

# Chapter 1

## Introduction

David D. Dill and Maarja Beerkens

At the opening of the twenty-first century, the structure of higher education in most countries of the world has undergone significant change as a result of new social demands for expanded access, technological developments, and global market forces. In this period of change the traditional concerns with access and cost have been supplemented by a new concern of policy makers with academic quality (Brennan and Shah 2000). As a consequence, new public policies on academic quality and new forms of academic quality assurance have rapidly emerged in many countries and have just as swiftly migrated across continents and around the globe. One indirect measure of the diffusion of these new public policies is the development of an international association of public and independent entities engaged in academic quality assurance – the International Network of Quality Assurance Agencies in Higher Education (INQAAHE). In 1990 when it held its inaugural meeting in Hong Kong, the INQAAHE had 25 members from 17 nations, primarily represented by the “Westminster” countries. By 2009 when the INQAAHE held its Ninth International Conference in Abu Dhabi, it had some 200 organizational members from 79 nations, with extensive representation from every continent save Antarctica.

While there has also been a commensurate increase in the literature on academic quality, a relatively small amount of this scholarship directly addresses the design, implementation, and impacts of these new policies and practices (see, for example, Westerheijden et al. 2007; OECD 2008). The rich and growing public debate about academic quality regulation within and across countries is therefore not well informed by evenhanded examinations of the strengths and weaknesses of these new regulatory instruments. The goal of this volume is to help fill this void with relevant policy analyses. The chapters that follow scrutinize new and innovative instruments of academic quality assurance in teaching and learning activities, utilizing the knowledge of informed scholars around the world, and provide comprehensible, easily accessible evaluations. The analyses will be as fair-minded as

---

D.D. Dill (✉)  
University of North Carolina, Chapel Hill, NC, USA  
e-mail: ddill@email.unc.edu

possible, assessing the relative costs and benefits of the respective policies from the perspective of the overall “public interest.”

We recognize that the framework of rules and regulations affecting academic quality within a state, province, or country as well as in the larger global community is still evolving, and continued experimentation and evaluation of quality assurance policies is needed. Our intent, therefore, is to provide information and analyses that can help inform and enrich the ongoing public debate about the appropriate regulation of academic quality.

In the sections to follow we provide an overview of what we mean by “academic quality,” why academic quality regulation may be necessary, the nature of the new forms of academic quality regulation, and the orientation of the policy analyses that follow in this volume.

## What We Mean by “Academic Quality”

As policy makers in various countries have debated policies designed to assure academic quality, there has been extensive dispute about the meaning of the term (Green 1994). Many academics have argued that “academic quality” is amorphous, non-measurable, or so ambiguous a concept as to be not appropriate for government regulation. Early writers on academic quality regulation (Ball 1985; Bogue and Saunders 1992) were fond of quoting the novelist Robert Pirsig’s classic phrase from *Zen and the Art of Motorcycle Maintenance*: “what the hell is quality?”

Quality . . . you know what it is, yet you don’t know what it is. But that’s self-contradictory. But some things *are* better than others, that is they have more quality. But when you try to say what the quality is, apart from the things that have it, it all goes *poof!* There’s nothing to talk about. But if you can’t say what Quality is, how do you know what it is, or how do you know that it even exists? If no one knows what it is, then for all practical purposes, it doesn’t exist at all. But for all practical purposes it really *does* exist. What else are the grades based on? Why else would people pay fortunes for some things and throw other things in the trash pile? Obviously some things are better than others . . . but what’s the “betterness?” So round and round you go, spinning mental wheels, and nowhere finding any place to get traction. What the hell is Quality? What is it? (Pirsig 1974, p. 179).

Yet there is an element of academic gamesmanship in this definitional debate. As Pirsig suggests in this quotation, professors routinely identify and differentiate academic quality when they grade student’s work. Many of the core processes of academic life – subject examinations, external examiners, as well as review processes for professional meetings, academic journals, and the award of research grants – are predicated based on a professional ability to identify and evaluate academic quality in student learning and academic research. While academics may vigorously debate the meaning of academic quality when confronted with potential government quality regulations, few professors have rejected a Nobel Prize because the process whereby her or his work was selected was too ambiguous!

From a public policy perspective we would argue that academic quality is best defined as equivalent to academic standards – the level of knowledge and skill

achieved by graduates as a result of their academic program or degree (Eustace 1991). During their higher education, students develop knowledge, skills, and abilities – “human capital” – that over their lifetimes provide private benefits to them as well as social benefits to the larger society. This human capital perspective (Becker 1964) provides the primary logic for the public subsidies of higher education in all countries as well as for the more recent spread of mass higher education around the world. We use the term human capital here in its broadest meaning to include not only the contributions that educated graduates make to the economy, but also the nonmonetary benefits they contribute to society through improved parenting, healthier lifestyles, greater civic participation, and increased social cohesion (Haveman et al. 2003).

The conception of human capital outlined above provides a means of defining academic quality in the public interest. From this perspective the public interest is best served by an institutional framework of policies, rules, and norms (North 1990) that maximizes in as efficient and equitable a manner as possible the academic standards attained by graduates. Not surprisingly, it is this conception of academic quality as academic standards that most often is articulated in current national policies on academic quality (Brennan et al. 1997). Consistent with human capital theory, these policies increasingly focus on improving academic outcomes, the educational “value-added” of an academic program or degree (Dill 2000).

Within the field of higher education, Astin (1985) has most clearly articulated this perspective on academic quality in his “talent development model.” Astin argued that the major purpose of a university is to develop the talents of its students to their maximum potential. This development is achieved by facilitating changes in students’ intellectual capacities and skills, values, attitudes, interests, habits, and mental health. Institutions that provide the largest amount of developmental benefits to students in Astin’s view, therefore, possess the highest academic quality.

Academic quality, understood as academic standards in student achievement, is also a necessary component of any discussion of cost and access in higher education (Berdahl and Spitzberg 1991). Policy makers must consider whether the rapidly increasing public investment in higher education is purchasing more, less, or comparable levels of academic achievement among students. Without some knowledge of the relationship between the level of public investment in higher education and the level of academic achievement produced, the public debates about higher education cost can be seriously misleading. Even if a government introduces market forces into higher education, which may lead, as in the USA, to institutions with varying levels of academic achievement, there is an important public interest in academic standards. If the market is to function efficiently, individual consumers need to be able to fairly evaluate the relative value-added by colleges and universities of widely varying cost (Dill and Soo 2004). For example, will an education at an expensive, well-established university in every case lead to higher student achievement than an education from a newly established distance learning institution? Similarly, policy makers in most countries who are concerned with access to higher education must confront the often-unasked question, “access to what” (Massy 2003)? Investments in access without a commensurate concern with the level of learning outcomes

produced by institutions of higher education inevitably may come to be seen as “a deception and a new form of discrimination” (Moodie 1991, p. 9).

This lack of connection between academic cost, access, and quality is also reflected, as noted earlier, in the substantial disparity in the volume of policy research addressing these respective regulatory issues in higher education. Policy-related research on quality assurance regulation is often national in orientation and, while growing, is still small in comparison to the amount of policy research on higher education cost and access. While we have no illusions that this volume can by itself address this lack of balance, we believe that systematic analyses of academic quality policies utilizing existing research and evidence, conducted by knowledgeable experts, and made available in an accessible form can make a substantial contribution to current policy debates.

## **Is Regulation Needed?**

At the outset, a useful distinction can be drawn between internal and external academic quality assurance. Internal quality assurance refers to those policies and practices whereby academic institutions themselves monitor and improve the quality of their education provision, while external quality assurance refers to supra-institutional policies and practices whereby the quality of higher education institutions and programs is assured. Individual universities have always possessed policies and practices designed to assure the quality of education, but academic institutions have also always operated within a national policy framework designed by the state to assure academic standards.

As suggested above, the combined impacts of globalization and massification have radically altered the traditional relationship between the state and institutions of higher education and motivated policy makers to seek new means for assuring academic quality in higher education (OECD 2008). First, the global demand for skilled human capital has motivated changes in the degree frameworks of many countries as policy makers sought international recognition of the credentials granted by their country’s higher education institutions. These new degree frameworks also encouraged a rapid proliferation of new academic programs in many countries, thereby testing established national practices for assuring academic standards. Second, the rapid growth of higher education systems has provided incentives for the development of private institutions, including cross-border franchise and virtual universities, which have posed novel challenges to national systems of external quality assurance, particularly those based on central control of public institutions. Third, the competitive forces unleashed by globalization and massification have required institutions of higher education to become more responsive to rapidly changing labor markets and to student program interests. Consequently, institutions in many countries have sought increased flexibility and autonomy from traditional state quality assurance regulations so that they can react more swiftly to changing social demands by establishing new academic programs, reconfiguring

existing programs, and eliminating outdated programs. Fourth, the rapidly expanding social demand for higher education has been caused in large part by students' desire to acquire the increasing private benefits available to individuals with higher degrees. The empirical reality of the growing private benefits of academic degrees has altered the traditional debate about higher education finance, encouraging many countries to require students and their families to pay a larger share of higher education costs. Consequently, as previously noted, the new public policies on academic quality assurance also seek to respond to public concerns that institutions provide educational value for money. In sum, the traditional external processes for assuring academic quality have significant limitations in the new, more competitive and demanding environment of higher education.

There is also emerging evidence that the internal processes by which universities have traditionally monitored and maintained academic standards may be inadequate to the new demands of mass higher education (Dill 1999). For example, a survey of Australian university administrators inquiring into how they evaluated the academic standards of their universities observed:

... when we asked how they knew, there was no VC or dean who had any valid or reliable means of knowing about the intellectual standards of their university's degrees, e.g. how they might have changed over time, how they compared between departments or how they compared with other universities (Anderson et al. 2002, p. 36).

Changes in the nature of academic work have also weakened the effectiveness of the existing internal mechanisms for academic quality assurance. The exponential growth of academic knowledge and the increasing specialization of research have made the traditional reliance on disciplinary norms a less reliable means of assuring academic standards in subject fields within colleges and universities (Clark 1996).<sup>1</sup> Studies of academic work at the subject level in the USA confirm the existence of an increasingly fragmented, atomistic, academic culture (Lattuca and Stark 1994; Massy et al. 1994). Not only do professors in many subjects do much of their teaching alone, but also because disciplinary subfields are defined quite narrowly, many academics find it almost impossible to discuss their teaching with other members

---

<sup>1</sup>Commenting on the contribution that disciplinary fragmentation makes to the complexity of higher education systems, Clark (1996) observed, "in mathematics, 200,00 new theorems are published each year, periodicals exceed 1,000, and review journals have developed classification scheme that includes over 4,500 subtopics arranged under 62 major topic areas. In history, the output of literature in the two decades of 1960–1980 was apparently equal in magnitude to all that was published from the time of the Greek historian Thucydides in the fourth century B.C. to the year 1960. In psychology, 45 major specialties appear in the structure of the American Psychological Association, and one of these specialties, social psychology, reports that it is now comprised of 17 subfields .... In the mid-1990s, those who track the field of chemistry were reporting that 'more articles on chemistry have been published in the past 2 years than throughout history before 1900.' Chemical Abstracts took 31 years to publish its first million abstracts, 18 years for its second million, and less than 2 years for its most recent million. An exponential growth of about 4–8% annually, with a doubling period of 10–15 years, is now seen as characteristic of most branches of science" (pp. 421–422).

of staff. Collective debate about the content of the curriculum, about pedagogic methods, and about means of assuring and improving the academic standards of programs has become increasingly difficult and rare. In many subjects, US academic staff expressed the belief that the field's diversity prevented achieving a consensus on what students should be taught. This lack of agreement is exacerbated by the rapid expansion of multidisciplinary and interdisciplinary subjects, because in these emerging fields academic staff can no longer rely on disciplinary norms to define academic standards.

This growing fragmentation of academic work means that in many disciplines and subjects, shared information on student learning no longer exists or is not easily obtainable. These changes pose a "collective action dilemma" with significant implications for institutional efforts to assure academic standards (Dill 2007). That is, for an individual member of academic staff to decide that participating in a collective effort to assure or improve student learning is more important than an equivalent hour spent on her or his own research or teaching, he or she needs to make a prediction as to the learning benefits generated by this cooperative activity. But if few incentives exist to produce evidence on student learning, then the individual will necessarily conclude that investing time in cooperative efforts to assure or improve academic standards is not rational.

This observed deterioration of the traditional collegial mechanisms for assuring academic standards within US colleges and universities is likely to have broader implications. The increasing specialization of academic work is inherent in the advancement of science and therefore affects all systems of higher education. In addition, as other nations "massify" their systems of higher education, rapidly expanding their academic offerings and providing access to a much more varied group of students than in the past, they are adopting modular forms of instruction, methods of continuous assessment, and credit-based systems similar to those in the USA. As a consequence, the traditional internal mechanisms for assuring academic standards are coming under strain in all countries.

Competing missions among universities is another factor that puts teaching and learning activities under great stress. The personal priorities of academic staff tend to lean toward research rather than teaching activities, because of either intrinsic interests of individual staff or future career perspectives (Fairweather 2000). Also for universities, financial and reputational rewards for research activities have considerably increased in recent years, especially in Australia and Europe, which has placed research management in universities at the center of attention. While the extent to which teaching and research are competing or supplementing activities is still open to debate (Hattie and Marsh 1996), it is clear that the adoption of strong policies regulating research quality without balancing policies regulating teaching quality will negatively affect the teaching mission of universities. In the worst case, when information about teaching quality is inadequate, research quality may become a proxy for institutional quality in the eyes of the public and contribute to the degradation of the teaching mission in the long run. As illustrated by the cases of this volume, a well-designed academic quality policy may help to restore a needed balance and increase awareness about academic standards within the university.

The dramatically altered environment of institutions of higher education has helped to reveal the inadequacy of both the traditional internal university practices for assuring academic standards and the limitations of existing approaches to public regulation (Brennan and Shah 2000). In their search for a national framework that will encourage innovation in academic programs while maintaining and improving academic standards, policy makers are experimenting with many innovative forms of academic quality assurance. Exactly what form such regulation should take and how extensive it should be is an issue that is deserving of increased policy research and public debate.

## Forms of Regulation

The concept of regulation is most often associated with a binding set of governmental rules to be applied by a public agency over specific activities – the so-called command and control perspective. But regulation can also be understood more broadly as all state actions designed to influence social behavior valued by the public (Baldwin and Cave 1999). In a similar spirit Clark's (1983) classic "triangle of coordination" emphasized three possible approaches to coordinating or controlling behavior in academic institutions: state authority, the academic oligarchy (i.e., professional control), and the market. From this perspective the state has a number of policy alternatives to command and control approaches for assuring academic standards. Academic quality potentially could be assured by professional self-regulation, which is "enforced" by government structuring or oversight, or by the competitive market, which is in turn steered by appropriate competition and disclosure laws designed to ensure that institutions of higher education provide adequate services to consumers. From this broader perspective the creation through legislation of a public agency such as the Quality Assurance Agency (QAA) in the UK for the purpose of conducting assessments of academic quality in universities would represent one mode of public regulation. But so also would state recognition of professional accrediting agencies as a means of assuring academic quality, or state policies that facilitate consumer sovereignty in a competitive market for higher education by mandating the provision of university information on academic program quality. Each of these mechanisms represents a possible approach to the public regulation of academic quality.

In fact, while the traditional national frameworks for academic quality assurance varied from country to country, they had generally followed three modal forms similar to those outlined by Clark (1983): the European model of central control of quality assurance by state educational ministries, the US model of decentralized quality assurance combining limited state control with market competition, and the British model in which the state essentially ceded responsibility for quality assurance to self-accrediting universities (Dill 1992). 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 delegated to the academic profession itself, which monitored and assured the standard of university degrees through

collective mechanisms such as the external examiner system. In contrast, ministries of education on the continent were much more active in setting standards for universities. They established and monitored regulations on university admissions, academic appointments, program curricula, and end-point examinations. In the USA, as higher education rapidly expanded following World War II, the federal Congress explicitly adopted a market-based approach to academic quality assurance as a supplement to the existing tradition of regional and professional accreditation (Leslie and Johnson 1974). In the 1972 re-authorization of the Higher Education Act, Congress rejected the entreaties of the higher education community to enact formula-based, enrollment-driven federal aid to academic institutions. Instead, legislators argued that providing aid directly to students was the most efficient and effective means to equalize opportunities in higher education and to harness market forces for enhancing the quality of higher education.

In accordance with this broader conception of regulation, Table 1 outlines the generic policy approaches (in bold) and new policy instruments for academic quality assurance (in italics) we analyze in the following chapters. As noted, each

**Table 1.** New public policy instruments for the assurance of academic quality

Professional (self) regulation	Market regulation	State (direct) regulation
<b>External examining</b> <i>External Examining (UK)</i>	<b>Information provision – university rankings</b> <i>CHE-Ranking (Germany)</i>	<b>Specification of standards</b> <i>National Qualifications Framework (Australia)</i>
<b>Professional accreditation and licensure</b> <i>Teacher Accreditation (USA)</i>	<i>National Survey of Student Engagement (USA)</i> <i>Course Experience Questionnaire and Graduate Survey (Australia)*</i>	<i>Subject Benchmarking (UK)</i> <b>Program assessment and accreditation</b> <i>Subject Assessments (Denmark)</i>
	<b>Information provision – system rankings</b> <i>State Report Card (USA)</i>	<i>Subject Accreditation (Germany)</i> <i>Medical Accreditation (UK)</i>
		<b>Institutional accountability</b> <i>Academic Audit (Hong Kong)</i> <i>Performance-based contracting (Catalonia, Spain)</i>
		<b>Information provision</b> <i>Course Experience Questionnaires and Graduate Surveys (Australia)*</i> <i>National Assessment of Courses (Brazil)</i>

\*The Australian Course Experience Questionnaire and Graduate Survey instrument is an interesting combination of state-mandated information and market-based dissemination. To aid comparative analysis we have grouped this policy with the other market-based instruments in Part II, Market Regulation of Academic Quality.

instrument assumes one of the three loci of authority. Professional or self-regulation clearly assumes producer sovereignty in which academics themselves are principally responsible for defining and enforcing the rules and norms assuring the quality of academic provision. This places greatest emphasis on traditional voluntary practices carried out by professional bodies including accreditation of academic programs and institutions by professional associations as well as collective professional practices such as external examining. For the market to work effectively as a means of assuring academic standards, it is necessary for students and their families to achieve effective consumer sovereignty through informed choice of academic programs. Quality assurance practices associated with this perspective include the provision of information and rankings by commercial, non-profit, or government agencies, which are designed to provide academic quality information to students and policy makers. Finally, state or direct regulation of academic quality assumes the sovereignty of the state in defining and enforcing academic standards. The new instruments emphasized by the state have adopted different approaches to academic quality assurance. Some countries have made efforts to articulate specific standards for all study fields and/or for higher education degrees as a guideline or benchmark for universities. The National Qualifications Framework in Australia and subject benchmarks in the UK are examples of such policies. The most direct means of government monitoring of academic quality in universities is likely assessment and accreditation of individual programs. In contrast, an institutional accountability approach to quality assurance employs performance contracts or an academic audit. In the former case, universities individually negotiate their targets with the state, and in the latter case the university itself maintains responsibility for its quality assurance, while the state assures only that the university takes this responsibility seriously. Finally, the state may attempt to assure academic quality by providing or mandating better information on academic performance.

Several key points can be derived from these simple distinctions. First, in a number of cases in this volume, the locus of authority is an indication of the instrument originator rather than a limitation on who can carry it out. A number of quality assurance practices such as accreditation or academic audit are essentially generic processes that can be conducted voluntarily under the auspices of academic professional organizations such as the Teacher Education Accreditation Council (TEAC) in the USA or the European University Association (EUA), or can be a requirement of national policy carried out by agencies established by or affiliated with the state as is the case with the academic audits conducted by the University Grants Committee in Hong Kong or accreditations conducted by the General Medical Council (GMC) in the UK. Similarly, quality rankings can be produced by the academic profession as in the world university league table published by the Shanghai University, by the private or non-profit sector as in the commercially produced rankings of the *US News and World Report* or the CHE Rankings in Germany, or by the state as in the Graduate Surveys produced in Australia. Second, while it is often argued that professional self-regulation or market forces represent serious alternatives to state regulation of academic standards, professional or market-based quality assurance practices are usually dependent on the state for their effective functioning. That

is, if professional self-regulation or market forces are to successfully protect the public interest in the assurance of academic standards, they must be reinforced by law or formally recognized and/or subsidized by the state. For example, the current influence of supposedly voluntary accreditation in the USA derives almost entirely from the fact that the national government utilizes institutional accreditation to determine college and university eligibility for federal student aid. Similarly, more valid commercial rankings such as those of the *Guardian* in the UK, the *Good University Guide* in Australia, or the *Globe and Mail* in Canada are greatly reliant upon government subsidized or produced data on universities (Dill and Soo 2005).

In sum, effective professional self-regulation and/or market regulation is best understood as an alternative state approach for assuring academic quality. For this reason we have purposely included a number of instruments that were initially developed by voluntary or non-profit entities (e.g., UK external examining, TEAC Accreditation, the National Survey of Student Engagement, and the CHE Rankings), since these types of instruments also could become important components of a national policy framework.

## **A “Public Interest” Perspective to Policy Analysis**

Professor Ulrich Teichler once whimsically observed that the main difference between research on higher education policy and on “mad cow” disease is that when the mad cow researchers present their findings, the mad cows are not in the room! Academics may not be “mad” in this sense, but with regard to the topic of academic quality regulation they are often easily incensed. Academic staff’s experience with and criticisms of academic quality regulation are of significant importance to policy makers, especially given the complexities of implementing such policies in the necessarily decentralized world of academic work and given society’s understandably strong support for academic freedom. But by the same token, academics, who carry out the vast majority of research on academic quality regulations, have a clear self-interest in the design of any such policies. Therefore, there is a real need for research on academic quality policies that is genuinely objective and evenhanded.

Our analyses attempt to address this need by adopting a “public interest” perspective. That is, while all researchers necessarily have value biases, we aspired to produce analyses that are as balanced as possible. This was pursued first by adopting as outlined below a common format for all of the analyses of policies and practices presented in this volume. Second, the analyses attempt to assess both the intended and unintended impacts of new regulatory policies – the relative costs and benefits of these policies to all stakeholders, not just to the members of the academic community. Third, the analyses have been carried out by experienced researchers with specific knowledge of the relevant policy and related research literature.

Each policy analysis examines one quality assurance policy instrument and the experience implementing it in a specific country or context. The analyses address

- the nature of the relevant higher education system in order to help readers understand the national context prior to the introduction of the new quality assurance policy;
- the perceived problems that led to the adoption of the quality assurance instrument;
- the nature of the policy instrument – the specific components of the policy and what it is designed to accomplish;
- the existing evidence regarding the impacts of the instrument, positive or negative, intended or unintended;
- where available, information on the financial costs of the instrument;
- the relationship of the analyzed instrument to comparable policies implemented in other countries.

The main purpose of each policy analysis is to provide an in-depth analysis of the design and implementation of the policy. It will inform readers about the impacts of the policy as well as guide them through associated risks, debates, strengths, and weaknesses. The analysis also will enable a reader to consider the possible effectiveness of the instrument in another political and academic environment.

As noted, the goal of these analyses is to provide information on innovative instruments and practices. By employing a similar framework for each policy analysis, we hope to enable policy makers and other stakeholders to consider different options, to compare their effects, and to see their relative advantages and disadvantages. This collected set of analyses should therefore be a helpful resource for designing or revising existing quality assurance policies in any country.

## Organization of the Volume

In the three sections that follow, we will introduce and analyze the policy instruments listed in Table 1. In Part I we will explore the instruments of professional or self-regulation of academic quality. In Part II we will discuss the instruments of market regulation, and in Part III we will assess the new state instruments for regulating academic quality. In our concluding chapter we will summarize what we have learned about the strengths and weaknesses of each regulatory approach and attempt to synthesize our findings into the national framework conditions necessary for the effective assurance of academic standards in the new environment of higher education.

## References

- Anderson, D., Johnson, R., Saha, L. (2002). *Changes in academic work: Implications for universities of the changing age distribution and work roles of academic staff*. Canberra: Commonwealth of Australia. [http://www.dest.gov.au/archive/highered/otherpub/academic\\_work.pdf](http://www.dest.gov.au/archive/highered/otherpub/academic_work.pdf) Accessed 12 April 2007.

- Astin, A. W. (1985). *Achieving educational excellence: A critical assessment of priorities and practices in higher education*. San Francisco, London: Jossey-Bass Publishers.
- Baldwin, R., Cave, M. (1999). *Understanding regulation: Theory, strategy, and practice*. Oxford: Oxford University Press.
- Ball, C. (1985). What the hell is quality? In D. Urwin (Ed.), *Fitness for purpose: Essays in higher education*. Guildford, UK: SRHE and NFER/Nelson.
- Becker, G. S. (1964). *Human capital*. New York: Columbia University Press.
- Berdahl, R. O., Spitzberg Jr., I. J. (1991). Quality and access as interrelated policy issues. In R. O. Berdahl, G. C. Moodie, I. J. Spitzberg Jr. (Eds.), *Quality and access in higher education: Comparing Britain and the United States* (pp. 164–171). Buckingham, UK: SRHE and Open University Press.
- Bogue, E. G., Saunders, R. L. (1992). *The evidence for quality: Strengthening the tests of academic and administrative effectiveness*. San Francisco, London: Jossey-Bass Publishers.
- Brennan, J., de Vries, P., Williams, R. (Eds.) (1997). *Standards and quality in higher education*. London: Jessica Kingsley.
- Brennan, J., Shah, T. (2000). *Managing quality in higher education: An international perspective on institutional assessment and change*. Buckingham, UK: OECD, SRHE & Open University Press.
- Clark, B. R. (1983). *The higher education system: Academic organization in cross-national perspective*. Berkeley: The University of California Press.
- Clark, B. R. (1996). Substantive growth and innovative organization: New categories for higher education research. *Higher Education*, 32(4), 417–430.
- Dill, D. D. (1992). Academic administration. In B. R. Clark, G. Neave (Eds.), *The encyclopedia of higher education* (pp. 1318–1329). Oxford: Pergamon Press.
- Dill, D. D. (1999). Academic accountability and university adaptation: The architecture of an academic learning organization. *Higher Education*, 38(2), 127–154.
- Dill, D. D. (2000). Designing academic audit: Lessons learned in Europe and Asia. *Quality in Higher Education*, 6(3), 187–207.
- Dill, D. D. (2007). Are public research universities effective communities of learning?: The collective action dilemma of assuring academic standards. In R. L. Geiger, C. L. Colbeck, R. L. Williams, C. K. Anderson (Eds.), *The future of the American Public Research University* (pp. 187–203). Rotterdam: Sense Publishers.
- Dill, D. D., Soo, M. (2004). Transparency and quality in higher education markets. In P. Teixeira, B. Jongbloed, D. Dill, A. Amaral (Eds.), *Markets in higher education: Rhetoric or reality?* (pp. 61–86). Dordrecht, the Netherlands: Kluwer.
- Dill, D. D., Soo, M. (2005). Academic quality, league tables, and public policy: A cross-national analysis of university ranking systems. *Higher Education*, 49(4), 495–533.
- Eustace, R. B. (1991). Gold, silver, copper: standards of first degrees. In R. O. Berdahl, G. C. Moodie, I. J. Spitzberg Jr. (Eds.), *Quality and access in higher education: Comparing Britain and the United States* (pp. 29–41). Buckingham, UK: SRHE and Open University Press.
- Fairweather, J. S. (2000). Diversification or homogenization: How markets and governments combine to shape American Higher Education. *Higher Education Policy*, 13(1), 79–98.
- Green, D. (Ed.) (1994). *What is quality in higher education?* Buckingham, UK: SRHE and Open University Press.
- Hattie, J., Marsh, H. W. (1996). The relationship between research and teaching: A meta-analysis. *Review of Educational Research*, 66(4), 507–542.
- Haveman, R. H., Bershadker, A., Schwabish, J. A. (2003). *Human capital in the United States from 1975 to 2000: Patterns of growth and utilization*. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.
- Lattuca, L. R., Stark, J. S. (1994). Will disciplinary perspectives impede curricular reform? *Journal of Higher Education*, 65(4), 401–426.
- Leslie, L. L., Johnson, G. P. (1974). The market model and higher education. *Journal of Higher Education*, 45(1), 1–20.

- Massy, W. F. (2003). *Honoring the trust: quality and cost containment in higher education*. Bolton, MA: Anker Publishing.
- Massy, W. F., Wilger, A. K., Colbeck, C. (1994). Overcoming hollowed collegiality. *Change*, 26(4), 10–20.
- Moodie, G. C. (1991). Setting the scene. In R. O. Berdahl, G. C. Moodie, I. J. Spitzberg Jr. (Eds.) *Quality and access in higher education: Comparing Britain and the United States* (pp. 1–10). Buckingham, UK: SRHE and Open University Press.
- North, D. (1990). *Institutions, institutional change, and economic performance*. Cambridge: Cambridge University Press.
- OECD (2008). *Tertiary education for the knowledge society, Vol 1*, P. Santiago, K. Tremblay, E. Basri, E. Arnal (Eds). Paris: OECD.
- Pirsig, R. (1974). *Zen and the art of motorcycle maintenance: An inquiry into values*. New York: Morrow.
- Westerheijden, D. F., Stensaker, B., Rosa, M. J. (2007). *Quality assurance in higher education: Trends in regulation, translation and transformation*. Dordrecht: Springer.