

Background paper

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The Regulation of Academic Quality: An Assessment of University Evaluation Systems with Emphasis on the United States*

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1.0 Introduction

During the 1990s a new issue arose on the higher education policy agenda of most countries throughout the world. The traditional policy issues of access and cost have been supplemented by a new concern with academic quality. First initiated in France in the early 1980s and more fully elaborated in the UK by the Thatcher government in the late 1980s, new forms of university evaluation – often termed “academic quality assurance” – have spread rapidly around the world. By the new millennium almost all of the countries in the European Union as well as many counties in Africa, Asia, and South America and a number of the US states were experimenting with new forms of academic quality regulation.

This discussion of academic quality regulation is organized as follows: (2) an overview of higher education systems, (3) relevant social changes affecting higher education, (4) an overview of higher education reforms, (5) an overview of university evaluation systems, and (6) an assessment of university evaluation systems. In a concluding section (7) I offer some summary personal observations on the development of university evaluation systems. Throughout I make specific reference to the US system, but also discuss other nations. This is particularly necessary because while the US is generally regarded as having the strongest research universities in the world it has not in my view been the most innovative reformer with regard university evaluation systems.

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2.0 Overview of Higher Education Systems

National systems of higher education can be classified in different ways (Dill, 1992). For purposes of discussing university evaluation systems the most useful categorization is each system's approach to coordinating or controlling behavior in academic institutions (Clark, 1983). These are professional authority, state authority, or the influence of the market.

For example in the UK, up until the election of the Thatcher government in the 1980s, the assurance of academic quality in the publicly supported university sector was primarily by professional self-regulation, as academics monitored and assured the standard of university degrees through collective mechanisms such as the external examiner system. In contrast, continental European countries such as France and the Netherlands placed much greater reliance on state regulation. Ministries of education established and monitored regulations on university admissions, academic appointments, program curricula, and end-point examinations. The third principal mode of coordination, market competition, has traditionally played a much larger role in assuring academic quality in the US. Following World War II, the federal Congress explicitly adopted consumer-based financial support of higher education in lieu of direct grants to institutions. This policy design was based in part upon the belief that student-based funding would create greater innovation and quality in academic programs by stimulating a more competitive academic market. Similarly, federal support for research was allocated to individual researchers and teams through a competitive grants system rather than through institutional grants. With regard university evaluation, this overall system of market competition was supplemented by a process of voluntary self-regulation through accreditation agencies and by regulations implemented by the various states that were designed to influence the quality of public institutions, but not private institutions.

As Clark (1983) noted, the three forces of professional authority, state authority, and the market are in constant tension. There is now widespread agreement that social and economic changes are altering the traditional balance among these forces in many countries, lessening the influence of professional authority while increasing the influence of the market and the state. However it is important to acknowledge that the degree of influence of professional authority as well as the influence of market forces is substantially affected by state policy. Professional control, or "self-regulation," requires a grant of authority from the state in order to function effectively. The relative influence of professional authority in higher education would be substantially attenuated if it were not empowered and enforced by state regulations affecting the creation of universities (i.e., market entry) and academic degrees. Similarly, much of the infrastructure of professional control including academic professional associations, journals, etc. is indirectly subsidized by the state through its financial support for the professional activities of faculty members in publicly financed universities. In the same manner the amount of market influence is measurably affected by state policies freeing, facilitating, and/or creating market competition in higher education (Dill, 1997b). Therefore, a crucial challenge for public policy is to achieve the ideal balance among these three forces in the design of effective university evaluation systems.

3.0 Social Changes

One of the most significant changes in the environment of higher education, now influencing all systems, is "massification." The transition from elite to mass systems of higher education is an international phenomenon that occurred earliest in the United States and is now occurring in other countries (Dill and Sporn, 1995). The transition was brought about by a combination of demographic, social, and economic pressures.

Pressures for growth in higher education in the post-war period were driven in particular by the “baby boom,” the pipe-line effect of more students in the system and higher retention rates, the change in social expectations and attitudes regarding higher education access and participation, and the demand for qualified manpower by industry. Thus, in contrast to the small number of elite, largely autonomous institutions (essentially peripheral to national concerns) that existed up until the mid-1940s in many countries, the mass systems that developed in the post-war period are characterized by expanded goals for higher education (in addition to those of production and dissemination of knowledge); explicit linkage of higher education with other educational sectors and with national socio-economic objectives; a more heterogeneous clientele and greater funding, planning, and co-ordination by government.

In relation to the expanded goal structure of higher education, mass higher education systems are expected to:

- play an important role in the general social objective of achieving greater equality of opportunity;
- provide education adapted to a great diversity of individual qualifications, motivations, expectations, and career aspirations;
- facilitate the process of lifelong learning;
- assume a “public service function,” that is to make a contribution to the solution of major problems faced by the communities surrounding the higher education institutions and by society at large and to participate directly in the process of social change.

The higher education systems of today are thus complex, multi-faceted, and constantly changing and as such represent major challenges for national policy makers, institutional leaders, and administrators, as well as the academic work force everywhere. Indeed, the substantially increased set of goals and related responsibilities have, not surprisingly, given rise to a number of critical areas of tension between: the requirements of excellence and of egalitarianism; the structure and size of individual demand for higher education and of labor market requirements; and the aspirations and interests of the different groups involved in higher education. The reconciliation of such conflicts, which are not destructive *per se*, has been recognized as a key challenge in the transition from elite to mass higher education systems and has led to ongoing debate regarding the best forms of organization, management, and co-ordination at both the system and the individual institutional level.

4.0 Overview of Higher Education Reforms

The evolution of a global economy and changing social demands on higher education in countries throughout the world have drawn attention to perceived inefficiencies in higher education management (Goedegebuure, et. al., 1994). Contemporary efforts at higher education planning and policy development therefore are characterized by:

- reductions in public expenditure;
- increased emphasis on efficiency of resource utilization and management;
- a strengthening of the policy and planning role of individual institutions;
- and an emphasis on quality assurance.

The higher education reform agenda in many countries is therefore much influenced by an economic perspective that encourages the substitution of market competition and consumer control for direct government regulation (Dill, 2001). The new policy strategy can be seen as a “stepping back” by governments from detailed centralized control through encouraging higher education institutions to be more autonomous, self-regulating and market orientated in their operations, albeit within an overall framework of government priorities. One of the consequences of the new strategy for higher education institutions is that institutions are able to obtain autonomy relative to central government, but at the same time are forced to go into the market in which they must seek sponsorship. The enlargement of institutional autonomy is assumed to result in a better adjustment to changing societal conditions but at the same time governments still have to protect the interests of the “consumers” (i.e. students) and formulate the overall goals of the higher education system.

5.0 Overview of University Evaluation Systems

Over the last decade a number of new public policy instruments have been adopted to address the problem of academic quality in research and teaching/learning respectively. I would argue that society’s interest in academic quality is in assuring and improving academic standards in research and student learning. This definition of academic quality as equivalent to academic standards is also consistent with the emerging focus in higher education on student learning outcomes -- the specific levels of knowledge, skills, and abilities that students achieve as a consequence of their engagement in a particular college or university program.

Table I lists representative instruments for assuring academic standards by the coordinating categories introduced earlier. Each of these generic categories assumes a different locus of control or authority over academic quality regulation. Professional or self-regulation clearly assumes producer sovereignty in which academics themselves are principally responsible for defining and enforcing the rules and norms governing academic quality. Direct state regulation of academic quality assumes that the state’s authority and control would be paramount in defining and enforcing academic quality regulations. For the market to work effectively as a means of quality regulation, it is necessary to assume consumer sovereignty over quality as represented by the free market choices of the clients of education programs or research.

6.0 An Assessment of University Evaluation Systems

There is an emerging research literature exploring the impacts of these respective policy instruments, although that literature is very uneven and incomplete. In the sections that follow, I will review some of the insights from this literature with particular reference to the policy instruments implemented in the US.

6.1 Research

One means of assuring academic standards in research was to concentrate research funds in a separate university sector. But the massification of higher education and increasing concerns about regional development have made this approach less viable politically as noted by the abolition of binary systems in the UK and Australia. A number of countries are therefore seeking new policy instruments for linking research funding to research quality as a means of limiting “research drift” and unneeded research expansion in higher education systems.

TABLE I
Alternative Policy Instruments for Assuring Academic Standards

Focus	Locus of Influence		
	<i>Professional (Self) Regulation</i>	<i>State Regulation</i>	<i>Market Regulation</i>
Research	Professional Peer Judgments	Research Assessments (RAE)	Competitive Allocation of Research Funds by State
Teaching/ Learning	Professional Disciplines/ Organizations External Examining Systems Voluntary Accreditation	“Assessment Regulations” (US) Academic Audits Subject Assessments Performance-Based Funding National Examinations State Accreditation	Student-Based Funding and Tuition Fees Information Provision

For example, the UK and Hong Kong have adopted Research Assessments Exercises (RAE) as a means of linking research funding to measures of departmental research quality. Research on the impact of the UK process (Henkel, 2000; Koelman and Venniker, 2001) suggests that it has not limited the research opportunities of new, younger researchers as initially feared, nor has it apparently had a dramatic effect on faculty transfer between institutions despite many reports that academic units were attempting to inflate their RAE score by recruiting productive senior researchers. The RAE has, however, increased the incentives for individuals to conduct research and as such may have lessened the time and effort faculty members put into teaching. The focus of the UK RAE on traditional publications has also created an apparent bias for short-term, disciplinary-oriented, mainstream research published in journals. On the positive side, there is evidence of more conscious planning and monitoring of research activity within universities and a greater concentration of research support through the closure and merger of low-rated departments. This structural impact appears to have been greatest in the humanities and social sciences.

Research Assessment Exercises are not the only means of regulating the quality of research. The US federal government has relied for many decades on a market-oriented system in which research allocations are made not to individual institutions, but to individual researchers on an open, competitive basis. The total research funding of any institution therefore represents the accumulation of these individual, competitive market transactions, rather than political or peer judgments about unit or university quality. The federal grants system does depend upon peer judgments of research proposals, rather than measures of research output, and therefore may bias to some degree the output of the research system. It is noteworthy, however, that even in those countries such as the UK committed to the RAE process, the proportion of research funds allocated through the

RAE process has been declining over time and the proportion allocated on a competitive basis similar to the US by UK Research Councils has been increasing.

6.2 Teaching and Learning

The more wide spread rationale for the development of new university evaluation systems has been to maintain or improve the quality of academic programs, teaching, and learning, especially in first-degree programs. All higher education systems still depend extensively upon traditional academic self-regulation, although many states have implemented external evaluation systems designed to increase program and institutional accountability for academic quality. With the increasing size, complexity, and variation occurring within many higher education systems, numerous stakeholders have also expressed interest in more market-oriented solutions to academic quality regulation.

6.2.1 Professional Self-Regulation.

Academic self-regulation of quality relies upon the norms and rules of the professional societies and disciplines, voluntary accreditation and certification procedures that are now becoming world-wide in many professional fields, and External Examiner Systems that exist in a number of countries. Improvements are being made in self-accreditation by international professional bodies, and, under external pressure (see below), in quality assurance procedures within individual institutions.

The institutional accreditation role in the United States is performed by six regional accrediting agencies responsible for determining whether institutional missions and objectives are appropriate for the institutional or degree level, whether sufficient resources are available to meet the objectives, and whether the resources are being effectively applied to produce the desired outcomes. Accreditation is criterion-referenced in that it compares observed performance against pre-set threshold standards usually determined by the accrediting agency. The accreditation process generally utilizes a combination of performance indicators, self study, and peer review. Performance indicators provide quantitative data on resources and performance. They might include: funding levels; facilities, equipment, and libraries; student profile and admissions selectivity indices; and student retention and completion rates. Self-studies represent an institution's evaluation of its own performance in relation to the standards and its own particular aspirations, based on both performance indicators and subjective factors. Peer review relies on the experience of outside experts who visit the campus and form their own opinions about performance in relation to threshold standards. Program level accreditations are also conducted using a similar process, but by independent professional associations in areas such as accounting, business, chemistry, law, and engineering.

Institutional accreditation has indirectly come under criticism from the US states almost all of which have passed regulations encouraging public institutions of higher education to implement various forms of "student assessment" programs designed to place greater institutional attention on the improvement of student learning (Dill, 1997a). Ultimately, all five regional accrediting bodies adopted an assessment criterion as one of their standards for reviewing institutions of higher education. In 1992 the federal government actively pressed for reforms in accreditation and this pressure eventually led to the creation of the Council for Higher Education Accreditation (CHEA), a national coordinating agency for accreditation that has placed great emphasis on improving accountability for academic performance.

US critics perceive accreditation as ineffective in assuring academic quality, as too formulaic, and irrelevant to policymakers' concerns about improving student learning (Dill, 2000b). Institutional accreditation is thought to be too comprehensive in its scope, bypassing the undergraduate core in the arts and sciences and consequently not systematically reviewing the academic experience for most students. Well-established universities, whose academic standards are clearly above the threshold level, criticize accreditation as overly costly, absorbing too much administrative and faculty time, while often providing little added value. Because of these criticisms a number of experiments are underway in both institutional and professional accreditation agencies to make the process focus more on the improvement of academic standards. Both the Western Association of Schools and Colleges (WASC) and the new Teacher Education Accreditation Council (TEAC) are experimenting with applications of the academic audit process first developed in the UK.

6.2.2 State Regulation

State regulation of the quality of teaching and learning takes a number of forms including USA-style "student assessment" regulations, academic audits, subject assessments, performance funding, and in Brazil, national examinations.

6.2.2.1 Assessment

In the 1980s, in addition to the traditional process of voluntary accreditation, a number of US states initiated reforms designed to improve the quality of undergraduate education (Dill, 1997a). These regulations on "student assessment" were designed to place greater institutional attention on the improvement of student learning. However, this effort by many states to enhance student learning within colleges and universities by direct regulation appears to have had a limited impact on academic quality. A national survey by the National Center for Postsecondary Improvement provides little evidence of a sustained commitment by institutions or academic programs to using student assessment information to improve student learning (The Landscape, 1999). Less than a quarter of the surveyed institutions reported that faculty members involved in institutional governance even supported student assessment activities and few institutions actively linked information on student assessment with improvement of the faculty's instructional approaches.

6.2.2.2 Academic Audit

Academic audits, first developed in the UK and then adapted in New Zealand, Sweden, Hong Kong, and Australia, are also directed at the institution level. Unlike accreditation, however, academic audits make no attempt to comprehensively review an institution's resources and activities, but rather are focused on those procedures by which the university attempts to assure its academic standards. Audits evaluate the basic processes of academic quality assurance -- how an institution satisfies itself that its chosen standards are being achieved. As observed in Sweden, the focus is not on "quality," but on "quality work." Audit reports, similar to financial audits, are usually made public. Academic audits offer some measure of public accountability in that they provide assurance that universities subject to market competition are seriously attending to issues of academic quality as well as cost.

Research on academic audits in a number of countries has identified the following impacts on academic behavior within colleges and universities (Dill, 2000c). Academic audits have:

- made improving teaching and student learning an institutional priority.
- facilitated active discussion and cooperation within academic units on means for improving teaching and student learning.
- helped to clarify responsibility for improving teaching and student learning at the academic unit, faculty, and institutional level.
- provided information on best practices both within institutions and across institutions.

6.2.2.3 Subject Assessments

In contrast to institutional accreditation and academic audits, subject assessments as implemented in countries such as Denmark, The Netherlands, and the UK focus on the quality of delivered performance in teaching and learning at the subject or program level. That is, assessment goes beyond accreditation to make graded judgments about academic quality levels rather than a binary judgment relative to threshold standards. Since a primary rationale for assessments is accountability, assessment results are generally made publicly available, and are often published in a way that permits comparisons among institutions.

Assessments too have limitations as a mechanism of quality assurance. Small countries may not have the critical mass of subject experts to permit effective external peer review of all fields. The rapid expansion of subject fields in the new context of mass higher education, and particularly the rapid development of new interdisciplinary programs for which there may be a limited number of external peers, also raises questions as to whether systematic external review of all subjects is feasible over time. Furthermore, as universities develop more sophisticated management systems featuring internal evaluation and assessment procedures, external subject reviews carried out on a timetable set by an external agency and unconnected to institutional administrative processes are increasingly seen as redundant and ineffective.

Research on the impacts of Subject Assessments (Henkel, 2000) indicates that these new instruments have helped to inject greater concern for teaching and learning among faculty members in the university sector. Measurable affects include significant increases in the amount of communication and collaboration among faculty members on teaching-related activities within and across academic units. There is also evidence of the development of new corporate mechanisms within universities for assuring faculty accountability for academic quality and the maintenance of standards. On the negative side, these processes have absorbed a great deal of faculty time and if poorly designed can become primarily exercises in paper work. There is also a danger that subject assessments, particularly as implemented in the UK, focus too much on teaching “performance” and as such may promote teaching orthodoxies that may not be the most effective means of improving student learning.

In the US many states and institutions have systematically conducted “program reviews,” which also focus on reviewing the effectiveness of planned or ongoing academic programs (Dill, 2000b). However, unlike subject assessments in other countries, US program reviews focus heavily on doctoral-level education, research productivity, and the reputation of departments. As a consequence, program reviews rarely seem to stimulate faculty discussion and collaboration about means of improving teaching and student learning. Within state systems the cost and time involved in existing academic program approval and review processes is coming under increasing criticism, particularly as competition among institutions rises and as public demands for new

programs and services become more insistent (Epper, 1999). Many state systems are seeking means of permitting public institutions the flexibility they need to address these emerging demands by delegating greater responsibility for academic program approval and program review to the institutional level.

6.2.2.4 Performance Funding

In over half of the US states the traditional funding model based upon broad measures of inputs such as enrolments, expected ratios of faculty to students, and price indices for staff salaries and library books is being supplemented with performance-based funding linked to narrower indicators of university efficiency and effectiveness (Burke and Serban, 1997). Among the US states that actively apply performance funding the proportion of the overall state budget for higher education is relatively small, ranging from less than one percent to as high as about four percent in Tennessee. There is some evidence that the portion of the state budget linked to performance has grown in the two states (Tennessee and Missouri) with the longest history. The current small percentages, however, are based upon the overall state budget for higher education, while performance budgeting is usually implemented as part of a state's incremental annual funding and therefore represents a larger proportion of the universities' operating budgets.

Performance funding of teaching and learning quality suffers principally from the limitations of available data and measurements of quality. In the US performance funding related to academic quality still tends to focus on input and process-oriented indicators of academic quality. From the standpoint of university accountability a major weakness of the performance measures emerging in the United States is their heavy emphasis on undergraduate education, an understandable concern of policymakers. The tendency, however, to apply similar indicators to all four-year institutions risks distorting the incentives for universities with their important graduate education and research functions. Unless further differentiated such performance indicators may decrease diversity in higher education systems that is vital to the public interest.

Despite the focus of US performance funding on promoting more effective undergraduate teaching and learning, there is little systematic evidence of these efforts affecting faculty work directly or indirectly (Fairweather and Beach, 2002). Recent research on the frequently cited Tennessee Performance Funding Initiative, which offered supplements of up to 5.45% over university operating budgets for institutions that demonstrated improvements in student learning and increased program quality, has discovered little impact on faculty attitudes and behavior. This occurred because the performance measures used focused on indicators such as graduate job placements, pass rates, or scores on professional licensure tests, rather than actual changes in department curricula or teaching. Improvement funds were also awarded to the central university rather than to academic departments demonstrating quality enhancements and these supplemental funds were often expended on activities not directly related to undergraduate instruction. Finally, administrators attempted to shield faculty members from the burdens of complying with the program, as a result most of the faculty members supposedly affected by the program were unaware of its existence.

6.2.3 Market Regulation

As higher education systems become increasingly complex and varied, many policy makers question whether professional or state regulation can efficiently and effectively influence academic quality. Increasing numbers of observers both within and without the academic community are suggesting that market forces alone may be sufficient to assure the quality of teaching and learning.

For market forces to exert such influence, the clients of higher education programs would need sufficient information in addition to price to make effective assessments of the quality of academic programs. Provision of such information could be required of institutions by the state or provided by the state directly. It is also possible that third parties and commercial enterprises such as newspapers and magazines (e.g., *The US News & World Report*) will capitalize upon the obvious economic demand for information on academic quality and that this commercial provision would be sufficient to make the market work effectively in the public interest.

A second critical point is that provision of information alone is unlikely to create an effective demand for academic quality that would benefit the larger society. The efficient competitive market assumes the existence of autonomous consumers who make rational, economic choices. But students or parents who pay little of the costs of higher education, as is the case in most countries outside the US, are not autonomous in this sense and therefore are unlikely to make the types of demands upon publicly-financed universities that would lead institutions to be more concerned about quality teaching and especially about student learning. Thus effective market control would also entail requiring students to pay a larger portion of the costs of higher education directly and/or allocating a larger proportion of the funding for higher education through student rather than institutional support.

A recent study of the US system by researchers at the Rand Corporation (Brewer, Gates and Goldman, 2001) raises serious concerns as to whether the existing structure of market competition in the US efficiently achieves the educational outcomes desired by society. The researchers discovered that those academic institutions just below the academic elite seek to build their reputation in the competitive student market not by pedagogical improvements, or by meeting new types of student demands, but by enhancing their reputations. These institutions therefore focused their efforts and strategic investments on improving the selectivity of the admissions process by linking tuition discounts with academic merit/student ability, attempting to lower student acceptance/yield rates, and investing in student consumption benefits such as dormitories, eating faculties, or fiber-optic computer networks that will help attract high quality students. The researchers suggest that this focus on admissions selectivity rather than improvement of teaching and student learning is reinforced in part by the existing commercial ranking systems in the US that use student “inputs” such as aptitude scores as a primary measure in league tables.

7.0 Concluding Observations

Let me summarize this brief discussion of university evaluation systems by offering some personal observations on how academic quality might best be improved.

First, there is emerging evidence that the traditional collegial processes by which universities assured academic standards may be deteriorating (Dill, 1999). One indicator of this change has been the distinct “research drift” in many systems of higher education. This is reflected in an increase in the proportion of time faculty members report to be engaged in research and scholarship, which in the US has increased in all categories of colleges and universities. This observed research drift, and its potential negative impact on teaching and learning was one of the frequently voiced rationales by US policymakers for the development of state policies on student assessment.

This research drift suggests the framework of norms and incentives influencing academic work is changing in many countries. Studies of academic work at the department level in the US reveal an increasingly atomistic academic culture (Dill, 1999). Not only do faculty members do much of their teaching alone, but because disciplinary sub-fields are defined quite narrowly, many academics find it almost impossible to discuss their teaching with other faculty members. In many disciplines, faculty members expressed the belief that the field’s diversity prevented achieving a consensus on what students should be taught. In this new context there is every incentive for faculty members to focus exclusively on her or his own specialized teaching and research, not on the collective efforts essential to assuring and improving academic standards.

The deterioration of the collegial mechanisms for assuring academic quality within US universities is likely to have broader implications. As other nations move to mass systems of higher education similar to the US, providing access to a much more varied group of students than in the past, they are also adopting an “American” form of instruction. This involves greater attention to general education at the first degree level, implementation of modular forms of instruction, and adoption of continuous forms of assessment in lieu of subject exams. One consequence of this change is that the traditional mechanisms for assuring academic standards in other countries such as end-point subject exams and the External Examiner system are gradually disappearing.

In the US traditional accreditation, state assessment regulations, and performance funding have generally been ineffective in strengthening institutional processes for academic quality. Instead the evidence from other countries suggests that evaluation approaches that adopt a “capacity building” orientation (Dill, 2000a) such as academic audits and subject assessments are more effective in restoring the internal web of academic accountability by which academic standards are best maintained. A significant advantage of these types of policy instruments is their presumption that responsibility for academic standards and the quality of teaching and learning must remain where the power exists to control or change academic practices -- with the faculty of an institution. But by requiring external verification of the internal processes by which universities assure academic standards, academic audits and subject assessments provide some public confidence that universities subject to market competition are seriously attending to academic quality.

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