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# **On Quality and Standards**

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### 1. Introduction

In 2008, Universities UK, the representative body for Vice-Chancellors of universities in the United Kingdom, published a pamphlet titled *Quality and standards in UK universities: A guide to how the system works*. The executive summary of that pamphlet opens as follows:

UK Universities are widely regarded as being amongst the best in the world. Maintaining the highest academic quality and standards is crucial to that reputation. This paper explains how universities ensure that students can have confidence that the time and money that they invest in their education are well spent.

This is saying three things. First, that there is some kind of reputational ranking of universities worldwide. Second, that this postulated ranking of universities is crucially based on "academic quality and standards". And third, that the matter of quality and standards relates to the educational experience of students.

There is something worth noting about each of these claims. About the idea of a quality ranking of universities, the curious thing is that no quality assurance agency in higher education will actually produce one. About "quality and standards", it turns out (in a footnote, to which I will return) that a definite distinction is to be made between these two concepts. And third, while the postulated ranking is of universities, and the basis of it is academic quality and standards, quality assurance agencies are concerned mostly, and in some systems exclusively, with only one university function, namely teaching and learning.

Over the past two decades, quality assurance in higher education has evolved into a professional activity which its practitioners may well consider to have reached a mature and stable state. Having seen some of this development in South Africa, Australia and the UK, from the perspective of both an academic and a university manager, I wonder, however, whether we have not reached a point of disjunction between the questions being asked of quality assurance and the answers being provided by its practitioners. Some issues which professionals in the field may regard as belonging to an early and relatively naïve phase of the development of

quality assurance have proved quite tenacious, re-appearing regularly in public discussion. In this paper I identify and discuss some of them.<sup>1</sup>

#### 2. Universities

My topic is the quality assurance of universities, rather than higher education generally. This distinction is necessary because we have reached a stage where some higher education is carried out outside of universities (e.g. colleges with limited degree-awarding powers), and some universities operate in part outside of higher education (e.g. by offering vocational training). Since our understanding of the context is ambiguous, it seems prudent to mention at the outset the assumptions I make.

- I will reserve the title of "university" for higher education institutions which, albeit to different degrees and with different emphases, carry out three core functions: research, education, and engagement with civil society. In what follows I further distinguish research and education as primary core functions, and civic engagement as the way we use those two functions to position ourselves within civil society.
- The university sector is bigger, more diverse, more complex and less certain of its place in society than it was when today's professors were students. The generational distinction is relevant, since many prevalent views about universities were formed a generation or two ago, and are rooted in the academic ethos of that time. However, within less than 50 years we have moved from a small university sector, providing a finishing school for the elite, to a mass post-secondary educational system.
  - There are more universities. The new universities came in two waves: those created during the expansionist phase of the late 1960s and 1970s, and those which acquired the title in the late 1980s and early 1990s, when the binary divide between technological institutes<sup>2</sup> and universities was abolished.
  - There are many more students, and they are more diverse. In the UK student numbers rose from under 1 million in 1985/6 to 2.5 million in 2005/6<sup>3</sup>. With the greater number of students came a greater variety of cultures and pre-university educational backgrounds. In the UK and Australasia there are large numbers of international students, with English as a second or third language, paying high fees.
  - The sector offers many more study options, study modes, learning technologies and assessment methods. Study can be full-time, workbased or distance learning. Topics range from those Aristotle would

<sup>&</sup>lt;sup>1</sup> I am indebted to a number of people for commenting on earlier drafts of this paper. I would particularly like to thank David Eastwood, Peter Williams and David Woodhouse.

<sup>&</sup>lt;sup>2</sup> Polytechnics in the UK, Institutes of Technology and Colleges of Advanced Education in Australia, and (about a decade later) Technikons in South Africa.

<sup>&</sup>lt;sup>3</sup> I get these figures, and some of the ideas in this item, from a report titled "The sustainability of learning and teaching in English higher education", prepared for the Financial Sustainability Strategy Group of UUK by JM Consulting, December 2008.

- have recognised to surf science and beauty therapy management. Comparatively few students study a topic for its own sake; most do so consciously in preparation for getting a job.
- Universities exist in a much more complex operating environment.
   The state pays for less and asks for more. Students can be more technology-savvy than their teachers. Business and industry demands not just education but professional skills. There is greater international competition. The regulatory and compliance burdens are higher. The range of interactions is wider. The timescales are shorter.
- The knowledge business has changed, with greater availability of knowledge, higher demand, quicker turnaround times, and more providers. Good course material on almost any topic is available free online, much of it via the open-access policy of reputable universities. Google and Wikipedia can instantaneously answer most queries with an acceptable degree of accuracy. To say that universities provide new knowledge is not sufficient to distinguish them from the in-depth responses of global consultants, the scientific expertise of multinational R&D divisions, the policy advice of government think tanks, and the tailormade course material of private providers.
- The university is not a business. Our primary motive is not profit but academic excellence. Our currency is not money but knowledge. However, while money is not an end in itself for us, it is a powerful means to an end. We therefore have to be businesslike in order to pursue our academic goals. Universities have to operate in an international market, and compete for students worldwide. They have to be astute financial managers. Their scientific work faces stringent health and safety conditions, and wide-ranging ethical checks. They must be proficient at strategic planning, human resource management, marketing, public relations, sport, risk management, intellectual property, procurement, estates, and information technology none of which is actually their core business. The leadership of a university, therefore, requires not merely administration, but management. Here, I will assume that efficient management of a university is a necessary but not sufficient condition for academic excellence and effectiveness.
- Students are not customers. They are students. We are not selling a product called "education". Indeed, we couldn't, because acquiring an education is something that cannot happen without the active participation and considerable effort of the recipient. We can teach, but the student must also learn. On the other hand, in order for teaching and learning to happen to best effect, there are many enabling factors that need attention, and it is in the provision of these enabling factors that student choice and consumerist attitudes are legitimate. Students may and do expect good facilities, efficient services, adequate accommodation, proper access to teachers, good feedback on their work, and intellectually stimulating topics to work on. Student choice is a powerful market force, which any university would ignore at its peril. But any university which sees students as nothing more than customers will soon be seen as nothing more than a shop.

• The university is not an instrument of Government policy. Certainly Government has the prerogative to make policy, and put steering mechanisms into place to translate policy into practice. Indeed, quality assurance is one such mechanism; two other common ones being funding and enrolment. But Government does not have the prerogative to dictate to any university how it should run its academic affairs. A university must be free to decide for itself, with full cognizance of government policy and practice, how it wishes to conduct its research and its educational practice, and who it wishes to engage with in carrying out those two functions.

## 3. Quality Assurance (QA)

It is a fair guess that if the question "What is quality in the university sector?" were to be posed to a cross-section of the population, the response would indicate that quality is what you have when you answer yes to the question "Is it good?". When asked what the "it" is that is being referred to, Jane and Joe Public are likely to say "standards", thus equating good quality with high standards. It is disconcerting, therefore, for the J Publics to learn (if they ever do) that QA professionals make a fundamental distinction between quality and standards, that quality assurance appears to be about processes more than outcomes, and that a quality assurance agency may say that judging standards is not their business. It is worth rehearsing the background to these views and perceptions.

In the late 1980s and early 1990s, when the topic of quality assurance in higher education first made its way into academic consciousness, the question of definition dominated. What do we mean by quality? To this question many answers were advanced, including the answer that no answer is possible<sup>4</sup>.

The QA debate started, in fact, with the notion of quality as excellence – i.e. *top* quality. But difficulties soon appeared. One is that reputation easily becomes a proxy for excellence, which gives the advantage to the old, the rich and the beautiful. Often this leads to imitation, as when universities style themselves as the "Oxbridge of Africa", the "Princeton of Europe", or the "Harvard of the East". Second, the notion of quality as excellence has the drawback that "elite universities" so easily come across as being *elitist*, evoking images of exclusivity and unfair advantage. But third, and mainly, if we construe quality as excellence, we are led from a substantive notion to a relational one. Excellence, in the sense of exceptional quality, comes to be seen not as the answer to the question "Is it good?", but as the answer to the question "Is it better than the others?". With that, it becomes all too easy to assume that quality manifests itself essentially as a ranking on some linear scale – an assumption I will argue against below. In practical terms, this assumption is what the *Times Higher Education* exploits and

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<sup>&</sup>lt;sup>4</sup> In this context I have found the following article very useful: Jethro Newton, "What is quality?", in *Embedding Quality Culture in Higher Education, A Selection of Papers from the 1<sup>st</sup> European Forum for Quality Assurance*, 23-25 November 2006, hosted by the Technische Universität München, published by the European University Association, 2007, pp. 14-20.

reinforces in publishing its "Top 200 universities in the world" list, and likewise with the Shanghai Jiao Tong's "Top 500" and other such lists. It is also the idea evoked by UUK, only slightly more subtly, in the quote above about UK universities being regarded as "amongst the best in the world".

The presumption of linear ranking is diminished by an alternative approach, where quality is defined as fitness for purpose. Here, quality is the answer to the question "Is it good at what it does?". An institution would set out its stall through its vision statement, mission statement and declared strategic objectives, and a quality judgment would be made in relation to how well it achieves its professed purpose. This definition allows for a diversity of contexts, universities and stakeholders. It also finds favour with those who wish to emphasize the independence of the higher education sector and the autonomy of universities, since the institutional purpose is self-defined, and thus quality assurance becomes a matter of self-regulation.

But autonomy has a flip-side, which is responsibility. If universities set the quality bar themselves, who is to be the judge of how well they meet their collective responsibility? And what happens if they don't? In particular, when the higher education sector itself is judged to be in need of systemic improvement, the question of fitness for purpose tends to morph into a question of fitness of purpose. Here, the quality question becomes "What is it good for?". The practical manifestation, typically, is when a judgment is made (often by an agency of the state) on the appropriateness of the mission of the institution relative to some higher purpose. Sometimes this approach to quality takes yet a further form, where it is explicitly the transformational progress of the university towards some social, cultural or political goal that is under scrutiny. On this approach quality assurance becomes closely entwined with state supervision.

Separate but related is the idea of a "good university" being one which brings societal benefit. It delivers a skilled workforce, supports culture and business and industry, helps to create jobs, plays a role in economic development and social mobility, and has a strong corporate social responsibility profile. What is happening here is that the notion of quality as reflected by esteem is changing into a notion of quality as reflected by impact. The quality question then becomes "Is it beneficial?". This is even more pronounced in universities created or sustained for some particular social purpose, such as having a religious foundation or furthering some language or culture. Here the notion of quality starts taking on a cultural and sometimes a moral dimension.

On a different front there is the quality question "Is it good value?", with the sharper version "Is it value for money?". As the UUK quote above indicates, students quite reasonably would like to know whether education is a good investment (i.e., "Is it worth it?"). On this approach, the discourse and methods of the market become part of the quality debate. Quality assurance is then one tool of competition in the market, with a judgment on value for money broken down into product classifications, prices, the means at your disposal, and the purpose for which you need the product. A quality comparison between the University of Somewhere and the University of Elsewhere becomes similar to the question of what car to buy.

given your needs and circumstances and a range of available models, from a Tata Nano to a Bugatti Veyron.

A discussion of quality will of necessity involve, implicitly or explicitly, the notions of efficiency and effectiveness. These are fundamental because they embody the distinction between process and product. Efficiency involves a judgment how well a process works in delivering a product; effectiveness involves a judgment whether satisfactory products have been delivered. In so far as education may be regarded as a process, low dropout rates and timely completion would be measures of efficiency, while a high proportion of first-class degrees and a good record of graduate employment would be measures of effectiveness. Soon, however, one runs up against the fact that more efficiency may mean less effectiveness, and vice versa. Thus, for example, teaching students in large lecture groups tightly timetabled is quite efficient in terms of resources, but from the perspective of individual learning not very effective. Small-group project work is an effective learning technique, but has inherent process inefficiencies, since the delivery of the project depends on the contribution of the slowest member of the group.

By this time the apparent simplicity of the original question of what we mean by quality has evaporated – which, in fact, is what happened in the evolution of quality assurance in higher education. No surprise, then, that you will find various national QA systems adopting various definitions of what they mean by quality. Still, it is fair to say that there is a general consensus, of which the example of the UK will serve well enough.

So what does quality mean in the world of quality assurance? The consensus view is that quality assurance is about the effectiveness of the educational process. Taking the UUK *Guide to how the system works* as an exemplar, we find the notion of quality defined as follows:<sup>5</sup>

Academic 'quality' describes the effectiveness of the learning experience provided by universities to their students, i.e. the appropriateness and effectiveness of learning, teaching, assessment and support opportunities provided to assist students achieve their learning objectives.

It is worth noting that this is not a million miles from what is understood as quality assurance in manufacturing. When the J Publics consult Wikipedia, this is what they learn:

**Quality assurance**, or **QA** for short, refers to planned and systematic production processes that provide confidence in a product's suitability for its intended purpose. It is a set of activities intended to ensure that products (goods and/or services) satisfy customer requirements in a systematic, reliable fashion. QA cannot absolutely guarantee the production of quality products, unfortunately, but makes this more likely.

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<sup>&</sup>lt;sup>5</sup> This definition, and the one of standards below, appear in the UUK document in the footnote to the quotation I started with, and mentioned in Section 1 above.

And the Concise Oxford English Dictionary would agree, describing "quality control" as:

A system of maintaining standards in manufactured products by testing a sample of the output against the specification.

We can now get back to where we started, with Jane and Joe's understanding of quality as high standards. Continuing with the OED, we find "standard" defined as:

An object or quality or measure serving as a basis or example or principle to which others conform or should conform or by which the accuracy or quality of others is judged.

- ... The degree of excellence etc. required for a particular purpose (not up to standard).
- ... average quality (of a low standard).

"Standard", then, as per the OED, has the connotation of "minimum standard". So, an athlete has to reach a certain standard in order to qualify for the Olympics, the Tata Nano and the Bugatti Veyron both have to comply with certain standards in order to be allowed on the road, and a student has to reach a certain standard in order to be admitted into university, and again to get a degree. Which fits exactly with the UUK's definition in the *Guide* of what standards are:

Academic 'standards' describe the level of achievement (i.e. the threshold) that a student has to reach to gain a particular degree or other academic award.

It all seems to fit together rather neatly now. If quality is the answer to the question "Is it good?", then standards give the answer to the question "Is it good enough?". On the authority of the OED, we may see standards as the benchmark by which quality can be judged. This vindicates the view of Jane and Joe Public, that by raising the (minimum) standard we raise quality overall. It also seems to fit with what the UUK *Guide* says. If academic quality describes the effectiveness of the learning experience, then, given that effectiveness refers to outcomes, one may reasonably conclude that the outcome being sought is high standards. So quality is about process, and standards are about outcomes, and the job of quality assurance is to check that the educational process will ensure high standards.

Except that it does not quite come across like that.

# 4. Issues with Quality Assurance

The fact is that some quality assurance agencies choose not to make a judgment on standards. Certainly this is the case for the Quality Assurance Agency (QAA)<sup>7</sup>

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<sup>&</sup>lt;sup>6</sup> Quality control is not quite the same thing as quality assurance – but that would be another distinction not foremost in Jane and Joe Public's minds.

<sup>&</sup>lt;sup>7</sup> I am a Board member of the QAA.

in the United Kingdom, as made clear by its Chief Executive Officer during the course of a recent polemic:

Clearly, standards are central to our mission and we are responsible for facilitating the way in which institutions describe them. We also need to be sure we have the means of monitoring and judging how they are being stewarded. But it is not our task to judge the standards themselves, second-guessing autonomous institutions' individual responsibilities in this area.<sup>8</sup>

One can see how this may confuse the J Publics. If you are not accustomed to making a distinction between quality and standards, and your QA agency informs you that judging standards is not their business, then you are likely to conclude they are saying that quality is not their business.

The view that judging standards is not the business of quality assurance is not, however, one that can be blamed on the quality assurance agencies. It is rather an outcome of universities' fierce protection of their institutional autonomy. The insistence is that each institution is responsible for its own standards. And the fear behind that insistence is of some governmental body telling the universities what to do, setting their curricula, and checking their outcomes. This is what happens in primary and secondary education in the UK, where there is a body called OFSTED<sup>9</sup> which imposes national standards on schools, and carries out rigorous assessments to ensure that those standards are adhered to. But, so the universities say, state-imposed standards would be inimical to a good university system, since the success of universities is a consequence of their autonomy.

So we end up with the position that standards are set by the universities themselves, and quality assurance is an external check on each university's internal processes for delivering on standards – but without the QA agency actually making a judgment on those standards. For Jane and Joe this raises an obvious next question: "So who *does* make a judgment on standards?"

Here, then, is an issue. Whose responsibility is it to answer questions about quality and standards? For primary and secondary education the answer is easy: it is the state. For university education, the situation in which we find ourselves is that the answer given by the quality assurance agency is seen as confusing, the answer that could be given by the state is not wanted, and the university sector itself does not offer any answer at all. The only easy answer available to the public, then, is the one eagerly offered by newspaper league tables.

In this circumstance we actively connive. We use league tables in promotional material (when they favour us), in strategic planning, and in making policy.

The evidence of the impact of rankings on higher education across the world is not hard to find. A single issue of THES, the Times Higher

<sup>9</sup> The Office for Standards in Education, Children's Services and Skills. (The last two portfolios were added after the acronym was settled.) See http://www.ofsted.gov.uk/.

<sup>&</sup>lt;sup>8</sup> Peter Williams, "Debating Standards", in *Higher Quality* No.28, November 2008.

Education Supplement, contains an advertisement for the University of Auckland, which describes itself as a "top 50 University in a top 5 City" (Times Higher Education, 2008). Similarly, the University of Sydney is "rated as one of the top 40 universities across the globe", whilst Imperial College London is "ranked 5<sup>th</sup> best in the world by the THES". An analysis of higher education in Ireland includes some key statistics, led by the point that two of its universities are in the world rankings. The City University of Hong Kong's growing international reputation is "evidenced by its surge up the THES rankings". 10

Such behaviour is common despite the well-known shortcomings of newspaper league tables.<sup>11</sup> They do not measure the same things, and they give them different weightings even when they do.<sup>12</sup> The rankings of an individual institution can vary hugely from year to year.<sup>13</sup> The methodology may be questionable.<sup>14</sup> The data may be dodgy. 15 The rankings largely reflect reputational factors and not necessarily the quality or performance of institutions. 16

A second difficult issue is that of comparability. This comes in two forms: comparing quality and standards between different universities, and comparing the standards of today with the standards of yesterday.

The question of comparability between universities, or the same degree at different universities, arises very naturally for prospective students, who need to make an advance judgment on (as the UUK Guide puts it) the investment value of different degrees. How does a physics degree at the University of Somewhere compare to a physics degree at the University of Elsewhere? How does a cosmology degree compare to a degree in beauty therapy management? In our diverse sector, with different universities having different interpretations of and emphases on the three core functions, we have not evolved a clear response to such questions. We have drifted into a position where, by our own arguments, sector diversity appears to contradict the idea of direct comparability. In the absence of any coherent

<sup>&</sup>lt;sup>10</sup> Peter W.A. West, "A Faustian Bargain? Institutional Responses to National and International Rankings", Higher Education Management and Policy, 21/1, 2009, pp. 11-18. In the same volume, see also Ellen Hazelkorn, "Rankings and the Battle for World-Class Excellence: Institutional Strategies and Policy Choices", pp. 55-76.

<sup>&</sup>lt;sup>11</sup> There is a good analysis in a report done for the Higher Education Funding Council for England by the Centre for Higher Education Research and Information of the Open University: "Counting what is measured, or measuring what counts?", Issues paper 14, 2008, <a href="http://www.hefce.ac.uk/pubs/hefce/2008/08\_14/">http://www.hefce.ac.uk/pubs/hefce/2008/08\_14/</a>.

<sup>&</sup>lt;sup>12</sup> See the very instructive table in the HEFCE report (p.20) on what five well-known newspaper league tables actually measure, and with what weightings. For example, the THES and the Shangai Jiao Tong rankings only overlap on one parameter, which is "Articles cited", with a weighting of 20%.

13 The School of Oriental and African Studies (SOAS) in London, in 2004 -2007, was successively ranked

<sup>44&</sup>lt;sup>th</sup>, 103<sup>rd</sup>, 70<sup>th</sup> and 243<sup>rd</sup> in the world by the *Times Higher Education Supplement*.

<sup>&</sup>lt;sup>14</sup> The *THES* ranking gives a weighting of 40% to a "peer survey". The HEFCE report points out that this process has little commonality with what academics regard as peer review, and has "bias built in". <sup>15</sup> The HEFCE report has a good discussion of how raw data, even from reputable sources, need to be

massaged in various ways for a university to end up with a single number as its ranking in a league table. Some publishers of league tables warn readers that it is not possible to replicate the overall scores from the published indicators. <sup>16</sup> One of the conclusions reached in the HEFCE report.

response from the sector itself, students then seek their answers in league tables, consumer guides, and web searches.

But perhaps the most common topic of public discussion on quality and standards is the perennial claim that, over time, "standards have dropped". This is a rich field for personal reminiscences, anecdotal evidence, latent prejudices, political posturing and media hype. A favourite attention-getter is to exhibit an exam paper in (say) Mathematics from (say) a generation ago, and pointing out that today's student would be flummoxed by quite a number of the questions in it. Likewise, it is not difficult to ridicule today's assessment methods for the amusement of those who were used to formal set-piece examinations. Blame is then assigned in various ways: to the increase in student numbers, to the equality agenda, to internationalisation, to managerialist vice-chancellors, to the creeping corporatization of higher education, or to the social engineering obsessions of whichever government is in power. In this unedifying spectacle the university sector comes across as being trapped by the discussion, rather than leading it.

We have now identified two issues concerning quality assurance: responsibility, and comparability. Both are rooted in the discussion we started with, which is the issue of clarity. It seems that, in response to a simple question about quality in higher education, we have, over time, developed an answer that is simultaneously complicated in its formulation and narrow in its application. Yet for all its apparent naïvety, the question whether the University of Somewhere is a good-quality university would be accepted by most people as a legitimate one, inviting a response which is not too convoluted and not too restricted.

#### 5. Ideas

If we are serious about a university having three core functions, and we wish to cement this idea firmly in the public mind, it seems peculiar to restrict our discussion of quality, and processes of quality assurance, to only one of those core functions. For prospective students (and their parents), and for prospective employers, the quality of the teaching and learning experience may well be paramount. But we ourselves have always taken great pains to emphasize the value of research, and more lately of civic engagement. We therefore acquiesce at our peril in a message that the quality of a university is only about the quality of what it provides to students. So here is a simple idea to begin with.

1. We could adopt a whole-university approach to quality and standards.

If quality is the answer to the question "Is it good?", then a natural follow-up is to ask what the "it" is that is being referred to. A reasonable answer would be that "it" is the university as a whole, involving all three of its core functions. The quality question, "Is the University of Somewhere a good-quality university?", then breaks

down into three questions. Does it do good research? Does it do high-quality teaching, facilitate high-quality learning, and provide a high-quality educational environment? Does it have an active and mutually beneficial relationship with civil society? Most universities can respond to each of these questions. To adopt a whole-university approach to quality we do not have to begin by reinventing any wheels. We could begin by attaching some available wheels to a single vehicle. <sup>17</sup>

In most countries the research function is already extensively scrutinized and benchmarked. As a case study, consider the national Research Assessment Exercise (RAE) in the UK. The RAE is a periodic national exercise, which gives an independent, credible and precise answer to the question of the quality of research per institution. The higher education system in most countries would have some version of such a national research assessment exercise. But somehow, over the past 20 years, this active pursuit of quality assessment and quality enhancement in research has become divorced from our understanding of what quality assurance means. So here we have a quality judgment being delivered, without it being thought of in the context of quality assurance.

The second core function, which is education, is what we currently associate with the notion of quality assurance in higher education, and there are well-developed and highly professional structures and processes for doing so. But here we have a quality assurance environment which does not seem to deliver a quality judgment – at least not in the shape that conforms to societal expectations. It is worth noting, in addition, that it is not only formal QA agencies that do quality assurance audits. In many universities a substantial number of students (more than half, in my own institution) study for professional degrees. In medicine, accountancy, engineering, architecture and many other professions the various professional associations keep a watchful eye on the curricula, teaching and outcomes of "their" degrees. And they tend to be be quite forthright in making their views known.

With the third core function, civic engagement, we have neither a context of quality assurance nor a coherent quality judgment. Some systemic and systematic thinking would be required to bring engagement under a quality assurance banner. I would argue that it has become necessary to do so, and I will develop this argument below. To begin with, we may note that most universities would already be able to present a portfolio of engagement activities, and many such portfolios would have a lot in common. Through their commercialisation and consulting activities, and in many other ways, almost all universities engage with business and industry. Most universities engage with issues of social justice, equality, and widening participation. Outside of the capital cities, many are involved in regional development initiatives. Many universities actively engage with the professions, with the cultural and creative sector, with the voluntary sector, with sport and recreation. Some are beginning to compile a corporate social responsibility profile, setting out for example policies and practices on environmental sustainability. Since we do all these things already, it seems not beyond us to set them out in some systematic function, and to ask how well we do them.

<sup>&</sup>lt;sup>17</sup> There are encouraging examples of this happening. The Australian Universities Quality Assurance Agency (AUQA) has in various universities covered topics in each of the three core functions.

We could, therefore, begin to address the issue of clarity by the simple step of agreeing that the quality question relates to the university as a whole.

2. We could compile quality profiles per university, rather than a quality ranking for the sector.

The difficulty with newspaper league tables is not, in the first instance, that they are compiled by newspapers. The real difficulty is that we have become accomplices in perpetuating the idea that quality manifests itself only as a ranking on a linear scale. There are, however, encouraging signs that the poverty of this position is being recognised, with better alternatives emerging.

As a case study and an illustration of the idea of quality profiles, consider the most recent RAE. The entire domain of university research was broken down into 67 "Units of Assessment", each university was invited to submit its choice of researchers for evaluation in each Unit of Assesment, and these submissions were then subjected to scrutiny by peer review, through specially-commissioned panels of assessors. This entire exercise was conducted on a "task-and-finish" basis, with the necessary administrative backup provided by a semi-autonomous government agency<sup>18</sup>. The output of each submitted researcher was judged to be in one of five categories, called 1\* to 4\*, in order of increasing quality<sup>19</sup>, or 0, meaning "unclassified". The university's showing in any particular Unit of Assessment was then portrayed by listing, of those researchers it chose to submit, the percentage judged to fall within each of the five categories, in decreasing order of excellence. So the quality profile of computer science (or history or epidemiology or civil engineering) at the University of Somewhere could be presented as five numbers adding up to 100, with one further number giving the size of the submission. Like this: 25-40-25-5-5 (40), meaning that, of the 40 computer scientists entered by UoS, the research outputs of 25% (i.e. ten) were assessed to be of 4\* quality, 40% (sixteen) of 3\* quality, 25% (ten) of 2\* quality, 5% (two) of 1\* quality, and 5% (two) unclassified. Quite a good showing, therefore.

As a quality judgment, there is nothing unclear about this. It also, quite easily, allows comparison. Suppose for example that while the University of Somewhere submitted 40 computer scientists out of a total of 50, and ended up with the quality profile of 25-40-25-5-5, the University of Elsewhere only submitted 30 out of a total of 60, but ended up with a quality profile of 30-50-10-10-0. Such information tells us quite a lot about the research profile of each department. It allows us to make a quality judgment about each of the two Departments of Computer Science, and it allows us to compare one against the other. Moreover, it allows us to judge and compare without being compelled to say that one of these Departments is better than the other.

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<sup>&</sup>lt;sup>18</sup> HEFCE, the Higher Education Funding Council of England.

<sup>&</sup>lt;sup>19</sup> To be precise: 4\* indicated "world-leading", 3\* "internationally excellent", 2\* "recognised internationally", and 1\* "recognised nationally".

This illustrates an important point: comparability is not the same as ranking. In the case of the two Computer Science Departments, no useful additional information would arise from computing any algorithm to rank one Department higher than the other. It is not that it is impossible to compute such a ranking. It is just that it is possible to do so in many different ways, not one of which has any greater claim to legitimacy than any of the others.

The RAE itself only produced quality profiles; it did not produce any ranking of the 159 higher education institutions which participated. But in the aftermath many such rankings were computed. The *Times Higher Education* went for what it called a "research excellence" ranking, which calculated a weighted grade point average of only the top two categories, 4\* and 3\*, without taking the size of any institution's submission into account. Not surprisingly, small and specialist institutions did very well on this ranking. The *Times* more or less copied the ranking from the *Times Higher Education*, except that it arbitrarily eliminated some smaller institutions. The Russell Group<sup>21</sup> published two tables: a Gold Medal table, taking only 4\* ratings into account, and a Gold and Silver Medal Table, using 4\* and 3\* ratings. *Research Fortnight* calculated a ranking of "research power", weighting the four-percentage quality profile by the size of the submission. Any university's research ranking, then, could vary quite significantly depending on which algorithm you prefer<sup>22</sup>. And after all of that, the funding body did its own calculation of how to translate the RAE outcome into state funding.

This was an entirely healthy development. It demonstrated to a large public that there is no single obvious way of translating a quality profile into a linear ranking. There are many different ways of doing so, and all of them are to some extent artificial. What the RAE illustrates, therefore, is that a quality profile reflects our quality judgment better than any ranking, and typically precedes it. Forming a judgment on the quality of the University of Somewhere is not, in the first instance, a matter of saying it is better or worse than the University of Elsewhere. In so far as any ranking can legitimately be done, it is derivative from a quality judgment, not the other way round.

Implicit in the RAE example is another general point: profiling is scale-able. Very easily, the quality profiles for each Unit of Assessment entered by the University of Somewhere may collectively be viewed as its overall research quality profile. The various different profiles do not need to be compiled into single numbers, or aggregated, or massaged in any way. To understand the profile of the UoS it is sufficient to look at what Units of Assessment it entered, and how it fared in each. And this allows comparison with any other university.

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<sup>&</sup>lt;sup>20</sup> Top in the *THE* ranking was the Institute for Cancer Research, which entered only two Units of Assessment, and a total of 97 staff. Second was the University of Cambridge, which entered 50 Units of Assessment, and 2.040 staff.

Assessment, and 2,040 staff.

The Russell Group is a UK association of 20 major research-intensive universities with medical schools. See <a href="https://www.russellgroup.ac.uk">www.russellgroup.ac.uk</a>.

My own university was ranked 27<sup>th</sup> in the UK by the *Times Higher Education*, 25<sup>th</sup> by *The Times*, 21<sup>st</sup> on the Russell Group Gold Medal table, 17<sup>th</sup> on the Gold and Silver Medal table, and 17<sup>th</sup> by *Research Fortnight* – and is the 14<sup>th</sup> highest funded university in England.

By using the RAE as a case study I do not mean to suggest that quality profiling is possible only in research – quite the contrary. Indeed, the indications are that we are beginning to realise the value of profiling in other domains as well. For example, in graduating our students we have long been accustomed to ranking them by degree classification, awarding a First, or an Upper Second, or a Lower Second, or a Third. Thus, by a single number we summarise the entire achievement of the student over three or four years. But a new realism is emerging – not least amongst students themselves. As the Vice-President of the UK National Union of Students recently said:

It is clear that the current degree classification system is no longer fit for purpose; students deserve a more detailed acknowledgement of their overall achievement from their time in higher education.<sup>23</sup>

This comment came in response to a proposal (now being trialled) to phase out the degree classification in favour of a "Higher Education Achievement Report", which will, in effect, give a quality profile of the achievements of the student over their period of study. And not only academic achievements, but also the extracurricular activities, graduate skills and community interactions which employers are increasingly valuing. Somewhat the same situation then emerges as with the RAE: two students may sensibly be compared with each other on the basis of their respective Higher Education Achievement Reports, and a prospective employer may do so in order to decide which of the two to employ. But one employer may well rank them in different order than another.

A third comment on quality profiling is that it overlaps with performance measurement, something we already do. In 2008, for example, the UK Secretary of State for Universities asked for advice from the Funding Council on "how we can best develop our understanding of institutions" performance in different dimensions", while taking into account "the different missions of individual institutions". The "dimensions" specified were research, teaching, innovation, skills and widening participation – an easy fit into the three core functions we assumed here. In response, the Funding Council produced a document titled *Understanding Institutional Performance*<sup>24</sup>, which sets out "to determine appropriate measures that add value whilst minimising the unintended consequences".

Imagine, now, on the whole-university approach, that we can compile a quality profile for each university for research, for teaching and learning, and for civic engagement. Imagine, for example, that each university can respond to the question "Do you offer good-quality education?" by exhibiting a profile of its educational programmes, its curricula, its teaching methodologies and technologies, its student cohorts, their entry- and exit-level performance, the

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<sup>23</sup> http://www.guildhe.ac.uk/en/news/index.cfm/nid/FD4E7268-555E-4E74-BDB987CA7199B98F.

<sup>&</sup>lt;sup>24</sup> I am indebted to Professor David Eastwood, the former Chief Executive of HEFCE (now Vice-Chancellor of Birmingham University), who submitted the report, for drawing it to my attention. It can be found at <a href="http://www.dius.gov.uk/higher\_education/shape">http://www.dius.gov.uk/higher\_education/shape</a> and structure/he debate/~/media/publications/U/understand inst\_performance\_131008.

contact hours offered, the teachers who will teach, and the assessment methods used. Such a profile could be accompanied by evaluations: internal student evaluations of modules, national student surveys by subject, employer evaluations of graduates – in short, responses to the questions regularly asked about the quality of education on offer. There is a place here, too, for the process evaluations and audits currently carried out by quality assurance agencies, and the accreditations of professional associations. Imagine, further, that each university can present a civic engagement profile, outlining its interaction with business and industry, with the public sector, with the National Health Service, with charities, with local authorities and regional development agencies, and with international collaborators. Such an engagement profile may be expanded to include a dimension of corporate social responsibility, addressing such issues as carbon footprint, sustainability and ethical investment.

Quality profiling of this kind would give us a fresh way of dealing with the issue of comparability – particularly if profiles could be compiled on the basis of some sector-wide guidelines and categories. That sector diversity came to be seen as creating a problem of comparability is largely because we became fixated with comparability in the sense of a linear ranking. If we make the idea of ranking secondary to the idea of profiling, the issue largely disappears, since sector diversity sits very comfortably with the methodology of profiling. As argued above, to compare two universities would be to compare their quality profiles, not to look up their rankings on some league tables. It would still be perfectly possible to come to a conclusion, on the basis of these profiles, that one is better than the other. But, depending on who is asking the question, and what the needs of the questioner are, we may end up with different answers.

Quality profiles would help us also in responding to the question of comparability of degrees. A physics degree at the University of Somewhere should be compared to a physics degree at the University of Elsewhere not, in the first place, as similar degrees, but as degrees on a similar topic at dissimilar universities. The profile of each university would give a good indication of the kind of physics degree you may legitimately expect at each.

If we do start compiling quality profiles, individually or collectively, we would begin to respond to the issue of responsibility. Whose responsibility is it to answer questions about quality and standards? Part of that responsibility must rest on the Universities. And the beginning of meeting that responsibility must be to exhibit our wares with some uniformity, allowing scrutiny by anyone.<sup>25</sup>

3. We could distinguish between the supply side and the demand side of the knowledge economy.

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<sup>&</sup>lt;sup>25</sup> I should make a small disclaimer here. I am not advocating the introduction of a fully-fledged "Teaching Assessment Exercise", or an "Engagement Assessment Exercise", on the same model as the RAE. However, I am suggesting that there is enough commonality beween universities to come to some agreement as to what a quality profile could consist of.

When higher education was a small sector, educating an elite, owning the knowledge resources, clustered into disciplines, in a world where the state paid for much and asked for little, a supply-side view of the knowledge economy made sense. This is the world in which many of today's professors and political decision-makers grew up. Not surprisingly, therefore, an underlying assumption of universities as the dominant suppliers of knowledge still shapes our language of discourse (and our judgment on quality). When we speak, for example, in the language of the "four scholarships" of the essence of universities being the creation, dissemination, application, and integration of knowledge, we are in supply mode, because there is nothing in this characterisation which questions why we do these things, to what end, or for whom.

As regards the scholarship of knowledge creation, take the distinction between "pure" and "applied" research. "Pure" research, so the thinking goes, consists of unlocking the secrets of nature, the functioning of society, or the mysteries of mind, and is carried out by academics following no other compass than their own curiosity and no other benchmark than the judgment of their peers. "Applied" research then takes the knowledge thus produced and looks around for possible applications. But there is nothing in this pure/applied distinction that encourages us to ask what kind of knowledge is required to tackle the needs and demands of society and the world around us. To believe that pure knowledge, generated freely, will in time become applied knowledge, and in such a manner as to meet society's needs and demands, is to believe that Adam Smith's idea of an invisible hand regulating supply and demand will manifest itself in the knowledge economy. I am not saying this is wrong. I am just pointing out that an unreflective adoption of the pure-applied distinction leaves us marooned on the supply side of knowledge production.<sup>27</sup>

The same point can be made about characterising the second core function of a university as nothing more than the dissemination of knowledge – i.e. teaching. Certainly we do do teaching, which on the dissemination model means little more than supplying knowledge to our students. But from the student's perspective what is important is not what we teach but what they learn. Learning is what happens on the demand side of the equation, and if we only position ourselves as suppliers of teaching, rather than agents and facilitators of learning, we will be ignoring the demand side – to our own detriment.

Perhaps the simplest way of summarising the change in the world of higher education is to say that in the knowledge economy the power has shifted from the supply side to the demand side. No longer do the universities call the shots, as sole suppliers. There are many suppliers now, and the users have a range of choices. That means that quality will not be defined exclusively, and perhaps not even primarily, on the supply side. More and more, the answer to the question "Is

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<sup>&</sup>lt;sup>26</sup> Ernest L Boyer: *Scholarship Reconsidered: Priorities of the Professoriate*. The Carnegie Foundation for the Advancement of Teaching, 1990.

<sup>&</sup>lt;sup>27</sup> This is not to take anything away from the long-term investment value of curiosity-driven research, nor from the pure joy of doing it.

the University of Somewhere a good university?" will be influenced by the extent of the interaction of UoS with civil society, and the degree to which that interaction is considered to meet societal demands and bring societal benefits. That is why it is increasingly important for us to understand and articulate the nature of the third core function of the university, and to bring it under the umbrella of institutional quality profiles.

Our civic engagement function allows us to respond to the quality question as formulated from the demand side – provided we conceptualise this function as one of response, not one of supply. Most universities have already moved beyond the outdated concept of engagement as nothing but some (often fairly patronising) supply-side "community outreach" agenda. We are also beginning to understand that engagement goes beyond the idea of a "third strand" of income, arising from a self-serving interaction with business and industry. Societal engagement is the way we position our research function and our educational function as an integral part of civil society. A quality judgment on engagement, therefore, while relying on the quality of the other two core functions, will have a different flavour, reflecting the fact that this is not a matter of peer evaluation but of user evaluation. Accepting this reality will help us respond to the shift towards quality assessment as a matter of impact, not just of esteem.

As a side benefit, the distinction between the supply side and the demand side of knowledge, and its manifestation in judgments of quality, brings further clarity to the issue of comparability. How does a degree in cosmology compare, in terms of quality, to a degree in beauty therapy management? Answer: they are in different boxes of the quality profile, since cosmology is oriented towards the supply side. and beauty therapy management towards the demand side, of our educational endeavour. This is not to duck the issue. It is merely to reflect the reality of an old distinction. When universities first started, and ever since then, we have lived with the distinction between studying out of curiosity and studying for a career. The Roman Varro distinguished, in the first century BC, nine "liberal arts": grammar, logic, rhetoric, geometry, arithmetic, astronomy, music, medicine and architecture. But by the early fifth century AD Martianus Capella had reduced the list to seven, removing the professional disciplines of medicine and architecture. Universities have long since learnt to accept this kind of distinction, and indeed to turn it into a strength. It is accepted that the quality requirement of the professional degrees include an emphasis on engagement with real life not regarded as essential in the liberal arts, and, conversely, that the liberal arts may insist on a level of originality not necessarily encouraged in a professional degree. It is no different today in comparing cosmology with beauty therapy management. The latter fits, in a direct way that the former does not, with the engagement profile of any university that chooses to make use of it.

The distinction between the supply side and the demand side of the knowledge economy, the understanding of the importance to us of the demand side, and the consequent emphasis on the engagement function, also help us to respond to the issue of responsibility. Who may judge quality and standards? For a university which sees itself as an integral part of civil society, a reasonable answer must be:

anybody. It is not necessary, and indeed no longer possible, to assume the existence of only one authority who pronounces on quality and standards. We noted above the example of professional associations quality-assuring "their" degrees. Likewise, many examples can be given of accreditations and awards of various kinds, such as the sought-after "triple accreditation" for Business Schools.

So: let the universities accept it as their responsibility to set out a transparent quality profile, perhaps within parameters and guidelines agreed by our quality assurance agencies, and then let those who are so inclined judge us on the criteria that are of interest to them. Let the state judge us on fitness for purpose and fitness of purpose, let business and industry and the professions judge us on outcomes and impact, let students judge us on value for money, let the quality assurance agencies judge us on process, let society judge us on benefit. And let the newspapers compute league tables by any algorithm they like – the more the better.

4. We could articulate a response to the charge that standards have dropped over time.

The *Times Higher Education* recently said in an editorial<sup>28</sup> that:

The problem of standards is the biggest facing this country's tertiary education system for many years. Claims of dumbing down have been numerous, vociferous and have come from many quarters.

But, *THE* continues, the curious thing is that a sensible response does not seem to be forthcoming, neither from politicians nor from the higher education sector itself. That is true. And yet there is a simple conceptual point that is easily articulated and which could go a long way towards finessing this apparently intractable "problem". It is the point that over time, the two core aspects of education, content and methodology, are always in flux – and that this is neither a bad thing nor an unexpected one.

As regards content, two observations may be made: that new subjects arise all the time, and that for existing subjects new knowledge is being added all the time. Without denying their historical antecedents, many subjects studied today did not exist two generations, or even one generation, ago. Computer science did not exist when I was born; intellectual property law did not exist when my first child was born; e-commerce did not exist when Mandela was released. Literature has been studied for centuries, but film and media studies are products of the current generation. Engineering has been a reputable discipline since the Industrial Revolution, but nanotechnology, rapid prototyping and global positioning systems were unknown to our parents. Medicine goes back to Hippocrates, but regenerative medicine through stem cell therapy will only be understood by our

<sup>&</sup>lt;sup>28</sup> The Times Higher Education, 23-29 April 2009. (Note that during 2008 the former Times Higher Education Supplement (THES) dropped the last word, and became simply the Times Higher Education (THE).)

children. Evidently, the newer the subject, the less substance there can be to the charge that standards have dropped.

Secondly, even for longstanding subjects, like mathematics, we add knowledge all the time. Indeed, we pride ourselves on delivering research-informed teaching, which means that the new knowledge we create informs our teaching, and is eventually absorbed into our curricula. It is only to be expected, therefore, that over time some of this new knowledge will be displacing some material which had been there before. A quick look on the web at the topics in the (UK) A-level syllabus for mathematics, for example, will show a reasonable emphasis on topics clearly related to the development of computing over the past 50 years. Thus students should "Know and be able to use Kruskal's and Prim's algorithms" on the minimum connector problem. These are topics that did not exist before the 1950s. Kruskal's algorithm was only published in 1956, in the *Proceedings of the American Mathematical Society*. Within half a century it has made its way from the pages of a research journal into the school curriculum.

The idea of increasing knowledge driving evolutionary change in curricula is easy to articulate, consistent with our overall message, and has many historical precedents. Latin has been crowded out of the undergraduate curriculum for law, as has mathematics out of medicine, and much of physics out of engineering. To what extent such changes have taken place in various disciplines, and to what extent a change in curriculum brings with it a change in standards, are topics worth considering. And it would be worth understanding on what grounds we may call some of these changes a "dropping" of standards. But perhaps this is a question we should ask last, not first.

As with content, so with methodology. The way we teach fluctuates over time. The discipline of mathematics education, for example, reflects a long-running dialectic between teaching fundamentals and teaching relevance. Anybody old enough to remember the "New Math" of the 1960s will recall the conviction with which it was proposed that the proper approach to teaching mathematics is to start with its foundations. Thus children were taught set theory before arithmetic, and learnt about number systems before mastering decimals. Since then the world has turned. Most of us now believe that the pedagogical order in mathematics is pretty much the opposite of the logical order, and that foundations should be dug down to, rather than built up from. No doubt a child faced today with an exam question on the more abstruse aspects of Peano's axiom system for arithmetic will be totally flummoxed by it – and no doubt a diehard New Math proponent will consider this fact clear evidence of a dropping of standards. But many of us will be relieved to have left New Math behind.

There is no disputing that many common examples of "dropping standards" are factually correct. We may be rightfully irritated by tortured apostrophes, poor grammar and spelling, lack of coherent exposition, apparent innumeracy, and the casual ignorance of many topics we were taught to consider as important. My local pub proudly advertises its "daily lunch's"; the student newspaper at my University declared itself "privledged to interview Proffesor Brink"; a Council member assured

me that his (very successful) business is "complimentry" to what he does for the University, and I have received a letter from a fellow Vice-Chancellor addressed to "Dear Principle". Students of science and engineering seem unaware of the intricacies of trigonometric formulae, or the epsilons and deltas of the definition of limits. PhD theses are increasingly hard to read because the authors seem never to have learnt to write in decent paragraphs.

On the other hand, millions of J Publics communicate effectively in abbreviated language over their mobile phones and emails every day; your calculator can do any trigonometric calculation you require, your computer can provide symbolic or algebraic formulae, your essay can be spell-checked, and you can have your thesis professionally edited. Our apparently sloppy society defies cries of standards dropping by the incontrovertible existence of outstanding literature, intellectually challenging debate, and continuous scientific and technological advance. Clearly there is a paradox here, and one worth exploring. But an approach that starts from nothing more substantive than the premise of standards having dropped over time is unlikely to lead us to a resolution. If and when we judge that standards are poor at any school or university we should not hesitate to say so and to do something about it. But such a judgment should in the first place be based on an evaluation of how those standards fail the requirements of society today. We should not be tempted into passing a judgment on current standards on so slender a basis as comparison with a presumed excellence of past standards. And we might keep in mind that Shakespeare could not spell either.

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