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VIEWING INTERNAL QUALITY ASSURANCE AS STRENGTHENED COLLECTIVE GOVERNANCE FOR IMPROVED STUDENT LEARNING[1]

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The definition of academic quality is frequently a point of debate. Academic quality can be defined as equivalent to academic standards, that is to say the knowledge, skills, and attitudes achieved by graduates as a result of their academic programme or degree. Over their lifetimes the 'human capital' developed by graduates provides both private and public economic benefits as well as valued societal outcomes in the form of improved parenting, healthier lifestyles, greater civic participation, and increased social cohesion. This conception of academic quality is increasingly reflected in national higher education policies concerned with improving academic outcomes, the educational 'value-added' of an academic programme or degree.

The basic argument of this chapter is that all institutions of higher education, including the most highly ranked and respected universities, can enhance their internal processes for ensuring and improving teaching and learning. In a 2015 lecture John Hennessy, the President of Stanford University, persuasively argued that his university could both markedly improve the quality of instruction and learning and lower costs by making changes to the university's internal processes (Hennessy, 2015). The key challenge in this respect is to make internal governance of academic programmes and instruction as rigorous, evidence-based, and subject to continual review by academic peers as are the institutional processes governing research in the best universities.

The design of effective internal quality assurance (IQA) is the heart of the matter, and it is widely impacted by the external forces increasingly affecting academia, including universities' efforts to ensure academic quality.

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1.1 Strengths and weaknesses of public policies to enhance the quality of higher education

Public policies designed to ensure and improve academic quality have had a mixed impact (Dill and Beerkens, 2013). Universal national assessments or accreditations of subject fields within a university have encouraged more attention by faculty to improving programme instruction, but have proven expensive, draining faculty energy and producing diminishing returns over time. They may also lessen the incentive for universities themselves to develop collective action by the academic staff as a whole to ensure academic quality. A second type of assessment, external quality evaluation of the university, is often too 'top-down' or comprehensive in its focus to have a positive impact on the educational quality of academic programmes. These institutional reviews often assume that the 'hard' factors of rules, procedures, and decision structures play a critical role, and tend to ignore the 'soft' factors by which universities communicate the attitudes and norms that significantly influence academic performance (Kaplan, 2006; Paradeise and Thoenig, 2013). Institutional reviews can also encourage a 'culture of compliance' in which universities adopt highly visible but superficial mechanisms to impress external evaluators, such as the appointment of academic quality officers; they may even encourage institutions to change the composition of the teaching staff in order to gain better evaluation ratings.

Performance-based funding for instruction and research has been another means through which governments have attempted to enhance the quality of teaching and learning. This has, however, generally been ineffective in improving teaching and learning within universities. It is obviously difficult to identify valid and reliable performance measures of academic quality. Student grades or marks, progression towards a degree, or graduation rates, for example, can all be increased by lowering academic standards. In addition, increased competition for research funds may motivate academic staff to invest less time in instruction and in the institutional processes required to ensure and improve student learning.

Policies encouraging greater authority for university administrators have also been implemented in a number of countries. In the contemporary world, active promotion of high-quality education and research within universities is becoming more essential, and strong leadership by their presidents has long been a characteristic of the best colleges and universities in the United States (Dill, 2014). However, if national policies instead encourage centralized decision-making in universities and diminish faculty influence over academic governance often described as 'managerialism' these policies may undermine needed efforts to improve academic quality and university efficiency. An econometric study of US universities (Carroll, Dickson, and Ruseski, 2012) discovered that decisions made primarily by university administrators led to an over-investment in university 'non-academic quality' – such as athletics, amenities for student life, and residential facilities – as well as to higher total costs for undergraduate students. In contrast, decisions reflecting greater faculty participation in institutional governance led to lower investment in non-academic quality and to increased academic quality, as measured by the scope and rigour of academic programme offerings as well as faculty qualifications.

Policies designed to increase the transparency of higher education by providing student applicants with better information about academic institutions constitute another set of actions designed to improve educational quality. They have proved that they can improve educational choices. However, studies of university or subject rankings (Dill and Soo, 2005) reveal that they frequently emphasize research performance measures or reputational ratings primarily based on research. Such rankings encourage some universities to cross-subsidize research expenditures with funds originally intended for instruction (Ehrenberg, 2012) and, as previously noted, may motivate academic staff to invest more time in research and less in instruction. Advocates of

transparency often assume better informed student choice will also lead to improvement in the quality of academic programmes. However, as a recent respected study of academic standards in the market-oriented US system concluded, 'there is no reason to expect that students and parents as consumers will prioritize undergraduate learning as an outcome' (Arum and Roksa, 2011: 137).

Finally, one clear indicator of the limitations of external policy-driven efforts at academic QA is the rapid, almost continual change in the design of these national policies in many countries. The reality is that improving academic quality and student learning is a complex human undertaking, which is the reason most nations have historically delegated the assurance of academic standards to the collective faculty of each university.

In addition to national policy, another external force warrants attention: innovations in information technology or online learning. Economists have traditionally argued that institutions of higher education were subject to the 'cost disease' (Bowen, 2013). That is, like other personal services such as medicine, academic instruction requires direct personal interaction. Therefore, academic wages necessarily rise at a rate greater than increases in productivity, because technical efficiencies are difficult to achieve in this sector. However, economist William Bowen, co-author of the 'cost disease' concept, now asserts that productivity growth in higher education instruction and learning has become both technically feasible and essential.

As evidence, Bowen reports on a rigorous study (Bowen et al., 2014) of a statistics course in which Carnegie Mellon University's (CMU) Open Learning Institute online instructional software was combined with a weekly face-to-face meeting. This 'hybrid' course also employed adaptive learning techniques, which provide timely online hints for students as well as valuable feedback data for the teachers. The study was carried out at six US public university campuses, and students were randomly assigned to either a conventional classroom version of the course or the hybrid model, in order to control for selection effects. Findings were remarkably consistent across campuses. The hybrid course was found to yield essentially the same learning outcomes with much less face-to-face staff time and 25 per cent less reported time invested in the course by students. Another key finding was that an important subset of students, those who were relatively less prepared academically, did as well with the hybrid model as did their better-prepared classmates.

Bowen does not argue that online education can be an effective substitute for traditional university first degree programmes, but his analysis leads him to call for openness to new means of instruction by institutions of higher education, and he emphasizes the need for reforms in institutional processes of academic governance:

> Decisions ... have to be made as to how to shape the export and import of new pedagogies across institutions as well as across fields of study. Advances in technology make it imperative to move away from historical notions that departments must drive all decisions of this kind. Moving away from a vertical, departmental, 'silo' approach to resolving important questions will not be easy, but it is essential. We have to organize ourselves to think more horizontally (Bowen, 2016: 1415).

1.2 Using the design principles of the 'commons' model to guide quality assurance within higher education institutions

A particularly valuable framework for improving IQA within universities is the 'commons' model for addressing issues of collective action in self-governing communities, as

developed by the Nobel laureate in economics Elinor Ostrom. In her Nobel Prize lecture, Ostrom (2009) emphasized that neither the regulatory intervention of the state nor market forces are the most effective institutional mechanisms for governing, managing, and providing complex public goods. Instead, she identified universal design principles which enable individuals within self-governing organizations to effectively address collective action dilemmas.

Do Ostrom's principles apply to institutions of higher education? She argues that a commons perspective is most applicable in organizations where effective cooperation and integration among independent individuals is critical to performance, as is clearly and increasingly the case in university instruction. A commons perspective is also most appropriate when organizations are self-organizing communities, the organization's members share common values, the organization possesses a 'nested' structure with multiple levels of rule-making (similar to the 'federal' model of academic governance in most universities), and the organization itself is of a size to facilitate the active participation of its members.

In one of her recent studies (Ostrom and Hess, 2007), Ostrom directly applied her framework to universities and concluded that they are best understood as humanly constructed, self-organizing, 'knowledge commons'. The following sections will utilize Ostrom's (2005) design principles to clarify the best means of rebuilding and strengthening the collective capacity of faculty members within universities to implement and improve student learning.

Recognition by government

An important first question is whether the government recognizes and confirms the professional autonomy and responsibility of commons members to govern their own institutions. Such recognition strengthens members' motivation and commitment to investing the necessary time and effort in the collective action necessary to address challenges to effective performance. One example of this type of recognition is the statement made in the Communiqué issued by the Conference of Ministers Responsible for Higher Education held in Berlin in 2003: 'consistent with the principle of institutional autonomy, the primary responsibility for quality assurance in higher education lies with each institution itself and this provides the basis for real accountability of the academic system within the national quality framework' (Berlin Communiqué, 2003).

Another example of such government recognition is the US Federal Policy on Human Subjects Research in academic institutions, implemented over the last 25 years (Lynn and Nelson, 2005). Because the US federal government finances over two-thirds of all expenditures on academic research and scholarship, this policy applies to all public and private colleges and universities in the United States. The policy requires all related academic studies to be approved at the proposal stage by an Institutional Review Board within each college or university. These Boards are composed primarily of university-appointed faculty peers. Significantly, negative decisions about proposed research issued by these panels cannot be reversed by any university administrator or by a court of law. While these review boards have been subject to academic criticism, this policy nonetheless represents one of the strongest national confirmations of university autonomy and collegial authority that I have discovered.

Strengthening the shared values of commons members

Recent intensive case studies (Paradeise and Thoenig, 2013) of leading universities in France, Italy, Switzerland, China, and the United States have produced general conclusions regarding the internal governance processes by which contemporary universities sustain or attain standards of excellence in research. Consistent with Ostrom's commons model, these studies

have concluded that academic quality is primarily sustained through the social interactions that occur within and between academic sub-units and among academic staff at the university. These collegial processes play a major role in building shared identities and developing valuable common knowledge in research among academic staff, as well as generating and communicating communal norms and values through socialization and internal regulation. Lastly, these processes legitimate certain decision-making criteria within academic institutions and have an impact on the distribution of authority and power within the university.

However, external assessments of the quality of university education suggest that traditional collegial processes do not appear to be as effective in ensuring the quality of teaching and learning (Dill and Beerkens, 2010). External quality evaluations often reveal substantial variation in the academic norms influencing teaching, student assessment, and marking standards across disciplines and fields within the same university. Those who have taught in one of the newly emerging inter-disciplinary or cross-disciplinary fields are likely to have experienced significant debates among faculty colleagues about academic standards in both instruction and research.

Thus, one valuable way to enhance internal academic quality assurance is for respected academic professionals to generate and communicate guidelines clarifying expectations about instruction and student assessment for all teaching staff. Such guidelines are a core component of US national policy on human subjects research.

Guidelines may be developed at the national level, similar to those promulgated by the Higher Education Academy (HEA, 2018) in the United Kingdom, or, more valuably, developed and communicated by a university's Faculty Senate or its Centre for Teaching and Learning. An influential example of university-based guidelines is the 'Principles of Teaching and Learning' developed by the Eberly Center for Teaching Excellence and Educational Innovation at CMU in the United States. These principles were derived from the research of the University's Open Learning Initiative, which creates academic courses based on the findings of learning science and evaluates those courses in terms of student performance in traditional university classrooms. Lastly, related guidelines are provided and disseminated through a free, informative, high-quality online course, 'Academic integrity: Values, skills, action', developed by FutureLearn at the University of Auckland in New Zealand. Successful completion of a similar online course, addressing the ethics of human subjects research, is required by the University of North Carolina for all academic staff and students conducting such research.

Cultivating the ability of commons members to learn from one another

Ways to improve academic quality can also be learned from other respected universities. Several US websites, for instance, offer valuable assistance which a university's Centre for Teaching and Learning could use to support improvements in instruction in its own institution. The above-mentioned Open Learning Initiative, covering course design and student learning, at CMU offers free, carefully developed and evaluated online university courses to anyone who wishes to use their materials for learning or teaching. These materials include the course syllabus as well as online learning materials and exams for numerous web-based courses which could be adapted or adopted by academic instructors anywhere in the world. While all the course materials are in English, CMU is primarily a school of engineering, so many of the courses are in the sciences and likely to be broadly applicable internationally. A second related resource on course design is the National Center for Academic Transformation (NCAT), which consults with US HEIs to help achieve their student learning and retention goals while reducing their

instructional costs. The NCAT website provides free guidelines on redesigning college courses using their proven methodology, which features more active forms of student learning.

One reason the many institutional Centers of Teaching and Learning in the United States have had a limited impact on improving academic quality is that they often adopt the individual faculty member as their unit of analysis. These centres focus their efforts on faculty volunteers who seek instructional assistance, and/or on the redesign of individual modules or courses of instruction. However, research in Northern Europe (Hovdhaugen, 2011) confirms the positive influence of the structure or 'cohesion' of an academic programme as a whole on student progression and degree completion. Similar research in theUnited States (Pascarella and Terenzini, 1991) indicates that learning of academic content as well as cognitive development are most significantly associated with the pattern and sequence of the courses in which students enrol, by programme requirements which integrate learning from separate courses, and by the frequency of communication and interaction among faculty members in the subject field. Following Ostrom's perspective, Centres for Teaching and Learning might be better advised to focus on supporting and motivating collective action by the faculty from each academic programme to redesign their curriculum and courses to maximize the effectiveness of instruction and learning.

As has been found in research on leading universities (Paradeise and Thoenig, 2013), the evaluations and influence of respected faculty peers are a much more powerful incentive for real academic change than administrative policies, government edicts, or market forces. In their research and scholarship faculty members continually learn and improve their performance based on peer reviews and criticism of their papers and publications, as well as through contacts with esteemed colleagues. Similarly, the best means for cultivating faculty engagement in quality assurance within a university is through a rigorous process of 'academic quality work' (AQW), a term coined by Bill Massy of Stanford University, who designed and helped implement the University Grant Committee's Academic Audit Process in Hong Kong (Massy, 2010; Massy, Graham, and Short, 2007). In AQW, each academic programme or department's procedures for ensuring and improving the quality of its educational provision are carefully reviewed by a panel of university peers. These reviews examine a programme's stated learning objectives, the design of its curriculum and co-curriculum, the teaching and learning methods employed in its courses, its means of assessing student learning, and the processes the programme uses to ensure educational quality.[2]

A very effective academic quality assurance process exists at a highly respected university in Hong Kong, where an elected Faculty Senate Committee on Teaching and Learning Quality reviews annual reports from each academic programme on its process for ensuring teaching and learning quality. When the committee has questions about the rigour or effectiveness of a programme's processes, they meet in person with the programme's faculty to discuss needed changes and improvements and then follow up systematically on proposed reforms. These structured faculty discussions between respected academic peers and a programme's academic staff appear to be particularly influential in improving teaching and learning.

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[2] AQW was developed in Hong Kong with an emphasis on improving teaching and learning, and was also initially implemented in this form in the US public university systems of Missouri and Tennessee. However, the concept of academic quality improvement can also be applied to research. In Missouri the AQW process was subsequently successfully adapted to include the review both of a programme's quality of teaching and learning and of the quality of its research. For a discussion of this combined process see Massy, Graham, and Short (2007).

This point is supported by Ostrom's research on commons organizations (Ostrom and Walker, 1997), which discovered that face-to-face communication in social dilemmas isthe most effective means of producing substantial increases in needed cooperation and coordination over time. Similarly, research on professional settings (Hage, 1974) shows that communication which influences individual behaviour is not vertical (as between faculty and administrators), not primarily written (as in reports or procedural documents), and not focused on the detection or imposition of sanctions. Rather, helpful communication is horizontal, with respected peers, largely verbal and face-to-face, and focused on the exchange of information about means of improving core professional tasks.

Because the rigour and effectiveness of QA often varies across departments and degree programmes within the same university, peer review of a programme's QA practices by university colleagues is more beneficial if it is truly cross-disciplinary, or horizontal, as Bowen has suggested. Faculty members in the humanities need to discuss their QA tools and processes with faculty members from medicine, social scientists need to compare their methods with natural scientists, and so on. This is the most effective means to ensure academic standards within a university and to promote the transfer of effective tools for improving instructional quality and student learning across programmes. If the faculty of each academic institution are collectively responsible for the academic standards of each programme, this reality should be clearly manifest in the design of internal academic governance processes for ensuring academic quality.

Developing more valid and reliable information for improving professional performance

The challenge of developing more valid and useful measures of added value in academia has led to experiments with standardized tests of general knowledge and skill, such as the Graduate Skills Assessment (GSA) in Australia and the Collegiate Learning Assessment (CLA) in the United States. But there are significant issues regarding the validity and reliability of these types of instrument as means of differentiating the educational quality of universities (Dill and Beerkens, 2013).

The claim 'if you can't measure it, you can't improve it' does have relevance to academic work, certainly with regard to the progress made in the improvement of knowledge gained from academic research over the last century. But as the recent experience with the OECD's Assessment of Higher Education Learning Outcomes (AHELO) Project suggests, the search for universally valid measures of added value in academia looks a lot like the quest for the Holy Grail and often distracts academic institutions from the needed reform of internal processes.

A major focus of effective internal QA should be providing incentives and support for collective action by the academic staff within each programme or department to develop valid, direct measures of learning outcomes at the subject level. As Pascarella and Terenzini (2005: 648) concluded in their exhaustive review of the available empirical research on teaching and learning in higher education:

Assessment of department-specific learning outcomes can be a useful vehicle for change. Assessment plans and activities developed and approved by faculty can provide an empirical foundation of systematic and ongoing rethinking, redesigning, and restructuring programmes and curricula. For faculty members, trained to be sceptical about claims, evidence is the gold standard in the academy, and they are unlikely to adopt new ways of thinking or behaving without first being convinced that the new pedagogies and organizational structures are better than the old. In addition, the findings of assessment studies specific to faculty members' academic units will generate more interest and action than general or institution-wide evidence.

Tests such as the above-mentioned Graduate Skills Assessment and Collegiate Learning Assessment, however, as well as US measures of the student experience such as the National Survey of Student Engagement (NSSE) and the University of California Undergraduate Experience Survey (UCUES), could be valuable as diagnostic tools within universities. For example, they could be applied by a Centre for Teaching and Learning to identify academic programmes or departments doing particularly well or poorly in QA. Such 'evidence' could be influential in motivating the academic staff of a programme to collectively address needed improvements in instruction and learning. These measures could also help the institution identify effective practices and tools from high-scoring programmes, which could then be usefully transferred to programmes with needs.

However, if a programme's academic staff is to experiment with new teaching practices and act collectively to improve student learning, this will require, as in research, provision of time and financial resources by the university, possibly through competitive grants to programmes for innovative quality assurance. As Bowen (2013) has argued, a critical challenge for all countries is how best to increase the academic outcomes of higher education without a commensurate increase in costs. In addition to better measures of student learning, useful measures of the cost of the increasingly varied forms of instruction now possible within university courses are essential to improving academic quality and productivity. Cost per unit ratios, such as cost per student credit hour or instructional costs per course, fail to take into account the specific and rapidly changing activities which now constitute teaching and learning. Determining the productivity of the different technologies involved in teaching and learning is complex, and often of little interest to the academic staff responsible for the effectiveness of academic programmes or to the faculty as a whole. Bowen (2013) has recommended a 'portfolio approach' to curricular development which would encourage consideration of the most effective and efficient instructional activities for different sizes and types of course; these include using lower-cost 'hybrid' instructional approaches with well-designed online instruction in large introductory courses in appropriate fields, using more costly digital adaptive learning techniques permitting instructors to provide personalized lessons and assessments in advanced seminars and laboratory courses, and using tutorial instruction in 'capstone' courses designed to provide students with an integrative or summative experience at the end of their academic programme. By associating the costs of a course with relevant instructional activity, academic programmes, deans, and the collective university faculty will have the type of information needed to make decisions about improving student learning in the most efficient manner. Massy's Reengineering the university (2016) illustrates how a university can develop an activity-based costing model for academic courses to assist administrators and academic staff to improve quality and productivity. This approach is now being used experimentally in universities in the United States and Asia. In addition, the Pilbara Group in Australia has developed and is marketing a similar activity-based costing model for academic courses, which it is now applying to other countries.

Developing more effective collective governance processes

Universities have always had internal processes by which the collective academic staff ensured academic standards. These include processes for developing, approving, and evaluating academic courses and programmes, evaluating and improving instruction, and ensuring both the integrity of grading standards across subject fields and the validity of means for assessing student learning outcomes.

A number of the more influential subject accreditation processes – the learning-oriented review processes developed by the former Teacher Education Accreditation Council and the

Accreditation Board for Engineering and Technology (ABET) in the United States, as well as the review process of the General Medical Council in the United Kingdom – provide potentially valuable models for the design of more effective collective QA processes within universities (Dill and Beerkens, 2013). An important component of these accreditation processes is the adoption of a more rigorous evaluation methodology in conformity with social science standards of evidence. These reviews strongly emphasize the development within universities of a 'culture of evidence' (Shavelson, 2010) for ensuring and improving academic standards through progress monitoring, feedback, and encouragement of active experimentation in academic programmes.

From this perspective the key issue for effective IQA is not whether an institution's core academic processes require the formal submission of information and reports by academic programmes. Rather, the critical question is whether evidence-based judgements about academic programme quality have been made with reference to these core academic processes, resulting in selective scrutiny, effective support, and observable improvement in identified programmes.

In the most respected universities there is an appropriate balance of strong administrative academic leadership with effective, collective faculty responsibility for and engagement in ensuring and improving academic quality. How can this balance be best achieved (Massy, Graham, and Short, 2007)? In one approach, the Board of Control of each university adopts a systematic institutional process for evaluating academic quality work and spurring its improvement. In another, responsibility is clearly assigned to the relevant academic administrators as well as to the collective faculty to review and improve the institution's AQW. This includes, for example, specifying the collective faculty's responsibility for developing and implementing peer reviews of each programme's quality, and specifying the responsibility of the academic deans and chief academic officer to approve the reviews of each programme's AQW, the programme's response to the review, and the programme's plans for improvement and implementation. A third approach is the adoption of a public mechanism for rating the relative performance of each programme's AQW. For example, the University Grants Committee in Hong Kong adopted a five-level 'capability maturity scale' describing the relative effort or stage of development of a programme's or institution's AQW (Massy, 2010). Immature entities can thereby be encouraged to do better while mature entities can be appropriately celebrated.

University planning and budgeting processes also play a significant role in IQA, as has been well illustrated over the last 25 years by Stanford University in the United States (Massy, 2016). In recent decades, most leading US universities, including publicly funded ones like the University of North Carolina, have reformed their administrative structure to ensure, like Stanford, that academic values effectively guide financial planning and budgeting. This has been accomplished by assigning responsibility for all planning and budgeting decisions to the chief academic officer, who usually has the title of Provost or Vice President of Academic Affairs. This responsibility involves developing and allocating a comprehensive operating budget, including all restricted and unrestricted operating revenue and expense for the next year, as well as the university's capital budget. At Stanford, as at other leading US universities, the Provost is a senior professor, most often with prior experience as a department chair or dean. In order to guarantee that planning and budgeting decisions truly reflect the university's collective academic values, the Provost's decisions are made in close consultation with a University Budget Committee.

At Stanford, this committee is composed primarily of academic administrators, who are also university professors, as well as of experienced senior faculty, including the chair of the Stanford Faculty Senate. Full-time Stanford faculty members represent more than two-thirds of the University Budget Committee members.

The Stanford financial planning and budgeting process involves a number of noteworthy practices. Certain academic units such as the Medical School and Business School, which have access to substantial external funding such as private gifts and research grants or contracts, are included in the comprehensive budget, but unlike other academic units they are funded on a formula basis. This formula funding, as well as needed cross-subsidies among the remaining academic units, ensures that all academic units receive sufficient financial resources to maintain and improve their academic quality. All allocations in the comprehensive budget, and the academic values informing these choices, are announced to the members of the Stanford University community annually via the Stanford University Budget Plan. This very informative document effectively illustrates and communicates the university's core values to all members of the university. Lastly, Stanford, like other leading US universities, has sometimes set a specific limit on administrative expenses, calculated as a percentage of the total budget, as a budget planning parameter. As a consequence, funds are reallocated as needed to ensure maximum investment in academic instruction and research. Similarly, establishing a minimum percentage of a total university budget to be allocated to instruction could be an effective tool for combating the declining institutional investment in teaching and learning now evident in the United States and a number of other countries (Ehrenberg, 2012).

1.3 Conclusion

Over the many centuries of their existence, universities have been continually adjusting and adapting their internal governance and core academic processes. As publicly supported or subsidized organizations, universities have necessarily been conscious of and responsive to legitimate government directives. However, improvements in the core activities of instruction, research, and public service, and their respective management within universities, have also occurred over time, most often without government intervention.

Given the critical importance of higher education to individuals and society, collective action to improve the effectiveness of each university's internal processes for ensuring and improving academic standards would genuinely be in the public interest. The design principles of Ostrom's (2005) 'commons' model provide a valuable approach to the development of more effective public policy for ensuring academic quality within self-governing universities:

• Government policy should first clearly recognize and confirm the professional autonomy and responsibility of the collective faculty of each university to govern and ensure its academic standards.

• This policy should encourage respected academic professionals to define, communicate, and strengthen the shared values and professional obligations required of all academic staff regarding their individual behaviour and collective responsibility for instruction and student assessment.

• The policy should cultivate the ability of academic staff to learn ways of improving instruction and learning from one another, through better designed collegial evaluation and monitoring of each academic programme's mechanisms for ensuring academic standards.

• The policy should encourage the development within each university of more well-founded and reliable information and evidence for evaluating and improving teaching and learning. The policy should stimulate appropriate faculty involvement and engagement in each university's processes of academic planning and budgeting, to ensure that academic values predominate in institutional decisions affecting academic standards.

As these principles suggest, and consistent with the traditional values of academic research, the best approach to ensuring and continually improving instruction and learning in higher education is through systematic, evidence-based analysis and continual review by academic peers within each institution.

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