977). In this international environment, it is natural that the Japanese higher education institutions as well as the national government should pay much more attention to promoting research productivity and especially graduate education in the research universities.

(3) Many universities, especially research universities, have been undertaking special projects aimed at promoting research, by establishing special research centres. For example, Hiroshima University approved four special research centres equivalent to a COE (Centre of Excellence) on campus.

(4) It has become necessary for all higher education institutions, especially research universities, to obtain as much funding as possible from the government and grant agencies in order to promote research.

Governmental subsidy for national university corporations in Japan, for example, is in the form of operational grants (Uneikofukin), a sort of block grant. These grants are allocated by the Evaluation Committee of National University Corporations on the basis of the reports from third-party evaluation agencies, consisting of the NIAD (National Institute of Academic Degree and University Evaluation) and JUAA (Japan University Accreditation Association), that consider the long-term

goals, medium-term strategies and annual plans prepared by the individual national university corporations.

A ranked list of the allocation of operational grants to individual institutions is agreed each year. As of the Fiscal Year 2004, the rank order was determined by the amount of the operational grants, which was allocated to individual national university corporations as follows: Tokyo (92,600 million yen), Kyoto (64,000 million yen), Tohoku (54,300 million yen), Osaka (52,900 million yen), Kyushu (48,500 million yen), Hokkaido (44,800 million yen), Tsukuba (42,200 million yen), Nagoya (36,200 million yen), Hiroshima (29,200 million yen), Tokyo Kogyo (24,000 million yen) (Arimoto 2005b, pp. 62-63). Assessment on a competitive basis was introduced for the first time in 2004 at the same time as the introduction of the national university corporation system.

As a result, it has been argued that the allocation of operational grants is strengthening the trend towards competitive funding. In fact, bidding for scientific grants is producing severe competition among institutions to the extent that a hierarchy has formed with Tokyo University at the top. In addition, new competitive funding has been introduced recently through the "21st Century Centers of Excellence (COE) Program" which was initiated in 2002 in the field of research, the "GP (Good Practice) program" initiated in 2003 and the "Modern GP program" initiated in 2004 in the area of teaching and learning. These programs are intended to give additional special funding to selected universities and colleges in order to upgrade their academic practice to world-class status.

### **3. The Advantages and Disadvantages of these Shifts**

#### **3.1 Have Professors Encountered Ethical Conflicts?**

(1) The problem of unethical science has increased because of the quest for money, visibility and reputation due to competition for survival among not only institutions but also individual faculty members. Recently, a series of remarkable cases have occurred featuring corrupt behaviour in science. As a result, the MEXT (Ministry of Education, Culture, Sport, and Technology) is now preparing measures to protect against such misconduct.

(2) According to the Carnegie Survey, the Japanese academic profession was the highest among fourteen countries in the levels of stress experienced. It is likely that these levels are now even higher because there are many more pressures working in academia such as severe competition, rationalisation, bureaucratisation, etc.

#### **3.2 Do they Worry that the University may be Losing its Mission?**

(1) Professor Ichikawa, a famous scholar in higher education research, always said that the traditional university has been dead for some time, and this is illustrated

by the following characteristics: the transformation of the traditional bottom-up administration to new top-down forms; the change in orientation from autonomy to accountability in administration and management; the shift of academic commitment from research to teaching; an academic revolution from teacher-centered to student-centered behavior leading to phenomena such as student consumerism; and the disintegration of the scientific ethos (Merton 1973).

(2) In particular, as far as the shift in academic commitment from research to teaching is concerned, every higher education institution has tried to integrate new research findings with teaching with a view to strengthening research. However, despite this Humboldtian ideal, the research paradigm has prevailed to considerable degree. As a result, a category of "research university" was gradually developed in the 20<sup>th</sup> century as the new model of a university (Geiger 1986; 1993).

Today's university, which is basically a development of the modern university consisting of the accumulation of various knowledge functions, appears to be facing conflicting missions and increasing difficulty in co-ordinating these. In other words, various pressures caused by environmental changes from inside and outside the university are having a combined impact on the way it operates. In this changing environment, the university has been gradually losing its autonomy, becoming increasingly accountable and modifying its mission. To explain this, four factors can be distinguished within a simple framework: (a) Social change; (b) the National government; (c) Society = market; and (d) the University.

Among these, (a) is transforming (b) (c) and (d), working directly on (d), the university. As a result of this, (b) (c) (d) are forced to change by themselves. At the same time, (d) is considered to be important in forming a triangle with (b) and (c).

If we use Burton Clark's triangular model of the relationship between the state (government), market (society) and academe (university) (Clark 1983), there are some structurally observable relationships: demands from the national government on the university and the response from the university as seen in (b); demands from society on the university, and the response from the university to society as seen in (c). Of course the relationship between (b) and (c) is also significant.

Accordingly, social change impacts directly on the university and at the same time works through the national government, the market and within science (the reconstruction of intelligence). In the face of such pressure and demands, the university is expected to use its expert knowledge to coordinate its various functions. There are various kinds of coordination possible, including political coordination, bureaucratic coordination, professional coordination and market coordination (Clark 1983). Currently, when political, bureaucratic and market coordination are too dominant, it is desirable that professional coordination from the inside of the university works to counteract these.



### 3.3 What Lies Ahead?

(1) Emerging divisions within society impact on universities and colleges, with differentiation between the 'haves' and 'have nots'. In contemporary Japan, it is said that a divided society is emerging due to social stratification between the upper and lower classes. What is important in this trend is the role of higher education. People who belong to the NEET (Not in Education, Employment or Training) and Freeter (the lowest status) groups have reportedly reached 4.5 million and the number of "working poor" who are on low incomes is increasing (Kosugi 2005). Poverty is inherited by the next generation and economic differences will produce educational differences.

How should higher education respond to this kind of problem? As an educational organisation, the university has a role in transforming rather than reproducing a divided society. The higher education system is responsible for guaranteeing universal access to high quality education and equal opportunity, since the key to social development surely depends on educated workers and high quality education.

We can analyze the current divisions in society:

First, upward mobility is declining owing to the collapse of the middle class. The 'degree-o-cratic' (meritocratic) society was divided into two parts: the strengthened part and the collapsed part. Universities are now separating into the 'haves' and 'have nots', or the elite universities and the mass or marginal universities. The former are associated with the upper level and the latter coupled with the lower level of social strata.

Second, this kind of separation is caused by emerging marketisation and the market mechanisms (Sato 2000). Analysis of the Social Stratification and Social Mobility (SSM) survey undertaken in 1995 suggested that differentiation was advancing more slowly (Hara 2000, p.29). However, it is becoming apparent that differences have widened in recent years (Otake 2005).

Greater division in society brings about differences between social classes in terms of educational investment and enrolment in universities and colleges. The Central Educational Council (CEC) proposed a classification of seven types of higher education institution, which seems to confirm this (CEC 2005). Among these categories, the first one, the research university, is most associated with the highest social class.

If this analysis and diagnosis is correct, real groundwork is necessary. It is not inevitable that universities must simply reflect the differences within society. The hierarchy among institutions is not fixed and there is flexibility in the relations between types of institutions. If university education contributes only to the reproduction of social stratification, it is performing an economic function rather than achieving its educational purpose.

Richardson and Hurley highlighted the following: “As resources shifted away from the need-based programs, the American higher education system showed signs of evolving into a two-tier system. Moderate income families were significantly more likely to attend elite institutions, while poorer students were increasingly concentrated in community colleges and public four-year institutions with low selectivity. Increasing college costs, declining state resources and enrolment management policies requiring most lower income and minority students to begin in community colleges all contributed to the trend. Low graduation and transfer rates from open-access on less selective institutions added to the degree of stratification.” (Richardson and Hurley 2005, p.322). However, we should not be pessimistic and view higher education as powerless in the face of these trends. At the very least, the prevailing economic reality does not completely prohibit the achievement of the educational ideal. In the United States, where a divided society has long been established, distinctions between universities are reproducing social stratification. However, if we continue to believe in the educational ideal we can improve the present situation.

The link between social class differences and enrolment has already been demonstrated (Kariya 1995, 2001; Kondo 2000). Any extension of the divisions in society will exacerbate these trends. The government is expected to improve this situation by providing financial support to higher education, because state expenditure on higher education has remained at a lower level compared with counterparts in other advanced countries. In an age of universal access, low public expenditure on higher education will require an increase in private funding to the detriment of the lower socio-economic classes.

Cost sharing between governments, taxpayers, parents, students, alumni and philanthropists is spreading throughout the world. The increasing costs of tuition fees, and course-related and living expenses is resulting in a mounting burden on parents and students. This raises issues about tuition fee levels, parents’ responsibilities, government support, loans to parents and students, etc (Teixeira et al. 2006). On the other hand, it is becoming more and more difficult for students from the lower socio-economic classes to meet the costs of tuition fees, as was shown in the recent trend in the United States (Johnstone 2004; Richardson and Hurley 2005).

Similarly, this problem can be observed in an increasingly divided Japanese society and a new system is to be implemented in order to improve the present situation. In practical terms, it will promote equal opportunity of enrolment by reforming the economic differences between social classes and opening access to higher education to all kinds of classes, while assuring the quality of higher education. In order to tackle the economic differences, reform of the scholarship policy is needed for students in the lower socio-economic classes in terms of grants and loans.

(2) The natural selection of universities and colleges will come to prevail when weaker institutions fail to achieve their full complement of students. This trend will intensify the business side of academia, leading to greater institutional cooperation, partnership and merger and, in the most extreme cases, the failure and closure of institutions.

(3) The CEC recently proposed the following plan to classify institutions into seven categories: the research university; the professional university 1 (world class); the professional university 2; the liberal arts university; the specialist university; the community university; and the socially-oriented institution (CEC 2005).

(4) The number of part time academic staff and those with fixed-term contracts is increasing, at the same time that permanent employment and the traditional seniority system, which has prevailed in the academic world in Japan for many years, is in decline.

(5) Tensions arising from globalisation and internationalisation will increase as the Japanese academic profession seeks to maintain its own identity. Japanese academics were confronted with similar issues for 130 years after the Meiji Restoration with the importing of various kinds of foreign models. They faced similar conflicts with Americanisation in the post-war period. After the War, the American model of higher education was introduced into the traditional German system which itself had been imported from many other advanced systems of higher education. In the course of the conflicts between the American and German models, a series of academic reforms were implemented to considerable effect. Some reforms were partially successful so that general education became consistent with the newly imported American model and various kinds of changes were realized in the higher education system and in individual institutions. However, some residual aspects of the German model were resistant to change. For example, a research orientation was not realized at all in spite of the influence of the American model. This situation was clearly revealed by the findings of the Carnegie international comparative study of the Academic Profession undertaken in 1992, though it was modified to some extent by 2003 when the related national survey was carried out. In particular, academics' commitment to research had declined so that by the time of the latter survey it was on a par with an orientation to teaching and research (Arimoto 2005a).

Ultimately, there was only a partial adaptation to foreign models. It could be argued that, during this process, Japanese academics tried to retain their identity, and that of the profession, by translating foreign models into the Japanese system.

#### 4. Concluding Remarks

This paper has considered the theme of *Reflections on the Changing Relevance of the Academic Profession in Japan*. Exploring some of the problems relating to this theme in more detail could reveal some useful findings.

(1.) The section on the drivers of relevance dealt with two issues in particular. The first was the *shift to the knowledge society and new demands for universities to cooperate in development*, and the paper discussed the following problems: (i) The relationship between social change and reform of the higher education system, which is becoming a very important issue. (ii) The enhancement of scientific or academic productivity is necessary if academia is to promote its scientific and academic development. Academic productivity theoretically consists of three elements: research productivity, teaching productivity and service productivity. The first two elements are particularly important in academic work. (iii) A concept of the knowledge society was first used officially by the national government in its policy and planning around late 1990s in Japan. (iv) In the emerging knowledge society, the government demands a great deal of universities, such as: high productivity in teaching, research and service: high productivity in the administration and management with a shift from a bottom-up to a top-down approach.

Second, on the issue of the *Changing economy of higher education in which universities receive less public support*, our conclusions were as follows: (i) Economic change in higher education has been linked with the appearance of the national university corporation and also national and public budget cuts for universities. National university corporations are now receiving approximately 70 per cent of their total annual budgets from public funds, while private universities are on average receiving less than 30 per cent of their income from this source. (ii) Survive under such circumstances is becoming a big issue in almost all higher education institutions. It is bringing pressure on the national as well as public sector to incorporate and privatize.

(2.) What is actually happening? In the first part, one of the issues considered was that institutions are under *Pressure to generate new revenues through relevant teaching and research*, and we discussed the following three matters: (i) This pressure has brought about a shift in the consciousness and behaviour of the academic profession from a research to a teaching orientation. (ii) Emerging pressure is also changing the nature of research in academia. For example, there has been an increase in research collaboration between the university and other parts of society. (iii) Generally speaking, the enhancement of teaching and research has been promoted to the extent that many institutions now ask their faculty members to pay attention to new national COE programs in connection with excellent research activity, which was started in 2002 as a national government project, and several GP (good practice) programs, such as special GP, modern GP and graduate GP, mainly in connection with teaching, which were started in 2003.

In the second topic, *shifts in the distribution of students by field with increasing numbers in 'relevant' subjects*, we discussed how there has been no substantial change in the rank order of the most popular fields of study since 1970. The third topic, *universities and individual professors taking on more relevant projects*, identified the following issues: (i) Short cycle projects of two or three years' duration have become popular among researchers in order to attract attention from outside academia. Usefulness, efficiency and accountability are also stressed as important. (ii) As far as research on higher education (RIHE) is concerned, it is interesting to point out that almost all institutions have changed their names to reflect a more practical orientation rather than their research function. In discussing the fourth topic, *Corporations and other actors negotiating new deals between universities and industry*, we found that the links between university and society are increasing, though this kind of trend was thought to be a kind of taboo among most students, academic and non-academic staff about thirty years ago when turmoil prevailed in many campuses nationwide. A renewal of the service function is necessary at a time when the renewal of the research and teaching functions is gathering pace. In particular, the link between universities and industry, which was unthinkable for many years, has been re-evaluated and has led to a sudden growth in collaboration.

The fifth topic, *Universities set up special vehicles to incubate research*, discussed the following four problems: (i) Catching up with the advanced countries' research productivity has been an important issue since the establishment of the modern university in Japan. Improvement in this area is an important goal for the Japanese university today. (ii) Our earlier research indicated that the following conditions were necessary for promoting the "research university": the climate of the department; a reward system; graduate education; a communications network among researchers. (iii) Many universities, especially research universities, have been undertaking special projects aimed at promoting research, by establishing special research centers. (iv) It has become necessary for all higher education institutions, especially research universities, to obtain as much funding as possible from the government and grant agencies in order to promote research.

(3.) These shifts have had positive advantages and disadvantages. In the first part of section 3, *Have professors encountered ethical conflicts?*, the following problems were highlighted: (i) The quest for money, visibility and reputation due to competition for survival among not only institutions but also individual faculty members. (ii) According to the Carnegie Survey, the Japanese academic profession was the highest among fourteen countries in the levels of stress experienced. It is likely that these levels are now higher because there are many more pressures working in academia such as severe competition, rationalisation, bureaucratisation, etc.

The second part, *Do they worry that the university may be losing its mission?*, discussed the following problems: (i) The traditional university has been dead for

some time and some reasons were given. (ii) In particular, as far as the shift of academic commitment from research to teaching is concerned, every higher education institution has tried to integrate new research findings with teaching with a view to strengthening research.

(4.) *What lies ahead?* In the final sub theme, we dealt with five problems: (i) Emerging divisions within society impacting on universities and colleges, with differentiation between the 'haves' and 'have nots'. (ii) The natural selection of universities and colleges will prevail when weaker institutions fail to achieve their full complement of students. This trend will intensify the business side of academia, leading to greater institutional cooperation, partnership and merger and, in the most extreme cases, the failure and closure of institutions.

(iii) The CEC recently proposed the following plan to classify institutions into seven categories: the research university; the professional university 1 (world class); the professional university 2; the liberal arts university; the specialist university; the community university; the socially-oriented institution. (iv) The number of part time academic staff and those with fixed-term contracts is increasing, at the same time that permanent employment and the traditional seniority system, which has prevailed in the academic world in Japan for many years, is in decline. (v) Tensions arising from globalisation and internationalisation will increase as the Japanese academic profession seeks to maintain its own identity. Ultimately, there was only a partial adaptation to foreign models. It could be argued that during this process Japanese academics tried to retain their identity, and that of the profession, by translating foreign models into the Japanese system.

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## **The Increasing Expectation of Relevance for Higher Education and the Academic Profession: Some Reflections on the Case of Mexico**

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### **1. Introduction**

During the last decades the world has experienced an intense and complex series of events that can be characterised, although quite simplistically, by a globalisation-regionalisation dynamic in which knowledge and information technology are playing a growing central role. Changes are taking place in many different parts and aspects of the world, but they are not, as some would have expected, simple or, in some cases, inclusive and positive. The recent invitation by UNESCO (2005) to help build societies of knowledge constitutes a reminder of such a situation.

With changes taking place at the societal level, it is no wonder that higher education has also been in a state of flux. With the increasing economic role of knowledge and its potential contribution to the marketisation and democratisation processes taking place in many countries, higher education has regained attention from a variety of international agencies, several of which have generated reports dealing both with its current state and with the direction in which it should move (e.g., Task Force on Higher Education and Society 2000; UNESCO 2005). There is, in short, a growing expectation regarding higher education relevance, and so the winds of change have been impacting higher education all over the world and, consequently, the academic profession that lies at its core. Such situation is no different for Mexico.

In this paper we briefly describe the recent evolution of Mexican higher education and, in that context, explain the reasons (drivers) why the expectations that Mexicans have regarding higher education relevance have increased along that same period. Then, we discuss four challenges that the Mexican academic profes-

sion needs to confront and solve, if it is to contribute more significantly to the increasing relevance that higher education is expected to have for the country and, more concretely, for its inhabitants' well-being. We believe that the challenges identified constitute issues that need to be attended and, to that extent, we hope this essay will contribute to the discussion of what needs to be done in order to strengthen the academic profession in our country, without which the future of Mexico will be in jeopardy.

## **2. Recent Evolution of Mexican Higher Education**

As Table 1 shows, Mexican higher education has grown impressively during the last four and a half decades. While in 1960 there were 78 higher education institutions, by 2004 there were 2,074. Concerning students the growth has been equally large: in 1960 78.8 thousand students were enrolled in a licensure programme,<sup>1</sup> but in 2004 there were about 2384.9 thousand students, representing an approximate enrolment rate within the corresponding age group, respectively, of 2.7 and 22.0 per cent in those same years. Working with such students, in 1960 there were around 10.8 thousand faculty positions, among which the full-time academic was practically non-existing. By 2004 251.7 thousand faculty positions were reported, and of them, in 2003, 27.2 per cent were full-time (Urbano-Vidales, Aguilar-Sahagún, and Rubio-Oca and Rubio 2004). There have been other major changes as well, such as the increment in student enrolment in private institutions, which changed from 13.8 to 32.7 per cent of all students in higher education in 1960 and 2004, respectively, and the female enrolment participation, which arose from almost none in 1960, to 50.3 per cent in 2004.

In addition to the above mentioned quantitative aspects related to institutions, Mexican higher education institutions have also changed along important qualitative aspects. So, for example, public institutions are now more diverse, including 2-year institutions, technical universities, as well as indigenous oriented intercultural universities. Also, private higher education institutions have, particularly after 1990, increased their number largely by way of small and in many cases low-quality institutions which have been described as demand-absorbing institutions (Muñoz Izquierdo et al. 2004).

**Table 1: Recent Evolution of Mexican Higher Education, 1960-2004.**

Aspect	1960	1970	1980	1990	2000	2004
Institutions	78.0 <sup>2</sup>	115.0 <sup>2</sup>	307.0 <sup>3</sup>	776.0 <sup>3</sup>	1250.0 <sup>2</sup>	2047.0 <sup>4</sup>
Students (thousands)	78.8 <sup>2</sup>	257.0 <sup>2</sup>	935.8 <sup>1</sup>	1252.0 <sup>1</sup>	2047.9 <sup>1</sup>	2384.9 <sup>1</sup>
Faculty positions (thousands)	10.8 <sup>2</sup>	25.0 <sup>2</sup>	73.8 <sup>1</sup>	134.4 <sup>1</sup>	208.7 <sup>1</sup>	251.7 <sup>1</sup>
Enrolment rate of age cohort	2.7% <sup>2</sup>	5.8% <sup>2</sup>	13.6% <sup>2</sup>	15.0% <sup>2</sup>	20.0% <sup>2</sup>	22.0% <sup>1</sup>
Private enrolment	–	13.8% <sup>3</sup>	13.5% <sup>3</sup>	17.4% <sup>3</sup>	27.6% <sup>3</sup>	32.7% <sup>4</sup>
Female enrolment participation	–	–	30.0% <sup>2</sup>	40.0% <sup>2</sup>	47.2% <sup>2</sup>	50.3% <sup>4</sup>
Concentration of students in Mexico City	–	52.5% <sup>3</sup>	31.2% <sup>3</sup>	23.4% <sup>3</sup>	21.7% <sup>3</sup>	–
Country's population (millions)	34.9 <sup>2</sup>	48.2 <sup>2</sup>	66.8 <sup>2</sup>	81.3 <sup>2</sup>	97.5 <sup>2</sup>	103.1

<sup>1</sup> Anexo del Sexto Informe de Gobierno 2006 (2006; p. 037, 039, 040).

<sup>2</sup> Grediaga Kuri, Rodríguez Jiménez y Padilla González (2004; Anexo Estadístico, Cuadro 2.1) In the case of students and faculty positions, the corresponding figures are for the licensure (undergraduate) level. Enrolment rate and female participation figures correspond really to 1984.

<sup>3</sup> ANUIES (2000; pp. 39, 227, 230). The concentration of students in Mexico City, and the private enrolment figures correspond only to licensure programmes in universities and technological institutes, and the 2000 figure corresponds actually to 1999.

<sup>4</sup> SEP (2005; p. 142).

At the same time that the previous changes have taken place, the relationship between public higher education and the Mexican state has changed significantly, mainly along four dimensions intimately related between them. First, and probably the central component of the larger set of changes, while budget appropriations before the early 1980s were based upon the reported number of students and personnel working in an institution and, more importantly, an exchange between the institutions' leaders, the political groups in which they participate, and the officials in charge of administering the budget, after the mid 1980s public revenues have increasingly depended on the number of students attending a particular institution, but now with the great difference that such number, as well as that of the institution's personnel, are highly supervised cross-checked. Such "non-reducible" appropriations, on the other hand, have been increasingly complemented by addi-

tional funding provided on the basis of projects that compete for special funds (Mendoza Rojas 2002).

Second, while there is a tradition of considerable autonomy awarded to public state universities, and there used to be a considerable discretion in relation to the hiring of personnel and the opening of educational programmes (Levy 1980), after the mid-1980s the federal Undersecretariat of Higher Education has closely supervised the hiring of new faculty and has exerted some degree of control over educational programmes by way of favouring the channelling of funds to accredited higher education programmes.

Third, previous to the mid-1980s there was very little concern about results, impact and accountability of higher education performance. Nowadays, in contrast, there is an evaluation environment that includes several evaluations systems and agencies that work with various aspects and actors of higher education institutions (e.g., educational programmes, faculty, and students). While the incorporation of these evaluation and accreditation practices has been a major development in the manner by which public higher education institutions are coordinated, and several important positive consequences have emerged from it, the incorporation of such schemes is still in its initial phases (Brunner et al. 2006; Mendoza Rojas 2002). However, the emphasis put on measurement has also had undesirable collateral effects, as aspects central to higher education institutions have been left out because they are not easily measurable or are not considered in the evaluation schemes implemented by the financing agencies.

Fourth and finally, the governance of Mexican higher education institutions used to have, before the mid-1980s, important participation of unions and faculty bodies, as well as of student organisations. Since then, and associated with the use of the budget as a steering instrument, there has been an increased influence on decision making by the managerial levels. At the same time, there has been a decrement in faculty participation in decision-making.

### **3. On the Relevance of Mexican Higher Education**

Initially provided to a small proportion of the population that would assume leadership roles in the professions and in the public sphere, Mexican higher education has grown impressively during the last four and a half decades. Although such growth was initially a response to the political unrest that the 1968 student movement left behind, as well as associated with the provision of legitimate and selective means for social mobility, nowadays there is an increasing consensus, in the state's discourse if not always at the level of its initiatives, that higher education is highly relevant to the country's future. In general, Mexican higher education relevance is currently understood largely in terms of its contribution to the solution of social problems such as employment, job creation and specialised training (work force training), research and development (economic competitiveness), the inclu-

sion of marginalised segments of the population into modernity (promotion of social mobility and equity attainment), and the strengthening of the Mexican democracy. This situation is not exclusive of Mexico, as much the same can be said of other countries, especially those in a developmental stage. In general, higher education has gained recognition for its potential contribution to society at large and, therefore, it is expected to increase its relevance in the near future.

In Mexico as in other countries, an increased expectation of relevance for higher education has been driven by a complex set of internal and external factors. We next discuss briefly the most salient drivers, of which the first three are common to many countries, while the last four are somehow more characteristic of Mexico.

First, the increasing centrality of knowledge to a nation's economic activity and competitiveness. As commented widely, knowledge is a key element in increasing economic productivity and the possibilities that a product or service will be able to compete, survive and thrive in the current markets. In this sense, countries are advancing various strategies to increase higher education enrolment rate, focus on areas closely related to the productive sectors, and promote and stimulate scientific research and technology developments closely associated with the economic activity. In addition to its contribution to a country's economic sphere, knowledge is also central for a society in the process of becoming an integrated set of knowledge societies (UNESCO 2005).

Second, an ever-present globalisation process by which goods, services and funds travel rapidly all over the world and with less and less barriers. In such a situation higher education institutions acknowledge that their programmes are to "produce" graduates capable not only to serve local needs and demands, but also be sensitive to international calls for work pertinent to them. So, for a country to have a competitive higher education system it must take into account international standards of quality and performance. Although there are serious concerns about the influence of international tendencies over the local relevance of higher education, there is no doubt that some Mexican higher education institutions, both public and private, are taking important steps along this line of development. For countries not among the most developed ones the situation represents the dilemma of how to be local, national and global at the same time or *glonacal* (Marginson and Rhoades 2002).

Third, the displacement of a socially-oriented state by one dominated by a market perspective in which competition for scarce resources is now the norm. The people's well-being has shifted from being a state responsibility to constitute a consequence of individual performance in a world dominated by market forces. Under these new conditions people have to compete in the job market so they can earn a living, and such competition has become increasingly dependent upon individuals who are able to provide evidence of their competences or, at least, of their potential for learning. Higher education credentials are therefore increasingly

being asked as a prerequisite for being considered for a job in the formal sector and, beyond such an economic function, for being included into the dynamics of a modern and global world (Tedesco 2000). Under these conditions the emergence of non-traditional providers of higher education services represent a growing competition for traditional higher education institutions.

Fourth and more closely related to the situation of Mexico, there is an inequitable situation of the country in key aspects of its life, such as income, culture, education, and significant participation in public decision making. While providing access and promoting success in higher education, specially for people in underserved groups, will not eliminate by itself the above asymmetries, it is expected that allowing for more people to attend higher education will facilitate their full involvement into the economic, social and political life of the country.<sup>2</sup>

Fifth, a general perception that education, and higher education in particular, is key to social mobility and inclusion. While the groups placed at the top of the economic, social and political pyramids have since years ago acknowledged the value of higher education in this regard such expectation has extended itself and has been assumed by larger proportions of the population, including, quite significantly, those citizens with very low income.

Sixth, a general perception that public higher education relevance and quality have decreased, particularly after the very intense expansion period of the 1970s. Being largely public before the 1980s, higher education functioning was negatively impacted by the growth of the sector and by the early 1980s economic crisis. So, after 1980 public higher education quality was seen (until very recently) as low in comparison with pre-1980s levels and so a door was open for the private sector to improve its image and standing. Under these circumstances private higher education institutions attracted considerable more students. A dramatic reduction of state funding, the consequences of an indiscriminated growth policy (e.g., in faculty profiles and student learning) and the lack of jobs for higher education graduates, all contributed to a widespread perception that the quality and social relevance of public Mexican higher education dropped significantly.

Seventh, the increasing perception that the country viability requires a significant change in the structure of its economic activity, which in turn requires improving the educational profile of its population. Mexican economy has been supported during the last decade mainly by oil, remittances from Mexicans immigrants working in the United States, tourism, and by the assembly and manufacturing industry. In an effort to attract more foreign investment, the idea has been spread that, whatever the case may be, revenues depend in an important degree on the qualification level of the work force. Research and technology development have also been identified as critical for national economic development, but financial and human resources are scarce. In addition, Mexican democracy requires a much more active, participatory and critical citizenship, and some observers have

highlighted the potential role that higher education could play in promoting such development among their students, personnel and the public in general.

So, it is now common place to accept that Mexican higher education has to train professionals and help form citizens; provide continuing education courses to professionals in service; provide its surrounding community with cultural offerings, perform research, technology and, in general, contribute to the economic and social development of its context. All of these responsibilities, on the other hand, are to be assumed in a changing environment where there are new financing schemes dictated by the state, a tighter evaluation and accountability set of regulations, more diverse institutions and students, a stronger managerial segment within higher education institutions and, very importantly, working with a faculty that is still characterised by its limited professional profile. Indeed quite a demanding set of tasks in the context of a not so impressive set of working conditions.

#### **4. Main Challenges Facing the Mexican Academic Profession**

As a central actor of a national effort to increase and improve higher education services, Mexican faculty have gone through a major change process during the last four and a half decades (Gil-Antón et al. 1994). As a central characteristic of the professional level with which they first enter the academic profession one can observe the degree with which full-time are hired. According to data collected in a national survey carried out around 2001-2002, before 1970 2.0 per cent of faculty hired into a full-time position held a doctorate degree; from 1970 to 1984 that figure dropped to 1.0 per cent; in the period 1985-1990 the corresponding figure was 2.5 per cent; in 1991-1996 the figure was 6.7 per cent, and in 1997-2001 the figure had reached 11.8 per cent (Grediaga-Kuri, Rodríguez-Jiménez, and Padilla-González 2004). Although the proportion of all full-time faculty that hold a doctorate degree was in 2004 considerably larger, around 19.0 per cent in the public state universities (Urbano-Vidales, Aguilar-Sahagún, and Rubio-Oca 2004), the previous figures speak still, of a weak offering of highly trained professionals aspiring to enter into the academic profession.

In the face of a higher education system that has been growing at the rates mentioned above and, at the same time, under strong pressures to improve the quality of their work, Mexican faculty as a whole (with certain important exceptions) are now expected to perform a larger set of activities: teaching, research, participation in the institution's collegial life, administrative work, participation in technology development, counselling and taking a central role in service activities, both to the productive and social sectors. The adding up of all these responsibilities have not come without stress (Aguirre-Lora 1988) and some discussion regarding the potential conflicting nature of some of these activities (Garriz-Ruiz 1997). Looking at all these changes in faculty work, Gil-Antón (2000b) has questioned whether Mexican academics have participated in them as actors or objects.



Moreover, the context in which the above tasks are to be performed have also changed. Among its main characteristics are the following: more students to attend, internal and external to the institution performance-based economic incentives, professional development programmes stressing the attainment of formal degrees rather than competences for their actual work, in many instances less than ideal working conditions (office spaces, communication facilities, base salaries, etc.), a highly rigid and segmented academic job market and a career structure that is not well defined.

So, the Mexican academic profession has come to a situation characterised, on the one hand, by stronger expectations of relevance and, on the other, by a set of conditions that make it very difficult to fulfil those expectations. As in many areas of public policy, the alternatives to the tensions implicit in this situation are not simple, and their pertinence is not always evident in the short run. It is contended here that for Mexican faculty to be in a position to answer more meaningfully to the expectations of relevance on their work, the following four main challenges need to be confronted.

In the first place, Mexican faculty need to continue their specialised training beyond the point of the attainment of a formal higher degree than the vast majority holds at this moment. In this regard two main issues need to be confronted. One, faculty training and professional development need to be re-conceptualised. Some programmes such as PROMEP (Programme for the Improvement of the Professoriate, as for its name in Spanish) and the internal merit-pay systems that public higher education institutions have in place, have promoted an atmosphere in which the goal, both institutionally and at the individual level, is to obtain a higher degree in the fastest possible way, and without necessarily much respect for traditional academic values (Gil-Antón 2000a).<sup>3</sup> Of course, this is not a generalised situation, but informal evidence suggests that some research needs be done in this respect to complement the quite positive data provided by the Undersecretariat of Higher Education in this respect (Urbano-Vidales, Aguilar-Sahagún, and Rubio-Oca 2006). In contrast to such approach, higher education institutions need to create the conditions for their academics to hold a degree level appropriate to the mission of the institution in which they work, the disciplinary area where they are located, and the particular tasks they perform. More importantly even, once the faculty had attained whatever degree is pertinent under the above considerations, higher education institutions need to keep in place strong, meaningful and effective faculty-support systems, including professional development opportunities that consider faculty in the context of the institution, their profession and themselves as persons (Wheeler and Schuster 1990). Without doubt, given that by 2005 about 58 per cent of all faculty held as their highest degree a licensure (Brunner et al. 2006), many of them need to work towards a higher degree, but such work needs to be carefully coordinated if it is to contribute substantively both to the individual academic and his institutional work. Being aware of figures as the one

just mentioned can also help understand why Mexican faculty are still very local and little international in scope.

Two, the professionalisation process requires a clarification of the roles, responsibilities and particular tasks that academics are to perform in the higher education institutions where they work. A most evident implication of the above statement is that higher education institutions need, instead of the 27.7 per cent reported for 2005, more full-time faculty to be able to provide all the services that are expected from them (Brunner et al. 2006). On the other hand, it is our impression that public and institutional policies and practices are, through a diversity of means, pressing for academics to perform, regardless of the academic setting in which they work, the discipline that they cultivate and the mission of their institution, under an ideal model of teaching-research-service, which we know that doesn't hold for the vast majority of individual faculty members, including those working in the most developed countries (Fairweather 1997). Additionally and in the context of scarce resources, there has been a tendency for the administration to assign faculty tasks that would (should) normally be performed by other professionals or, at the least with the support of other professionals. Such is the case, for example, with extra-academic student mentoring (Galaz-Fontes, Duarte-Godoy, and Martínez-Stack 2006) and non-academic fund raising. Another issue regarding the challenge of the continuing professionalisation of the Mexican academic profession is that as such it doesn't appear to hold a high level of professional autonomy in the sense that the selection, promotion and permanence of colleagues are to a great extent perceived and dependant upon other institutional actors (Galaz-Fontes and Vilorio-Hernández 2004). Finally, while faculty positions in public institutions come with a good deal of stability, such is not generally the case in the private sector, a situation that doesn't facilitate assuming a professional role at such workplaces.

A very important second challenge for the Mexican academic profession is that it needs better and more homogeneous working conditions. A particular pressing situation is that of faculty's income and the way its sources are structured. In the case of full-time faculty working in the public sector the current situation is such that there are three main sources of income, all of which are important in order for the faculty to maintain an adequate income level. The three income sources are those of the institution's salary, the institution internal merit pay system and, for those doing research, an external merit-pay system associated with such activity. While merit-pay systems are not something strange to academic work, the problematic issue in the Mexican case is that the salary base is, in many cases, the smallest portion of the income of an academic, reaching down up to 30 per cent for those in the highest levels of the merit-pay structures (Brunner et al. 2006). Under such circumstances, where the incentive component of faculty's compensation has transformed itself into an indispensable part of their normal income, it has been observed how faculty's actual work becomes more responsive to short-term

and criteria external to the institution, rather than to their local work setting (Suárez-Zozaya and Muñoz-García 2004).

There are other academic working conditions that need to be attended for faculty work to be as productive as it can be. Infrastructure, classrooms, laboratories, equipment, and office spaces are among the most evident, specially now that there has been a great effort in bringing into higher education institutions more students. Additionally, faculty work needs to be clarified and accepted that in some institutions there should be other professionals to support the educational experience of students (counsellors, learning centres professionals, research grant specialists, etc.). Another working condition that needs to be improved is faculty evaluation. Faculty need to be confronted with the impact of their work and with alternatives of how to improve it, and these tasks are a central component of evaluation systems, which need to go beyond being a facilitator for an academic to improve its income.

A third major challenge that the Mexican academic profession faces is the structuring of an academic career. Until very recently the recruitment, entrance, promotion, permanence, and retirement of academics in Mexican higher education institutions has been the result of very specific conditions like the need to attend more students and even political considerations. Such conditions have not been necessarily associated with substantive academic criteria and sound evaluation considerations. In public institutions there are rules in place since some time ago, but the actual dynamics of the academic career is still driven by factors going beyond the merit logic that lies at the bottom line of what is usually thought of as an academic career. Moreover, in the context of federal programmes targeted at improving faculty's credentials and profiles, fulfilling formal requirements (e.g., having a graduate degree) have transformed, from being *an* element in a larger evaluation context, into *the* main evaluation criterion.

The weakness of a clearly defined academic career under the ruling of institutional norms has been intensified by the way in which the academics' income is structured to the extent that internal institutional rules are usually overridden by the way pecuniary benefits are distributed. In particular, the way merit-pay systems work have diminished the possibility for local collegiality, something essential of a true professional body of academics. Additionally, usually merit-pay systems are not able to take into account the various missions that different institutions (and academic units within institutions) might have and, consequently, the diverse roles of the academics that work in them. While income is without doubt an important component of an academic career, it is counter-productive in the long run if it becomes its principal driver.

A particular situation that the Mexican academic profession needs to consider currently is the retirement, during the following ten to twenty years, of all those faculty that were hired during the 1970 higher education growth period. Nowadays, there are no attractive conditions for retirement and, therefore, many aca-

demics will delay their retirement as much as possible, which is something that will most probably complicate the replacement process. Unfortunately, few institutions have analyzed recently the structure of their academic career (Gil-Antón et al. 2005).

Finally, if we see higher education institutions as demanding professionals to perform a particular set of scholarly tasks relevant to their particular missions, and academics as the supply of those professionals, it is obvious why several scholars of the academic profession have proposed as one lens for its study the use of the market concept (Ordorika 2004). Under this perspective the study of the academic labour market helps us to identify factors and dynamics that can help explain and improve the conditions of the academic profession. We have previously discussed income in the context of working conditions, so we will not touch again this topic, although it is a most important element that should be kept in mind when analyzing the academic labour market.

In the case of Mexico the current academic labour market is clearly divided into two types; the public and the private which, in turn, are segmented by type of contract: full- versus part-time. The part-time faculty market is largely determined locally by higher education institutions and it responds to the demand and supply of local professionals to attend, the majority of occasions, teaching activities, although it is not uncommon to have part-time academics that, by virtue of several part-time contracts, are in fact “full-time” faculty. While part-time faculty are not usually involved in their institutions beyond the teaching that they do, some of them might also be involved in the management of academic programmes.

Although part-time faculty are not expected to have strong academic profile, but rather professional expertise, the demands for more or less qualifications are associated with the prestige of the institution which is to hire them. So, while high-prestige universities, whether public or private, demand some graduate degree even of their part-time faculty, low-prestige institutions (demand-absorbing) welcome “professionals” working in the field, irrespective of their credentials.

While the nature of the contracts of part-time faculty makes their market multi-institutional, the full-time faculty market is limited to a much smaller set of institutions. In the case of the public sector the availability of full-time positions responds not only to local conditions, but also to considerations taken at the federal Undersecretariat of Higher Education, where such positions in public higher education institutions are finally approved and financed. In contrast, in the private sector full-time positions are largely associated with certain institutions offering the more traditional set of services associated with a higher education institutions, including in some instances research. In any case, up to now inter-institutional mobility is very limited, as there are no conditions for an academic to follow its career continuously if he moves from one institution to another, which means that for all practical purposes there is no academic job market at the national level. Additionally, hiring and salary practices and structures are usually so rigid that

academics not from the locality have little incentives to move away from the institution in which they started their academic career.

## **5. Final Comments**

It is clear that Mexican higher education, as that of many countries, is expected to increase its relevance for the country. The issue at stake is crucial, as the viability of the state to provide for its citizens is what is at risk here. In such circumstance the faculty plays a central role and they are expected, as well, to work in a more pertinent manner. To this, however, we believe that the Mexican academic profession needs to confront the above described challenges and dilemmas. The way in which they are solved will mark, for better or worse, the next generation of academics and, with it, Mexican higher education in the first half of the twenty first century.

## **Notes**

- <sup>1</sup> The Mexican licensure degree is a 4-5 year undergraduate programme that is normally highly professional oriented, as compared to the liberal arts and sciences bachelors' degree in the United States higher education.
- <sup>2</sup> People can be economically active and, however, live in the periphery of society, as the informal sector of economy shows. In the case of México the economic informal sector is very important, as it is reported that by early 2006 28 per cent of the employed population was in it. In general, people in the informal sector have a low economic condition and few years of schooling (Brunner, Santiago, García Guadilla, Gerlach, and Velho 2006).
- <sup>3</sup> The most prestigious private higher education institutions have also adopted the notion that the highest the degree of their faculty the better, although the reasons for this are more related to accreditation and marketing reasons.

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## II

### INTERNATIONALISATION AS A CHALLENGE TO THE ACADEMIC PROFESSION





## **Internationalisation of Higher Education and the Australian Academic Profession**

V. Lynn Meek

### **1. Introduction**

The term ‘international higher education’ is not easily defined. It means many things to different people, and is often confused with globalisation of higher education. According to Altbach (2002, p. 1), “globalisation refers to trends in higher education that have cross-national implications”, such as student markets, internet-based technologies, the global knowledge economy, and massification of higher education, while internationalisation ‘refers to the specific policies and initiatives of countries and individual academic institutions or systems to deal with global trends’, such as international student recruitment. This paper is concerned primarily with international higher education, particularly the international higher education student market, and the role of government policy, rather than globalisation. However, it is recognised that it is impossible to keep the two phenomenon entirely separate.

Green (2002, p. 1) maintains that “international higher education” is an “umbrella term for the various institutional programs and activities that are international in nature, such as student and faculty exchange, study abroad, international development activities, foreign language studies, international studies, area studies, joint-degree programs and comparative studies, among others”. Knight (1999) divides international higher education into four approaches: the activity approach (involving discrete activities along the lines described by Green; the competency approach (which stresses “the development of skills, knowledge, attitudes, and values”); the ethos approach (emphasising “a campus culture that fosters internationalisation”); and the process approach (“the integration of an international dimension into teaching, research and service”). To this list, one could add the business approach (which emphasises the maximisation of profit from international student fees); and the market approach (with its stress on competition, market domination and deregulation). No one approach to international higher education dominates all the others. Even the market approach which has been so strong for a

number of years is now being moderated by quality assurance concerns and a negative popular reaction to economic globalisation.

This paper examines the internationalization of Australian higher education and its impact on the academic profession. Australia is a good example of internationalization driven by the marketisation of higher education. But as the paper argues, benefits of internationalization should go well beyond the profit motive – although the market emphasis has created a number of problems and issues as well.

The paper commences with an overview of the Australian higher education context, followed by changes in the policy environment that has made Australian higher education so financially dependent on the international higher education student market. This is followed by a profile of the extent of Australia's involvement in international higher education. The paper concludes with a discussion of the strengths and weaknesses of internationalization, particularly in relation to its impact on the academic profession.

## **2. The Australian Higher Education Context**

Australia is a constitutional democracy consisting of a federation of six states and two territories. In the Australian federal systems, the powers of the Commonwealth are limited to areas deemed to be of national importance. As discussed in more detail below, just how far those areas extend is presently the subject of considerable debate.

Whereas in terms of landmass Australia is the sixth largest country in the world – approximately the same size as the Continental United States – it has a population only slightly larger than the Netherlands. Most of the nation's population of some 20 million people (0.3 per cent of world population) is highly urbanised. The Annual population growth rate is 1.2 per cent. It is an aging population, with 20.8 per cent in aged bracket 0-14 years, 16.6 per cent 15-24 years, 53.1 per cent 25-64 years, and 12.5 per cent of the population 65 years or older. Nearly 22 per cent of the population is foreign born or of foreign nationality (Australian Bureau of Statistics, various publications 2001-2006). The average Australian lives in an urbanised setting, is of working age, born in Australia, unlikely to immigrate, English speaking, Caucasian and Christian.

In recent years the growth rate of the Australian economy has exceeded that of most other OECD countries, while maintaining low inflation and high employment. In 2006, unemployment was approximately 5 per cent of the workforce. In terms of average weekly earnings, holding a degree or diploma is an advantage. Australia has relatively high graduate employment with 81 per cent of graduates finding work within four months of their date of graduation. The Australian GDP has steadily increased over the last 15 years, from 485.04 \$b in 1990 to 734.21 \$b in 2003.

Australia's "economy is 1.9 per cent of the Gross Domestic Product (GDP) of the OECD, and accounts for about 1 per cent of world trade" (Department of Education Science and Training (DEST 2003, p. 3). Historically, the nation's wealth was based on primary products – mineral and agricultural. But in recent decades there has been a deliberate attempt by Government and industry to switch the basis of the Australian economy from primary products to knowledge – to create what one Prime Minister termed in the 1980s as the Clever Country. While in the early 1970s, about 21 per cent of Australia's GDP was based on manufacturing and 5.4 per cent on agriculture, presently those figures are 12 per cent and 3.6 per cent respectively. As the Chief Economist of one of the country's largest banks put it: "Australia's economic growth will increasingly be linked to the mortarboard not the sheep's back ..." (Doherty 2004, p. 3). Much of Australia's wealth still comes from minerals and in recent years, Australia has enjoyed strong economic growth based largely on mineral exports, particularly to countries such as China and Japan. However, the mining industry itself, like other sectors of the economy, is more knowledge dependent and research based than in the past.

Since 1997 Australia has been a net exporter of education. Table 1 lists Australia's main exports, of which education services is ranked ninth.

Australia has a well-developed but comparatively small science base, with the majority of its R&D effort concentrated in the public sector. Taking into account the size of the nation, Australia's contribution to world science is impressive, particularly with respect to medical and health disciplines and biological sciences and astronomy. Australia's scientific output has steadily increased:

- in 2004, Australia accounted for 2.89 per cent of world research (DEST 2006b, p. 27);
- it ranked ninth out of 21 countries behind Canada, France, Germany, Italy, Japan, Spain, the United Kingdom (UK) and the United States of America (USA) in the total number of research publications and ahead of countries such as Korea, the Netherlands, Sweden and Switzerland (Department of Education Science and Training 2003, p. 6);
- it ranked eighth out of 21 countries in the number of research publications on a *per capita* basis, ahead of Canada, France, Germany, Japan and the USA and behind Denmark, Finland, Israel, Netherlands Switzerland and the UK (Department of Education Science and Training 2003, p. 6).

**Table 1: Australian Major Exports of Goods and Services, 2002-03 and 2003-04**

<b>Major categories of Goods and Services</b>	<b>2002-03</b> (\$m)	<b>2003-04</b> (\$m)
Crude materials, inedible, except fuels	21,466	20,739
Mineral fuels, lubricants and related materials	23,803	20,381
Food and live animals	18,399	18,158
Commodities and transactions not classified elsewhere (in the SITC)	13,117	13,700
Machinery and transport equipment	13,530	11,923
Manufactured goods classified chiefly by material	12,605	11,339
Tourism	9,434	10,212
Transportation services	7,467	7,564
<b>Education services</b>	<b>4,896</b>	<b>5,622</b>
Chemicals and related products	5,093	5,288
Miscellaneous manufactured articles	4,413	4,267
Other business services	3,704	3,592
Miscellaneous business, professional & technical	3,170	2,985
Beverages and tobacco	2,725	2,694
Gross inward insurance premiums receivable	1,645	1,678
Computer and information services	1,091	1,128
Financial services	984	1,004

Source: Australian Vice-Chancellors' Committee (2005; p. 12).

Over the last decade or so, Australia's investment in knowledge (defined by the OECD as including R&D, education and training, and software) as a percentage of GDP has varied from a low of 3.7 per cent in 1993 to a high of 4.12 per cent in 2002 (Australian Research Council 2006, p. 9). This places Australia amongst the top 50 per cent of OECD countries, but below the OECD average of 5.2 per cent. In the last three decades, total expenditure on R&D has quadrupled, from \$3.1 billion in 1976-77 to \$12.2 billion in 2002-3, with an average growth rate of 5.2 per cent (Shanks and Zheng 2006, p. 28).

### *The Higher Education Sector*

An exceptional feature of the Australian higher education sector is that the states have legislative control of higher education institutions, whilst financial responsibility rests with the Commonwealth. Appropriate and politically acceptable roles for both State and Federal governments in the funding and coordination of Australian higher education have challenged policy makers for several decades. Historically and constitutionally, all forms of education in Australia have been primarily a matter for the States. But in the years following the second world war, there has been substantial and increasing Federal intervention in higher education. In 1974 the Whitlam Labor government assumed responsibility for providing all regular recurrent and capital funds for universities and colleges of advanced education and abolished tuition fees in universities and colleges. These decisions significantly changed the Australian higher education landscape and ensured that the Federal government would dominate planning and funding of this sector (Meek et al. 2003).

Yet the States retain many responsibilities for higher education, including legislative control, ownership of land and capital assets, controls on the use of terms such as 'university' and 'degree', and statutory requirements relating to industrial matters and the governance of individual institutions. The decision for the Commonwealth to assume nearly full responsibility for the public funding of higher education did not go entirely uncontested at the time. Also, the States have responded differently to this Federal Government intervention. Some States, for example, have maintained a higher degree of financial commitment to higher education than other States, coupled with a more prominent leadership role.

In 2005 and 2006 successive federal education ministers have called for the Commonwealth to assume full legislative as well as financial control of higher education. This has been motivated, in part, by the desire of the federal government to introduce more fee-for-service private higher education providers, both domestic and foreign. In July 2006, the Minister announced under the banner of enhancing diversity that she had achieved agreement with her State and Territory counter parts to "provide greater choice for students to study at a variety of high quality higher education institutions". As indicated by the Minister, the new set of *National Protocols for Higher Education Approval Processes* "will allow ... higher education providers to accredit their own courses, bypassing costly and time consuming reaccreditation processes run by State Governments". Up to now, only universities could accredit their own courses. The agreement also included "specialist institutions having access to a university title" and the reduction of "research and higher degree teaching requirements for new universities in their first five years of establishment" (Bishop 2006, online). This decision has the potential of transforming the Australian higher education landscape more than any

other decision in the last decade. But Australia is no stranger to higher education reform.

As of 2006, the nation's higher education sector consists of 37 public universities, some of which are quite large with enrolments in excess of 45,000 students, two small private universities and a number of small specialist institutions both public and private. In 2005 an Australian branch of a USA university was established in Adelaide (Carnegie-Melon). Up to mid-2006 there were more than 150 non self-accrediting higher education providers registered by the States and Territories. In 2005, Australia had nearly one million students enrolled in higher education courses, about one-quarter of whom were overseas students. Up to now, the defining characteristics of an Australian university strongly endorse the principles of unity of teaching and research and a broad, comprehensive curriculum. But that may change and possibly adversely impact the structure and character of the Australian academic profession in the future.

#### *Policy and Funding Shifts*

From the beginning of the 1990s, Australia has experienced dramatic change in government policy and funding. In summary, the initial reforms involved:

- shift in cost from the state to the individual through the introduction of domestic tuition fees in the form of the Higher Education Contribution Scheme (HECS);
- enhanced national and international competition for students and research income;
- greater emphasis on accountability for the government dollar couple with performance based funding;
- an increased reliance on income gained from sources other than the Commonwealth government;
- increased emphasis on efficiency of resource utilization;
- increased emphasis on demonstrable contribution to the economy of the nation; and
- strengthening of institutional management.

The consequences of these initial reforms have continued to play themselves out to the present day. But the above list of reforms and funding imperatives have been added to by subsequent governments. In particular:

- a real decline in government funding;
- increases in domestic tuition fees;
- introduction of domestic full-fee paying undergraduates;
- capping of the number of undergraduate student places; and
- tighter rules on access to student financial assistance.

The current Australian government has been reluctant to significantly increase investment in higher education, and Australia is one of few OECD nations where government funding to higher education in real terms has declined over the last decade.

In most all OECD countries, while private expenditure on higher education has risen more rapidly than public expenditure, public expenditure has expanded as well. Australia appears to be the exception. Funding of Australian higher education increased during the period 1995-2000 with respect to all sources of revenue (see Table 2). However, direct public funding from the Commonwealth Government declined by 11 per cent in real terms. And, while total funding increased by 12.5 per cent in real terms, total student load increased by 21 per cent (Phillips et al. 2002, p. 28).

**Table 2: University Revenue in Australia by Source 1995-2000 (in billion AU\$B)\***

	1995	1996	1997	1998	1999	2000	% change
Commonwealth	4.7	4.9	4.7	4.6	4.4	4.2	-11.0
HECS	1.0	1.0	1.3	1.5	1.7	1.7	68.9
Fees	1.0	1.2	1.3	1.4	1.6	1.7	75.3
State	0.1	0.1	0.1	0.1	0.1	0.1	25.8
Other	1.5	1.5	1.4	1.3	1.3	1.6	7.9
Total	8.3	8.6	8.8	9.0	9.1	9.3	12.5

\*Adjusted by CPI to 2000 terms.

Source: Phillips et al. (2002, p. 26).

With the beginning of the new millennium, the Australian government committed substantially more funding to research and development in higher education. But contrary to government assertions, it has been argued that this money, rather than being new additional money to the sector, only partially compensated for previous falls in public funding – which began with a 5 per cent cut to the higher education budget when the government first came to power in 1996. Moreover, since much of the financial commitments have been projected over a period of about a decade, it takes considerable time for their effects to become apparent. In 2003/4, the government again increased funding through creating additional student places and other means. But the long-term impact is not clear. This is an area deserving of much more research, based on reliable empirical data. What data that is currently available, indicates the continued decline of public funding in real terms of Australian higher education up to the year 2003. Commenting on changes in the pro-

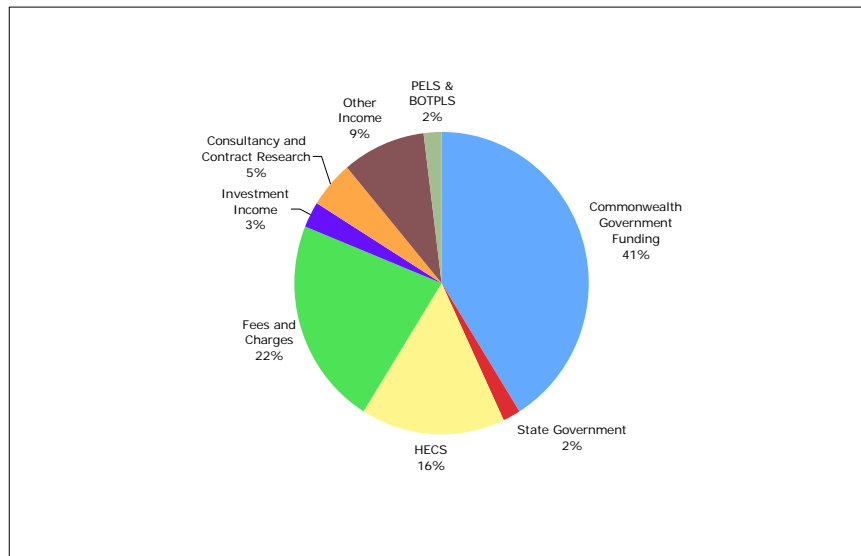


portion of public and private expenditure on higher education the OECD's (2006, p. 217) *Education at a Glance* writes that:

“It is notable that rises in private educational expenditure have not generally gone hand in hand with cuts (in real terms) in public expenditure on education at the tertiary level or at the primary, secondary and post-secondary non-tertiary level. On the contrary, public investment in education has increased in most of the OECD countries for which 1995 to 2003 data are available, regardless of changes in private spending .... Increasing private spending on tertiary education tends to complement, rather than replace, public investment. *The main exception to this is Australia, where the shift towards private expenditure at tertiary level has been accompanied ... by a fall in the level of public expenditure in real terms ....* (emphasis provided).“

The Australian government says itself that it no longer funds, but subsidises higher education. About 40 per cent of the revenue for higher education comes direct from the Commonwealth (see Figure 1).

**Figure 1: Higher Education Institution Operating Revenue in Australia by Source, 2003**



Source: DEST 2005, p. 16.

### 3. Profile of Australia's International Higher Education Student Market

The current state of affairs of Australian higher education is the product of nearly three decades of government policy reform aimed at increasing the efficiency and

effectiveness of the sector, based largely on notions of market competition, user-pays and funding differentiation. This is certainly true of internationalisation and the recruitment of full-fee paying overseas students.

In mid-1980s, there were only a few thousand overseas students studying in Australia. Up to that time, the education of overseas students was seen mainly as a form of foreign aid. Students were subsidised by government aid programs and fees were not paid directly to institutions. But the 1987 Green Paper on higher education (*Higher Education: a policy discussion paper*) foreshadowed a more market oriented approach to foreign students by stating that 'full-fee paying overseas students provide another important source of potential revenue growth' (p. 83) - quite an understatement as it turned out. The overseas student target group would mostly be from South East Asia, although in recent years the recruitment base has marginally expanded.

In 1988, the government recognised that 'the subsidised overseas student program was no longer satisfactorily meeting its aid, education or economic objectives' (DEET 1991: 380). From the beginning of 1990, all foreign students would enter Australian universities on a full cost basis, and government deregulated the overseas student market by allowing individual institutions to directly recruit overseas students and to set and retain fees with no corresponding reduction in government operating grants. The change in policy was justified in the following terms:

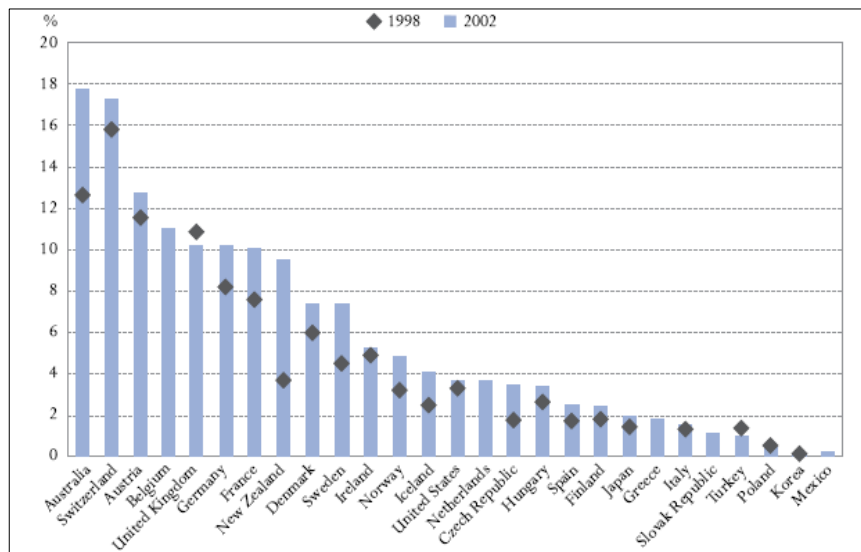
"In the light of significant external economic changes and changes in the policy and administrative environment, Australia could no longer see itself so much as a donor of education and training services to developing countries, a benefactor, but more as a partner where mutual benefits for individuals and countries is the desired outcome (DEET 1991, p. 380)."

The deregulation of the foreign student market created an environment of fierce competition amongst institutions for the overseas student dollar. Nearly all institutions regularly send representatives on student recruitment drives throughout South East Asia, and some institutions have established overseas campuses, such as in Malaysia, Singapore and South Africa.

By 2004, over 228 000 foreign students, about one-quarter of all students, were studying in Australia and contributing billions of dollars to the national economy, making the education of overseas students one of the country's largest export earners (see above 2). Here is an example of how enhanced competition in a deregulated higher education environment appears to produce the desired outcome.

In terms of the distribution of foreign students by country of study, Australia is about the third highest behind the United States, the United Kingdom and Germany. But in terms of the proportion of students who are international in each country, Australia leads the world (see Figure 3).

**Figure 3: International Students as a Proportion of All Student Enrolments by Country**

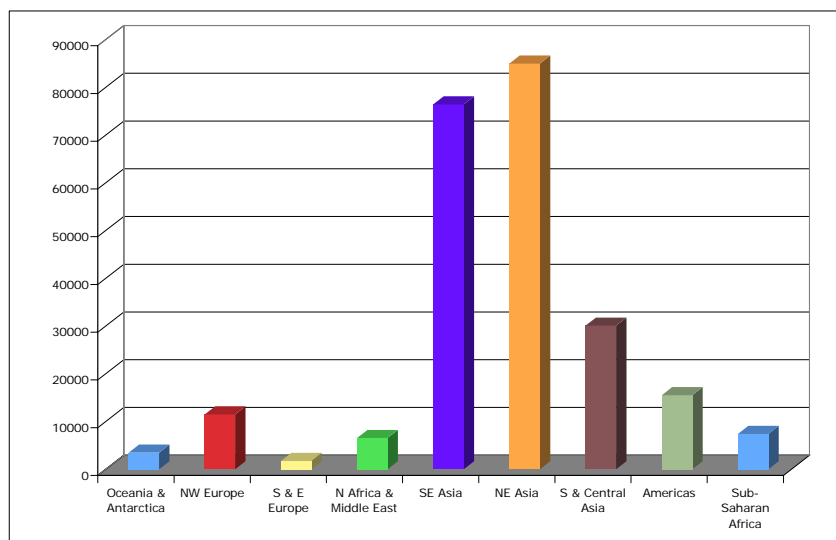


Source: OECD 2004; p. 293.

As mentioned above, the greatest proportion of international students come from South East Asia, North East Asia and South and Central Asia. This is clearly depicted in figure 4.

The most rapidly expanding area of international student recruitment has been with respect to off-shore programs. The number of off-shore programs rose from virtually zero in 1990 to nearly 1600 by 2003. There are a number of different types of off-shore delivery modes, as summarized below:

- *Twinning* Students study for a period of time offshore and then at the onshore campus of an Australian university.
- *Mixed mode* A local offshore institution delivers an Australian university program with course delivery through intensive residential schools and distance education.
- *Offshore campuses* An Australian university establishes a campus of the institution offshore.
- *Online programs* Programs are delivered through the internet by Australian onshore staff.

**Figure 4: Origin of International Students in Australia, 2003**

Source: DEST 2006a, online.

In June 2006 there were 144,733 full-time equivalent full-fee international student enrolments in Australian higher education, representing a 4.9 per cent growth on 2005 numbers. About 41 per cent of these students were enrolled in Business Administration and Management and a further 9 per cent in computer Science and Information Systems. Presently, international student fees contribute about 15 per cent to the total annual higher education budget.

#### 4. Discussion and Impact on the Academic Profession

In their submission to a recent Higher Education Review, the Group of Eight universities (2002, p. 13), representing the older, more research intensive institutions, stressed that ‘the development of new transport and communications technologies and the growth of global industry both enable and require universities to operate internationally as well as nationally and regionally’. The submission went on to state that:

“It is essential for Australia that this country’s universities are able to participate as effective, highly regarded players in the international education and research architecture that underpins the new global knowledge economy. Our best universities have established a well-justified international reputation for the high quality of their courses and graduates. They are significant players in international education in world terms. Simi-

larly, our leading universities have established a significant international reputation for high quality research (p. 14).”

The Group of Eight identified a number of benefits of international higher education:

- Australian citizens who participate in a range of student and academic exchange programs increase their understanding of other cultures and broaden their scholarship.
- Australian students and the broader Australian community benefit socially and culturally from the presence of overseas students in this country.
- Collaboration with international colleagues enhances the capacity of Australian academics to produce high quality research.
- Education is the key to social and economic development of all nations.
- The most frequently cited benefit of the internationalisation of Australian higher education is the export income generated by overseas students studying at Australian universities in Australia and abroad.

These benefits are of considerable importance. But international higher education is not without its problems either. With the rapid increase of international higher education, both in Australia and elsewhere, have come questions of the maintenance of a desirable level of quality. Also, clearly, some nations benefit much more than others from international higher education, fuelling tensions between the richer and poorer countries in the region. It is the academic profession that makes international higher education possible, and it is academics that must bear the brunt of the problems created by increasing internationalization. Nonetheless, international students themselves too have expressed concerns.

In Australia, the decline in funding per student place in the context of overall dramatic increase in student number over the past decade has been linked to issues of decline in quality. A similar link is made with respect to international students as well. The National Liaison Committee for International Students in Australia (NLC) has argued that:

“there is a perception that international students have been recruited for revenue raising purposes to offset cuts in Commonwealth funding for higher education. The increase has been of great concern due to no prior planning for expanded capacity to accommodate these international students. Amongst others, concerns include international student fees, student class sizes and student-staff ratios; decrease in student contact with staff; and difficulty in finding accommodation on & off campus (NLC 2002, p. 2).”

Some Australian universities with large numbers of international students have capped the proportion of the student body they will permit to be international. Other universities, however, are largely dependent on international students for their survival.

The deregulation of international student fees appears to have been a great success in Australia. But there is a danger, as the NCL notes, if the perception builds

overseas that international students are subsidising Australian higher education and getting little in return, it will eventually reduce enrolments. The NLC (2002, p. 8) maintains that 'educational institutions should ensure that revenue from international student fees directly fund the cost of education and related overheads before being channelled into other areas. The current perception that revenue from international student fees do not directly fund the cost of their education has resulted in dissatisfied students and a disgruntled community ...'.

The NLC is not only concerned whether the higher education sector can bear the dramatically increased numbers of international students coming to Australian, but also is worried about the quality of off-shore initiatives:

"... international students who are enrolled in institution programs through offshore schools have become a worry in being able to maintain the quality and reputation of Australian education. This is because these students are often enrolled in the courses using different assessment standards and criteria from their onshore counterparts. Further, there have been discrepancies in teaching standards, quality of education and support services in these offshore campuses as compared to onshore campuses. This causes an inequality in student standards and subsequently a difference in preparation for the work environment upon graduation. Given that offshore campuses are beyond the legislative control of the Commonwealth government, it is imperative that Australian institutions be constantly reminded of these issues when they are forming educational alliances or creating campuses. The Australian University Quality Audit Committee, in including an audit on offshore activities of the institutions, shows its concern in the effects of these activities on the higher education industry (NLC 2002, p. 4)."

There have been a number of policy measures relating to the internationalization of higher education that directly affect how academics go about their business. Many of these measures have been motivated by government to protect the multi-billion dollar international student industry, precipitating a compliance culture throughout the sector.

The Australian University's Quality Agency has become more rigorous in its audits of off-shore programs. Here the emphasis has shifted somewhat from quality improvement to identifying 'bad practices' of individual institutions or programs that might threaten the image of the entire sector across the region. The Education Services for Overseas Students (ESOS) Act is legally binding, covering a number of activities relating to teaching international students:

- Marketing and student information
- Student recruitment
- Student records - attendance
- Educational resources and facilities
- Written agreements for refunds
- Student support services

The Australian Vice-Chancellors' Committee has developed a *Code of Practice for the Provision of Education to International Students*. There is a Common-

wealth Register of Institutions and Courses for Overseas Students (CRICOS). Each course offered to overseas students must be on the CRICOS registrar.

This increasingly complex and onerous regulatory environment protecting the international student market makes life more difficult for academics in a number of ways. The National Tertiary Education Union in a 2004 study of its members identified a number of problems. There is often a disjuncture between regulatory mechanisms as prescribed in university policies and actual practices. Related to this is the lack of formal processes for dealing with staff concerns about quality. Universities may engage in inadequate and inaccurate costing of the financial returns resulting from international initiatives, coupled with unrealistic projection of enrolments. This may leave academic staff under resourced to teach international students, particularly off-shore. There have been allocations of 'soft marking' and decline in standards, coupled with concerns about English language proficiency. But much of this evidence is anecdotal.

The NTEU study also found that university practices for staff involved in off-shore teaching is largely unregulated, raising concerns about health and safety. The desire of cash-starved institutions to raise additional revenue may threaten academic freedom as to what is taught and where. There appears to be increasing tension between academics and management over compliance issues. There are concerns that management takes increasingly large share of the financial rewards from international and off-shore teaching, leaving academics inadequately compensated for their efforts. Finally, and quite clearly, internationalisation has increased the workloads of academic staff.

## **5. Conclusions**

The internationalization of higher education effects the Australian academic profession – profoundly in many respects. The problems alluded to above are serious ones, and will be made more so if the profit motive assumes pride of place in the rationale underpinning international ventures. That said, there are also clear benefits to international higher education. In addition to those listed above, these include the establishment of global research and teaching networks and increased opportunities for international collaboration. The cross-cultural exchanges promoted by international higher education strengthens Australia's multicultural society. There are also social, economic and diplomatic benefits to the nation that are created by the growing global network of Australian international alumni. In balance, the benefits of internationalization far outweigh the problems. However, that balance can easily tip in the opposite direction if an overly bureaucratic, compliance orientated and profit motivated culture comes to dominate the internationalization of Australian higher education.

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## **Challenges of Internationalisation of Higher Education and Changes in the Academic Profession: A Perspective from Japan**

Futao Huang

### **1. Introduction**

This article is mainly concerned with challenges of the internationalisation of higher education and changes in the academic profession in Japan. As for the term 'academic profession', in the Japanese context, it can be interpreted in both a broad sense and a narrow sense. The definition of the academic profession in a broad sense refers to all persons who teach or conduct research, or produce publications based on scholarly research at higher education institutions or research institutes inside or outside colleges or universities. In a narrow sense the academic profession means faculty members who are mainly involved in teaching and research activities at a college or university. This article focuses on discussion of the academic profession in a narrow sense.

Like many other countries, in Japan the academic profession has been affected by various factors and has kept changing since the 19<sup>th</sup> century when the first modern university was established. Especially in the recent years, with several other important factors, internationalisation of higher education has posed significant and direct challenges for the academic profession in Japan at both policy and institutional levels. By identifying the characteristics of internationalisation of higher education and the academic profession in Japan, the article will address two major research questions. First, what are the most important challenges of the internationalisation of higher education for the academic profession in Japan? Second, what changes have taken place in the Japanese academic profession facing these challenges?

The article begins with an introduction to the most distinguishing features of Japanese higher education with a focus on the academic profession. It then gives an overview of the major development of internationalisation of Japanese higher education in the historical perspective. By clarifying several challenges and im-

pacts of the internationalisation of higher education in Japan, the article examines changes being resulted from these challenges especially since the 1980s. The article concludes by arguing that the internationalisation of Japan's higher education has led to new and tremendous changes in the academic profession, but these changes vary significantly according to the different sectors and institutional types. More importantly, the most essential part of Japan's academic profession has not entirely changed.

## **2. Japanese Higher Education and Academic Profession**

There are several striking characteristics of Japanese higher education.

First, the private sector constitutes a large proportion of all institutions. In 2003, the proportion of students in private universities and junior colleges amounted respectively to 79.6 per cent and 88.2 per cent of the totals. Moreover, the number of private institutions at university and junior college levels comprises a similarly big share of the total (MEXT 2004).

Second, the national, public and private sectors, established by different founders, are expected to play different roles and fulfil diverse functions. Except for a very few private universities, the vast majority of private sector institutions are involved in educational activities. Besides, more faculties of humanities and social sciences are established in private higher education institutions. In contrast, in addition to providing students from different backgrounds with general and professional education, the national universities are expected to facilitate the advancement of basic, applied, and large-scale (with substantial funding, often supported by the national budget) scientific research, and undertake more research activities.

Third, higher education institutions conform to a hierarchical structure: in the national sector, the national universities that were established before the World War II and identified as the former Imperial Universities, even now enjoy a higher academic and social prestige than any other institutions.

With regard to the characteristics of the academic profession in Japan, they include the following two aspects.

First, as the modern Japanese universities were developed on the German research-oriented model, this tradition has dominated Japanese universities, especially the national sector, for a long time. According to the results of the International Survey of the Academic Profession, which was conducted by the Carnegie Foundation in 1992, Japanese faculty completed more scholarly publications than faculty in any of the other countries surveyed. Moreover, approximately 75 per cent of Japanese faculty members think that it is important for a faculty member to have a strong record of successful research activity, a proportion much higher than in most of the other countries (Arimoto 1996).

Second, before April 2004, when the national universities became national university corporations, faculty members were civil servants, with an implication that almost all of their missions and activities could be regulated by the central government. In practice, however, at the institutional level professors enjoyed comparatively great academic freedom and autonomy. This is well illustrated by the fact that, even in the national sector, Japanese faculty have had more power in approving new academic programmes, making faculty promotion and tenure decisions, and especially determining the distribution of budgets. These aspects of governance were decentralized in Japan from the start and Japanese faculty have enjoyed even greater autonomy in the governance in their institutions than typical in the UK, Germany, Sweden or the Netherlands, but as incorporation of the national universities was implemented only on 1 April 2004 the biggest change is that professors, including administrators, in all national universities have become non-public servants and are no longer directly subject to government. With reduced autonomous rights or powers at faculty level, the power of the bureaucracy within each university has been far more expanded than that of academic faculty: in particular leadership from the top by the President has become greatly emphasized.

### **3. Internationalisation of Japan's Higher Education and Its Challenges**

There are a vast number of explanations that can be assigned to the term "internationalisation of higher education". This article regards internationalisation of higher education as the process of undertaking various forms of educational, research, or in a broad sense, academic activities between different countries at a tertiary level. It emphasizes two major components. On the one hand, it refers to internationalisation of higher education in home institutions, including internationalisation of the university curriculum and integrating an international dimension into education, research and administration; on the other hand, it denotes cross-border mobility of students, faculty, educational programmes and institutions, including sending students and faculty abroad and accepting foreign students and faculty.

It is widely acknowledged that internationalisation of higher education occurred as early as the 12<sup>th</sup> century when, in Europe, medieval universities emerged. Its development can be divided into several phases. In each phase, internationalisation adopted different forms and its aims varied due to differing contexts or rationales. However, the situation in one country differs greatly from that in another country.

From a historical perspective, internationalisation of Japanese higher education can be split for practical purposes into four major phases. They include a phase of introducing Western academic standards and dispatching Japanese faculty and students to Western countries from the latter part of the 19<sup>th</sup> century to the early

20<sup>th</sup> century; a phase of exporting Japanese academic conventions and values to other countries, especially to many Asian countries from the 1930s to 1945; a phase of adopting American models in almost every aspect of academic and educational activities from 1945 to the latter part of the 1970s; and a phase of facilitating *Kokusaika* (meaning internationalisation in the Japanese language) since the early 1980s.

*The first phase: Westernisation*

As early as the latter part of the 19<sup>th</sup> century, the Meiji government of Japan had made a number of attempts to learn from Western countries, including establishing the first modern Japanese university – the University of Tokyo. But internationalisation in the early Meiji period was mainly concerned with an introduction of Western ideas and practices to Japan. It focused on absorbing Western educational ideas – inviting foreign faculty and introducing university curricula from Western countries – with the purpose of modernizing Japan by importing Western academics for a short period (Ebuchi 1997). In the early Meiji era (1868-1912), the central government dispatched many university students abroad, mostly to the U.S., the UK, France and Germany. At the same time, the government also hired many excellent foreign scholars to work in Japanese national universities and institutions. In 1876 alone, there were 78 foreign faculty members who were involved in professional and language teaching activities, in most cases using foreign languages (MOE 1992). Due to the fact that the internationalisation of higher education in this period was characterized merely by learning from Western countries and adopting Western models, Japan could not establish its own system of training high-quality faculty. By employing foreign faculty in Japanese universities and sending Japanese faculty and students abroad for advanced studies and research, Western academic norms and conventions concerning the academic profession were gradually imported into Japan.

*The second phase: Japanisation (exporting Japanese models)*

Since the early 20<sup>th</sup> century, and especially from the 1930s to the end of World War II, academic activities in Japan were basically dominated by nationalism and militarism. Except for a few limited fields – notably in medicine and engineering – Western academic standards, including English language teaching, were strictly forbidden in Japan. Meanwhile, Japanese educational models and conventions were exported to Korea, Taiwan and some South-Asian countries, which were occupied by Japan. In contrast to the introduction of Western academic standards, mostly European models and adaptation of them as an effective means to realize Japan's modernisation and industrialisation in the previous phase, by denying absolutely all Western knowledge of academic norms and conventions – especially the UK and the U.S. models - the internationalisation of higher education in

this period took as its major form export of Japanese academic values and standards to Asian countries and areas, as one of the measures to colonize these countries and areas. Under rigid regulation and control of central government, academic freedom and institutional autonomy in Japanese universities were greatly violated.

*The third phase: Americanisation*

Since the end of World War II, the American system has affected reforms of Japanese higher education in almost every aspect. Among various reforms of higher education that have been influenced by American models, policies of democratisation and massification exerted a strikingly significant impact on reconstructing post-war Japanese higher education, including the academic profession. With progress of democratisation and massification of higher education, considerable changes took place in the roles and characteristics of the academic profession in Japanese higher education institutions. One of the big changes was the widespread growth of interest in research and establishment of various academic societies: in particular academic faculty became more research-oriented, engaging in both pure research and applied research (Cummings and Amano 1977). In fact, it was not until 1971, when the OECD published a report on Japanese education, that the Japanese government realized the importance of finding its own way to promote internationalisation of education (OECD 1971).

*The fourth phase: Kokusaika (internationalisation)*

The importance of the report by the OECD in 19971 cannot be overstated. In response to the suggestions made in the OECD report, policies concerning internationalisation of higher education since the early 1980s have come to play an increasingly dominant part in major reforms of higher education at national level. Among these was the ambitious plan to host 100,000 overseas students by the year 2000, which was announced by the Ministry of Education, Science, and Culture in 1983 (Nakasone Plan). This has affected the internationalisation of Japanese higher education significantly. To attain the goals, various efforts have been made at both policy and institutional levels. Since then, almost every aspect of internationalisation of higher education, including internationalisation of university curricula and even of the academic profession, has been largely affected by the plan. Since the 1990s, with the rapid progress of economic globalisation, internationalisation of Japan's higher education has entered a new phase with new characteristics. They include the following major aspects.

(1) *Increasing the number of international students:* As the Japanese government has placed a particular emphasis on attracting more international students and

presented clearly defined plans since the 1980s, there has been a rapid growth in the number of international students in recent years (see Table 1).

**Table 1: Change in the Number and Proportion of International Students in Japanese Universities**

	National		Municipal		Private		Total	
1983	312	27.2%	22	1.6%	834	71.2%	1,168	100.0%
2003	28,350	25.9%	2,707	2.5%	78,451	71.6%	109,508	100.0%

Source: Ministry of Education, Science and Culture (1994) Data of University Council (in Japanese). Ministry of Education, Culture, Sports, Science and Technology (2002) *Ryugakusei ukeire no gaikyou* (Outline of the Student Exchange System in Japan) (in Japanese).

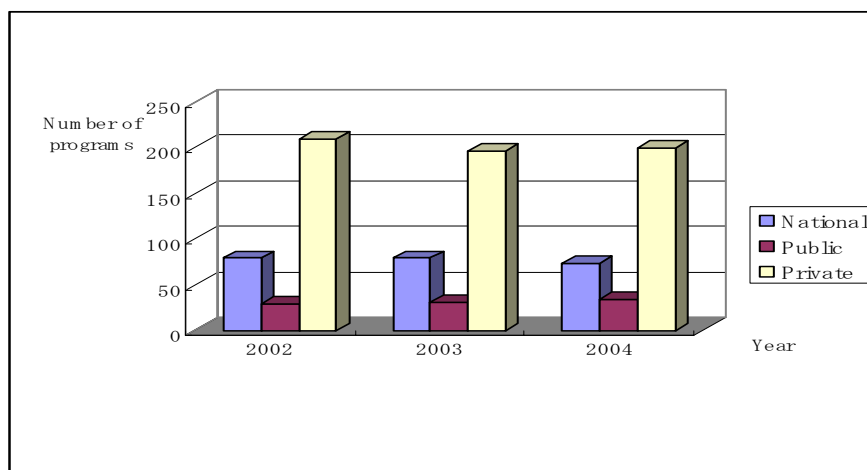
As shown in Table 1, by 2003 the number of international students in Japan had exceeded 100,000, although two years later than the schedule set 1984. By country of origin, the vast majority of international students were from Asian countries with the biggest share originating in China, followed by those from South Korea. By field of study, more than half of the students took courses in humanities and social science. By sector, more than 60 per cent of international students entered the private sector, studying at the undergraduate level and in short-term programmes, whereas more than half of the graduate students went to national institutions.

(2) *Internationalizing the university curriculum*: With increases in the number of incoming international students and reform of the curriculum, great efforts have been made by faculty members in the development and implementation of English language programs designed for both international students and local students. In a limited number of institutions, all programs are being taught in English: by 2004 four institutions could provide all of their programs totally in English. In other cases, English-taught programmes are provided only in some faculties or departments in the institution. These English programs are mostly concerned with the subjects of natural science, regional or area studies and internationally recognized professions or diplomas (Huang 2006). In general, the English language programs are divided into two types. Degree-conferring courses or programs specially designed for international students at graduate level form one type. The other type refers to courses in English specifically designed for students from North America, Europe and other English-speaking countries at undergraduate level. This has led to an increase in the number of faculty members who can provide English language programs. Probably this is one of the most important reasons why efforts have been made in all sectors, but especially in private universities, to employ more foreigners as faculty members. In a sense, faculty members in some Japa-

nese universities and colleges have been asked to provide English language programs with a further emphasis on internationally recognized professional programs and certificates rather than those of the merely traditional language/culture-oriented type (Huang 2006, pp. 521-539).

As shown in Figure 1, compared with the number of programs offered in the national and public sectors, far more foreign language programs, mostly English language programs, were provided by faculty members in the private sector.

**Figure 1: Number of Programmes Offered in Foreign Languages**



Source: MEXT (2005) *Reforms in Foreign Language Education* online information at <http://www.mext.go.jp> (August 7 2006).

Currently, the internationalisation of university curricula in Japan has come to be valued as an increasingly significant part of Japanese higher education, rather than being regarded merely as the means of accomplishing the Nakasone Plan or of providing language education either for international students or for Japanese students at home. In recent years, the number of English-taught programs provided by both national and private institutions for all students has increased strikingly. Furthermore, more attention has been paid to implementation of cross-border education; some institutions even strive to deliver degree-conferring professional programs at the graduate level such as double Master's and PhD programs in cooperation with partner countries. Strongly facilitated and regulated by the central government, individual institutions have been encouraged to play a more crucial part in internationalisation of university curricula.



(3) *Promoting mobility of cross-border programs and institutions*: From the early 1980s, there appeared cross-border programs provided by American institutions in branch schools or institutions. Programs in these institutions are delivered entirely for Japanese students in Japan. Prior to the 1990s, the number of branch schools or institutions newly established in each year had undergone very rapid growth, rising from only one in 1982 to 18 in 1990. By 1990 the total existing number had risen to 36. But prior to February 2005, none of these branch campuses of foreign institutions had been accredited by the Japanese government as higher education institutions in accord with the Standards of Establishment of Universities and Colleges. Consequently, credits gained at these branch campuses were not transferable to other Japanese institutions, nor could students graduating from these branch campuses be accepted into higher-level Japanese educational programs. Hence, with a steady decline in the 18-year-old population in Japan, many of these American institutions recognized that they could not expect to increase their revenues by enrolling Japanese students; since the early 1990s, the number of these branch campuses has decreased, now to less than 10. Although by the 1990s their numbers had grown quickly, the branch campuses by foreign institutions were neither officially approved nor supported by the central government, nor were they regarded as part of the Japanese higher education system. It is safe to state that Japan chose to stimulate its internationalisation of higher education through its focus on attracting incoming international students.

In addition, since the 1980s, many Japanese private universities have also started to establish branch campuses in foreign countries. These campuses have been established mostly in English-speaking countries, such as the U.S., the U.K., Canada, Australia, New Zealand, and some European countries such as Denmark and the Netherlands. They were established with the intent of providing Japanese students, who travel to these campuses from Japan on foreign language training programs, particularly an English-language learning environment. It should be pointed out that, by early 2005 none of these cross-border programs and institutions, which included both incoming foreign educational programs and institutions to Japan and the programs and institutions exported by Japan, had been recognized as an integral part of the national higher education system of the host countries: they were merely regarded as extra-university activities, totally isolated from the national higher education activity. This type of cross-border programs and institutions is more affected by market forces and is primarily operated through market mechanisms. As it is not considered to be part of the national higher education system, it can be categorized as an extra-curricular/overseas-led type. In most cases, this type of cross-border programs or institutions only provide a preparative education or general study for local students that may facilitate their subsequent pursuit of higher level education either on home campuses or abroad.

(4) *Emphasizing linkages and partnerships with foreign institutions*: With rapid trade and economic cooperation between Japan and China and other countries in Asia, apart from the U.S., more and more Japanese universities have established numerous bi- and multilateral cooperation agreements between Japanese and foreign institutions (Table 2). These occur not only in the private sector, but also in many national universities. Among which, the number of these agreements in national and public sectors with China had surpassed the number of agreements with the U.S., though the number of the agreements with the US had constituted the biggest share in the total (Table 3).

**Table 2: Numbers of Bi-lateral Cooperation Agreements Between Japanese and Foreign Institutions**

	National	Public	Private
2000	2,791	184	3,260
2001	3,823	320	4,540
2002	4,322	355	5,060
2003	4,674	393	5,724
2004	4,788	362	5,604

Source: MEXT (2005)

**Table 3: Top Five Foreign Partners in Bi-lateral Co-operation Agreements Between Japanese and Foreign Institutions** (per cent by October 2004)

	National		Public		Private		Total	
No.1	China	19.9	China	24.3	U.S.	23.2	U.S.	18.6
No.2	U.S.	13.1	U.S.	20.2	China	16.8	China	18.2
No.3	Korea	10.9	Korea	11.0	Korea	9.4	Korea	10.2
No.4	German	5.1	Australia	5.5	UK	6.8	UK	5.6
No.5	Thailand	4.8	UK	5.2	Australia	5.0	Australia	5.3

Source: MEXT (2005)

(5) *Establishing “Centers of Excellence in the 21<sup>st</sup> Century”*: Facing pressure from globalisation, in recent years, Japan has also launched some national plans to enhance the quality of higher education. In June 2001, the Japanese government issued a guideline for reconstructing Japanese universities, especially for national universities. In the guideline, the goal of fostering the “Top 30” Universities towards attainment of top global standards was identified. Later, the program was changed into a scheme of cultivating “Centers of Excellence in the 21<sup>st</sup> Century” (COE21). The central government is supporting the selected units with an expanded budget. By focusing on nine key disciplines, exemplified as life sciences, medical sciences, chemistry and material sciences, mathematics, physics and earth sciences, information, electrical and electronic engineering, it is hoped that the quality of research activity in Japanese higher education can be considerably enhanced and increased international dimensions can be integrated into campus research activities.

(6) *Implementing third party evaluation based on international standards*: Since the early 1990s, various strategies and measures have been taken to assure and enhance the educational quality at both system-wide and institutional levels. By 2005, Japan has constituted a new, plural, diversified system of evaluation and accreditation in which different actors and stakeholders are involved. Among which, evaluation and accreditation by third party organisations such as JABEE (Japan Accreditation Board for Engineering Education) was founded. It focuses on an absolute evaluation: to stress more the standards and conformity of educational quality based on internationally accepted criteria, to be more precise, JABEE is expected to ensure the international equivalency of engineering education programs to develop engineers provided by Japanese institutions of higher education, such as universities, and contributing to the development of society and industry through the promotion of engineering education and the training of international engineers (Huang 2006, pp. 343-360).

#### *Major challenges for the academic profession*

As discussed earlier, in this era of globalisation, the internationalisation of higher education has posed several challenges for the academic profession in Japan.

First, is that, like in many other countries, the policy and practice concerning internationalisation of higher education in Japan are not only affected by their own national policy, character and identity, but also influenced by calls and pressures from international, regional and global organisations. Various factors, especially the rapidity of economic globalisation and advancement of IT as well as introduction of market-oriented mechanisms, are exerting an increasingly significant influence on the academic profession in Japan. Thus, compared with what had happened prior to the 1990s, changes in the academic profession in Japan would be much more strongly driven by economic factors.

Second, even currently Japan needs to dispatch students and members of faculty abroad for advanced studies or research, as part of the efforts to enhance the quality of education and research activities and to establish “Centers of Excellence in the 21<sup>st</sup> Century” in Japan. However, compared with the previous decades, since the 1990s, the internationalisation of Japan’s higher education has not passively responded to the impact of globalisation, nor is it a one-way internationalisation, merely absorbing the Western or US norms and conventions, more and more private institutions and some national universities have made efforts to export their educational services abroad and undertake joint programs with foreign partners, Japanese faculty members, though not all of them, are required to make more academic contribution abroad and play a more active role in cross-border educational and research activities in a more competitive environment at an international, regional and global level.

Third, the growing importance of the English language in teaching and research activities in internationalisation of higher education has posed another big challenge for Japanese academic profession. This requires the academic profession in Japan not only to provide more English language for both local and international students, but make publication in international academic journals and conduct co-operation with foreign partners. Besides, due to the new evaluation and accreditation system, in some academic fields, for example, engineering, law or medicine, etc., more international standards were and will continue to be introduced into Japanese higher education institutions. It will inevitably impact teaching activities significantly and result in more internationalized university curriculum and adaptation of internationally accepted teaching standards in Japanese universities.

Fourth, the Japanese government has begun to consider revising the legislation concerning approval of foreign institutions in Japan and to adopt new strategies for recognizing cross-border or transnational branches and programs. This approval makes it possible for foreign educational activities or service to be recognized by Japanese universities and allows Japanese students to apply to the foreign educational programs or institutions in Japan. Meanwhile, more and more Japanese institutions have attempted to export their educational activities by providing transnational programs in other countries. These all differ from the preparatory Japanese language programs that were offered abroad in the 1980s, in that they are degree-conferring programs at graduate level, covering professional programs such as engineering, management and literature. Moreover, these double or joint degree-conferring programs are provided not only in cooperation with English-speaking countries, but also in partnership with non-English-speaking countries such as China, Singapore and other South-Asian countries. This has required and will continuously require some faculty members, though quite a few at present, to be able to provide programs not only at home institutions, but in foreign campuses. This is also a big challenge for some faculty members in near future if

further internationalisation of higher education is to be pursued in Japanese higher education institutions.

Finally, although a special emphasis is still placed on the cooperation and academic exchange with the U.S. and Western countries, an increased attention had also been paid to the linkages and partnerships with Asian countries, especially with China and Korea. There has emerged an increasing demand for the academic profession in Japan to establish a closer cooperation and partnership with Asian countries and be more involved with regional academic activities.

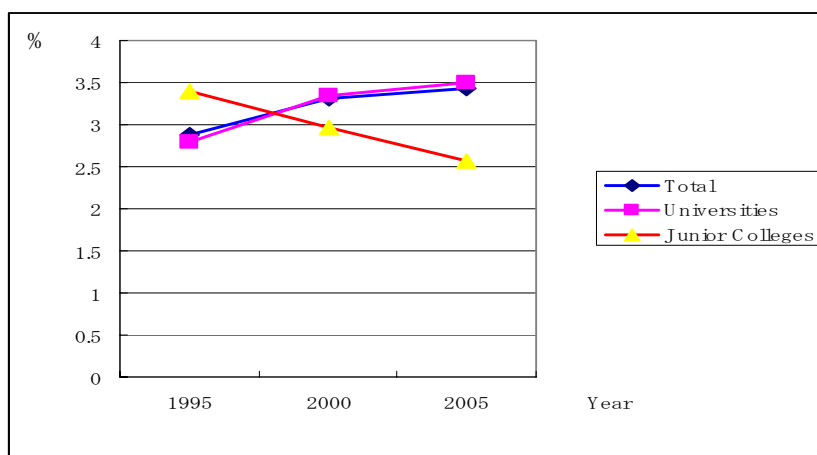
#### **4. Changes of Academic Profession in Japan in an International Dimension**

It is worth noting that changes in the academic profession in Japan have been affected by a combination of both domestic socio-economic factors and international trends. However, by focusing on the impact of internationalisation of higher education since the 1990s, we can identify the following several new and big changes that have taken place in Japan's academic profession

##### *Expansion in the number of full-time foreign faculty members*

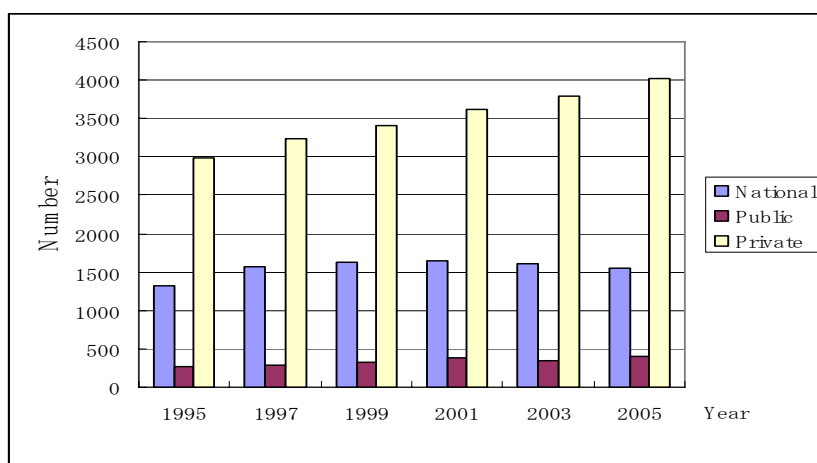
Since 1995, as indicated in Figure 2, there has been a gradual increase in the number of foreign faculty in Japan. Especially the number of foreign faculty in universities has maintained a steady rise. In contrast, there has been a sharp decline in the number of foreign faculty in junior colleges over the past decade. Moreover, it should be mentioned that, although there has been a continuous growth in the number of non-Japanese nationals in the full-time faculty at both universities and junior colleges since 1995 (Figure 3), as shown in Table 4 and Table 5, from 1995 to 2005, there had been no big rise in the number of non-Japanese faculty who became presidents or vice-presidents in either universities or junior colleges. Except for one non-Japanese president in a public university, by 2005, all the non-Japanese presidents and vice-presidents had been in private sector.

**Figure 2: Percentage of Non-Japanese Faculty in the Full-time Faculty**



Source: MEXT (1996, 2001, 2006) *Statistical Abstract*, Tokyo, Japan, National Printing Bureau, pp. 86-88, 94-95, and 92-93.

**Figure 3: Numbers of Non-Japanese Faculty in the Full-time Faculty at Universities and Junior Colleges by Sector**



Source: online information at <http://www.mext.go.jp> (July 26 2006).

**Table 4: Numbers of Non-Japanese Faculty in the Full-time Faculty at Universities by Position and Sector**

Type of Position	1995				2005			
	Total	National	Public	Private	Total	National	Public	Private
President	3	-	-	3	6	-	1	5
Vice-President	2	-	-	2	3	-	-	3
Professor	775	62	44	669	1,523	191	96	1,236
Associate Professor	893	259	58	576	1,701	565	153	983
Lecturer	1,453	528	101	824	1,682	376	97	1,209
Research Associate	732	463	39	230	737	413	28	296

Source: MEXT (2006), online information at <http://www.mext.go.jp> (July 26 2006).

**Table 5: Numbers of Non-Japanese Faculty in the Full-time Faculty at Junior Colleges by Position and Sector**

Type of Position	1995				2005			
	Total	National	Public	Private	Total	National	Public	Private
President	4	-	-	4	-	-	-	-
Vice-President	-	-	-	-	-	-	-	-
Professor	118	-	1	117	65	1	3	61
Associate Professor	174	1	8	165	102	4	7	91
Lecturer	398	1	9	383	135	1	9	125
Research Associate	11	-	-	11	5	-	-	5

Source: MEXT (2006) <http://www.mext.go.jp> (July 26 2006).

With regard to foreign faculty members by region and country of origin, by 2003 faculty members from Asian area had amounted to approximately 60 per cent of the total non-Japanese faculty. Among which, the number of faculty members from China mainland and Taiwan had topped the list, followed by faculty members from Korea and the U.S. This clearly indicates that faculty members from China had been a majority of non-Japanese faculty (Shu 2005).

*Growth in the number of Japanese faculty members with overseas doctorates*

In recent years, there has emerged a large number of Japanese faculty members who had earned their doctor degrees in foreign countries. Especially in some research universities, the number of faculty members with overseas doctorates has been greatly increased. It is estimated that by 2003 in research universities 6.2 per cent of Japanese faculty members had earned their doctor degrees in other countries. By origin of country where these doctor degrees were issued, the share occupied by North America is over 70 per cent with European countries contributing about one quarter; universities in the English language region provide 83 per cent of the total. Of these, especially the percentage of PhD degrees issued by U.S. and UK universities make up of over 90 per cent of the total in North America and European countries. This shows that though there are fewer faculty members from these two English-speaking countries than from the Asian area, particularly from China and Korea, apparently the US and the U.K. universities still have exerted a profound impact on Japanese higher education and faculty members (Yamanoi 2005).

*Increase in the number of articles by Japanese faculty in international journals*

In addition, efforts have also been made to make more publications, especially scientific papers in major international journals by Japanese researchers, including university faculty members over the past decades. According to the statistics of the MEXT (MEXT 2003), of the scientific papers published in principle international scientific journals between 1981 and 2000, the number of Japanese scientific papers in 1981 was ranked fourth in the world after the USA, the UK, and Germany. In 1992, the number of Japanese articles surpassed that of UK and has held the second position, second only to that of the USA. However, citations of Japanese articles in the principal journals have remained in fourth place for a long time; it is also apparent that only few Japanese articles had high rates of citations.

*More mobility of Japanese faculty and incoming foreign faculty*

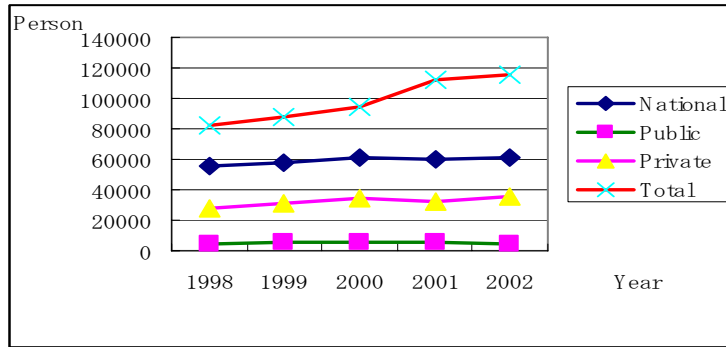
With the rapid development of internationalisation of higher education with foreign partners, great efforts have also been made by more and more Japanese higher education institutions to facilitate the mobility of faculty members between different countries and areas. It is estimated that 115,833 Japanese researchers were sent abroad for study or research in total. Of these, the number of faculty members from national, public and private sectors amounted to 101,107, constituting a predominant share of the total. Figure 4 shows that except for the public sector, there was a steady rise in the number of faculty members who had been sent abroad. Moreover, it is also evident that though there had been a gradual



decline in the number of faculty members in the national sector by 2002, it had accounted for over half of the total.

By 2002, the areas in which Japanese faculty members stayed had mainly been in Europe, Asia, and North America. The proportion of short-term faculty members from Japan had held almost the same share in the three different areas: one third of those faculty members being in each area respectively, whereas the percentage of long-term (over 30 days) faculty members from Japan had concentrated on North America and Europe, constituting approximately 80 per cent of the total.

**Figure 4: Numbers of Japanese Faculty Staying Abroad by Sector**



Source: MEXT (2005) *Kokusai Koryu handbukku* [Handbook of International Exchange] online information at <http://www.mext.go.jp> (August 9 2006).

In parallel with an increase in the number of Japanese faculty abroad, mostly in Western countries, especially in North America and Europe, in recent years, the number of foreign faculty who came to Japan for research also expanded rapidly. For example, the number of incoming foreign researchers to Japan, a majority of them being faculty and staying in universities, had increased from 21,170 in 1998 to 30,118 in 2002. But, in contrast to a large number of Japanese faculty members who chose North America and Europe as their host countries or areas for advanced studies or research, the vast majority of incoming faculty had come from Asian countries, making up approximately 60 per cent of the total, especially those from China had held the top.

## 5. Conclusions

In sum, like many other countries, since the 1990s, aspects of the internationalisation of Japanese higher education have gone beyond simple mobility of international students and members of faculty, and have come to include activities in a

more competitive internal environment. They include internationalisation of the university curriculum, promotion of cross-border higher education activities, adaptation of international standards for evaluating some educational programs, construction of "Centers of Excellence", and establishment of bi-lateral cooperation between universities at both regional and international levels. All these new trends are posing and will continue to pose challenges for almost every dimension of the academic profession in Japan. As a result several new changes have taken place in Japan's academic profession. Of these, while there has been a growth in the number of Japanese faculty with overseas doctorates being earned from Western countries, much evidence indicates that there has been a much closer relationship and even co-operation between the Japanese academic profession and that in other Asian countries, in particular China and Korea. This differs essentially from the challenges of internationalisation of higher education in the previous phases.

It is though evident that Japan's academic profession is also facing many issues resulting from the internationalisation of higher education in this era of globalisation. A number of clear examples illustrate this. First, in comparison with the private sector, neither the national nor the public sector is actively responding to new challenges nor have they accomplished any remarkable expansion of employment foreign faculty nor have they exported cross-border programs and institutions. Second, in the past decades data shows there has been no big rise in the number of non-Japanese presidents or vice-presidents in either national or public universities. Third, a continuing emphasis on increasing the number of Japanese faculty members with overseas doctorates obtained in the U.S. or the U.K., and in efforts made to provide English language programs, and in the high percentage of Japanese faculty members who choose North America and Europe as host countries for their advanced studies or research, all clearly show that the academic profession in Japan still maintains its basic character of being engaged in a process of catching up with advanced overseas countries, mostly identified with the English-speaking countries in Europe and especially the U.S. So, on one hand, it is necessary to keep on importing English-language products to enhance the quality of learning and research in Japan; and yet, on the other hand, efforts are being made to export educational programmes with distinctive characteristics.

In short, great efforts have been made by Japan's academic profession to respond to the challenges of internationalisation of higher education at home. However, this leaves much to be dealt with by Japan's academic profession while taking up challenges of internationalisation of higher education across borders. The basic reason seemingly lies in the fact that Japan has not established universally recognized excellences in its own academic system, or maintained a quality of higher learning that can exert academic influence at an international or global level.

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## **Challenges of Internationalization for the Academic Profession in Norway**

Agnete Vabø

### **1. Introduction**

This article discusses the challenges of internationalisation for the academic profession in Norway. In line with the definition of the international comparative project: Comparing Academic Profession – the CAP project, the use of the term academic profession refers to the scientific employees at universities and university colleges.

The Norwegian higher education system is made up by three kinds of institutions: research universities, scientific colleges and state colleges. In 2003, of 51 000 individuals involved in R&D activities in Norway, 22 000 were employed in the higher education sector.

To take part in international relations is generally considered to be of great importance for a small advanced country like Norway, particularly to increase the breadth and quality of research. During the last two decades, internationalization of higher education and research has become a major political issue, both on national and institutional level.

In contrast to the old internationalisation typically initiated and managed by academic staff on an individual basis, the new internationalisation has a more formal, institutional and collective character (Trondal et al. 2001). Nevertheless, it seems as if the new internationalisation affects most aspects of academic work and careers, from student mobility to modes of scientific publication. The challenges are numerous. Many of the efforts are marked by practical obstacles. Others may challenge the academic profession in terms of their values, ideology and power, especially since the new internationalisation is saturated with new steering ideologies and measures of academic performance.

From mainly having emphasised the mobility of students and staff, recent efforts within the new internationalisation are marked by a more competitive edge – the academic profession is expected to take part in the international competition on students and financial resources, e.g. by radical reform in order to attract for-

eign students and staff (organisational reforms like the establishment of centres of excellence, mergers, new study programmes taught in English, etc.).

To the extent possible it will be maintained that the various efforts and challenges may be experienced differently among various academic groups and institutions. The topics and knowledge of academic disciplines differ with respect to global orientation. Nevertheless, it will be argued that the efforts to improve international academic collaboration are marked by tensions between the strategic interests of the political authorities and the values and interests of the academic profession.

The data and discussions presented in this article are mostly based on National R&D statistics, relevant white papers, and previous empirical studies on internationalisation of higher education and the academic profession in Norway. The author has received constructive comments from Dr. Nicoline Frølich (NIFU STEP) from which the article has benefited.

## **2. Global Competitiveness through Principal Agent Relationships versus Academic Rationale**

The Norwegian research and higher education authorities constantly strive to develop efficient measures for internationalization of higher education and research and to position themselves in a number of regions and arenas.

Although Norway is not a member of the EU, a major aim for the Norwegian research and higher education community, according to the most recent national white paper on research, is to play an active part in the European Research Area, (for instance by coordinating national research programmes in accordance with European ones). The ambition is to further the development of the research cooperation with the US, which has always been of great importance to Norway, and also to make closer links with Canada and Japan. Other important aims are to strengthen bilateral research cooperation, to develop Norway as an attractive host to foreign researchers and as a global partner in research, as the White Paper 2004-2005 (*Vilje til forskning 2005*) underscores. Recently, attention has been drawn to the need for closer collaboration (including higher education and research) within the northern areas, including North West Russia, e.g. on Arctic research, in which one of the Norwegian Universities, University of Tromsø is expected to be an important player.

Recent investigation reveals that arguments for internationalisation of the academic profession are (still) embedded in academic rationale whilst in the public policy for higher education and research, economic and strategic justifications for internationalisation are becoming more dominant (Frølich 2006).

As more and more resources aimed at internationalising academic activities are organised within programmes directed at targeted areas, topics and regions, the internationalisation activities of the academic staff have to an increasing extent

become subordinate in a principal agent relationship (Gulbrandsen 2006). In addition to the national research councils and ministries for research and education, the EU and the Nordic Council of Ministers (NCM) may serve as prime examples of principals.

### **3. The European Union**

Recent investigation of the effects of EU 6<sup>th</sup> framework programmes among researchers based in Norway shows that these framework programmes create conditions for research projects dependent upon international cooperation in order to be carried out. Many researchers also report that programme participation gives an opportunity to position themselves internationally. They also benefit from participation in terms of international networking. Participating in EU programmes is challenging since the economic conditions are poor and since the researchers experience the programme organisation as highly bureaucratized (Langfeldt 2006). It is also my impression that many scientific employees in Norway, particularly within the humanities and social sciences, are sceptical towards participating in EU programmes due to the frequent occurrence of low standard academic quality and the efforts needed to be invested compared to the possible outcome and benefits.

### **4. The Nordic Context**

Due to close historical, cultural, and linguistic ties, the Nordic region (Denmark, Finland, Iceland, Norway and Sweden) has traditionally been an important arena for cooperation within education and research. In addition to Norway, Finland, Denmark, and Iceland are also small nation states. In recent years there has been a growing concern about the need for extended Nordic collaboration on education, research and innovation, in order to reach the critical mass necessary to fulfil national goals of educational and research excellence in relation to EU policy and the increasing global trade in higher education. Nordic cooperation in higher education seems to be rapidly changing its agenda and partly also its rationale for cooperation. Some of the main developments taking place suggest that the traditional academic and cultural motives are being supplemented by economic and more market-based motives.

The new policy vista has triggered the establishment of a Nordic Innovation Centre. NordForsk, also operating under the Nordic Council of Ministers for Education and Research was established in January 2005. NordForsk sponsors Nordic Centres of Excellence, research programmes, networks, researcher training schools, particularly where Nordic collaboration are assumed to produce added value, of which current examples are Molecular medicine, Food Nutrition, Health and Welfare. Central players of NordForsk are the national research councils.

NordForsk also cooperates with the Nordic Innovation Centre as both organisations work for the positioning of the Nordic research and innovation area. In higher education, several initiatives have also been taken.

As is the case for the Nordic countries, the Baltic States are also nations of relatively small populations, and are therefore believed to benefit from collaboration on education and research. The Baltic countries as well as North West Russia have had access to Nordic collaboration and funding through the Nordplus Neighbour programme. The Nordic Council of Ministers has also suggested launching “Nordic joint degrees” in areas where the Nordic region has specific and high-level expertise (Stensaker and Danø 2006).

For more than twenty years, the Nordic Council has supported research and teaching within the academic field of Nordic language and literature. Whether Nordic collaboration should be based solely on the Nordic/native languages or also on English has been highly disputed among various actors.

Undoubtedly there is, in the Norwegian context, competition between different discourses on how to internationalize education and research, with respect to the languages used rationale for cooperation, but also with regard to region, for instance to what extent it should be directed towards aid and solidarity with more underdeveloped regions (Frølich and Stensaker 2005).

## **5. Internationalisation as a Measure of Performance**

Challenges also occur when internationalisation is used as a measure of performance of academic staff. International capital, getting published internationally and participating in international networks have become essential criteria for receiving funding. The results of one’s work should on a regular basis be presented at international conferences and workshops. For instance, international activities are important criteria in the new incentive based funding system. Articles in international journals featuring peer reviews are among the most accountable results. Introduction of the new funding criteria are, however, criticised for working in favour of the publishing mode of the natural sciences.

## **6. International Publications: Collaboration Profile**

National R&D statistics show that the volume of international publications has increased, articles in scientific journals have become the dominant mode of publication, and co-authorships are becoming more common. In 2004, 53 percent of all scientific articles published by Norwegian researchers were co-authored by international colleagues, a significant increase since for instance 1981, when this number was 16 percent. Traditionally, most collaboration was found in relation to three regions with equal weight in the profile: the USA and Canada, the countries of the European Union excluding the Nordic countries, and the Nordic countries.

The collaboration profile has broadened in recent decades. As the Report on Science and Technology Indicators for Norway 2005 shows, there has been a strong increase in the collaboration with Russia, Poland, Japan, China and Australia. In descending order, the five most frequent countries in the collaboration profile are the USA, Sweden, the United Kingdom, Germany and Denmark.

Co-authorship between European and Norwegian researchers increases whilst co-authorships between American and Norwegian researchers are (slightly) decreasing. This may be interpreted as an effect of the effort of research collaboration within the EU (Kyvik and Sivertsen 2005). Also co-authored research articles with African colleges increase (Frølich 2006).

## **7. English as a Standard Academic Language**

Regarding the use of English as a standard academic language, some argue in favour of the need for maintaining a Nordic scientific language from a democratic perspective as a means to secure common access to scientific knowledge. At what level the use of English in academics should be supported, and how, is also debated (Simonsen 2004).

## **8. Sojourns Abroad**

Academic staff and doctoral students are expected to have shorter and longer sojourns abroad, particularly during researcher training, as part of doctoral training and as post-doctoral fellows. From 1991 to 2000 there has been a substantial increase in all types of professional journeys (conferences, guest lectures, study and research visits, peer reviews, research co-operation), although they are mostly related to conferences and research collaboration (Kyvik and Smeby 2004).

There are many other examples of mismatch in the standards of internationalisation approved by the principals versus the different needs in different disciplines and fields of science with regard to internationalisation such as if, when, for what academic purpose, for how long and where one should have a sojourn abroad during researcher training (Vabø 2003). In addition to systemic and internal academic factors affecting international mobility patterns, there are many social and practical problems, in relation to family obligations, language differences, welfare arrangements, tax systems et cetera that may represent important barriers to mobility in researcher training.

## **9. Mobility, Brain Drain and Inbreeding**

Whilst the Norwegian academic system has been characterised by brain drain, with more outgoing than incoming researchers, it has now become more common to hire foreign academic staff. Also the number of foreign doctoral students in



Norway has increased significantly during the last years; for instance between 1991 and 2005 the share of international candidates completing their doctoral degree in Norway increased from 7 to 22 percent (Source: Doktorgradsregisteret Oktober 2006, NIFU STEP, Oslo).

The positional hierarchy is in many ways characterised by a system dynamic stemming from the late nation building era of the higher education sector in the 1960s and 1970s; the focus in those years was on growth and equality, both in terms of the spread of institutions, research and study programmes offered among the national regions, as well as internally between ranks. The universities still have a recruitment policy working in favour of “homegrown” candidates where applicants to academic positions with a background from other Norwegian universities or from foreign countries (until recently) had small chances (Vabø 2003). Since recruitment strategies can no longer solely be justified by practices of inbreeding, academic staff from abroad may win in the competition with local candidates. Nevertheless, a challenge for universities and academic groups is how to keep the most talented foreign doctoral candidates as well as how to become attractive for more well-qualified applicants – this goes for academic as well as social conditions. Centres of excellence are supported, both at a national and at a Nordic level, among other reasons in order to attract foreign researchers. It is relevant to consider that the Norwegian language and culture may be hard to crack. Even more important is the fact that Norway is a young and small nation state with its first university in Oslo established in 1811, and the main development of universities and university colleges took place in the post war period, the University of Bergen in 1948, the University of Trondheim in 1969 and the University in Tromsø in 1972. (Last year, the state college in Stavanger and the Norwegian College of Agriculture were granted university status.)

These background characteristics are important in explaining why Norway lacks internationally well known research university/institutes or groups. Unlike its neighbouring country Sweden, Norway has no Nobel Prize winner.

## **10. Internationalisation and Higher Education**

The total number of students at Norwegian colleges and universities today is approximately 210 000. In the spring of 2004, the total numbers of full time students at Norwegian universities were 70 258 (UiO: 29 022, UiB: 16 557, UiTø: 5 907, NTNU: 18 772), at the scientific colleges 6 891, in the state college sector 86 204 (Source: Norwegian Social Science Data Services – NSD). In addition a steadily rising number is studying abroad; 20 000 (according to the Norwegian Bureau of Statistics).

In line with the Bologna Declaration of 1999, the Bachelor/Master study structure (3+2 years) was implemented mainly at all levels of the Norwegian universities, scientific colleges and state colleges in the autumn of 2003. The aims of the

European so called Bologna process were *inter alia* to develop easily readable and comparable degrees, to establish a system of credit transfer (ECST system), to facilitate student and academic staff mobility and to enhance European co-operation in quality assurance.

The duration of studies and the quality of teaching and learning had been a concern since the mid-1980's in Norway due to the increased number of students at all levels and the simultaneous increase in the percentage of failed exams. To the educational authorities, the Bologna process represented a legitimate opportunity to abolish the old study structure and replace it with a degree system more efficient at dealing with the needs of a mass system of higher education. The wish to participate in European student exchange programmes had also created a need for more internationally standardised studies and degrees. The aim is that 50 per cent of the students should conduct part of their studies abroad and that all students should have the right to be offered suitable programmes for partial studies abroad by their university or college (according to the White Paper No .27/2000-2001).

In Norway, the introduction of this new degree system is part of a larger reform process called "The Higher Education Quality Reform". This reform represents an attempt to achieve a higher degree of efficiency through devolution of authority to the higher education institutions, the provision of stronger leadership, increased emphasis on internationalisation, the formation of an autonomous central institution for quality assurance, and accreditation and the development of criteria for institutional audit, new pedagogical designs as well as a new funding model that is supposed to provide stronger incentives for improvement.

The new credit point system (in line with ECTS), the grading (ABCDEF), the modularisation, the international study period and the character of intermediary and final examinations have become the standard, and are explicitly related to the Bologna process. The changes mentioned above are of central importance with regard to our higher education system. For instance regarding internationalisation, student exchange and mobility has become an important part of the strategies of the institutions and leads to closer collaboration with institutions abroad. In 2003 the PhD was also implemented, and is supposed to replace 14 different doctoral degrees. However, the traditional dr. philos. is to remain.

As concluded in numerous evaluations and reports (e.g. Vabo and Smeby 2003), the "new" internationalisation activities within higher education are affected by many challenges and obstacles. The barriers to, for instance, programmes for student and staff mobility (Nordplus, Erasmus) are many, both private and professional, and it often takes a considerable amount of resources to reach the goals for such programmes in a satisfactory manner.

It is clearly the intention that the Bachelor and Master programmes should lead to an increase in international student mobility; all Bachelor students have the right to spend a semester abroad during the study period. So far, the increase has

been rather modest. The lack of administrative capacity at the institutional level as well as the lack of state incentives encouraging the institutions to increased mobility is considered to be a major reason for this (for additional information see: The Norwegian Centre for International Cooperation in Higher Education ([www.SIU.NO](http://www.SIU.NO))).

Nevertheless, an increasing amount of formal agreements on staff and student mobility have been made with higher education institutions abroad, and a range of study programmes now use English in the syllabus and as a teaching language. It is therefore interesting to observe that in a recent survey among academic staff in Norway where the respondents were asked to rank mobility of staff, institutional cooperation, mobility of students and stronger market competition, only 13 per cent considered student mobility as most important for quality enhancement in higher education.

## 11. Conclusions

From being a highly privatised affair organised on individual basis, the internationalisation of higher education and research has become a major political issue in Norway during the last two decades, at the national as well as the institutional level. The academic profession has to an increasing extent become subordinate in principal agent relationships, as more resources aimed at strengthening the international co-operation in higher education and research are channelled into strategic programmes of various kinds. International activities have become a measure of performance in the national and institutional management of universities and individual academics.

The new modes of internationalisation of higher education affect all aspects of academic work and course of career. As a student, through participation in mobility programmes, during researcher training, as a criteria for recruitment to academic positions, and regarding modes of academic work, both with respect to teaching and research.

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### III

#### THE CHANGING ROLE OF GRADUATE/DOCTORAL EDUCATION, TRAINING AND WORK AS A CHALLENGE TO THE ACADEMIC PROFESSION



## **The Changing Role of Graduate and Doctoral Education as a Challenge to the Academic Profession: Europe and North America Compared**

Barbara M. Kehm

### **1. Changing Policy Contexts**

In Europe as well as in North America doctoral training and education has moved more into the focus of scrutiny, policy formulation and reform initiatives in recent years. There is widespread dissatisfaction with the traditional forms of doctoral education and training. This is not only due to a considerable increase in the production of doctoral degree holders but also to changes in the policy context for this phase of advanced academic education. Globalisation, the shift towards knowledge-based economies and the resulting increase in competition for best talent have contributed to such a shift. Due to the increase in doctoral degree holders which is thought to be desirable in order to support the shift to a knowledge based society and economy, another policy change can be observed. It is expected that far more trained researchers than before will seek and will have to seek jobs outside academia and research institutions. Relevance of research topics and the acquisition of additional skills and competences for non-academic labour markets have therefore become key challenges in doctoral education and training.

Currently doctoral students are believed to be

- educated and trained too narrowly,
- lacking key professional skills,
- ill prepared to teach,
- taking too long to complete their degree or not completing it at all,
- ill informed about employment opportunities outside academia, and
- having a overly long transition period from PhD completion to stable employment.

These statements, though coming from a summary of problems seen in US American doctoral training (cf. Nerad and Heggelund 2005), hold also true for Europe.



In Europe the Bologna Process integrating doctoral education as a third cycle of studies and the Lisbon Strategy requiring more and better trained researchers to make Europe the most competitive and dynamic knowledge-based economy in the world have been important factors leading to a changed policy context. In North America globalization is seen as having altered the context and substance of research and research training.

Together with the considerable increase in the production of doctoral degree holders, one of the main points of criticism in this context is, that doctoral students are insufficiently trained for the world of work outside academia where most of them will find jobs eventually.

## 2. Main Problems in Doctoral Education

Some studies which are focused more strongly on Europe (cf. Kehm 2005a, Teichler 2006) have identified altogether eleven problem areas in the traditional forms of doctoral education in European universities:

- traditional master-apprentice models versus schools and programmes;
- highly regulated and competitive versus rather informal and unregulated admission;
- status of doctoral candidates: students versus salaried junior research staff; (EURODOCS: “early career researchers”) but also: regulation of rights and duties of both sides
- frequent insecurity of financial situation;
- increase in numbers of doctoral candidates and degree holders but often not in the “relevant” subjects; competition for best talent and brain drain;
- long average duration of the phase of doctoral qualification with large differences among subjects;
- lack of proper supervision and quality control of doctoral education and training;
- mobility and international exchange of doctoral students lower than expected but increasing competition to attract (and keep) best talent (vertical mobility);
- large differences in the processes of assessment and validation of performance; problems with issues of independent assessment;
- new trend of “professional doctorates” (and “fast track”): relevance and quality issues;
- transition into (academic) careers: “holding positions” in post-doc phase.

The one issue attracting quite some criticism in practically all European countries is that doctoral education and training should meet the needs of an employment market that is wider than academia (EUA 2005). Besides providing doctoral education and training with more structure, i.e. embedding it into schools and programmes, the issue of “relevance” for a wider spectrum of professional work is on

the agenda. This is also reflected in the European framework of qualifications for the level of PhD training (Dublin Descriptors 2004).

Looking at the main problems being seen in doctoral education they are rather similar in Europe and North America but differ in their emphasis. In Europe there is a certain amount of pressure to give doctoral education and training more structure, i.e. to abolish the traditional (Humboldtian) master/apprentice model in favour of graduate schools or doctoral programmes which include taught elements. This is basically the Anglo-American model although the separation of Master degree students and doctoral students is still more pronounced in most of the European countries (except the UK) and there is mostly no possibility to start a doctoral training after having received a Bachelor degree only. For many Western and Northern European countries it is also unfamiliar to think of doctoral candidates as students. Traditionally they have had a status as junior researchers or research assistants. The issue of status also influences questions of funding.

A second issue is the duration of doctoral studies. This is a feature with which policy makers and academic management are unhappy in both regions under discussion here. The long time-to-degree and high drop-out rates have led to criticisms of the quality of supervision and increased quality control of doctoral programmes as such.

In Europe mobility and shorter research periods abroad of young researchers have been promoted for quite some time but it has been lower than could be expected. The issue of mobility is also a somewhat ambiguous one. In the face of globalisation the ability to work in international teams and have some kind of international experience is an increasingly necessary key qualification and widely supported and encouraged on the one hand. On the other issues like competition for best talent, brain drain and brain gain, income from tuition fees have triggered forms of mobility which are not appreciated by those who might be losers in this race. While in Europe the emphasis still mostly tends to be on temporary mobility and exchange within the framework of institutional collaboration and networks, joint doctoral degrees, inter-sectoral mobility and a debate on the conceptualisation of a European doctorate, the trend in North America differs insofar as institutions try to attract doctoral students for the whole phase of this qualification period and even provide attractive conditions to keep international doctoral degree holders in the country. In Canada, for example, 60 percent of all international doctoral students intend to remain in the country after having received their degree. In 2003, the proportion of international students getting their PhD in the USA among all PhD recipients was 26 percent, while it was 33.9 percent in Canada (cf. Williams 2005 for Canadian figures and Nerad and Heggelund 2005 for US figures). In Europe, the UK, Spain and the Netherlands, in particular, have high levels of international doctoral students. In other European countries their proportion remains under ten percent.

### 3. The New Trends: Professional Doctorates and “Fast Track Doctorates”

It is clear that with the rise in the number of doctoral degree holders not all of them will be able and will want to follow a career in academia. Although there are still some countries in Europe in which industry and commerce are not interested in hiring such highly qualified workforce, the labour market for doctoral degree holders outside academia is mostly improving. Still, there is widespread criticism that they don't have appropriate skills and competences.

In Canada the majority of doctoral degree holders (56 percent) start employment already outside academia, although more than half of them remain in what is called the educational services industry. Doctoral education and training in Canada is clearly linked to strategic national ambitions for scientific and technological competitiveness. More fellowships and other sources of funding for doctoral education and training are available in the sciences and engineering subjects than in other fields. This leads to the fact that 43 percent of all doctoral students are enrolled in the sciences and in engineering compared to only 21 percent of all bachelor and master students in these subjects. In particular, a re-structuring of doctoral education and training to include more interdisciplinary work has taken place in recent years (cf. Williams 2005). A higher level of interdisciplinarity in doctoral education is also called for in the US and in Europe because it is hoped that in such a setting transferable skills can be developed more easily.

A number of countries (e.g. USA, the Netherlands, UK, Austria with one pilot project) have started to introduce what is being called a “*professional doctorate*” which is distinct from the traditional research oriented doctorate. Professional doctorates (e.g. in management studies, education, applied sciences, public services, or architecture) tend to be somewhat less demanding as regards the requirement of producing an “original piece of research”. They are often related to projects carried out within an enterprise or in another future field of employment and jointly supervised by the home university and the respective enterprise. The course work emphasises more generic skills, interdisciplinary approaches, and problem solution capabilities. The inception of such professional doctorates is closely linked to a growing concern about the employability of doctoral degree holders in the labour market outside academia (also cf. Bourner et al. 2000). Currently it is still unclear, however, whether this type of research training is linked to a student or to an employee status of the respective doctoral candidates.

But there are still a few countries, for example Poland and Italy, in which employment of doctoral degree holders outside research institutes and academia is rather untypical. Generally, potential employers in the private and public sector criticise that doctoral degree holders are too narrowly specialized and lack generic and transferable skills. The new development of professional doctorates is intended to redress this problem by paying more attention to the issue of employ-

ability of doctoral students outside academia. In several fields of study and scholarship (e.g. medicine, chemistry, business administration or law) this is not new and has been practiced for quite some time, but there are new aspects to the issue of professional doctorates. In the Netherlands, the UK and also in the USA the emerging knowledge economy more and more often requires a workforce having research skills. In the UK and the USA this development has led to the construction of “professional doctorates” (e.g. in fields such as economics and business studies or in education) preparing the respective students not only with research skills but other generic skills and competences as well, like managing research groups and large projects, communication competences and the ability to work in teams. Usually the requirements for a thesis in such programmes are somewhat less demanding than for a research doctorate.

The basic concepts in the development of “professional doctorates” include the definition of quality, standards, and skills and entail more regulation in terms of necessary support structures and supervision. First pilot projects are on their way to achieve a stronger cooperation with industry and business (e.g. through project work in industry or joint supervision of research) and establish research schools in applied sciences (e.g. chemistry, physics, biology, public services). It is as yet unclear whether this development will eventually lead to a training status or to an employment status of the doctoral students. Overall, the number of programmes for professional doctorates is growing (also cf. Bourner et al. 2000 and Scott et al. 2004).

The typical definition for a “*fast track*” *doctorate* is that exceptionally well qualified Bachelor degree holders may be directly accepted into a PhD programme thus sidestepping the requirement for a Master degree and finishing one or two years earlier with their PhD degree than fellow students in a regular PhD programme. Normally this entails more course work to acquire necessary research and other skills which otherwise may be acquired in the Master programme and a very intensive because rather short period of research work which runs often parallel to the research work. It is expected that eligible candidates have very good grades and a high scholastic aptitude. In order to cope with intensive workload they will also need secure funding during this period because they will not have enough capacity to do additional work or to work in areas not related to their own research. But a fast track doctorate has also met with criticism. Candidates might be too narrowly trained because they concentrate early on a particular specialization. In Germany there are hardly any experiences as yet with this model of doctoral education and training. British experiences would be interesting because the fast track model has been existing there for a longer time.

#### 4. New Developments in Germany

Germany is probably the most active producer of PhDs in Europe, if not worldwide if we look at the number of PhDs in relation to the number of university graduates. There are approximately between 23,000 and 25,000 doctoral degrees awarded by German universities annually.

But Germany is also a country – though not the only one – in which there are many pathways to a doctoral degree. The majority of PhDs are still produced in the traditional framework of the master-apprentice model. The right of a professor to accept doctoral candidates is part of the academic freedom, and although it entails a responsibility to support the research and advise the candidate as well as it is a matter of personal prestige that once the thesis is submitted the candidate will not fail, the individual professor does not have an obligation to secure funding for the candidate and support him or her in finding employment after the degree has been awarded. In addition, the candidate often has to provide services and support for the teaching and research activities of the professor. The supervisor will not only act as the main reviewer of the thesis but also as the main examiner in the oral defence of the thesis.

Since the early 1990s the German Research Council has started to counteract this form of personal dependence usually combined with a long to degree and established and funded “Graduiertenkollegs”. The funding usually also included a number of scholarships for the doctoral students. More structure was provided through the introduction of taught elements and the schools were evaluated on a regular basis. Often there was joint supervision. The German Academic Exchange Service has also funded about 50 international doctoral schools in recent years.

The implementation of a tiered structure of study programmes and degrees in the framework of the Bologna process has introduced some new approaches to doctoral education and training in Germany.

The guidelines of the German states (Laender) for the implementation of Bachelor and Master programmes have included one specificity. Since both universities and universities of applied sciences are allowed to offer Bachelor and Master programmes some kind of other distinction had to be found for the Master level. For the accreditation all new programmes have to provide information whether they are “application oriented” or “research oriented”. One would expect that the universities of applied sciences, according to their traditions, would basically develop application oriented Master degrees. But they did not. In fact they tried to do what they had wanted already for a long time, i.e. become more similar to universities. They frequently added academic elements to their master programmes in order to enable their graduates to continue in a doctoral programme at a university without having to study for one or two more years. At the same time universities were forced to add application oriented elements to their master programmes in order to provide proof that they had taken the employability issue into

consideration. This is normally implemented by a wide array of integrated or additional study tasks to acquire key competences.

The general rule is that all graduates with a master degree encompassing 300 or more ECTS have a right to be admitted for doctoral studies. This general rule does not distinguish between applied or research oriented Master programmes. There is only one professional area in which a clear differentiation is made for graduates from the two types of master programmes and that is the public service itself. Graduates from applied master programmes will not have an option to start the upper public service career stream. Because each university has the right to regulate its own entrance criteria for doctoral programmes the basic right of master graduates to be admitted can be restricted due to recruitment and selection criteria about which the university, the school or programme decides itself. It is better to speak in this respect of eligibility.

Despite the fact that in Germany the Master degree is still the dominant prerequisite for entering doctoral education and training the guidelines of the states concerning access to doctoral programmes for Bachelor and Master graduates from April 2000 include the regulation that German as well as international students with a Bachelor degree can be admitted into doctoral studies. However, they have to go through a process of proving their aptitude which the universities have the right to devise themselves.

A recent search of the web pages of German universities has resulted in the following cases in which a “fast track” is currently being implemented or envisaged in the near future:

- Bonn-Aachen International Center for Information Technology;
- International PhD Program in Molecular and Cellular Life Sciences at the International Max-Planck Research School in Munich (condition: one year preparatory programme for Bachelor graduates);
- Graduate School of Chemistry and Biochemistry at the Ruhr University in Bochum;
- Faculty for Psychology at the Ruhr University in Bochum (plans exist for a one year preparatory programme followed by three years of doctoral training);
- University of Karlsruhe, Institute for Botanical Sciences (fast track option under discussion);
- University of Cologne, Graduate School for Biological Sciences;
- University of Duesseldorf, fast track in Chemistry possible.

For the medium-term future a number of different pathways towards a PhD will coexist in Germany universities. The general trend is to incorporate doctoral education more into structured programmes and centres or schools. However, the German initiative for excellence in the framework of which elite universities are supposed to be identified has triggered a process of competition and institutional diversification among the German universities. Experts agree that the German

university landscape will very soon be divided into research intensive, research active and teaching only institutions. Cutting edge research and high level research training will most probably be concentrated in the research intensive institutions. Thus, the initiative for excellence has similar effects as the British Research Assessment Exercise (RAE).

### **5. Is There a Challenge to the Academic Profession?**

Looking at the changes in policy and actual training of doctoral students no immediate and direct challenge can be identified to the academic profession at a first glance. Although there is more pressure to improve quality and efficiency of doctoral training and in some countries a second stream of this training for professions outside academia seems to emerge, the recruitment pool for the reproduction of the academic profession remains basically the same and one model of training will not easily replace the other. Instead, the most obvious development will be that there are different pathways possibly with a differentiation of purposes as well which are emerging for this phase of qualification. However, at a second glance there are a few changes and trends which are starting to have an impact on the academic profession.

Despite a number of differences between Europe and North America in terms of the forces and forms of change in doctoral education, there is one shift which is clearly similar and which might constitute a challenge to the academic profession depending on interpretation. This is the more or less advanced shift from the individual and/or departmental responsibility in reforming doctoral education (i.e. self-governance of academic affairs) to the institutional level. Well reputed doctoral education and training programmes more and more contribute to the overall reputation and profile of an institution, attract best talent and funding and thus, begin to play a more important and extended role than serving the extension of the knowledge base in any given discipline. Therefore, doctoral education and training seems increasingly to become an object of institutional management and strategic policy making.

From this derives a second trend which manifests itself in the increasing concentration of research in institutions deemed to be research intensive. Though individual supervision within the framework of the master/apprentice model will still be possible for some time in the majority of European countries, there is a visible shift towards integrating doctoral training within larger programmes, schools and centres which are centrally managed. In the context of new managerial forms of institutional governance a valid prognosis could be that we are moving from the “managed academic” to the “managed doctoral student”. This was also an underlying trend in the recent discussions and recommendations of a large Conference organised by the European University Association (EUA) on “Doctoral Programmes in Europe” which took place in Nice in December 2006 (EUA

2006). Although it was emphasized during the Conference that there is no “one size fits all model” the growing importance of institutions to provide structure and organisation, to regulate access and admission of doctoral candidates and to develop strategies for career management and the post-doctoral phase was highlighted.

## **6. Conclusions**

Concerning the forces and forms of change at work in doctoral education we find notable differences due to national traditions and general policy developments.

In Europe we can observe a general shift in policy making for doctoral training and advanced research from the national to the supra-national level. The Bologna Process as well as the Lisbon Strategy have re-enforced this trend. More often than not, innovative models and new ideas are generated in European working groups or associations.

Despite continuous differences in terms of the forces and forms of change in doctoral education in the European countries, there is one factor of change which is clearly similar, namely the more or less advanced shift from the individual and/or departmental responsibility in reforming doctoral education to the institutional level. Well reputed doctoral education and programmes more and more contribute to the overall reputation and profile of an institution, attract best talent and funding and thus, begin to play a more important and extended role than serving the extension of the knowledge base in any given discipline. We can note this as an example for a general paradigmatic change in higher education policy which implies two shifts. First, the shift from the institutional logic to the systems logic moving the “idea of the university” (in a Humboldtian sense) into the background and focusing on the structure of a higher education system on the macro level. Second, the shift from the chair holder logic to the institutional logic in which academic work is more closely controlled and monitored and embedded into the new corporate identity of the institution.

It could also be said that doctoral education and training is currently undergoing a paradigmatic change insofar as it is no longer regarded as exclusively an academic affair being part of the tasks and responsibilities of the individual professor or, at the most, of the department or faculty but has moved into the focus of institutional and national policies (also cf. Enders 2005b).

But there are more shifts involved in the ongoing changes. The European initiatives to create a European higher education and research area are increasingly influencing or even shaping the national agendas with regard to doctoral education and research training.

There is a basic agreement in Europe that high quality research training as well as a higher supply of qualified researchers are important elements to realise the vision of a Europe of knowledge. To achieve these goals doctoral education and



research training is supposed to be given more structure and to improve its quality and relevance. In identifying the goals of the reform and analysing the instruments and models used to implement it, we can observe two underlying trends.

The first trend is that doctoral education and research training is no longer regarded as exclusively curiosity driven and as the disinterested pursuit of knowledge. Instead the generation of new knowledge has become an important strategic resource and economic factor. It thus becomes a commodity and its shape acquires a more utilitarian approach. Policy makers have begun to be interested in the state of research training and universities have been requested to develop institutional strategies for it. In addition, it is deemed so important a resource that it is no longer left in the hands of professors and departments but has become an object of policy making and has moved to the institutional and national, even supra-national level.

The second trend is that in most highly developed countries across the globe there has been a considerable increase in the number of doctoral students and doctoral degrees awarded over the last ten to 15 years. A further considerable increase is expected as a result of the implementation of the Bologna Process and the Lisbon Strategy. This means that an increasing number of doctoral degree holders will not remain in academia but seek employment on the labour market outside universities and research institutes or academies of science. Actually, this development is expected to trigger economic growth and innovation. However, for these jobs a research training within disciplinary boundaries and the acquisition of skills geared towards teaching and research in higher education institutions are deemed to be insufficient. Thus, reforms of doctoral education and research training are a must, even if we don't agree to the trend towards commodification of knowledge production.

The impact of globalisation with its increased emphasis on competition on the one hand and strategic alliances on the other has been identified as one of the main factors triggering change in doctoral education and research training. Globalisation is linked to the faster dissemination of information and knowledge through new information and communication technologies. This has not only led to the fact that information and new knowledge become outdated much faster than before but also an increased emphasis on the production of new knowledge. In the emerging knowledge societies or knowledge based economies knowledge production becomes commodified and a strategic national resource. These developments have started to have an impact on the ways in which knowledge is generated in universities and finally how education and training for the future knowledge producers is organised. It is no longer almost exclusively geared towards self-recruitment of the teaching and research staff within academia but towards a much broader range of careers in society and the economy.

Emerging models for research organisation and research training for the knowledge society differ from traditional models in several respects. Paavo Uronen (Uronen 2005) has summarised them as follows:

- from national to international,
- from basic, curiosity driven research to results oriented research (i.e. relevance, impact),
- from individual research to team research,
- from narrow, disciplinary oriented research to multidisciplinary research,
- from small laboratories to larger research institutes, programmes and centres of excellence (i.e. critical mass),
- from fragments to big science,
- from public or university funded to multiple funding sources,
- from unbound research to research within programmes and projects
- from purely academic to also professional,
- from national security to competitiveness and job creation
- from utilisation of resources to sustainable development.

The European model of doctoral education and training is still very much shaped by the traditional “master-apprentice-model” and for a while certainly will continue to be dominant. However, the idea of doctoral programmes is spreading and will become more important. Approaching doctoral education in a more systematic way and providing it with more structure while at the same time working towards more transparency in admission, selection and quality assessment will probably leave enough room for national traditions and ambitions to remain.

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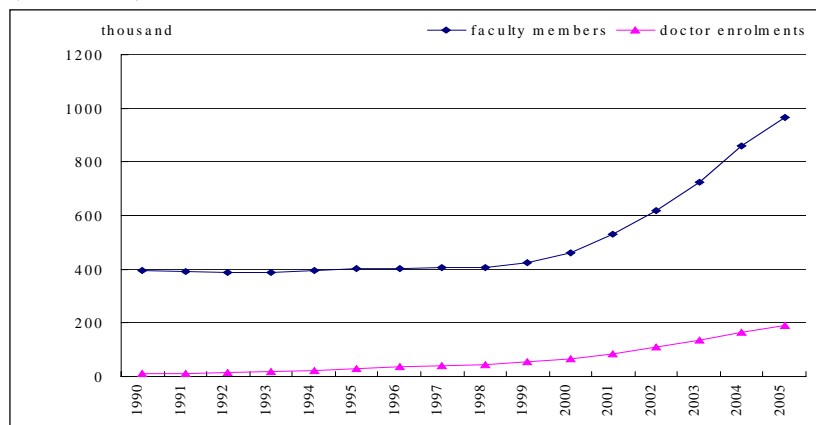
## Challenges to the Academic Profession Development Posed by the Changing Doctoral Education in China

Hong Shen

### 1. Introduction

In many countries, most entrants to the academic profession are required to hold a doctoral degree from a top university, and from at least a second-tier university in others. In China, more than 30 top universities recently agreed that newcomers should also have post-doctoral experience, and that doctoral degrees were no longer sufficient for the best academic positions. In short-cycle colleges, bachelor's degree-holders were once the majority of the faculty, but now there are a number of doctoral degree holders on their campuses. There seems to be a close relationship between the expansion of doctoral education and that of the academic profession. The two curves in Figure 1 show the expansion in both areas.

**Figure 1: Increases in Doctor Student Enrolments and Faculty Members (1990-2005) in China**



Sources: Educational Statistics Yearbook of China (1990-2004), People's Education Publishing House, Beijing; The Statistical Communiqué of Educational Development in China (2005), Ministry of Education, PRC.

Despite the dramatic expansion in doctoral education in a short period, it is important that core requirements are met in a given country. These requirements will reflect the culture of that country, and will also be influenced to some degree by political and economic conditions.

## 2. Doctoral Education in China

1980 is considered a milestone in the history of academic degrees and graduate education in China. In this year, the modern academic degree system was established in China marked by the issuing of the *Academic Degrees Statute of PRC* (ADS) and the establishment of the State Academic Degrees Committee (ADC). The ADS ratified the three levels of academic degrees – Bachelor, Master and Doctor – as they had been defined by the *Academic Degrees Award Law* in 1935 by the National Government of Kuomintang (Jiang Kaishi). The ADC became the highest authority for academic degrees and has been affiliated to the State Council of China since. The State Ministry of Education (MOE), in parallel, has been the main authority on graduate education. A series of laws and policy documents have been issued and reforms have been conducted since 1980. All these factors helped to shape doctoral education in China in the following ways.

*The doctoral education system:* There is an institutional dimension to Chinese graduate education. Both higher education institutions and parallel independent research institutions have been authorized to support doctoral students and award doctoral degrees. The universities and colleges must be public and full-time, and the research institutions must be affiliated to government agencies, such as the Chinese Academy of Science, the Chinese Academy of Social Science and the state ministries. In 2005, there were 349 authorized institutions awarding doctoral degrees in China.

*Graduate Schools:* Graduate school is part of the organisational dimension of Chinese graduate education. Some institutions with intensive graduate education are accredited to establish graduate schools; each institution can have only one graduate school and the name of the university is given to the graduate school, for example, Beijing University has the Beijing University Graduate School. The graduate school is independent from other academic schools and it is an administrative unit at the second tier within a university, focusing on the recruitment, student affairs, graduation and degree awards for graduate students for all disciplines and departments in the university. By 2005 there were 56 Graduate Schools altogether.

*Types of degrees and disciplines:* There are two types of degrees in the Chinese academic degree system, namely, academic degrees and professional degrees. At doctoral level, there are three professional degrees: Doctor of Clinical Medicine, Doctor of Dentistry and Doctor of Veterinary Science. At the masters' level, there are 16 professional degrees in Accounting, Agriculture, Architecture, Art, Busi-

ness Administration (MBA), Dentistry, Education, Engineering, Landscape Studies, Law, Clinical Medicine, Military Studies, Physical Education, Public Health, Public Management and Veterinary Medicine.

Degrees are awarded in 12 main disciplines: Agriculture, Economics, Education, Engineering, History, Law, Literature, Management, Medicine, Military Studies, Philosophy and Science.

*Authority to supervise:* Not every faculty member can supervise graduate students. The authority to supervise is very strictly controlled at doctoral level. Before 1999, the supervisors of doctoral students were approved by the ADC, and by the authorized institutions from then on. Doctoral supervisors make up a special tier above the level of full professor even though there is no extra payment associated with the role. To be a supervisor of doctoral students is the ultimate stage in a professorial career. This is a unique characteristic of Chinese doctoral education.

*Entry requirements:* The three types of degree (bachelors, masters and doctor) are organized hierarchically. Individuals can apply for the degree at the next level but they can not usually skip a level. A masters degree holder can apply for a doctoral degree, and normally a bachelors degree holder can only apply for a masters degree. There are two exceptions. Those who have prior achievements in teaching, research or management, and once they have completed the required curriculum and dissertation, can apply for a doctoral degree, even though they do not have a masters degree. These individuals are called doctors with “equivalent educational qualifications”. Masters degree students who excel can apply in competition for doctoral study directly and bypass the application for a masters degree and the doctoral entrance examination. This is called “the Master-Doctor-Continuum”. Universities prefer to retain potential masters students for doctoral education in some key disciplines by this means.

*Length of schooling:* There is a “4-3-3 system” for undergraduate, graduate and doctoral education in China. This means that gaining bachelors, masters and doctoral degrees requires at least 4, 3 and 3 years respectively. Chinese universities operate an “academic-year + academic-credit” system in which a very small number of students can graduate ahead of time. The masters degree used to be a terminal qualification which required three years of study. Recently, masters degrees were reduced to two years of study. Masters degree holders with both three years of study and two years will co-exist for a couple of years. By contrast, some experts have criticized a period of three years training as insufficient for a qualified doctoral-degree-holder and the production of a high quality doctoral dissertation. Policy has changed recently, so that four years of study is now required for a doctoral degree, and this is still being trialed.

*Requirement for graduation:* Every doctoral student is required to complete the curriculum and write a respectable dissertation. The curriculum is composed of both required courses and optional courses, and it is generally expected that 14 course credits will be gained. The requirements for the dissertation include both



academic and format standards. As for academic standards, the dissertation must contain original ideas, issues of theoretical and/or practical significance, and evidence of systematic and integrated knowledge. The major research findings should be published in the key journals or be utilized in social practice. The author of the dissertation must display his or her capacity for undertaking independent research. After the completion of the dissertation under the supervisor's guidance, the dissertation must be submitted to at least three domestic experts for peer review and, if the feedback is good, then the candidate can orally defend his/her work in front of a Doctoral Dissertation Defense Committee composed of at least five domestic or foreign scholars. When a candidate successfully undertakes a defense, his or her application including the dissertation is submitted to an Academic Degree Awards Committee at the school level first and finally the university level. Once this process is completed, the candidate can be awarded a doctoral degree. Degrees are usually awarded twice a year in June and December.

To sum up, under these institutional conditions, doctoral education in China has achieved great progress. Recent data is offered as proof. In 2005, the authorized doctoral education institutions altogether recruited 54,800 new students, registered 191,300 enrolments, and awarded 27,700 doctor degrees. The accumulated number of doctoral degrees awarded from 1982 to 2005 was 153,073. This huge number attracted immense attention both domestically and internationally. Undoubtedly, the number of doctoral degrees will also have some bearing on the status of the academic profession in China.

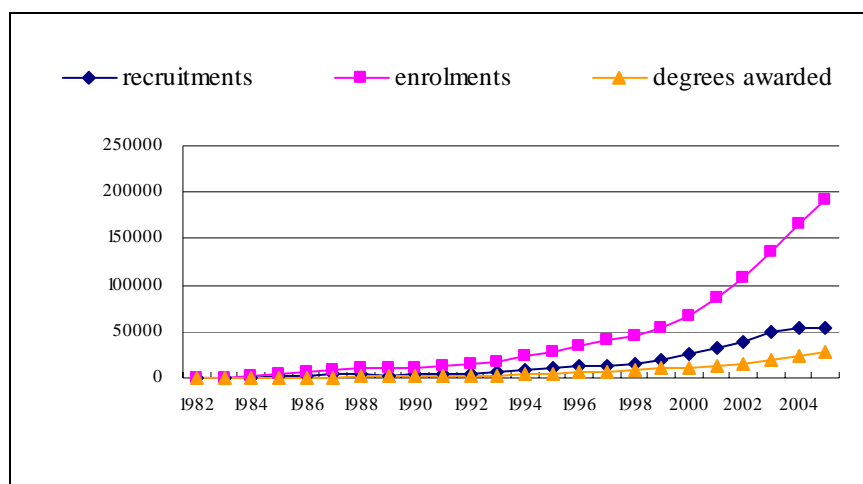
### **3. The Expansion of Doctoral Education**

The evidence outlined above indicates the expansion of doctoral education in China which, without doubt, has been very dramatic. Is this expansion necessary? What positive and negative effects will this expansion have on higher education, on doctoral education itself and on the rest of society and the economy?

#### **3.1 Increase in Numbers**

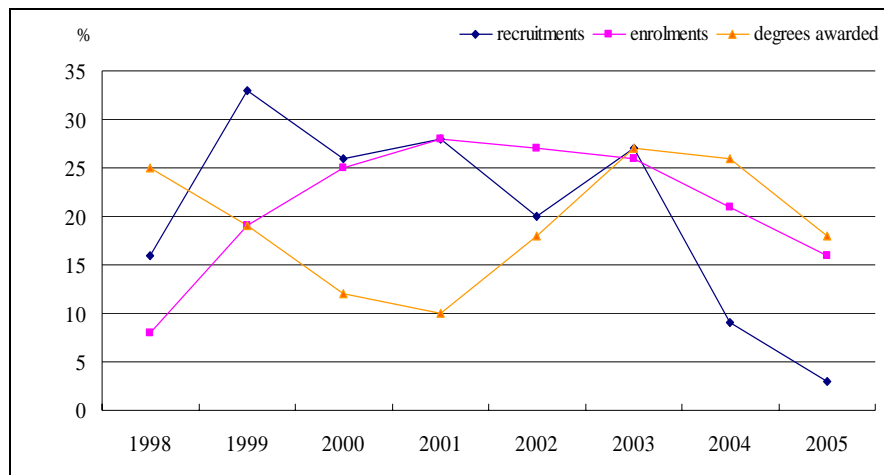
Figure 2 shows the numbers of recruitments, enrolments and degrees awarded from 1982, when graduate education was in fact resumed, to 2005, latest available data.

**Figure 2: Increases in Doctoral Education in China (1982-2005)**



Sources: Working Group (2006), Report on the Development of Academic Degrees and Graduate Education in China, Higher Education Press, Beijing; The Statistical Communiqué of Educational Development in China (2005).

The changes from year to year in terms of recruitments, enrolments and degrees awarded seem to be quite surprising. There was a peak in 1999 in the line for recruitment which was 33% more than in 1998, and there was a trough in 2001 in the line for degrees awarded when there were only 10% more than in 2000. The enrolment line seems to be a parabola but with a period of acceleration initially, followed by deceleration. Interestingly, in Figure 3 a watershed becomes apparent from the mass of data. In 2003, the rates of increase in all three elements coincide at 27% more freshers, registered students and awards than the previous year. After 2003, however, all three curves drop, with recruitment reaching its lowest rate of increase - only 3% - in 2005. This indicates that, after five years of expansion in enrolment and registration, the rate of increase in Chinese doctoral studies began to slow down. Both Figures 2 and 3 help to explain this expansion.

**Figure 3: Increments of Doctor Education in China (1998-2005)**

Sources: Working Group (2006), Report on the Development of Academic Degrees and Graduate Education in China, Higher Education Press, Beijing; The Statistical Communiqué of Educational Development in China (2005).

### 3.2 Positive Impacts of the Expansion of Doctoral Studies

As more and more people enter doctoral education, three major changes occurred in mainland China that had positive impacts on both higher education and society.

*Diversification and equity in doctoral education:* At the beginning of the 1980s, 1990s and 2000s, there were less than 1,000, less than 15,000 and more than 100,000 doctoral students respectively in the country. That is to say, in the last two decades, the increase in enrolments was tenfold. Now, in the mid-2000s, the number of doctoral students is approaching 200,000 (191,300 in 2005). Quite a large number of those doctoral students are not from traditional student groups, in terms of age, family background, nationality, etc. The diverse backgrounds of the students require institutions to provide a flexible doctoral education. This diversity can be embodied in curriculum structure, inter-disciplinary training, teaching methods, research programs and approaches to supervising. The diversity also involves inter-institutional communication and international exchange.

Another obvious benefit is equity of access to doctoral education. Because the places for doctoral study have increased, people from remote districts, poor families, in-service positions etc., can all participate in doctoral training. For example, a survey found that the fathers of 27.6% and 13% of doctoral students are farmers and workers respectively, and the fathers of 44% of doctoral students had only

received school education at junior middle level, primary level and zero year (Working Group 2006, p.55). These groups may never have thought of studying for a doctoral degree 10 or 20 years ago. Government, institutions and doctoral supervisors have all contributed to retaining these disadvantaged students on doctoral programs as long as they meet the academic requirements.

*Enhancement of the faculty's academic level and the educational quality of institutions:* Due to the increasing numbers and diversification of doctoral students, faculty members have to work hard to improve course instruction, obtain more competitive research projects and improve their reputation in both academia and society. Only in this way can they attract better applicants and ultimately train excellent doctoral degree holders. The doctoral students are also quite different: some are mature; some like independent or isolated study but others enjoy team work; some are introverted while others are extrovert; some would like to work in a single discipline but others prefer to undertake inter-disciplinary research. These differences present great challenges to faculty members in those institutions authorized to provide doctoral education. They have to attach great importance to quality, methods of teaching, innovative achievements in research projects and publications, integrative capacities in consultancy and exchange, and communication skills in getting on with these students. These aspects reveal not only the academic ability, but also the understanding and awareness of the faculty members.

Institutions are also faced with these challenges. In order to train high quality doctoral students, more money, better supervisors, better facilities and effective administration are all needed. These institutions must try hard to obtain funding, employ and retain high quality faculty members and reform campus management. These factors are intertwined with one another. In this sense, institutions must focus on accountability, performance and efficiency. However, when considering accountability, academic freedom should not be neglected; while we reflect on performance, input should also be taken into account; and when thinking about efficiency, equity should not be forgotten. As a result, the institutions should have an autonomous, active, auto-critical (3As) system for their doctoral education. Only when the institution is operating according to the 3As can educational quality be advanced.

*The development of human resources to a high level:* China has achieved huge progress in political, economic, technological and educational and other areas since opening up in 1978. However, the country has not managed to develop its human resources to a high level. A large number of outstanding young people are now studying or working abroad, and some are employed in well-paid companies whether they have graduate degrees or not. One important reason for this is that access to doctoral education has still been too limited. The expansion of doctoral education is beneficial in a number of ways. First, it can attract intelligent young people to study on campus; second, it encourages successful scholars who have

been studying abroad to return to the Chinese academic profession; finally, it can not only meet the current human resource needs of society, but also retain talent at a high level for the near future.

### 3.3 Negative Impacts of Doctoral Education Expansion

Compared with the gradual nature of the increase in doctoral education in China's past and in some western countries currently, doctoral students seem to have swept into Chinese campuses like a tide in the past decade. For instance, recruitments totalled 54,800 in 2005, which was 4 times that in 1995 and 20 times that in 1985. The enrolments in 2005 increased 4.6 times compared with 1995, and 50 times compared with 1985. In fact, the growth of doctoral education has been matched by the expansion in undergraduate education since 1999. The number of doctoral degrees awarded in 2005 was 5 times that in 1995 and 117 times that in 1985. Because of this dramatic increase in numbers, people have begun to worry about quality.

Actually, as the doctoral education expansion has matched the undergraduate education expansion, quality of higher education is a key issue of debate in China. One opinion is that the expansion of undergraduate education has actually reduced quality because student numbers increased, yet faculty members and facilities have not grown at the same pace. Each academic is now faced with more students, who cannot depend on the same level of guidance from faculty as before. On the other hand, students are crowded into classrooms, laboratories, libraries and dining halls, and more than before have to share a single facility. This will surely affect quality, it is argued. Another opinion claims that the definition of quality should be changed since higher education is shifting from an elite to a mass system, and the character of the cohorts in each is fundamentally different. For different cohort sizes, it is suggested, the standards for educational quality should be different; that is to say, we should not borrow the standards of an elite age to measure quality in mass higher education. The two opinions both seem reasonable. There may be similar debates around doctoral education. No matter when and where, doctoral education is the highest formal educational level, and it always has an elite status because only a relatively small group of people can participate in it. Therefore, different definitions of quality are not appropriate for the doctoral level. The quality of doctoral education should always be maintained, no matter how many participants there are – 1,000, 10,000 or 100,000.

However, how can the quality of higher degrees be maintained at the same level as before doctoral education expanded? Three steps should be considered carefully: recruitment, training and graduation.

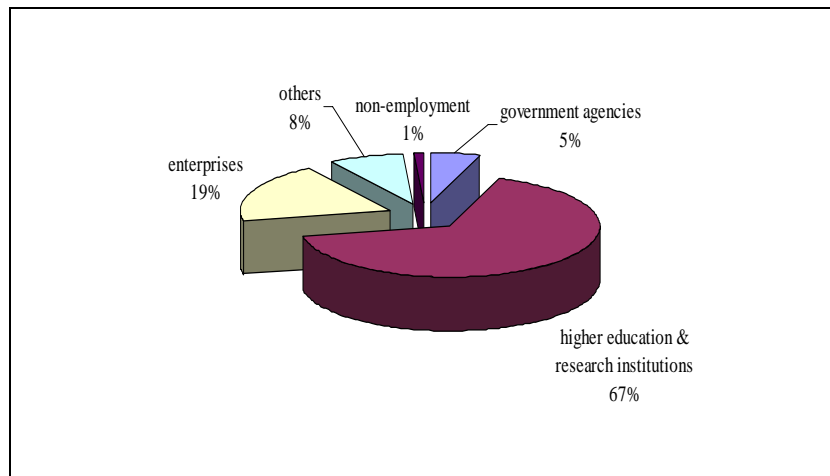
*Imprecise requirements for recruitment:* In the past, it was very difficult to become a full-time doctoral student, and the entrance examination usually included two parts: a written test and an oral interview. Now the written test is similar but the oral interview no longer effectively evaluates applicants. For example, some institutions recruit part-time in-service doctoral students without any entrance examination, the entry requirements simply being a masters degree and a provincial or ministry level award. These two kinds of Ph.D candidates (full-time and part-time in-service) differ greatly from each other.

*Informal training processes and graduation:* The teaching processes, proposal defense and dissertation defense seem to be informal. As there is no qualifying examination in most authorized institutions, the proposal defense is used as a kind of medium-term screening. In some examples of course instruction, the teachers are faced with a bigger classroom and individual communication is nearly impossible. The proposal defense is usually conducted in the American style; at least five examiners take part and discuss the viability of the topic, the reasoning and conceptual framework and feasibility of the work plan, based on the student's written proposal and oral report. However, the defense rarely screens out poorly qualified doctoral students. Again, very few fail in the dissertation defense. The invited examiners sometimes criticize the dissertation heavily, but the grade awarded is still high enough to pass the defense and obtain the degree. The more rigorous examiners are not popular and, in this sense, selecting examiners for the dissertation defense also becomes a form of "knowledge".

*On job-hunting:* Job-hunting for higher degree holders is another significant issue arising from the expansion of doctoral education. In March 2004, a survey of 2,426 doctoral degree holders (Working Group 2006, p. 45) found that only 1% of the interviewees were unemployed. As Figure 4 shows, exactly two thirds (66.8%) of the respondents were employed by higher education institutions and independent research institutions. About one third of the doctoral degree holders surveyed were employed by government agencies (5%), businesses (19%) and other kinds of employers (8%). In the long term, perhaps, more attention should be paid to the concentration of disciplines and fields of doctoral study.

Due to both the positive and negative impacts, the changing doctoral education also influenced the features and development of doctoral education itself.

**Figure 4: Survey of the First Appointments of Doctoral Degree Holders Awarded in 2003**



Sources: Working Group (2006).

#### 4. Select Features of Doctoral Education in China

In any country, doctoral education is likely to have its specific features. In China, the recent changes have both strengthened and weakened some of the features of doctoral education.

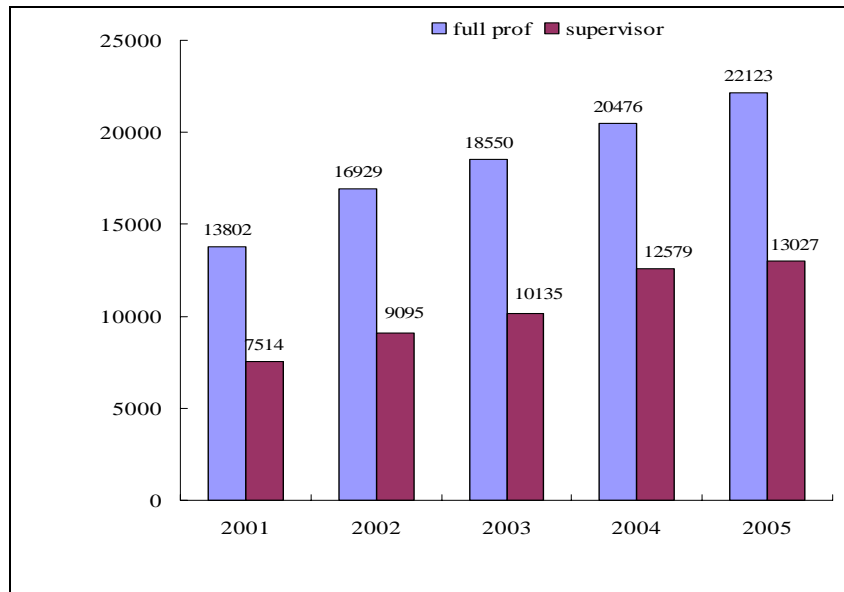
*The unique characteristics of its organisation:* There are two striking features of the organisation of doctoral education institutions in China. The doctoral education system consists of higher education institutions, research institutions, military universities and Chinese Communist Party (CCP) universities. Within this system, the top universities are the core and most of the doctoral students study in 38 “985 project” and 18 other graduate school universities. Only a small number of military and CCP universities provide doctoral programs in some special fields, such as Military Strategy and the History of the Chinese Communist Party. In China, independent research institutions can also award doctoral degrees, unlike in other parts of the world. In reality, these research institutions usually ask their graduate students to complete courses in particular universities, and then return to complete their research projects and write up their dissertations in the research institutions.

*A head start:* As has been mentioned above, masters degrees used to be the terminal degrees in China. After three years of study, masters degree holders have acquired some academic knowledge in their specialisation and have also gained a

strong academic foundation. Although the 3-year masters degree is now shortened to two years the traditional requirements for masters awards are still strictly kept.

*Supervisors:* In contrast to the United States, only “doctoral supervisors” can guide doctoral students in their academic affairs. The supervisors are “promoted” from full professors through a process of personal application, the scrutiny of achievements by the school academic committee, nationwide peer review, approval by the university academic committee and, finally, a report to the State Academic Degrees Committee. The process is the same as promotion from associate professor to full professor. In this sense, doctoral supervisors have a higher academic status than ordinary full professors, and they are highly qualified to guide doctoral students. Figure 5 shows the proportions of doctoral supervisors among full professors in the 30 top universities.

**Figure 5: Supervisors and Full Professors in the 30 “985 Project” Universities (2001-2005)**



Sources: Educational Statistics Yearbook of China (1990-2004), People’s Education Publishing House, Beijing; The Statistical Communiqué of Educational Development in China (2005), Ministry of Education, PRC.

*Close relationship between the supervisor and the student:* Each doctoral student must have one supervisor, but each supervisor can have ten, twenty or even more doctoral students. According to a survey undertaken in March 2004, 3.5% of the supervisors surveyed had more than 30 doctoral students, 8.8% of them were



supervising between 21 and 30 doctoral students and 24% of them had between 11 and 20 students. In some disciplines, the ratio of supervisors to doctoral students is even worse. In the fields of Economics and Management, 42.9% and 25% of the supervisors, respectively, have more than 20 students (Working Group 2006, p. 157). Normally, the Supervising Committee for each doctoral student should be composed of at least three faculty members but, in practice, only the supervisor is responsible for advising on the selection of courses, consideration of the research topic and the preparation of the proposal and dissertation by his or her doctoral students.

It is widely recognized that every supervisor has a limit to their familiarity with the subject of a doctoral student's dissertation. The single supervisor system relies on the capacity and vision of just one person, and this may inhibit students' innovation and imagination and influence their behavior and approach to getting things done. As a result, the supervisory system in China has both strengths and weaknesses. On the one hand, the supervisors are carefully chosen and reviewed to ensure they are highly qualified, but on the other hand, their limitations may also hinder the development of the students. If the capacity of a real supervising committee can be combined with that of the strong supervisor, the quality of doctoral education would surely be improved greatly.

Interestingly, the relationship between supervisors and doctoral students in China can be compared with that between parents and children. It helps students in their acquisition of knowledge and there can also be honest friendship between supervisors and their doctoral students; but it may not be so good for their approach to academic research. Supervisors usually criticize the students or disagree with their opinions, but very few students dare to contradict their supervisor's ideas. This may severely hinder students' academic freedom and scholarly development.

## **5. Two Modes of Doctoral Study**

Unlike the U.S. where part-time students stretch the course requirements over a longer period, part-time students in China actually study "part-time". Their courses are specially arranged at weekends or during holidays in a quite intensive way, whereas the courses for full-time students are arranged on week days during semesters. Full-time students have to write their dissertations while on campus and they can benefit from the academic environment. Part-time students have to write their dissertations either at home or in their work places well away from the academic institution at which they are registered. There are also differences in the recruiting process in which candidates for full-time places are required to pass an entrance examination but part-time students are not. The degrees gained by full-time and part-time students appear to be the same but their significance can be

quite different. Degrees undertaken by full-time students are generally regarded as much more demanding and credible.

## 6. High Concentrations in Particular Institutions and Disciplines

*Institutions:* As Table 1 shows, doctoral education is highly concentrated. The major 14 universities, 4.3 percent of authorized institutions, train one third of the doctoral students.

**Table 1: Institutions by Enrolment Numbers Over 3,000 (2005)**

No.	Name (province)	enrolment	recruitment	degree awarded
1	Zhejiang Univ. (Zhejiang)	6050	1564	1021
2	Wuhan Univ. (Hubei)	5577	1515	619
3	Peking Univ. (Beijing)	5088	1388	962
4	Huazhong Univ. of Sci. & Tech. (Hubei)	4990	1385	714
5	Jilin Univ. (Jilin)	4966	1517	535
6	Qsinghua (Beijing)	4909	1055	635
7	Shanghai Jiaotong Univ. (Shanghai)	4466	1193	658
8	Haerbin Institute of Technology (Helongjiang)	3944	924	375
9	Xi'an Jiaotong Univ. (Shan'xi)	3878	800	408
10	Fudan Univ. (Shanghai)	3776	1119	784
11	Sichuan Univ. (Sichuan)	3710	1037	544
12	Zhongshang Univ. (Guangdong)	3456	1082	571
13	Zhongnan Univ. (Hunan)	3369	919	384
14	Nanjing Univ. (Jiangsu)	3197	871	582

to be continued

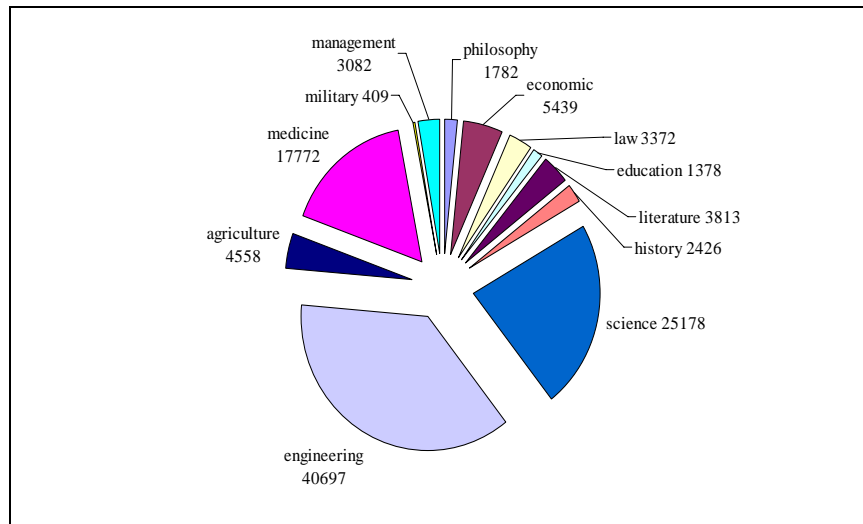
**Table 1 continued**

15	Tongji Univ. (Shanghai)	3025	749	344
Sub-total in 15 institutions		64401	17118	9136
Total in all 349 authorized institutions		191300	54800	27700
Numbers in 15 institutions / numbers nationwide (%)		33.7	31.3	33

Sources: The State Ministry of Education (2005), Higher Education Institutions Statistics Collection.

*Disciplines:* We also find a concentration of doctoral students in certain disciplines. Three disciplines, Engineering, Science and Medicine, awarded 76% of doctorates between 1982 and 2003. The lowest rates were in Military Science, Education and Philosophy: 0.37%, 1.25% and 1.62% respectively. The distribution of doctoral degrees awarded in twelve disciplines can be seen in Figure 6.

**Figure 6: Distribution of Doctoral Degrees by Disciplines (1982-2003)**



Sources: Working Group (2006)

## 7. Links Between the Change of Doctoral Education and of the Academic Profession

The majority of doctor's degree holders are employed at universities and research institutes. The profession must select most of its new recruits from among doctoral degree holders, and doctoral education provides a pool of future academic talents. Yet there is no doubt that the changes in doctoral education present challenges for the development of the academic profession.

*Different objectives of the persons involved:* There are three aims for doctoral education from the perspectives of government, employers and the doctoral students themselves. The government hopes that leaders in a range of areas will be highly qualified and that those who have doctorates should be favoured. The aim for government is that doctoral degree holders should form the elite in science, technology, economics, marketing, politics and education. For this purpose, higher education should provide multi-purpose training for doctoral candidates so that they can undertake academic, business and leadership roles.

Employers will want their new employees to be competent for positions in pure research, the stock market, teaching or production. To this end, doctoral education should include both theory and practice, focusing on academic training and non-academic activities.

As for the students themselves, most apply for doctoral study because they want to become a scholar (69.9% of doctoral students surveyed in 2004 said this was their motivation for undertaking doctoral education (Working Group 2006, p. 74). However, when they graduate, some fail to find an academic post.

There are differences between these aims. They introduce confusion to the doctoral education process and this is a significant challenge to the future of the academic profession. Scholars pursue knowledge and this knowledge is closely linked to academic concerns. If doctoral education provides a mixture of academic and non-academic training, newcomers to the profession may not be capable of handling the academic issues they will be faced with. Therefore, a new model is proposed which might be called "scholarship + leadership".

*Efforts to improve quality:* Doctoral education in China currently requires 3 to 4 years of study, with no real screening out of incompetent candidates, and each doctoral student usually has only one supervisor. Doctoral degree holders educated under this model may well fall short of what is required by the academic profession. This is due to several reasons: students are expected to defend their dissertations after such a short training period (the longest is 5 years) that they may not be able to concentrate on innovative research; strict screening is not implemented; faculty may change their academic responsibilities and students can lose heart in their academic endeavour; there is inequity between those students who study hard and are successful and those who are incompetent, and yet still

qualify; and each student has only one supervisor, so his or her weaknesses will be magnified, while the expertise of other successful supervisors will be wasted. More importantly, this may encourage scholar-tyrants who could threaten academic freedom and communication.

On the other hand, many top Chinese universities require doctoral students to publish several papers during their study period, so that they can defend their dissertations within the period allowed. Writing and publishing papers may take students away from courses, projects and seminars. Publishing sometimes makes students eager for instant success; they are forced into being prolific writers with few innovative ideas, and they may develop bad habits harmful to their future academic careers.

Current doctoral education does not include preparation for students to become faculty members after graduation. When doctoral degree holders become university faculty members, they have to complete a "preparatory training program" in some universities. Most of the doctoral students do not have training in how to write project proposals or how to organize team work. About 66.8% of the doctoral students surveyed in 2004 were working in universities, colleges and independent research institutions as cited above (see Figure 5), and most of them did not have sufficient induction to their work. This means that our doctoral education fails to prepare people for the future academic profession, and this also increases pressure on those students who plan to be scholars. Changes should be made to improve the current training model, including adding new elements to the curriculum, for example: research methodology, skills in applying for research funding, communicating with students, being a consultant for government or non-governmental agencies and enterprises, and so on. With this kind of preparation, students may be more adaptable in the future.

*Change of the funding model:* Today, doctoral students in China are funded in three ways: some are sponsored by the government, some are funded by their current employers and others are self-financed. In 2003, tuition fees paid by these different types of student were 12,000, 14,000 and 13,000 yuan per student a year respectively (Working Group 2006, p. 239, 253). The current financial model has two main problems. There is no specific research grant for doctoral students. 93.6% of those doctoral students surveyed in 2004 participated in their supervisor's projects (Working Group 2006, p. 201), and the funding is therefore controlled by the supervisors. This may impact on students' enthusiasm and sense of responsibility. If experienced and exceptional doctoral students can obtain research grants personally, they will have opportunities to learn to manage projects, expenditure, team work and the research process itself. This kind of experience will be very important for their future careers in the academic profession.

Most doctoral students work under difficult financial circumstances. About 14% of doctoral students surveyed had a grant or income of less than 300 yuan per month, and about one third of the students had a grant or income less than 500

yuan per month. However, 41% of students said they normally required 500-800 yuan a month to live on. The survey shows that, if students had a grant or income of about 800 yuan (100 US dollars) a month, nearly two thirds of students could meet their everyday needs. So, it is essential that doctoral students are provided with a monthly grant of 800 yuan. Doctoral students' family background should also be considered in providing the subsidy no matter what category of student they belong to.

The fall of 2006 witnessed further changes, as more than ten universities began to reform their financial models. Their main motivation is to establish a foundation from three sources: government, institutions and supervisors' project funds. This policy will strengthen the responsibilities of institutions and supervisors and, incidentally, relieve students' burden. It is a new challenge for Chinese doctoral supervisors to obtain project grants to enable their students to work on real research related to their dissertations. The supervisors will shoulder more responsibility for funding students, helping them to produce original dissertations and research results, and training them to be the next generation of academics.

*Challenges for the Academic profession:* The academic profession and doctoral education are interdependent and interact with each other. As is well known, changes in doctoral education will influence the development of the academic profession and, conversely, changes in the academic profession will also influence the development of doctoral education.

*The competitiveness of the academic profession requires innovative doctoral students:* Compared with other professions, the Chinese academic profession is increasingly competitive. This competitiveness is illustrated by differences in social reputation, income and professional stability. However, the Chinese academic profession is not competitive enough internationally. The small numbers from China of organizers and keynote speakers of significant international conferences, papers in the top international journals, and of positions in well-known international academic associations is proof.

*The administration of the academic profession requires all-round doctoral students:* Internationally, many academics are also involved in administration. Only when administrators understand the academic profession and know more about the characteristics of the modern university can they perform their managerial roles better. In China, the presidents, vice presidents, deans and vice deans within the universities all progressed from being professors. Some of them are simultaneously professors and administrators, including some very famous professors. In order to prepare future faculty members to participate in university administration, it is very helpful to include optional courses or programs and provide opportunities to serve as assistants to senior university administrators for a period. Comprehensive training packages can also be designed to prepare doctoral students for combining academic work with administrative responsibilities.

*The internationalisation of the academic profession requires doctoral students who are willing to collaborate:* Academic work increasingly requires team-work, multidimensional communication and collaboration. As a consequence of economic globalisation, international communication and cooperation with academics from other countries may also influence the development of the academic profession in each country. University teaching, scientific research and policy consultancy already operate across national borders. However, how can we train doctoral students who are willing to collaborate? Training in foreign languages, communications skills and team working are all possible and should be introduced and emphasized. The training process should encourage students to keep an open mind about the outside world and international affairs. This is quite a challenge for Chinese doctoral education.

## **8. Conclusions**

There have been dramatic developments in the economy and in higher education in China in the past two decades. Doctoral education has expanded considerably in terms of recruitment, enrolment and degrees awarded from 1999 to 2003, although the year 2003 saw a downturn in this trend. This expansion has had both positive and negative effects on the higher education system and society. It has enabled Chinese doctoral education to develop strong features of its own. There have been many changes in its organisational structure, relationships between supervisors and students, and the distribution of Ph.D programs in different institutions and disciplines. This transformation in doctoral education has affected the academic profession in China and, concurrently, developments in the academic profession (Hong Shen 2006) have also presented challenges to doctoral study. In order to improve doctoral education, reform is needed of its objectives, training arrangements and financial models so as to improve quality, ensure better recruits for the academic profession, sharpen the competitiveness of the Chinese academic profession, enhance its internationalisation, and to train innovative, all-round and collaborative doctoral students.

## **Acknowledgements**

Many thanks to Dr. Saixian Cao, formerly doctoral student of mine for her language polishing, and to my current doctoral student Yingli Zhang for the data collecting, and to my CAP team for many discussions on the project as well. The final thank goes to the Ford Foundation which supports the Chinese CAP-Study.

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## The “New” Look of Academic Careers in the United States

Martin J. Finkelstein

### 1. Introduction

For nearly a decade now, researchers in the United States have been warning about extraordinary demographic shifts in the American faculty. Finkelstein, Seal and Schuster (1998) reported a sea-change in the demographic profile of new entrants to the faculty ranks in the early 1990s. The new academic generation was heavily female (and these females were more likely than their senior female counterparts to be married); they were increasingly minority and counting an increasing proportion of foreign national among their ranks, especially in the natural sciences and engineering. Moreover, given the widespread aging of a faculty hired right out of graduate school to staff the higher education boom of the 1960s and early 1970s, many were predicting large-scale retirements (despite an end to mandatory retirement) and a wholesale changing of the guard. These developments not surprisingly spawned major lines of inquiry focusing on: (1) the preparation and recruitment of the next generation of college faculty in the US (Wulff and Austin 2004; Gaff et al. 2000; Gaff 2002); (2) a re-consideration of the structure of American academic careers in light of the incipient “new majority”, married women struggling to balance professional career and family life; and (3) the re-examination of tenure and the general restructuring of academic appointments.

As early as 1986, Bowen and Schuster were predicting by the turn of the century a mass exodus from the ranks of the American faculty of that large cohort hired in the 1960s to staff higher education’s post World War II expansion (Bowen and Schuster 1986) – just at the moment when demographers were projecting a mass influx of traditional undergraduate students, the sons and daughters of the baby-boomers (Frances 1998). To what extent, they worried, would higher education be able to compete with medicine and law and business in recruiting the “best and brightest”? And was the very definition of just what constitutes the “best and brightest” changing as our colleges and universities were recalibrating their missions to broader goals of access and equity (Keller 2001)? Moreover, with the end

of the mandatory retirement at American universities scheduled for 1994,<sup>1</sup> would the projected mass exodus of the post World War II professoriate become instead a glorious bottleneck – as individual faculty decided en masse to stay on the job – in effect freezing out that new academic generation?

As it turns out, a decade of research suggests that neither the concerns about a bottleneck freezing out a new generation nor the concerns about a return to the 1950s and early 1980s when academic position lay vacant for want of qualified applicants (or graduate students were plucked from their doctoral studies to fill full-time faculty roles) were well-founded.

*Preparing and recruiting the new academic generation:* Beginning in 1993, with the support of the Pew Charitable Trusts, the Association of American Colleges and Universities and Council of Graduate Schools launched a national project to restructure (reform) the preparation of future faculty. In particular, these efforts were intended to prepare individuals for careers outside research universities teaching students with a wide variety of backgrounds and preparation and for the full panoply of responsibilities in the faculty role (Gaff et al. 2000; Austin 2000). In some sense, it provided another outlet for needs first addressed by the development of the Doctor of Arts degree in the 1970s (Glazer-Raymo 1993). Together with the American Association for Higher Education's<sup>2</sup> Forum on Faculty Roles and Rewards, and in particular, the New Pathways Project, these efforts spawned a number of examination of graduate education and preparation for college teaching (Nyquist 2000, 2002), the concerns and challenges facing new faculty as they embarked on academic careers (Rice, Sorcinelli, and Austin 2000; Menges 1999), and a variety of efforts by professional association and agencies such as the National Science Foundation to prepare, in particular, the next generation of faculty in STEM fields. Taken together, these studies provide both hopeful signs and warning signals. Academic careers continue to attract individuals of extraordinary talent, but these individuals, especially the female majority, are now asking hard questions about the personal costs of succeeding in academic careers and the challenges in achieving a balance between work and family.

*A Career Fitting the New Majority:* Earlier studies of academic women reported that while they were more likely than men to interrupt their graduate study for childbirth and other domestic responsibilities, they tended to complete their degrees about as quickly (Strober 1975) if at a slightly late age (Tuckman 1976). Moreover, upon degree completion, they typically plunged right into an academic career (Gappa and Uehling 1979). Once having embarked on an academic career, career experiences are less clear. While some earlier national surveys reported that women were no more likely than men to interrupt their careers for personal and family reasons, several more recent studies provide a more complex picture. McElrath (1992) found that women who interrupted their careers were less likely to achieve tenure. Harrigan (1997) examined retention after ten years among new faculty cohorts between 1978-1991 at the University of Wisconsin-Madison.

While female faculty showed lower ten-year survival rates than men during the early period (1978 - 1984) – about 43 per cent survived compared to 59 per cent of the men –, those differences in ten-year survival rate disappeared among new cohorts hired after 1985. Moreover, when Tamada and Inman (1997) examined gender differences in attrition among multiple cohorts of female faculty at a selective liberal arts college between 1960-1994, they found no significant gender differences in survival rates at all. These analyses did not permit any inferences regarding reasons for attrition, however.

Most recently, Mason and Goulden (2002) used data from a national longitudinal employment database on PhD recipients, the Survey of Doctorate Recipients, sponsored by the National Science Foundation, to examine the effect of parenthood on the careers of male and female faculty. They reported a large and consistent “baby effect” and a “timing of baby effect.” There was a consistent and large gap in achieving tenure between women who have “early” babies and men who have early babies (defined as a baby within the first five years post receipt of PhD) – and this gap persists across academic fields and institutional types. In the sciences and engineering, there was a 24 per cent gap between men’s and women’s rates of achieving tenure 12-14 years after PhD receipt; the gap was 20 per cent in the humanities and social sciences. The effect of having “late” babies (those that arrive more than 5 years post PhD receipt) were far less dramatic. Overall, women with late babies and those without children demonstrate about equal tenure rates. Overall, women who attained tenure were unlikely to have children in the household and were more likely than men to remain single.

Studies of faculty a generation ago, when the initial rise of marriage rates among academic women emerged, reported greater conflict between work and family roles for academic women than for men (Finkelstein 1984, p. 211). These conflicting pressures, as well as the increasing social acceptance of divorce, may indeed help explain the fact that academic women are now twice as likely as academic men to report one or more divorces (Finkelstein, Seal, and Schuster 1998; Wolf-Wendel, Twombly, and Rice 2003).

Moreover, according to more recent estimates (Astin and Milem 1997), more than one third of college and university faculty who are married or in a marriage-like relationship have spouses/partners who are also academics – and that proportion increases to nearly two in five among married academic women (Wolf-Wendel et al. 2003). Although women faculty are somewhat more likely than men (15% compared to 8%) to be single, married women faculty are more likely than men to be partnered with other academics (Astin and Milem 1997). Nearly twenty years ago, Burke (1988) concluded from her study of the academic labor market at research universities that “the spouse employment issue [is] now much more pronounced than it was in the 1950s” (p. 78). Burke continues, “Spouse employment was a factor in almost 20 per cent of the appointments and resignations” (p. 78). It is safe to say that the “the spouse employment issue” is now even more significant

that it was in 1988; and will pose substantial challenges to academic institutions' ability to recruit and retain faculty members (Wendel-Wolf, Twombly, and Rice 2003).

## 2. The Revolution in Faculty Appointments

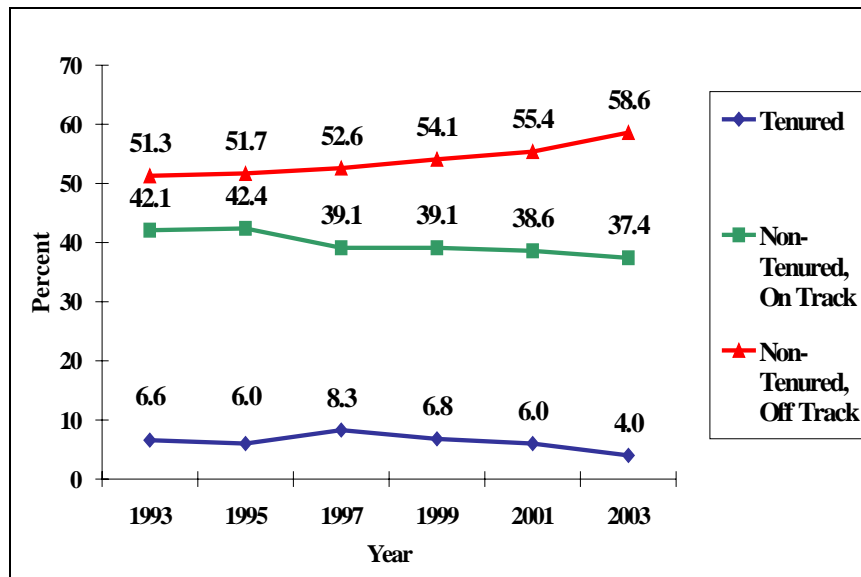
Concerns about new faculty recruitment and changing expectations of the "cost-benefit" of academic careers are operating in the context of a very new set of structural arrangements: the development of fixed-terms contract system which, in addition to part-time staffing, is developing as a parallel system to the traditional tenure track system. Baldwin and Chronister (2001) provided the first comprehensive snapshot of the varieties of non-tenure eligible full-time appointments in their national study of 84 institutions. They identified several types of off-track appointments, including : the teaching-only appointment in lower division service courses (introductory foreign languages; English composition; introductory mathematics, etc); the "clinical" appointment of established professionals without traditional academic credentials; research-only appointments and what amount to administrative, program-director type appointments (pp. 97-112).

Schuster and Finkelstein (2006) provided some of the best available estimates of the scope of the appointments revolution. The proportion of full-time faculty who were in fixed contract (non-tenure eligible) positions was barely perceptible in the 1960s, but these appointments have risen to over a quarter of the full-time faculty over about thirty years. Thereby, the bulk of these off-track appointments are *not* due to institutions with tenure systems abandoning those systems, but rather due to their development of parallel systems of term appointments (Schuster and Finkelstein 2006). That these aggregated data represent a serious underestimate of the phenomenon is demonstrated when we look explicitly at the growth of fixed-term contracts only among "new hires"<sup>3</sup> in recent years (Figure 1). The fact is that the *majority* of newly hired full-time faculty in American higher education is now part of this parallel non-tenure system and has been so for at least the past decade.<sup>4</sup>

With a calculator, it is possible to estimate, albeit crudely, the implications of these trends for the character of the academic workforce. Consider the following: If 4 per cent of the current tenured faculty retires annually over the next 20 years (i.e., if 80% of current tenured faculty, who constitute 40% of the total full-time faculty, depart), they will leave 20 per cent of the current full-time faculty (10% of all faculties) tenured. If they are replaced by a cohort of full-time faculty evenly divided between tenured/tenure-able and off-track appointments (i.e., that 40% of all full-time faculty are now only half tenured) and if current full-time staffing patterns are continued at 50/50 over those 20 years, the percentage of full-time faculty who are tenured will shrink steadily to about 30 per cent, and only 15 per

cent of the headcount faculty will hold tenured/tenure-able appointments (50% of headcount faculty is part-time).<sup>5</sup>

**Figure 1: Appointment Status of Full-time Faculty, New Hires Only, 1993-2003 IPEDS**



Source: Schuster and Finkelstein 2006

### 3. The New Appointments and the Changing Nature of Academic Work

In seeking to assess the significance of these "new" appointments for the nature and conditions of academic work, we should begin by remembering that during the 20<sup>th</sup> century, American higher education came to be dominated by the Humboltian (in contradistinction to the Napoleonic) model wherein the self-same faculty member was expected to combine the teaching and research functions in a single job (in France, and in the Soviet and Chinese systems, these functions were organizationally split between the degree granting universities, on the one hand, and the non-university research institutes, on the other). Indeed, it is precisely this *integration* of multiple academic tasks into a unitary faculty role – in the context of the system's radical decentralization – that is frequently cited as the major strength of American higher education – the structural source of its creativity and productivity. To what extent, and in what ways, have these "new" appointments reflected a departure from the Humboltian model? To what extent do these new

appointments represent nothing more than a purely technical change in the duration of faculty contracts? Do these new appointees perform the same sort of work? Are we witnessing a simple tinkering with the temporal terms of work? Or, rather a re-thinking of the work itself?

Well, in the case of part-time faculty, the answer is clear. Part-time faculty roles are limited almost exclusively to teaching; they include neither research nor traditional service activities. Moreover, even the teaching role is rather narrowly defined in terms of actual classroom contact with students (the instructor may not be heavily involved in designing the course or in deciding on assignments and the criteria for student evaluation). Available data suggest that even among full-time faculty, those on fixed-contract appointments perform different roles than their regular, tenure-earning colleagues. They typically focus their energies on only one of the three traditionally integrated faculty functions – teaching OR research OR service – and spend less time on their more circumscribed responsibilities.

For the largest group of full-time, fixed contract faculty – those who are “teaching” only – there is little involvement in research and institutional governance; and for research only faculty, little involvement with teaching and students (see Table 1). In a sense, full-time, fixed contract appointments of the “teaching only” variety represent a kind of aggregation of multiple part-time appointments into one! – and a significant departure from what has historically been one of the distinctive sources of American higher education’s strength.

**Table 1: Selected Work Activities of Tenured/Tenure Track vs. Non-Tenure Track Faculty by Principal Activity and Gender, Full-time Faculty, 1998**  
(percentage)

	Principal Activity					
	Teaching		Research		Administration	
	Tenureable/ tenured	Non-tenure track	Tenureable/ tenured	Non-tenure track	Tenureable/ tenured	Non-tenure track
<i>Female</i>						
Teaching under- graduates only	59.8	62.4	7.3	22.0	38.6	54.9
Zero publications during career	23.4	40.4	1.2	8.0	17.2	35.0
Zero publications last 2 years	35.8	53.3	2.3	15.4	26.4	49.6

to be continued

**Table 1 continued**

Have funded research	18.3	29.1	84.2	74.6	28.5	42.7
No contact hours w/ students	29.4	47.5	31.7	49.0	28.1	37.8
<i>Male</i>						
Teaching undergraduates only	49.5	64.1	4.2	15.4	25.8	58.5
Zero publications during career	15.2	37.3	0.2	3.5	5.6	29.5
Zero publications last 2 years	29.8	48.5	1.4	3.5	17.9	49.1
Have funded research	31.6	15.6	86.3	88.1	43.3	21.8
No contact hours w/ students	29.3	41.8	33.0	47.1	27.3	38.7

Source: Schuster and Finkelstein 2006

#### 4. The Tracks/Troughs of the "New" Academic Career

Early evidence suggests that the new appointments are re-shaping academic careers as we came to know them over the past half century. Over that period, a singular, predictable, lockstep academic career track developed in the four-year collegiate sector in the US as follows:

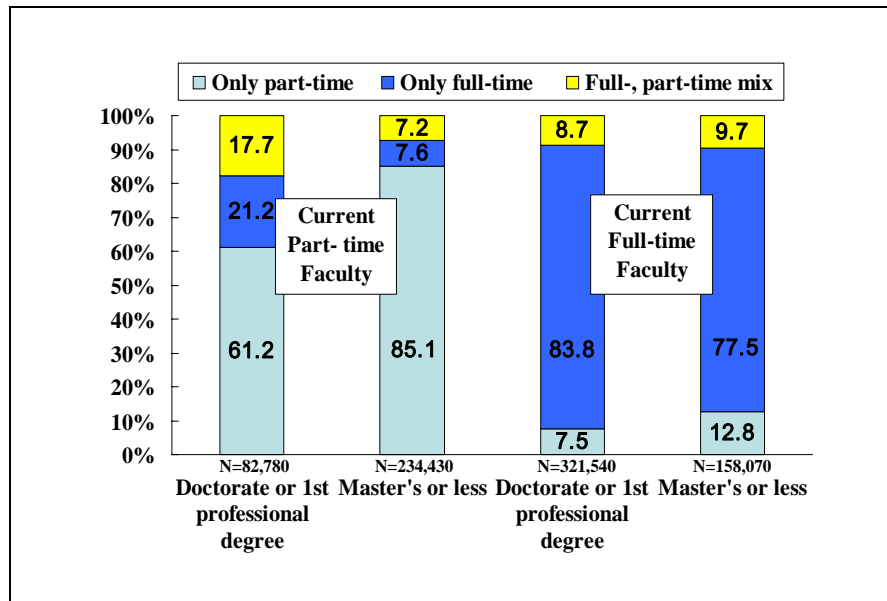
- PhD receipt,
- Initial appointment to full-time, tenure-ladder rank position (assistant professor),
- Review for tenure after a 6-7 year probationary period,
- Tenure review based on success in trinity of teaching, research/publication, and service (institutional and external),
- Promotion to associate and full professorships.

Newly available evidence from the US Department of Education's National Study of Postsecondary Faculty suggests that this modal, homogeneous pattern is fast becoming a thing of the past. Figure 2 compares the previous work experience reported by then current full-time and then current part-time faculty in 1998. What is clear from these bar graphs, is that among part-time faculty, the vast majority of



previous work experience is also part-time; and for full-time faculty, primarily full-time. When we control for highest degree, the relationships are even more pronounced. Among Master's degree holders, part-time work constitutes what amounts to a separate career track, i.e., 85 per cent of current part-timers have always worked exclusively on a part-time basis. Among doctorate holders, part-time work can serve as a temporary stepping stone to full-time work. Among those who held full-time appointments in 1998, eight of ten had always worked exclusively on a full-time basis.

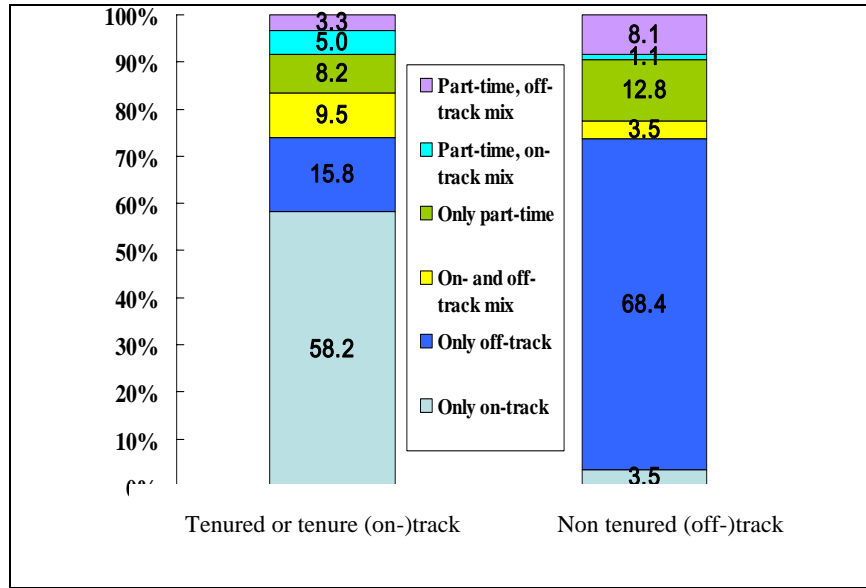
**Figure 2: Previous Academic Work Experience of Faculty by Current Employment Status (Part- or Full-time) and Highest Degree, 1998**



Source: 1999 National Study of Postsecondary Faculty (NSOFP-99)

Figure 3 examines only current full-time faculty and compares the work experience of fixed-term contract appointees with tenured/tenure-track appointees. The data suggest clearly that current tenured/tenure track faculty usually start out that way – about 3/5 had reported only previous tenure-track/tenured experience. At the same time, 2/3 current fixed-contract faculty typically pursued their careers entirely in fixed contract positions. While there is some permeability between fixed contract and regular tenureable full-time appointments (about 1/4 move from fixed term to tenure track), the two have come to constitute for the majority of American faculty quite independent career tracks.

**Figure 3: Previous Academic Work Experience of Current Full-time Faculty by Current Tenure Status (On- or Off-Track), 1998**



Source: 1999 National Study of post-secondary faculty (NSOFP-99).

It should be noted that these data are retrospective – supplied by “survivors” reconstructing their career trajectory. It is not possible to estimate the proportion of individuals who began their careers in part-timer and/or fixed contract appointments and subsequently abandoned their academic career. If we assume that many of these were unable to “cross” tracks, then our data likely underestimate – perhaps considerably – the independence of these alternative career tracks.<sup>6</sup>

**5. Quo Vadis?**

What have we learned from this review about the structure of academic careers in the United States? Let me begin with the following propositions:

First, *the structure of academic careers in the US crystallized in the post World War II period.* It was in the early 20<sup>th</sup> century, roughly paralleling a period of remarkable growth and the emergence of the American Association of University Professors, that an inter-institutional career, anchored in the independent life of an autonomous discipline (anchored in disciplinary expertise), became possible – not becoming the “norm” until the post World War II period. For nearly a half cen-

tury, the discipline-anchored, inter-institutional career remained of a piece – the prototype for what we think of as *the* academic career.

Second, in the 1990s, the very success of efforts to diversify the faculty, in particular, its increasing feminization, was exacerbating the constraints of what has become the traditional academic career. The demands of the traditional tenure clock, and their timing, were coming up against the equally unyielding demands of the biological clock and the “new” American family (Ferber and Loeb 1997). To what extent, and in what ways, could the traditional academic career accommodate these new demographic realities? An emerging, albeit secondary concern centered on faculty appointments and the traditional centrality of tenure to the academic career. Not only was there increasing attention to the ascent of part-time appointments, but new kinds of attention were focused on “alternative” full-time appointments – variously labelled, “off-track”, fixed term, etc. Evidence suggested that these appointments were spreading and questions were being raised about their implications not only for academic work and careers, but also for educational quality. Finally, despite the ending of mandatory retirement, demographic realities including the increasing age structure of the American faculty in the face of the impending wave of new students (the baby “boomlet”) gave rise to renewed (second order) concerns about recruitment of the next generation faculty – a particularly complex question in light of the changing realities of faculty appointments and demographics.

So where does the recent research leave us in light of the emerging new realities of American higher education in a global, knowledge-based economy? Most fundamentally, even current research, takes as its point of departure and reference what we have described as the traditional academic career characterized by a terminal degree in the discipline, and then a career lockstep largely defined by a probationary, pre-tenure period, and movement through the academic ranks to a full professorship. While we continue to build our knowledge base on that foundation, our analysis suggests that the ground beneath our feet is shifting – in a way it has not in perhaps a century. The data we presented here, and in much greater detail in Schuster and Finkelstein (2006) suggest that largely underneath our collective radar screens, a new “model” or prototype of the academic career has emerged – or more accurately, a multiplicity of such models has emerged. While the tenure-based prototype continues to exist (tenure systems have not been, and are not being, replaced by term appointment system in a process of one-for-one substitution), there has emerged a *parallel* system of full-time faculty, term appointments that have become the modal prototype among new hires for more than a decade and, if present trends continue, will become the prototype of full-time faculty work. Moreover, the available evidence – however preliminary – suggests clearly that these new types of full-time appointments differ both in the nature and scope of work responsibilities, the demographics of their incumbents, and also in the career path in which they lead. For the most part, at least two separate career

tracks exist among full-time faculty (a term and a tenure track) – each of these further differentiated by one or more different, specialized roles – teaching OR research OR administration. Moreover, the evidence we have presented from NSOPF99 quite conclusively demonstrates what earlier research (Gappa and Leslie 1993; Gahn and Twombly 2001) had merely suggested: that part-time teaching, with a few notable exceptions, constitutes largely an independent – and alternative – career track for those typically, but not exclusively, with the Master's as the terminal degree – especially so in the two-year community colleges and in the professions. Reinforcing the shaping influence of the new appointments on academic careers is, of course, the increasing majority of “professional school” faculty in American higher education – supplanting the modal “arts and sciences” professor. Professional schools have always departed from the norms of the traditional liberal arts in terms of the faculty role and rewards; and that only reinforces current movements towards greater specialization in the academic role.

## Notes

- <sup>1</sup> The age discrimination legislation in the 1980s eliminating mandatory retirement provided a ten year exemption for college and university faculty so that the impact of uncapping on higher education might be studied. Several studies cited below were conducted and concluded that effects would be minimal. The exemption was to expire in 1994, and the attempt to determine whether that temporary exemption needed to be made permanent or might be relinquished.
- <sup>2</sup> The American Association for Higher Education was officially closed in 2005. Many of its activities have since been continued by the Association of American Colleges and Universities (AAC&U) as well as by individual scholars.
- <sup>3</sup> IPEDS' glossary defines “new hires” as “persons who were hired for full-time permanent employment for the first time, or after a break in service, between July 1st and October 31st of the survey year. These do not include persons who have returned from sabbatical leave or full-time faculty with less than 9-month contracts/teaching periods.”

<sup>4</sup> It is not yet clear to what extent the slight decline in per cent of new hires appointed off the tenure track in 2005 represents an idiosyncratic aberration in the trendline (to be erased in 2007) or a genuine reversal in the trend.

<sup>5</sup> These calculations make a number of assumptions, including that the turnover rate for contract faculty roughly equals that of full-time faculty. Were contract faculty shown to have significantly higher turnover rates, then it is indeed possible that the number of *positions* held by individuals on fixed term contracts might not substantially exceed those for lower turnover and tenure-track faculty. However, the available evidence does NOT suggest that the turnover rate for term faculty is significantly higher than for tenure track faculty at the institutional level (however counterintuitive that may sound!). About 2 per cent of tenured/tenureable faculty retire annually (vs. closer to "0" per cent for term faculty who tend to be younger and at an earlier stage of their career) and perhaps as many as 10-20 per cent of all on-track faculty who come up for tenure each year are denied. In addition, there is a not insignificant percentage of on-track faculties, especially women and minorities who depart BEFORE they come to the tenure decision. If you add these up, there is at least a 5 per cent turnover in the tenured/tenureable faculty on average at most institutions (it is no doubt a bit lower at the research universities).

It should also be understood that a lack of difference in turnover and ipso facto the magnitude of shrinkage of the tenured/tenureable faculty may result in patterns in the aggregate that do not reflect the idiosyncratic experiences of individual institutions. Indeed, we note differences by type of institution in staffing configuration in the discussion that follows.

<sup>6</sup> That is, those faculties who remained in their first teaching appointment beyond graduate assistant are excluded from the analysis here.

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IV

MANAGEMENT AND ITS INTERFACE WITH THE  
ACADEMIC PROFESSION





## **The Academic Profession and its Interface with Management**

Maurice Kogan

### **1. The Issues<sup>1</sup>**

In earlier sessions we considered the changing role of the academic profession. We noted how academics had continued to assume predominantly collegial arrangements but the profession felt it had come under pressures potentially endangering the survival of the core identity of academics and universities. Academics perceived a gradual loss of professional autonomy, stronger pressure to take into account external societal expectations, a decline of possibility to shape their organisational environment, and an increasing control of their performance.

We also noted how increasing pressures for efficiency elevated the status of university management as a force in enabling universities to work between the traditional ideals and the new pressures of efficiency and coordination.

In this paper an attempt will be made to consider the changing role and status of non-academic managers and administrators and the resulting changes in the interface between them and academic staff. More specifically, it will discuss:

- the range of changes that are affecting the role and status of university management,
- the bases of academic authority and power within universities,
- the functions of the administrator,
- the normative bases of university administration,
- dimensions of universities as organisations which affect the nature of management,
- the interfacial relationships and mechanisms between academics and administrators.

## 2. The Main Changes Affecting University Management

Some of the changes in HE's governmental frames, in the relative reduction in resources and in the expansion of institutions have led to changes in internal management:

- growth in total managerial and administrative work at institutional and infra-institutional level,
- changes in the tasks and relative power of academics and administrators within universities,
- increased range of tasks for non-academic administrators as well as increase in their numbers,
- development of academic administration: the bureaucratisation of the collegium.

The earliest descriptions of university organisation assumed the dominance of academic ways of working, and the arguments in favour of them were convincing. Academics constitute the main production units, and their ability to produce requires considerable freedom. The academy's desired state was one in which 'academic autonomy, whether defined and guaranteed by law, by financial independence, or by customary tolerance, is thus the necessary safeguard for the free and unfettered discharge of every university's primary duty, which is to permit intellectual non-conformity as the means of advancing knowledge (Templeman 1982).

The dominant descriptions depicted university organisation as dual: the collegium (an ascription which often occluded the great power of the *ordinarius*) and the hierarchy/ bureaucracy constituted the Janus face of university organisation (Moodie and Eustace 1974; Becher and Kogan 1992). This is now an oversimplification; the changing tasks of higher education have led to changes in internal power relationships, including the precipitation of hybrid roles.

Institutions' responses to external changes become structured in terms of organisational and power structures. Many of the more important changes have been described as bureaucratisation. This word is currently being used to mean two quite separate things. The first is the shift from individual and academic power within the often mythic collegium to the system or institution. The second is the growth of power, and numbers, of non-academic administrators. The first is the major phenomenon and the second a possible but not invariant consequence of it.

Observation of systems both western and further east suggests that wherever systems either centralise or decentralise, authority at the head of the institutions is strengthened. It seems as if systems need a minimum of authority at one level or another if they are to hold together disparate concerns and priorities. Whatever space the collegium yields is occupied by the rectorates. In all but the Anglo-phone countries, that need for cohesion was previously met by the regulations laid

down and decisions made by national authorities. Both centralisation and decentralisation bring a changed status for academics.

The rectorates of the centralising and the decentralising systems both feel they must ensure that their institutions conform to wide span national policies. The common coinage in these apparently opposite trends is the insistence on quality assurance. In continental Europe, to different degrees in different countries, decentralisation has reduced formalistic central power in favour of market behaviour and normative control through evaluation. In the UK, the change has been from decentralisation to more decisive planning and quality assurance, together with some insistence on market behaviour. In the U.S., the authority of the head of the institutions has a long tradition and often has served as a role model for recent changes in Europe.

### **3. Changes in Management**

These changes have led to shifts in the internal structure of universities. In the traditional university, the vice-chancellor or rector was not unequivocally the manager of academics. Whilst he/she always held a great deal of power, this was to some extent shared by other members of the collegium of academics. The rector/vice-chancellor convened senior academics on many of the more important issues such as resource and staffing allocations, promotions or new academic developments. He was more powerful than others and as chairman of all the important committees and by his access to the chairman of council could take the lead in decision-making. The administrators – the registrar, finance officer, personnel manager and the like - may have generated power and the use of considerable discretion but were essentially acting on his behalf. When they communicated policies and decisions to academics they did so on behalf of the rector; they possessed no managerial authority over academics.

Under recent developments, the head of the institution is expected to be a chief executive and in some institutions in some countries is named as such. Professors acting as heads of departments are expected to act as 'middle managers'. The head of the institution has a stronger cohort of officers, often named as 'directors' (of eg finance, human resources, research policy, equity policies). This has affected their relationship to academics. They do not 'manage' them but have the authority of the rector or vice-chancellor to create and carry out policies to which academics must conform.

There has been an expansion in the status and powers of 'new higher education professionals', 'professional administrators', 'middle-level managers'. It has been observed in US institutions that institution wide committees in which faculty are represented but share in decisions with administrators and others are competing with senates which traditionally had the lion's share of decision making (El-Khawas 1995). 'Administrators' prime roles are managerial support or service

provision. Academics have to adapt to communication with these professionals who are amateurs in academic matters but professionals in shaping the university, and in aspects of institutional management not normally grasped by academics.

A changed role for higher education management is said to be emerging as higher education responds to a changing external environment. The changes are not the same in all systems which had different starting points. Some, e.g. Norwegian universities, which originally had administrative staff with a predominantly clerical background now recruit from university graduates, but are not reported to have achieved a new ascendancy over academics (Gornitzka and Larsen 2004). Others (e.g. the UK) began with administrators in strong registrar roles well up to the status of professors. They retain much of this status, and have expanded roles, but there is some apprehension about how they are located given the changing powers of vice-chancellors and university councils (Lockwood 1996). New systemic and institutional processes such as quality assurance have, however, been introduced which also change traditional distributions of power and values within academe and are already known to be a force for change in academic practice and produce new style directorates (Henkel 2000).

In the US, Gary Rhoades' study (Rhoades 2006) found increasingly aggressive colleges and universities seeking to capitalise on faculty's intellectual products. Participation in the new service-information economy has contributed to the fastest growing category of professional employees - support or managerial professionals. The growth of newly professionalised 'support' roles has gone alongside changes in the control and management of academic work which have affected the nature of academic roles - by changing the division of labour in the academy. These professionals are involved in intersecting with the private sector. "They are key players in academic capitalism" (Rhoades 2006; see also the description of changes towards more flexible employment practices (in Middlehurst and Kennie 1995).

With the increased scope of university activities, the growth of quality assurance procedures, the increased attempts to follow market behaviour, and the increased burden of centrally created policies, the numbers of managers and administrators has increased. Studies undertaken in Finland (Visakorpi 1996) showed that from 1987-1992 numbers of teaching staff increased by 5.5 per cent whilst administrative staff numbers went up by 39 per cent. In Norway, 1000 person years in administrative positions were added to the four universities from 1987 to 1999. This 66 per cent increase compares with a 56 per cent increase in academic staff. (Gornitzka and Larsen 2004). In the UK, between 2003/4 and 2004/5 full time managerial, professional and technical staff increased from 26.1 per cent to 26.4 per cent and secretarial and clerical from 18.1 per cent to 18.2 per cent of the total of 234,440 full time staff (HESA 2003/4 and 2004/5; longer time series figures are not available).

With these changes, simple diarchical assumptions do not hold. There are mixtures of collegial, academic-based decision-making and bureaucratic/hierarchical working. Academics take over roles of higher education professionals or administrative leadership. Evaluation systems are partially steered by academics and partially by others. Research is to lesser extent the successful target of managerial activities in higher education than teaching.

#### **4. Functions of the Administrator**

The managerial system is headed by a rector or vice-chancellor, usually but not always an academic, and is serviced by administrators who may be professional managers, or may be recruited from academics. Administrative structures vary according to country. In the English speaking countries, the vice-chancellor is seen as both the chief academic and the chief executive. The chief administrative officer – a registrar or secretary-general – is accountable to him/her in his chief executive role. Until recently, vice-chancellors have been appointed until retirement ages, but terms are getting shorter; mainly five year terms though this is not universal (Middlehurst 2004, p. 272). In some countries, a director, appointed by the Ministry of Education, has been parallel to the rector who is elected by the collegium, but, in most countries, the director is now explicitly subordinate to the rector, although still appointed by the Ministry. The fact that the rector is elected for a period from two to five years, and therefore politically vulnerable, whilst the director is a permanent appointment may still affect the power relationships between the two lines.

Powerful non-academic directors have been known. In the 1960s, the role was established in Sweden, to the discomfort of some academics, because “the government wanted to handle the growing university sector’ and ‘a strong university director was needed to establish enough confidence in the capacity ... of the universities to handle their new tasks in a professional way” (Karlsson 1996).

Administrators are concerned with a range of functions including giving advice to the vice-chancellor/rector on the development of institutional policy, strategy and tactics; policy execution; preparation of papers and reports to committees; development, monitoring and coordination of systems and procedures; management of non-academic staff and the physical and service resources of the university responsibility for the university's estate.

While forms of control and administration may have grown within universities, these functions may be taken by academics as well as by non-academic administrators. Changes in structure led to an increase in the power of academic leaders. Decentralisation to the universities in Scandinavia brought “an academic recovery of power, but this change has primarily affected a few academic leaders, not the whole academic staff” (Karlsson 1996). Similarly, in the US in six esteemed institutions, “the response to strategic change appears in the most effective instance to

a reassertion of academic meritocracy over pluralism and democratic participation” (Dill and Helm 1988).

In many countries universities have a “strengthened steering core” (Middlehurst 2004). The powers of vice-chancellors have been strengthened and senior management teams include both senior academic role holders and directors of services such as finance, human resources, planning and estates. Pro-vice chancellors may take functional responsibility for such areas as academic development or research. Similar functional precipitations have long been part of the US scene in the roles of provosts or academic vice-presidents.

Some of the tasks of administrators are regulatory whilst some are developmental. The collegium, through Senate and its infrastructural echoes at faculty and departmental levels, creates rules on matters that are inherently academic but these rules have to be administered to ensure conformity and legality throughout the whole institution. The administrators, then, whilst not concerned with the intrinsic academic judgements that might be made within the rules, monitor and ensure conformance to policies on modes of academic appointment, admission of students; assessment of students, and recent policies such as non-discriminatory practices.

They provide the expertise on the plethora of employment, safety and anti-discriminatory law. They may have a fiduciary role in ensuring that resources are spent with propriety. They enforce institutional and national legal rules on the spending of money. There is a Company Secretary role which provides “a legal and ethical check upon the activities of the rest of the senior management of the institution” (Lockwood 1996). It would be their duty to warn a vice chancellor if he/she were infringing regulations or council or senate policies. There have been cases when chief administrators have felt it necessary to act as ‘whistle blowers’ when their senior colleague acts outside powers.

On the developmental side, they may have the task of ensuring an adequate flow of resources to the university or of maintaining and developing the ‘personality’ of the institution by promulgating it effectively in the external environment. Increasingly, they are concerned with activities which may change the boundaries of the institution, such as developing entrepreneurial activities, ‘going into Europe’, sharpening and marketing the institution’s capacity to get research contracts and grants.

Increasingly, the interest of the state in matters of academic substance brings administrators to the boundary of the academic domain. Requirements placed on institutions to defer to quality evaluation increasingly bring departmental performance under institutional review. This can cause administrators to come quite close to monitoring academic performance. Whitchurch (2004, p. 280) notes that responses to changes in the higher education environment have meant that: “administrative managers find themselves not only acting as independent arbiters, giving impartial advice on the basis of professional expertise, but also becoming involved in political judgements about institutional futures. They increasingly undertake an interpretive function between the various communities of the university and its

external partners. As the boundaries of the university have become more permeable administrative and academic management have interdigitated, and hybrid roles have developed”.

### **5. Functions of Academics**

The professoriate has both external and internal roles. Professors figure in the invisible colleges which are largely informal arrangements through which academic norm-setting is maintained and assessments made for senior academic posts, fellowships of academies and research grants. Academic content of both teaching and research is moderated through conferences and publication systems maintained by trans-institutional systems. They lend authority to quality assurance systems. The decisions made within the invisible colleges are transmuted into allocative decisions by the management systems, often through the operations of a coo-opted elite of academics.

A professor is, or used to be, an acknowledged leader in his subject field. Whether a head of department or dean or not, professors are expected to set the norms for teaching and research in their subject area. They should, but do not in all systems, take a key role in curriculum development as well as setting the themes and standards for research and scholarship. They should actively mentor junior staff. They should be responsible for ensuring that new areas of their subject are covered and that new teaching methods and advances in subject knowledge are pursued.

From this base, related to expertise, they take a role in institutional government. They participate in decisions on promotions and resource allocations in the wider institution, which includes the review of the institutional profile. The operation of the professoriate or the academics more widely makes them part of a system. This is apparent when the curriculum or rules of assessment, examination or evaluation are decided. These take on a formal legislative aspect and also require a bureaucracy to implement them. They thus have functions that link them with the managerial system of the university. This is quite apart from the academics who cross over into explicit managerial or administrative careers. In particular, the roles of Deans have become more managerial, all the more so when they are long term appointments sometimes recruited directly from outside the institution.

### **6. Normative Basis of Administration**

There is a great deal of literature about the values of academics. There is far less on the values or normative base of administration in higher education, although Stensaker's recent work (Stensaker 2004) on organisational identities helps us to open up this field. Administrators and managers may not consciously look for a normative base to their work and it may be dormant and implicit. Deem (2006)



has usefully depicted the extent to which 'manager-academics' appear reluctant to learn from externally generated research on their values, policies and practices. This can be construed as a weak acceptance of the self-knowledge essential to self-guided professionalism. They depend instead on other ways of achieving power and self-confidence.

One thoughtful rendition (Lockwood 1996) of the normative base of administration has resonances of what I tried to analyse for the value base of the British Civil Service whilst it was still enjoying its golden age in the 1970s (Kogan 1973). Lockwood starts with the observation that it takes place within an institution which "places responsibility mainly on individuals of high academic quality functioning within a comparatively non-hierarchical and pluralistic structure of both work and management." In this environment, and one of massive external changes, "the expertise of the in-house professional administrator functioning in structures which provide for continuity has been an important factor in facilitating transition or adaptation at the institutional level." It is possible to score continuity as a function that translates into such values as predictability and reliability, taking a longer view and ultimately, contributing to organic and social solidarity. If it goes bad it spells stagnation. By contrast, the academic always has his eye on external reference groups and allegiance to the external invisible college may be stronger than to the institution.

Lockwood maintains that permanency gives the administrator the capacity to act as a change agent. He/she can "(adjust) the institution to new economic conditions, (cope) with internal conflicts, (steward) the estates against short-term internal demands, or (press) for changes in working practices uncomfortable for current employees." And "the low external allegiance of administrators makes for high commitment to the employing institution." These ingredients of the internal administrative model, however, are in Lockwood's view being eroded.

Other attempts to differentiate between academics and administrators should be noted.

Watkins, Drury and Preddy (1992) describe managers as being responsible for coordination and control of the activities of other people; professionals by contrast are responsible for their individual contributions to the business (quoted by Middlehurst and Kennie 1995). Deem (2006, p. 74) uses Bourdieu's (1988) distinction between academic power (founded on the accumulation of positions allowing control of other positions) and scientific prestige "founded on successful investment in the activity of research alone" to depict those who have followed academic managerial careers.

Whitchurch (2004, p. 295) notes how administrative managers' growth as professionals can be described using Archer's (2000) analysis: "The data suggest that a key element of administrative managers' identity is the ability to empathise with the intrinsic academic values, and also to be able to comprehend their exchange value in the outside world".

## **7. Dimensions of Universities as Organisations which Affect the Nature of Management**

In order to analyse what is at present emerging we might turn to concepts taken from traditional organisational theory and think of the distinctions between academics and administrators in terms of differentiations in tasks, values, knowledge and power or authority.

Stensaker's (Stensaker 2004) definition of organisational identity as collectively held perceptions and beliefs about the distinctiveness of a given organisation enables us to ask what aspects of these beliefs can be attributed to either academics or administrators. Work on professional organisations other than universities (the British National Health Service) has led some of us (Joss and Kogan 1985; Kogan et al. 1995) to conclude that institutions depending on the use and generation of knowledge engage in three kinds of quality assurance. They denote different value positions that can be taken up by different role holders:

- 'technical quality', concerned with the specialist quality of work applied by individual practitioners in their work;
- 'generic quality', concerned with the common aspects of quality in the way that work is organised and managed, its results and relationships as applied by whole services or management units (includes behaving with a respect for agreed procedures, punctuality, relationships with colleagues and customers and respect for the delivery of the service); and
- 'systemic quality', concerned with the quality of a comprehensive and integrated set of services, as applied by whole services or management units.

Traditional organisational theory (e.g. Brown 1961) would start with the analysis of diffuse values and missions in universities and divide them between frontline production and secondary control of supporting functions. Crudely put, the academics are the producers - of knowledge and education - but either they or non-academic administrators then have to ensure that production takes place within a common frame of law and resources. If we go to industrial examples, we would also say that there are non-producers who occupy the essential roles of marketing and selling products.

In academic institutions, the technical values have traditionally dominated. The creation and certification of knowledge and its transmission according academics' epistemic assumptions is the ultimate end of administration. As we move, however, into the market and state corners of Burton Clark's triangle, so institutions move towards more corporate concerns. They become more concerned that clients will receive services and enjoy relationships with the institution and its parts that will guarantee continuing market shares. Other forms of generic behaviour derive from the requirement to conform to external legislation and expectations of institutional behaviour in appointments and the like. They are required by outside

forces and the pressures of resource constraints to think and behave systemically in terms of planning, portfolio building and resource use.

Academics increasingly cannot hide from the generic and systemic aspects of their institutional being. Nor can institutions do other than strengthen their non-academic expertise and working in order to meet these demands.

This depiction of complex organisation leads us to deeper issues. Academic work is underpinned by certain value positions. The classic depictions are the disinterested search for the truth and the certification of knowledge on the criteria of logic, evidence and demonstrability. But the secondary functions also have value bases. Administration has to have a concern for public accountability and for predictability which is not at the top of a research scientist's head. There are also value positions which may be shared territory, such as a concern for equal treatment of clients, or advancing the university beyond the good of individual academics or their departments. Certainly that has been a powerful tradition in British public administration (Kogan 1973).

All of this invites us to divest ourselves of some of the earlier simple diarchical assumptions. Academics move into systems management and administrators increasingly help create the policy and procedural frames for academic work. The structural consequences are:

- a) in virtually all higher education institutions there are mixtures of collegial, academic-based decision making, and bureaucratic/hierarchical working. Those operating the bureaucratic lines can be, however, either academics or professional administrators. Hybrid roles emerge, and some non-academic administrators may have to move away from bureaucratic assumptions and be ready to exercise greater discretion and initiative in their roles (Whitchurch 2004);
- b) collegial working is not simply a coming together of peers, but is itself structured into hierarchical and bureaucratic formats;
- c) for institutions to work effectively there are, and have to be, hinge or interfacial mechanisms which enable collegial decision making to be authorised, legitimated and resourced by the institution. These are put into effect at least in part through the activities of the administrators or bureaucracies.
- d) as institutions become more complex so they elaborate staff or regulatory or developmental roles cutting through traditional academic organisations.

It is an illusion to assume that academics working together in the collegium can be other than bureaucratic. The collegium generates and then authorises the curriculum by going through successive stages of authorization through faculties, senates or academic boards. It acts similarly on the content and structure of assessment procedures. It determines the criteria and standards by which new appointments to faculty are made, which the total institution absorbs into its own criteria. It decides about the resources it needs, and presents them to the institution for determination.

These functions require academics not to act as free spirits but to undertake quite technical tasks in order to reach decisions that then, in effect, have the force of regulation. Their decisions are taken on delegation from the total university. For them, to be effective, there has to be legitimating action taken by the university. These are collated and monitored by members of the parallel administration.

Thus it is not realistic to assume that there are two clear cut organisational lines of collegium and a bureaucracy. Several collegia within an institution are held together by bureaucratic and hierarchical forms. A central bureaucracy assists and monitors academic decision-making whilst undertaking other tasks which are not within the remit of the academic bureaucracy, such as the maintenance of the physical aspects of the university.

## **8. Some Issues**

Some issues arise from the analysis given above:

- a) Universities increasingly depend upon central administrative bureaucracies because resources are scarce, and the challenges from the external environment are more severe. Could this mean that bureaucratic values of predictability, conformity to set rules, due process and collective productivity are overtaking the individualistic and creative values assumed for academic work?
- b) The full-time academic bureaucrat is becoming more common. This might lead to increased disassociation between them and their academic peers and changes in the value orientation of academics as they see status going to those who manage rather than perform?
- c) Does the rise of the academic bureaucrat make redefinition of the non academic bureaucrat necessary? Does their distinctiveness rest in specialist knowledge or in the objectivity claimed for them by Lockwood? Or both?
- d) The increased range of tasks for non-academic administrators raises questions about their recruitment and training. Of what should these consist? Those canvassed include technical knowledge of finance and personnel, information technology and planning as well as political and negotiating skills (Davies 1979). A balance between generic training and individualised staff development, perhaps related to organisational development, may need to be struck.
- f) To what extent can we note coexistence of collegial, participatory and top-down modes? Is there mobility between these different roles, and what is the effect of this mobility? How are they affected by macro-steering, by training, by recruitment, by activities of institutional development?
- g) How do the bureaucratic values of predictability, conformity to set rules, due process and collective productivity, the entrepreneurial values of institutional gain, and the individualistic and creative values assumed for academic work interact and reshape each other?

## Notes

- <sup>1</sup> This paper is a developed version of 'Academic and Administrative Interface' in M. Henkel and B. Little, eds. *Changing Relationships between Higher Education and the State*, London: Jessica Kingsley 1999.

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## **Transformation of Academic Work: Facts and Analysis**

Christine Musselin

### **1. Introduction**

The academic profession has always been the process of change. While reading some historical research or looking at the comments and pieces by academics reflecting on their situation over time (for instance, Wilson 1980, Rice 1986 or Altbach 1980, 1996 and 1998, Clark 1987), it is striking to observe that they all converge in that, whatever the moment in which they were, they observed that the academic profession was no longer the same. There is therefore no ideal, universal and stable state of the academic profession. As all social bodies, it is a living entity, able to adapt, sensible to external changes but also trying to enact its environment.

These developments affect the relationships between the academic profession and other parts of the society and the position of this particular profession within this society. It also affects its internal modes of regulation and the capacity of the profession to control them and to avoid the intervention of external actors. It finally affects the content of academic activities themselves and the norms according to which they are to be achieved.

As a result, even if the “crisis of the professoriate” has for years been an inevitable part of the diagnosis, the details or the intensity of the factors constituting the crisis have evolved over time. Among today’s often mentioned problems, many are linked to the massification of higher education (and of the academic profession as a consequence) and to the critical perceptions on science: on the one side, scientific progress can be depicted as dangerous, on the other scientific results are open to controversy by public opinion, while at the same time the access to knowledge has increased and is shared by more people than before, thus weakening the status of the scientists. Both processes transform the situation of the academic profession in our societies<sup>1</sup>: holding an academic position is no longer rare. Thus there has been a decrease in most countries in the status of academics in



terms of income, prestige, or social position, even if academic identities seem to remain strong and stable (Henkel 2000).

A further issue is related to the weakening of professional power. The figure of the scientist defended by R. K. Merton (for instance 1957) or J. Ben David (for instance 1977) in the fifties and sixties, i.e. a member of a specific sector of the society characterised by its capacity for self-regulation, the respect of a specific ethos and its autonomy towards external forces or other sectors of the society has been subjected to many controversies. Some arose from the sociologists of science themselves with the emergence of the strong programme (Bloor 1976, Latour and Woolgar 1979, Latour 1987), and the antidifferentiationist thesis (Shinn and Ragouet 2005), but this figure has also been more and more criticized by non academic actors. On the one hand, the previously celebrated autonomy of scientists became a cause for inefficiency and has progressively been described as an obstacle to private funding and to the transformation of science into innovation. On the other, the limits of the professional self-regulation have been highlighted and the strength and efficiency of the ethos in framing and disciplining the individual behaviours have been questioned. As a result non-professional instruments of control expanded at the level of higher education institutions while new allocation formula, assessment processes, steering agencies have been developed by the public authorities in order to create incentive structures able to canalise what was considered to be the over-autonomous scientists.

These evolutions do not only transform the norms and rules regulating the academic profession in developed as well as in developing countries (see for instance Altbach 2000, Altbach 2002, Enders 2000 and 2001, Enders and de Weert 2004). They also affect the content of academic activities in many ways. The aim of this paper will thus be first to describe and account for these transformations and second to provide some explanations for them and to resituate them into the larger context of work in our societies.

## **2. Transformation of Academic Work**

Two main correlated occurrences will be distinguished. First the on-going diversification and specialisation process of academic activities and second the increasing forms of control which are being experienced.

### **2.1 Diversification and Specialisation**

*Academic activities are more and more diverse*

It is probably an oversimplification to say that in the past academic tasks meant two main tasks: teaching and research. The combination of these two activities allowed to categorise faculty members on an axis starting with those teaching

only, continuing with those mixing both teaching and research and ending with those mainly involved in research. Two principles of differentiation organised the academic profession: one separating academics according to their main activities (research or teaching); another drawing territories around the different tribes (Becher 1989) constituted by the disciplines and sub-disciplines.

An in-depth investigation of academic work would probably have shown that many academics were already engaged in many other activities. It is at least what can be deduced from reading biographies of Pasteur by B. Latour (2001), Nash by S. Nasar (1998) or autobiographies (Friedel 1994, Mendras 1995, Crozier 2002 and 2005, etc.): whatever the period concerned, they were all engaged in a multiplicity of activities. This confirms the importance of what Latour (1987) and Callon (1989) would describe as the building of socio-technical networks, for their careers and in turn for their scientific reputation, today and in the past. Thus, even if one could distinguish, as Bourdieu (1984-1988), between two types of careers<sup>2</sup> the core activities were teaching in classes and publishing results in academic journals. Other activities were necessary but were not expected and were not explicitly rewarded.

Today, this is no more the case. Writing proposals, developing contracts, elaborating e-learning programmes, being engaged in technology transfers, etc. are part of the tasks achieved by faculty members nowadays and they are no longer considered as peripheral, not compelling and secondary, but recognised as important aspects of academic work. Academics are expected to make these endeavours in order to gain scientific reward. In Germany and in the USA for instance, the ability to raise money and to manage research projects based on external funding is one of the criteria of judgment when hiring professors (Musselin 2005b). It is no longer something academics can do: it is something they must do. For example, scientific productivity (in terms of number and impact of publications) is of course one of the explicit criteria expressed by the direction of the INRA (a French national research institution in agronomy) in order to be promoted from the corps of *chargés de recherche* (tenured research fellow) to the corps of *directeur de recherche* (senior research fellow). But management competencies are as important as the scientific profile: being responsible for a small research team within a lab, leading a European research project, being in charge of contracts are necessary in order to have a chance for promotion (Carrère et al. 2006).

This diversification of tasks also holds true for teaching. Activities around teaching have evolved and represent a larger scope of tasks nowadays. Giving a class and supervising doctoral students are only one part of the training work. Teaching engineering, designing e-learning programmes, finding internships for students, for instance, also belong to “teaching” today.

Furthermore, new missions (or the so called “third mission”) are emerging. They include links with regional, national or international bodies and decision makers, interaction between scientists and the public at large and involvement in

public debates, public expertise, support to public policy at large, etc. Such tasks also participate in the diversification of academic activities.

*The specialisation of academic staff*

An important consequence of this diversification process is the specialisation of academic work. It follows two lines.

First, specialisation occurs through the evolution in the distribution of tasks during the career achieved by permanent academics. Economists often highlight a negative correlation between age and publications, the latter diminishing as the former increases. They often (explicitly or implicitly) explain this relationship by the decreasing intellectual capacities of scientists when they get older.<sup>3</sup> As a matter of fact, most Nobel prize winners were less than forty when they made the discovery for which they were rewarded (Stephan 2006). But this explanation underscores another, which, rather than in contradiction with the first, accentuates it: the evolution in the contents of tasks during career trajectories. According to a recent study led in physics and biology in several French universities (Becquet and Musselin 2004), there still exists a clear division of tasks according to the career position: experimentations are generally achieved by doctoral students and post-docs under the supervision of the *maîtres de conférences* (tenured assistants/ associate professors), while the professors raise funds, develop contacts, write project proposals. Thus, the seniors are less and less in contact with concrete scientific work.<sup>4</sup> This increasing share in project management, administrative responsibilities and maintenance of partnerships which occurs with seniority is again not new, but it becomes more and more important, clear and explicit. As a result, the gap between the disciplines for which this division of tasks has become crucial (at least to ensure a certain level of scientific production) and those where it is still secondary (French historians, for instance) is increasing in terms of task contents as well as in the perception of environmental pressures: while the former are trying to develop contacts and to maintain them, the latter seem to ignore their environment.

In some countries (US, UK, the Netherlands for example), this trend toward specialisation leads to reconsidering the link between research and teaching and to segmentation among the permanent staff: higher education institutions open posts which are either teaching or research oriented, thus threatening the Humboldtian definition of what an academic is (should be).

A second line of specialisation develops according to the contractual status. The increasing part of contingent staff allows for a specialised distribution of activities among them. In the US for instance, undergraduate classes are often given by part-time or adjunct staff, while in France they are often allocated to doctoral students with teaching duties<sup>5</sup> or to ATER (Time-limited Assistants for Research and Teaching) who have the same teaching duties as the permanent

faculty-members but are appointed on a one-year contract that may be renewed only once. The same trend can be observed in the area of research activities. The remarkable increase in post-docs in the US (Ehrenberg 2005) but also in many other countries (UK, Australia, etc., cf. Robinson 2005 for instance) is also a way to allocate identified activities (specific experimentations within well defined projects) to a particular type of manpower.

Last but not least, new positions appear which require a mix of competences and original profiles of candidates. Staff working in transfer and technology offices, for instance, often were trained as academics and hold a PhD but also have management skills. The individuals hired to answer calls on project proposals provide a further example: they must possess a solid scientific background with strong skills in project management. New functions at the frontier between academic and management activities are thus created and participate in establishing a new division of academics tasks based on increased specialisation.

## 2.2 Increased Controls over Academic Tasks

The developments mentioned above facilitate the emergence of increased control over academics because it is easier to control single-task workers than multiple-tasks workers. But, there is also a general increase in and diversification of the forms of control exercised on academics.

Among the national procedures which were developed, the British Research Assessment Exercise provides a good example (Dill 2002). It did not only produce a clearer hierarchy among the British university departments in Great Britain, but also resulted in a classification of the academic staff (drawing a line between the research active and the non research active staff). This has an impact on the management of staff in terms of salaries (in relation with the scientific production) or in terms of hiring strategies (Harley 2002).

But the most striking and important development of these supplementary forms of control certainly happened at the level of universities. In many countries, the recent period has been marked by the introduction of tools allowing higher education institutions to intervene on the management of their academic staff. First, in countries where academic positions were traditionally managed at the central level or by the decentralised public authorities, this function has often been transferred to the university level. This is the case, for instance, in Italy, the Netherlands, Austria, etc. (see for instance Enders and de Weert 2004): in these countries, decisions such as the creation, suppression or reoccupation of positions are now directly negotiated by university leaders with their departments and *facultés*. This is expected to have disinflationist effects: first by stopping the traditional game which consisted in asking the state for more positions than needed in order to recruit as many positions as possible; second by inciting to recruit contingent staff, so that each institution tries to get as much staff as possible with the same budget.

Parallel to this increased control over the size and composition of the academic profession, an expansion of the incentive mechanisms at the disposal of higher education institutions to manage their academic staff occurred. As documented in another paper (Musselin 2005a), internal labour markets (Doeringer and Piore 1971) developed within European universities. Thus, promotions during career do not only rely on institutional mobility and the capacity to be hired (or proposed for recruitment) elsewhere. Institutions have their own career procedures and development and offer possibilities for promotion to the best academics of those who are not moving. As an example, one can mention the introduction of merit pay salary in German universities: it is clearly an instrument allowing the latter to reward or sanction their academic staff and to introduce regular compelling evaluation procedures at the level of each institution.

Such evolutions affected the nature of the relationship between each academic and his/her institution. The university is no longer a place welcoming and sheltering academic activities, it has more and more taken over the role of an employer. The affiliation (or sentiment of affiliation) to one's institution is progressively transformed into work relationships. The responsibilities and duties of each academic are not only defined by his/her professional group but also by his/her institutional work arrangements. This often goes along with a transformation in the type of employment contracts on which academics are recruited in order to allow a closer and more direct work relation. In Austria (Pechar 2004) or in Japan (Yamanoi 2003), for example, the newly hired professors no longer have a status of civil servants but are recruited on private contracts: thus their employer no longer is the abstract figure of the state but the concrete person of the university president.

Consequently this increased the possibility of intervention for university leaders on the allocation of work among academics, while these leaders are less and less expected to behave as *primus inter pares*, but to act as employers. In many countries, academics must (at a minimum) account for the use of their time. Sometime the repartition of their time among the different activities is not defined by their institution and regularly renegotiated. Such an evolution finally transforms the scope of academic freedom. In many countries it has long been considered as the freedom to teach and to do research on topics chosen by each academic, as well as the freedom to self-organise his/her work (Musselin 2005b). It is nowadays more and more limited to the first part of the definition, because higher education institutions have an increasing impact on the allocation of tasks and on the repartition of the time dedicated to these tasks.

The trend described in the above paragraphs is often analysed (and criticised) as a loss of control from the academic community. Many authors conclude that professional power is weakening because other forms of control have developed. But, as already argued (Musselin 2005b, Enders and Musselin 2005), this analysis is not completely relevant. By and large, the increase in control over academics

relies on assessments led by peers. The decisions made by editorial boards, hiring and promotion processes, or assessment procedures remain largely (if not entirely) controlled by academics and they are no easier than previously. The RAE, for instance, very much relies on the scientific criteria of each discipline. The incentives used on the internal labour markets are mostly academic-based and the reward system which has been developed in that framework is all the more legitimate due to its reliance on external peer review. As a matter of fact, there is a great deal of evidence that the professional power often supports the institutional power. Rather than a decrease in academic power, there is an emergence of other forms and other actors of control on top of academic regulations. As a result, academics are no longer evaluated only by their peers, but also by their own institution or through national devices that public authorities develop in order to control, rank, and benchmark their activity. As a whole, there is a global increase in the level and intensity of controls, which often relies on peer review processes.

Nevertheless, two mechanisms tend to modify somewhat these conclusions. On the one hand, what is considered as an academic criterion is evolving. Some new aspects which were not present previously or which were not considered as “scientific” beforehand are now qualified as such by peers. In parallel, the hierarchy among the “scientific” criteria may be subject to modifications. On the other hand, peers sometime accept to integrate hybrid criteria in their judgement and thus take into account elements that are themselves “non purely academic”. This happens when they feel obliged to incorporate them in their judgment in order to remain “credible”, for example, by giving priority to the social relevance of a project. This also occurs when decision-making bodies are composed of peer and non-peer members (as in the British research councils, for instance).

### **3. Transformation of Academic Work: an Analysis**

The points developed above have already often been outlined, described and in some cases denounced. Many authors highlight the risks attached to these developments and feared the rise of “academic capitalism” (Slaughter and Leslie 1997 or Slaughter, and Rhoades 2004), the results of managerialism (Halsey 1992, Dearlove 1997, Deem 1998, Reed and Deem 2002) or the consequences of globalisation (Marginson and Considine 2000). Others, on the contrary, point at the limits and weaknesses of the professional guild to auto-regulate itself and reveal the abuses or the inefficiency it produces (see Alchian 1977). But such opposed perspectives often rely on normative, when not ideological bias. The issue I would like to address here is different as I will not discuss whether these evolutions are welcome or not, threatening or not. These are of course crucial questions, but we often lack the empirical data (and often the adequate methods) to document the quantitative, but above all the qualitative impact that the on-going transformations have on scientific production or on the innovation capacity of higher education

and research systems (Musselin 2006a). Indeed, some recent studies measured the negative impact of the increasing number of contingent staff on students achievement (Ehrenberg and Zhang 2004) while others worry about the lack of creative autonomy experienced today by young scientists employed on non-tenure track positions at an age at which one generally produces major results (Stephan 2006). But such measurements are still rare and further evidence is needed on the long run to broadly assess the effects.

For this reason, instead of making an inventory of the potential positive or negative impacts of these developments, the second part of this contribution aims at discussing two different but compatible explanations of these trends. Finally it will be argued that the distance and the difference between academic and non-academic work being reduced as both sectors are experiencing two opposing but converging processes.

### 3.1 The Late Industrialisation of Academic Activities

A first explanation is directly connected to the massification of higher education systems. It links the diversification and specialisation processes to the increasing numbers of students and staff and explains this growth by being generated by a move towards the industrialisation of academic activities. Although higher education, in many countries, remained a craft activity even after massification, this is progressively changing (Gumport 2000). Even if still far from an industrial activity, some features of industrialisation can be observed, if one defines it as the passage from craft production of ad-hoc products to the production of mass products through organised production processes through three mechanisms: specialisation of tasks, rationalisation and normalisation.

E-learning provides a good example for this.<sup>6</sup> Traditional teaching was typically a craft activity, each academic being responsible for his/her own class either alone or with a small team of assistants. The conception of the course was a personal exercise and the contents could be adjusted and redefined according to the needs or attitudes of the students. Both aspects have been transformed by on-line teaching. On the one hand, the conception of the course requires both content and technological skills and this is often distributed among different groups of actors (academics and technicians) who must cooperate to develop the products. Beyond this, there generally is a separation between the “authors” of the course and in turn the teachers (tutors) using it and interacting with the students: this pushes a little bit further the allocation of tasks among different jobs<sup>7</sup> (conception/computerisation/tutoring). On the other hand, the on-line curricula are rather standardised products in the sense that they are “set” and can not be changed or adapted “in-time”, but also because they have to respect technical and conception norms. Teaching material are no more personal pieces each linked to a specific teacher, but more generic products which can be used by different tutors.

Kleinman and Vallas (2001) found the same process for research activities. They observed the transformation of research units into profit units or the use of standardised quantitative measures of production. They thus argue that there is an industrialisation of academic research.

This first explanation focuses on the inevitable consequences associated to the need to deliver more and more courses to more and more students, and to the transformation in working conditions implied by the mass production of education and research.

### **3.2 The Transfer of Practices and Tools from Non-academic Work to Academic Work**

The second explanation is not an alternative one: it is compatible and can even accelerate the process described by the first. But it has another, more external, cause. The diversification and specialisation processes, and the increased controls over academic activities are described as both due to the transfer of instruments and practices from the private (firm) sector to the academic sphere (or to the weakening autonomy of science and higher education and their increased permeability to other spheres). This would push towards the transformation of universities into organisations (Brunsson and Sahlin-Anderson 2000, Krücken and Meier 2007, Musselin 2006b), the mutation of academic activities into academic work and of scholars into knowledge workers.

For most authors, this process is linked to public policies motivated by the new public management rhetoric and recipes, as well as by the dismissal of professional regulation to the profit of organisational regulation.

But Kleinman and Vallas (2001), Jong (2005) and others insist on the influence, research contracts and partnerships with firms have on the diffusion of codes and culture from the industrial to the academic sector. For them being in contact with the non-academic research sector leads to learning and respecting the rules and practices of this sector. As a result, such interactions are a more powerful mode of transfer, or at least a more powerful vector of change, than higher education reforms.

### **3.3 Diminishing Distance between Academic and Non-academic Work**

As mentioned above, the current developments affecting academic (craft) activities tend to transform them into academic (industrial) work. This considerably reduces the differences between the members of the academic profession and traditional workers. In terms of control over the organisation of their time, the allocation of tasks and the specialisation of their activities, as well as in terms of staff and career management, the discrepancies between a wage-earner in a firm and a faculty member have decreased on the average (more for contingent staff than for the traditional tenured positions).



This nevertheless is not only due to the two processes discussed above (industrialisation on the one hand and transfer from the private firms sector on the other). It is also linked to the transformation of work in the non-academic sector. As very interestingly argued by Kleinman and Vallas (2001, p. 453) about university and firm researchers, while “universities increase the frequency of their interaction with industry, they experience the mounting pressures to become isomorphic to their corporate partners” but reciprocally, “as firms compete for investment capital and for academic researchers from the most prestigious universities, they increasingly adopt institutionalised practices associated with academic laboratories and departments. The two authors thus point at the industrialisation of academic research and simultaneously the “collegialisation” of private firm research, which they describe as “a shift away from the hierarchical constraints (...) toward a newer, more flexible, and egalitarian organisational pattern that grants expert employees much higher levels of autonomy than before” (Kleinman and Vallas 2001, p. 460). There are thus two opposed but convergent trends at the same time, one transforming academic activities and the other affecting work in firms.

It seems therefore that work situations in firms are growing closer to academic tasks. This is the argument developed by Menger (2002), a French sociologist of arts, who concludes that intellectual activities (arts of course but scientific occupations as well) no longer are specific but become a model towards which the organisation of work and employment relationships in firms are leaning. This is reflected in the transformation of firms themselves and in the managerial forms they seek to achieve. The model of the pyramidal structure with a long hierarchy has been replaced by flatter architectures. They also tend to abandon the organisation model for network structures and this further impacts on the division of work. For instance, chains of interdependent but isolated specialists are replaced by collective projects within which different specialists interact and work together for a period of time limited by the achievement of the mission for which they are gathered together. The logic of staff gathering in such projects is first of all based on individual professional competences rather than on qualifications (specific degrees and credentials) while autonomy at work, responsibility, accountability and individual performance within a collective group become more important than hierarchical authority and vertical control. As a result, the role of firms in the definition of each job decreases in favour of the worker him/herself. Consequently too, employment relationships are supposed to evolve. Instead of being recruited on tenured positions, the “new” workers, pertaining to this model are supposed to go from one project to another. This justifies the development of the “new career theory” (in particular Arthur 1994, Arthur and Rousseau 1996) which stresses the fading organisational careers (workers following the careers designed by internal markets in their firms) and the rise of boundaryless careers (workers being self-responsible for the construction and development of their individual careers).

Bringing firms and scientific (or artistic) organisations together is probably excessive but one can not be insensitive to the similarities to be observed between the normative injunctions addressed both to the workers and academics, in terms of mobility (either geographical, institutional or thematic), flexibility, networking, etc. Such occurrences, referred to as “new capitalism” (Boltanski and Chiapello 2005) in firms and as “academic capitalism” in universities are either considered as an expected future for the contemporary human beings (this is the position mostly adopted by the promoters of the “new career” approach), or as a threat for the workers/academics themselves and for the society/higher education itself (see Sennett 1998 for society and Slaughter and Rhoades 2004 for higher education). But whatever opinion one might hold, it is important to be attentive to them and to the bridges they incite to be built in terms of research agenda between two spheres of activities generally viewed as separate.

#### **4. Conclusion**

In this paper I focused on one specific aspect of the on-going evolution of the academic profession: the transformation of academic activities. Two main trends have been discussed: the diversification and specialisation of academic tasks, and the increased control over academic work. A more complete overview of the present change would be needed to show that these two trends are connected and in turn contribute to modification of the relationships between the academic profession and other parts of the society, the position of academics within this society, the internal modes of regulation within the profession and the capacity of external actors to influencing them. We here only indirectly mention these other aspects.

But this restricted focus on academic work is of great interest, not only because it affects the day to day life of academics but also because it reveals larger phenomena. I thus pointed out the industrialisation of higher education and research and the transfer from the industrial to the academic sector. Finally, I analysed these transformations as the resultant of a more general process attenuating the discrepancies between academic and non-academic work.

This leads to simultaneously consider the transformations of work in firms and in academia. But also to better identify which of the driving forces identified above, concern both firms and higher education institutions, and which are more specific to the academic world. No doubt further comparative research between academics and non-academic knowledge workers is needed!

## Notes

- <sup>1</sup> For a in depth presentation of this issue and of its potential forthcoming consequences and evolutions see Enders and Musselin (2005).
- <sup>2</sup> In his work published in 1984 (in English: 1988) from a study led on French academics in 1967, P. Bourdieu distinguishes between “pure” scientific careers and careers built on the participation in the management of science (sitting in evaluation commissions, being elected in national bodies, etc.).
- <sup>3</sup> See for instance Siow (1995).
- <sup>4</sup> The importance of the administrative responsibilities and of the tasks of project management in the activity of the professors is mentioned by some *maitres de conférences* (or some *chargés de recherche* at the INRA (Institut de la Recherche Agronomique) or in other national centres for scientific research) as the main reason why they do not want to become professors or *directeurs de recherche*. They consider that the increase in salary they would get is too low to compensate the increase in responsibilities and the decrease in concrete research tasks.
- <sup>5</sup> Among the doctoral fellowships attributed by the Ministry of Education, an increasing number are for “allocataires-moniteurs”. They have a three year fellowship which includes a teaching duty of 64 hours per year. They also have to attend the classes of the CIES (Centres for Initiation to Higher Education) which prepare them for their potential future situation as academics.
- <sup>6</sup> As for the problems it raised in the academic community and institutions. The relatively non-successful French policy for the creation of what has been called “campus numériques” (digital campuses) is partly due to the resistance of academic work and academics to the passage to industrial processes (Miladi 2005).
- <sup>7</sup> To those already mentioned, one should add the project managers, the sales taskforce, the webmaster, etc.

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## Shifting Boundaries and the Academic Profession

Mary Henkel

### 1. Introduction

According to Bernstein (1996), individual and collective identity is strongest and most stable when the actors concerned have the power to maintain strong boundaries, to protect the space between themselves and other individuals and groups. However, ideological, political, economic, and social changes during the last decades have had major implications for the power, and in some cases the desire, of academics to maintain boundaries which they had come to take for granted. One consequence is that the conditions which have long enabled the formation and maintenance of stable and legitimising academic identities have been transformed.

The changes are, in part, specific to their world: ideas have changed about the control, definitions and functions of research and higher education in societies. Academic assumptions about higher education exceptionalism, about academic rights and duty to pursue truth and extend knowledge for its own sake and about individual academic freedom and collective self-regulation as prerequisites for good academic work, have been put under question. Conceptions of knowledge as public utility, as a prime source of collective and individual wealth creation and market competitiveness, have become increasingly influential. Academe is seen not as a separate set of institutions operating in a bounded world but as embedded in the larger social and economic system. With that, some argue (Lyotard 1984; Barnett 1988; see also Clark 1998), the justification for academic autonomy has gone. Values of social and commercial instrumentalism, interdependence and academic cooperation and engagement with other social actors and institutions (Association of Commonwealth Universities 2001) have become increasingly influential.

The changes are also, however, more general and perhaps more fundamental. They include the democratisation of knowledge in “knowledge societies” and the related reappraisal of the meaning and structural manifestation of functional specialisation. Governments and the public are no longer willing to give the same authority and autonomy to professions in public institutions. Increasingly, they are



seen to need management, as well as greater openness to more diverse forms of knowledge, including that of consumers, and to collaboration with other occupational groups. At the same time, distinctions between the state and the market have been blurred. Market mechanisms and principles have been incorporated into public bodies, together with management. These developments are among the factors contributing to the rise of increasingly multi-functional organisations with more complex structures, in which boundaries have both been reconfigured and become more permeable.

The aims of this paper are, first, to articulate more fully how pervasive the blurring of boundaries has been in the policies and organisation of academe since the 1970s. It will focus particularly on conceptions of research, its modes of production and organisation; and, more briefly, on conceptions of teaching and its organisation. Secondly, it will consider the implications for academic power and relationships within universities and their meaning for the academic profession.

The paper is based upon empirical research undertaken in England during the late 1990s (see Kogan and Hanney 2000; Henkel 2000; and Henkel et al. 2000), together with more recent analysis of British research policies and the response to them as illustrated by the websites of some research-intensive universities.

## **2. Conceptions of Knowledge and its Production and Control**

The following policy developments have significant implications for dissolving and shifting epistemological boundaries. First is the landmark change in assumptions about agenda setting and the control of scientific research represented by the Brooks report (OECD 1971), which argued that governments rather than scientists should set priorities and make the achievement of social and economic goals the key driver of science policies.

Second is the growing importance of “strategic research” (Dainton 1971; Henkel and Kogan 1993; Rip 2000) and of science as a strategic resource (Blume 1985) in science policies. Irvine and Martin’s definition of strategic research has been widely accepted: ‘basic research carried out with the expectation that it will provide a broad base of knowledge likely to form the background to the solution of recognised current or future practical problems.’ (Irvine and Martin 1984, p. 4). This definition blurs the boundaries between basic and applied research. It sustains a commitment to the funding of basic research, while signalling that such research should ultimately be of use.

Then there is the adoption by a number of countries of Foresight policies (Irvine and Martin 1984; Martin 1995). Foresight is “a process for bringing together scientists, industrialists, government officials and others to identify the areas of strategic research and the emerging technologies likely to yield the greatest economic and social benefits” (Martin 1996, p. 158). The process thus entails a rec-

conciliation between 'science-push' and 'market-pull' models of the science-technology relationship.

With the encouragement of the OECD, some Western science policies have been subsumed under industrial policies (the UK affords a prime example). Radical industrial innovation as the driver of competitiveness has become a key priority for science policies in the context of growing complexities of modern technologies and the possibilities of synergy between them. Increasingly, different forms of relationship between university-based scientists and private businesses of all kinds were objects of interest among policy makers: networks of innovation, flows of information and forms of collaboration and exchange.

Meanwhile, the growing importance for policy makers of science-technology-innovation relationships increases demand for inter-disciplinary and domain-oriented research.

These developments have generated models of knowledge production in the literature, in which linear connections between science and technology and clear divisions of labour are replaced by more complex and interactive roles and relationships. By the 1990s, the science-technology relationship had come to be seen 'in terms of a *dynamic* (emphasis original) system with many connections and feedback loops' (Martin and Nightingale 2000, p. xvi) between multiple parties, including scientists from different disciplines and academic institutions and firms, sometimes from different industries. Mode 2 forms of knowledge production involving transdisciplinarity and "hybrid communities" are now asserted as more prevalent than Mode 1 discipline-based inquiry (Gibbons et al. 1994; Nowotny et al. 2001).

In some contexts relationships between government, industries and universities can readily be understood in terms of Etzkowitz's triple helix model, in which these three institutions, 'in addition to performing their traditional functions, take the role of the other, with universities creating an industrial penumbra, or performing a quasi-governmental role as a local innovation organiser' (Etzkowitz 1997; see also Etzkowitz and Leydesdorff 1997).

And while research has continued to suggest that the decline of the discipline as driver of and framework for research has been exaggerated, there is evidence of significant revision and opening up of sub-disciplinary boundaries in chemistry and the biological sciences, a substantial increase in inter-disciplinary research amongst physicists, chemists and biologists and significant cross-disciplinary advances in methods in all these areas. Wallerstein has further argued that the tripartite division between the natural sciences, the social sciences and the arts and humanities has been undermined by such developments as complexity studies and cultural studies (Wallerstein et al. 1996, 2003).

### 3. Meanings for Change in Universities

The bedrock of the work of universities remains the production of new knowledge, through research and scholarship. Their functions of providing advanced education and awarding advanced qualifications continue to be based upon that work. However, universities are less distinctive organisations than in the past. They must succeed as “quasi-corporate entities producing a wide range of goods and services” (Gumport 2000, p. 71), competing for custom and resources, as well as reputation, regionally, as well as nationally and internationally. Those that are public institutions are publicly accountable, and all must be responsive to users of their services, some of whom may also define themselves as stakeholders. It is now universally taken for granted that they must depend not only on individual academic talent but also on its management and marketing. This requires new structures and new categories of personnel, giving rise to new relationships and distributions of power.

In the 1980s and 1990s, the government enhanced the power and made more explicit the responsibilities of the, predominantly lay, governing bodies of universities. It reinforced their accountability for the financial viability of their institutions and the delivery of value for public money and it promoted the view that university governance should conform more closely to best business practice. However, certainly in the most successful research universities, academic participation in the organs of university governance remains high; attempts to reduce the size governing bodies and mould them into a more corporate style have been resisted (Shattock 2004).

This said, most universities have made major changes in how they are run. Vice Chancellors have largely embraced the role of Chief Executive. Authority has been substantially centralised in small senior management teams under their leadership and these teams comprise key non-academics directors as well as academics (see the paper by Maurice Kogan).

Strategic planning and management are major concerns of governing bodies and senior management teams, and, within these, research strategy and management are of overriding importance for most institutions. As the potential research fields have multiplied exponentially at the same time as competition for public and private funding has increased, this means, first, determining research priorities, deciding in what areas of research the university will be involved and where its resources will be concentrated. What the priorities are and how narrowly they are drawn will depend partly on how the university defines its overall mission and partly on the strength of its material and scientific capital. However, selectivity and concentration are key features of all universities’ policies.

Structures for research management vary between universities but most are substantial and centralised. In Britain, they include a research committee and at least two pro Vice Chancellor roles, for research and for, e.g., “innovation and

economic development” or “enterprise and innovation” and/ or external relations. These latter functions extend beyond the exploitation (internal and external) of research, to include, for example, the opening up of universities’ educational resources to industries and other interests at home and overseas.

Institutional investment in such functions, which often originated in industrial liaison units, has escalated in the last 20 years, and been encouraged by a stream of government initiatives, now substantially consolidated under “third stream funding” for “knowledge transfer”. This includes: heightening the public profile of university research; identifying current and future markets for research that is translatable into technological innovation; supporting existing and encouraging new forums in which individuals and groups in the university can develop a wide variety of relationships and contracts with firms and other external bodies; and generating funding for and developing facilities through which they can gain access to university researchers, equipment, programmes and research students. Increasingly important, particularly for research-intensive universities, is expertise in intellectual property and facilitating licensing, patenting and the formation of spin-out companies. The arena of activity may be international, national, regional and local.

Recently government has taken a further step towards the institutionalisation and perhaps professionalisation of the “knowledge transfer” function with the announcement of plans for an Institute for Knowledge Transfer, to be developed by the Association for University Research and Industry Links (AURIL). (HM Treasury, DTI, DfES 2004).

There are clearly significant overlaps between the management of research and the management of knowledge transfer and innovation-oriented work. Policies in the latter area feed back into the institution’s research capacity and *vice versa*: the identification of potential new collaborators, academic or industrial, new applications, new customers or other sources of funding may mean some researchers taking new directions, joining new networks. Such developments might generate new types or levels of research achievement and persuade the university to increase its capacity in particular disciplines or fields.

The Pro V-C for research has an assessment, developmental, co-ordinating, advisory and monitoring role. He or she must take a lead in the development of the university research strategy, shaping the research profile of the university and its public face, determining the structures within which it will be realised and achieving as strong a research cadre as possible. Such concerns touch upon, indeed reach into, many aspects of the management of the university. It suggests that the boundaries between a number of roles at the centre of the university must be “fuzzy” (Whitchurch 2004) and not only those between research and innovation or external relations. But external boundaries are also relevant. Research universities increasingly establish strategic partnerships both with other universities and with key research-oriented industries. This means that they, too, contribute to building

the relatively strong institutional framework with which academic researchers now work.

Senior managers do consult internally as well as externally: generally, the stronger the research record of the university, the more they rely on the knowledge of the field in the professoriate and on their research initiatives, even if the basic units are no longer the sole drivers of research development in their institutions. An area in which leadership tends to come from the centre is that of inter-disciplinary initiatives, although here, too, senior managers argue that, while they might make the first move, they leave the relevant academics to explore the possibilities and make proposals. Empirical work for a study of academic responses to the British Foresight policies suggested that while many academics preferred to work within the framework of their own discipline and department, growing numbers (and not only scientists) saw no contradiction in having a strong disciplinary commitment and regarding inter-disciplinary development as the key to advances in knowledge. Scientists with substantial experience of working with industry often relished the intellectual challenge presented by the domain-based problems they confronted there (Henkel et al. 2000; see also Shove 2000; Marton 2005; Nowotny et al. 2001).

The means employed to shape and structure university research are largely familiar managerial instruments, including resource redistribution, selected incentives and sanctions and, increasingly, active employment policies, involving not only head hunting but also restructuring the existing academic workforce to secure the best possible research cadre.

A key determinant of academics' influence in the development of research in their university is their performance in the national research assessment exercise (RAE). Further, such has been the importance of this exercise for universities' public funding but still more for their reputation and capacity to attract talent and generate other research-related income, that a significant component of the research strategy and of the remit of the Pro Vice Chancellor for research, is the management of the next RAE.

This will include a review at central or faculty level of all individual and group research achievements and the establishment of ground rules for inclusion in the exercise. Exclusion frequently carries heavy penalties: redefinition of role, e.g. as teaching only; pressure to take early retirement. Review criteria are primarily academic and likely to be comprehensive and searching (e.g. quantity of publications but also status of research outputs; amounts but also sources of research funding). Reviews look for critical mass in research areas, make judgements about the status of the research, with reference to national and international funding bodies' criteria, assess whether the potential for synergy between research activities could be more fully realised by, for example, virtual or substantive structural change, identify gaps or weaknesses that might be rectified in time for the exercise by new recruitment.

A major management responsibility at faculty and basic unit level is the optimisation of individual and group research performance. While some academics may feel little infringement on their academic freedom in consequence, others may find their research agendas and publications significantly shaped by the institution and their work and productivity rate subjected to close scrutiny by senior colleagues at these levels. Increasingly, research mentoring and also annual appraisals by heads of basic units or faculties are features of academic working lives, in the name of individual career development but also of the importance of the collective achievement to which that does or does not contribute. Academic work may not be directly managed but it may be steered.

The combined effect of institutions' concerns for collective achievement, reputation and resources has implications for individual working lives and identities and for the institutional structures and cultures in which they are developed. Institutions acquire stronger hierarchical structures, in which more functions are devolved to defined levels. At the same time, discipline-based departments have often been converted into larger and more loosely defined schools, within which divisions may be found organised round domains or fields or combinations of disciplines. A matrix is often formed by establishing distinct structures for research: institutes, centres and/or units. Few are focused on single disciplines, the differential scale of their activities is huge and their rationales a combination of the extrinsic and intrinsic: the institutionalisation of the university's core priorities; the concentration of researchers working in a highly specialised field; demonstration of the university's commitment to strategic research; bringing together disciplines into an interdisciplinary framework that provides them with a visibility that they might not otherwise have, as well as facilitating new working relations, new research directions and new opportunities for boundary crossing. Such frameworks could be seen as a lifeline for fields of study that have diminished in influence or in their capacities for generating income. Some research centres have cross boundary objectives built in, such as the development of connections and collaborations with other academic institutions or with other sectors or organisations, public service, industrial or cultural. They, in turn, imply new and more fluid working structures, networks, consortia and "hybrid communities". Research institutes may be housed in buildings and use equipment funded by industrial firms, some of whose employees may work on site. Some become almost self-governing empires, with expanding and changing disciplinary and institutional links, research workforces, contracts and funding sources.

Team membership is increasingly important for research funding in all fields and all academics, including social scientists and humanities scholars, are under pressure to develop multiple research profiles and connections. First the Economic and Social Research Council (ESRC) and now the newly created Arts and Humanities Research Council (AHRC) are promoting team-based research, as well as

the social and economic value of research and the needs of research users (though these are more obviously contested ideas in the AHRC).

New structures mean changing relationships between academics but also new and more varied relationships with other staff. Such staff includes the range of other professionals now employed to meet universities' needs for a wider range of established expertise (see the paper by Maurice Kogan) in, e.g., law, finance, information systems, human resources management, marketing and public relations. In consequence, existing institutional functions, such as the recruitment, reward, training and development of staff, the construction of institutional data bases or the securing of different forms of contract may be reframed within new professional norms, rules and knowledge.

The proliferation of cross-institutional advisory and development units to lead, as well as support, the functions of knowledge transfer, innovation and external engagement has entailed the introduction of more hybrid and still emergent roles. Some of these may be filled by new types of personnel, including individuals combining high academic and research qualifications with technical and business management and/ or government experience, who are employed to help institutions to manage novelty and uncertainty in their expanding worlds. Such individuals will shape, as well as be shaped by, their institutions; their relationships with academics are likely to be a combination of collaboration, negotiation, education and persuasion, as well as support and advice. Again, they may reframe approaches to cross-boundary relationships involving academics according to norms and practices imported from outside academe.

The growing complexity of university organisation means new demands on administrators and a consequent change in their relationships with academic staff (see the paper by Maurice Kogan). They become expert sources of information and interpretation in a far wider range of fields than before, not least those of external evaluation and research funding, where their understanding of agency criteria, modes of working and regulation mean that they have acquired new levels of authority *vis a vis* academics. As public and measurable performance of academics becomes more integral to the working of universities, academics increasingly find themselves subject to internal administrative as well as academic scrutiny (Bleiklie et al. 2000; Henkel 2000). Whitchurch (2004) has argued that as different parts of the university meet increasingly variable demands and opportunities, and internal as well as external boundaries become more fluid, strategies, policies and structures have to become more integrated. Administrators, at least those at senior level, have to adapt to working more often in hybrid teams with strategic functions, whose work may impinge strongly on academic policies and practices.

The implications of these developments for academic power are complex. Academics no longer have a monopoly of influence on organisational goals, strategies, structures and cultures. For some this has meant loss of control of their academic

academic agendas, loss of disciplinary location, loss of self esteem and loss of identity. Others have succeeded in accommodating and exploiting new demands and connections without deviating from their main agenda, even if the contexts in which it is pursued have multiplied. Moreover, their disciplinary identity may remain central in that process. Others, again, have exploited the breaking down of boundaries between the academy, business and government and, in particular, the opportunities for shared space, exchanges of research personnel and facilities to increase their power and significantly enlarge their arenas of knowledge production. Multiplying commercial and inter-institutional relationships have enabled them to exert greater leverage on multiple funding sources than was conceivable in the past. They constitute one kind of institutional research entrepreneur and can be distinguished from those academics whose more individualistic entrepreneurialism involves the foundation and direction of spin-out companies.

Overall, it seems that universities have become more corporate, embodying stronger constraints and authority relationships and growing emphasis on collective rather than individual endeavour. At the same time they are more fragmented and less bounded, with greater scope for different forms and conceptions of working space, of working relationships and of the definitions of colleagues. Further, they are less distinctive organisations; they have stronger connections with other sectors of society. They have incorporated new managerial and entrepreneurial cultures, as well as different forms of knowledge with different histories and traditions. Internal boundaries between different occupational groups and functions have become blurred, so that the simple distinction between academic and non-academic work has become less useful. New, and as yet ill-defined, categories of actor and task are emerging, and along with them perhaps more scope for individual influence on how roles and relationships develop. Meanwhile, in many cases, disciplinary boundaries have become less evident and less important and the discipline is no longer the sole or even the dominant basis of organisational structures.

However, it can also be argued that some boundaries have been more clearly defined within the academic profession, notably by a changing and more dynamic academic labour market. This has significantly multiplied and sharpened differences in the status, power, reward and working horizons of individual academics. The employment contracts and conditions under which academics work reflect major inequalities, most notably, although not only, between permanent and temporary appointments, and major differences in the definitions of work. Definitions of the work of academics with permanent contracts have often become more complex combinations of research, teaching, "knowledge transfer", administration and management. Fixed term appointments are, by contrast, tightly defined: contract researchers, whose term and form of work is tied to project or at best programme funding, now make up a large part of the research workforce in universities. Moreover, the concept of a nexus of research and teaching as the core of academic



practice is often inapplicable. These trends suggest important implications for relationships between academics. The elaboration of research functions is paralleled by that of teaching. The conditions are ripe, therefore, in many disciplines or fields for research and teaching to be carried out in increasingly separate worlds and by largely different individuals.

#### **4. Shifting Boundaries and Educational Responsibilities**

The last quarter of a century have seen significant changes in what are regarded as essential prerequisites for the teaching functions of the academic profession. The impetus has come from two major external forces, the massification of higher education and the quality movement; it has been reinforced by the focus in higher education policy on student employability. The first two have generated redefinition and substantial enlargement of the teaching function, while the third has given rise to a major shift towards interdisciplinary and vocationally relevant degree programmes. Discipline-based scholarship is no longer regarded as sufficient qualification for university teaching. University teaching has been professionalised as a distinct function from research, a development driven not so much from within the profession as from agencies established by government policy and legislation.

Some of the implications for intra-institutional boundaries and relationships can be briefly outlined. External evaluation and the promotion of quality assurance in higher education were the spurs for teaching to become a matter for institution-wide management and more elaborate administration at central and faculty level in universities. Again, almost all universities established pro Vice Chancellor posts for teaching, together with committee systems for quality assurance and development of teaching. Institutional policies and structures were strongly shaped by the national assessments of teaching quality and institutional audits.

As national quality frameworks of increasing complexity were developed, administrators were given more prominent roles in universities, as interpreters of the national system, advisers on the management of the evaluation process and guardians of the records required for it. Quality assurance policies and structures were increasingly intertwined with institutional development of teaching. Again, administrators made important inputs to them.

These developments have meant several critical changes in conceptions of responsibilities for and expertise in higher education. First, the quality of education is seen as more dependent on the institution, and on institution-wide policies and structures. Control over students' educational experience is not now the monopoly of the basic unit and the individuals within it; there has been a loss of freedom and responsibility at this level. Second, the boundaries of academic and administrative expertise and jurisdiction have been blurred. Academics have become dependent

on administrators and subject to scrutiny by them, as well as by senior academics, in aspects of what has hitherto been regarded as core academic work.

At the same time, thinking about what is required of the individual academic to provide students with a good educational experience has shifted away from the depth and authority of his or her knowledge to understanding of and skill in pedagogy, a field that has formed no part of academic training and been regarded with disdain by most academics. Alongside this, several other types of orientation and knowledge have also come to be seen as required by academics. They include regarding preparation of students for the labour market as part of their role, willingness to accommodate new modes of educational provision (distance learning; work-based learning) and, in some cases, incorporating understanding of social, physical and psychological disadvantage into their approach to teaching.

Staff development policies in universities have been increasingly focused on the introduction of new perspectives and practices into academic teaching. Thus academics are required to engage with and learn from an emerging cadre of new and as yet ill-defined groups of staff “associated with the support of teaching and learning ‘who are neither wholly lecturing nor technical nor support staff’” (Whitchurch 2004, quoting Gornall 1999).

In addition, and perhaps less challenging, is the growing recognition of the need for more clearly defined technical or professional expertise in education, such as information technology and e learning specialists and librarians.

All of these developments entail new thinking about the definition of teaching and of academic work and the nature and boundaries of the arena in which teaching and learning occur.

## **5. Conclusion: Shifting Boundaries and Some Implications for the Academic Profession**

The paper has focused primarily on the consequences for universities of a blurring or increased permeability of boundaries, between the market and the state, between the university and other forms of organisation, between disciplinary communities and between academics and other occupational groups.

Most academics now work in multi-functional organisations, in which the definitions of work and responsibilities have expanded and become more varied, for them and for others, and organisational cultures are changing. New values and organisational principles have been incorporated. Academics are now managed in academic institutions but the modes of management are, arguably, still emerging and the academic experience of management highly differentiated in a profession where inequalities are widening.

The idea that the organisational structure for the regulation of the academic profession can be understood in terms of two interlocking, conceptually bounded and autonomous academic institutions or communities, the discipline and (in

Clark's terms) the enterprise is now untenable: structures are both more complex and more fluid. It is true that these are still key institutions in which academic agendas are set and academic reward systems are administered and that academics remain dominant decision-makers on these issues (see Christine Musselin's contribution in this volume). However, crucially, academics now recognise that they have no monopoly on determining the purposes or definitions of academic work. Governments, businesses and other interest groups play a strong part in shaping these and ensuring that the outputs are of value to them, rather than to the academic profession alone. If academics largely retain control of the work of generating new knowledge through research and scholarship and, to a lesser extent, that of higher education, they do so within open and shifting boundaries, whose contours depend not on assumed authority or traditional principles (academic autonomy and academic freedom) but on political, economic and social values and power and judgements of performance. These, in turn, will depend in part upon how effectively the academic profession engages with other interests, at different levels and in different forums (Henkel 2005).

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# **The UNESCO Forum on Higher Education, Research and Knowledge**

**Recent and Forthcoming Publications 2006-2007**

## **I. Books**

**Knowledge Society vs. Knowledge Economy: Knowledge, Power and Politics**  
Editors: Sverker Sorlin, Hebe Vessuri ( Palgrave McMillan, New York, 2007).

**Knowledge, Power and Dissent**  
Editor: Guy Neave (UNESCO, Paris, 2006).

**Higher Education Research and Knowledge the Asia Pacific Region**  
Editors: V. Lynn Meek and Charas Suwanwela (Palgrave McMillan, New York, 2007).

**Universidad e investigacion scientifica. Convergencias y tensiones**  
Coordinator: Hebe Vessuri (CLACSO Libros, Buenos Aires, 2006).

## **II. Occasional Papers**

**Restructuring and Differentiation of Patterns of Higher Education on Arab States: Meeting the Challenges in the Present and the Future**  
(UNESCO: Paris 2006)  
(UNESCO Forum Occasional Paper Series, Paper No. 14)

**Organization, Structure and Funding of Research**  
(UNESCO: Paris 2006)  
(UNESCO Forum Occasional Paper Series, Paper No. 13)

**Capacity Building in Higher Education in Mozambique and the Role Played by Co-Operating Foreign Agencies: the Case of the World Bank**  
Chilundo, Arlindo  
(UNESCO: Paris 2006)  
(UNESCO Forum Occasional Paper Series, Paper No. 12)



**Empowerment of Women in Higher Education**

(UNESCO: Paris 2006)

(UNESCO Forum Occasional Paper Series, Paper No. 11)

**The Roots and Fallouts of Haile Selassie's Educational Policy**

Kebede, Messay

(UNESCO: Paris 2006)

(UNESCO Forum occasional paper series, Paper No. 10)

**Implications of WTO/GATS on Higher Education in Asia and the Pacific.  
The Republic of Korea Part II**

(UNESCO: Paris 2005) (UNESCO Forum occasional paper series, Paper No. 9)

**Implications of WTO/GATS on Higher Education in Asia and the Pacific.  
The Republic of Korea Part I**

(UNESCO: Paris 2005) (UNESCO Forum occasional paper series, Paper No. 8)

**Managerialism and Evaluation in Higher Education**

(UNESCO: Paris 2004) (UNESCO Forum occasional paper series, Paper No. 7)

**Diversification of Higher Education and the Changing Role of Knowledge  
and Research**

Papers presented at the Second Scientific Conference Meeting for Europe and  
North America

(UNESCO: Paris 2004) (UNESCO Forum occasional paper series, Paper No. 6)

**Market Coordination, Research Management and the Future of High Educa-  
tion in the Post-Industrial Era**

V. Lynn Meek

(Paris: UNESCO 2003) (UNESCO Forum Occasional Paper Series; Paper No. 5)

**Challenges of the University in the Knowledge Society, Five Years After the  
World Conference on Higher Education**

Carlos Tünnermann Bernheim and Marilena de Souza Chaui

(Paris: UNESCO 2004) (UNESCO Forum Occasional Paper Series; Paper No. 4)

**Science and Higher Education in the Process of Internationalization. Elements of a Conceptual Framework for Latin America**

In Spanish:

**La Ciencia y la Educación Superior en el Proceso de Internacionalización. Elementos de un Marco Conceptual para América Latina.**

Hebe Vessuri (Paris: UNESCO 2003)

(UNESCO Forum Occasional Paper Series; Paper No. 3 and 3/s)

**From Manpower Planning to the Knowledge Era: World Bank Policies on Higher Education in Africa**

Joel Samoff and Carol Bidemi

(Paris: UNESCO 2003) (UNESCO Forum Occasional Paper Series; Paper No. 2)

**Research and Research Training Systems: Towards a Typology**

Guy Neave

(Paris: UNESCO 2002) (UNESCO Forum Occasional Paper Series; Paper No. 1)

**Academic Freedom Conference: “Problems and Challenges in Arab and African Countries”**

Editor: Abdalla R. Bibtana (Paris: UNESCO 2006)

**Academic Mobility in a Trade Environment: Issues, Opportunities and Risks**

In Spanish: Movilidad Académica

Publisher: UNAM (Journal PERFILES), Mexico

**III. Publications in 2007**

**UNESCO: “Universities as Centres of Research and Knowledge Creation: An Endangered Species?”** Proceedings of a Global Colloquium from the 29th November to the 1st December 2006.

Published online 2006: URL

[http://portal.unesco.org/education/admin/file\\_download.php/Finalreport\\_EN.pdf?](http://portal.unesco.org/education/admin/file_download.php/Finalreport_EN.pdf?URL_ID=52646&filename=11736997525Finalreport_EN.pdf&filetype=application%2Fpdf&filesize=94250&name=Finalreport_EN.pdf&location=user-S/)

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Final Report (Editor Hans Weiler): UNESCO, Paris 2007 (English and French)

## Commissioned Papers

A series of special thematic papers have been commissioned from the UNESCO Chairs network and other specialized sources to focus on key themes for the Organization.

Papers published online on the Forum website in July 2007

*Dr. Wallace Baker, Senior Partner Emeritus, Baker and McKenzie, Paris*  
The Global Compact and Business Ethics: Engaging Academia

*Dr. Roger Benjamin, The Council for Aid for Education CAE*  
Assessment versus Accountability in Higher Education

*Dr. Nicholas Burnett, Director, Global Monitoring Report on Education for All , UNESCO*  
The Education for All (EFA) Movement: the importance of educational research

*Dr. Donald Gerth, President Emeritus California State University at Sacramento and Chair, American Council of the United Nations University*  
Internationalism and Universities in the 21st Century

*Professor Jagdish Gundara, Institute of Education University of London, UNESCO Chairholder in Intercultural Education*  
Intercultural Studies: Implications for Research-based Teacher Education

*Dr. Diem Ho, Director for University Relations and Member, Academy of Technology, IBM Europe*  
Innovation, Knowledge Management, Research: The ICT factor

*Professor Bruce Johnstone, State University of New York at Buffalo*  
Trends in Higher Education Financing and Implications for Research

*Dr. Murielle Joye-Patry International Federation of University Women, iFUW*  
Civil Society Partnerships and Development Policies: Emerging Trends

*Dr. Jane Knight, Ontario Institute for Studies in Education, University of Toronto, Canada*  
The General Agreement on Trade and Services (GATS) and Higher Education: A Global View

*Dr. Patti McGill Peterson, Council for the International Exchange of Scholars  
CIES*

New Models for the Research University

*Professor Louise Morley, Sussex University, UK*

Post Graduate Research: A global review of trends and issues

*Dr. Bikas Sanyal, Consultant, International Institute for Educational Planning,  
UNESCO*

The Role of Higher Education in obtaining EFA goals with particular focus on  
developing Countries

*Dr. Traugott Schoefthaler, Executive Director, Anna Lindh, Euro-Mediterranean  
Foundation, Alexandria, Egypt*

The Dialogue of Civilizations: fostering university research on intercultural un-  
derstanding

*Professor A.H. Zakri, Director, Institute of Advanced Studies, United Nations  
University, UNU/IAS*

The United Nations Millennium Development Goals and poverty reduction: the  
role of academic research

#### Further Information

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**PUBLICATIONS OF THE INTERNATIONAL CENTRE FOR HIGHER  
EDUCATION RESEARCH KASSEL (INCHER-KASSEL)**

**(A) "Hochschule und Beruf"  
(Campus-Verlag, Frankfurt/M. and New York)**

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