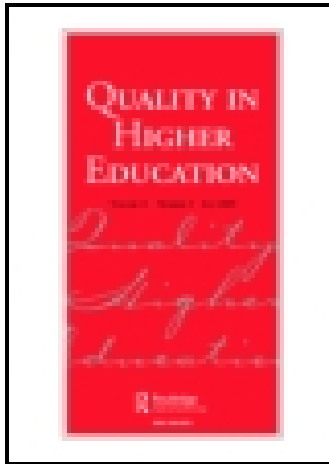


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Progress in Developing a National Quality Management System for Higher Education in Oman

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ABSTRACT *The post-secondary education sector in Oman consists of a complex suite of public and private institutions, in a number of distinct segments, offering local and foreign programmes developed through their respective quality assurance systems. The Omani higher education quality management system is undergoing significant advances to address this situation. Some of these advances are briefly outlined in this paper. Infrastructural policies and frameworks, institutional and programme standards and quality assurance processes and a range of quality enhancement activities are all in progress. Experience shows that the methods used to develop national frameworks and processes are, in themselves, vital factors in the success of those frameworks and processes. Most particularly, benchmarking and consultation have proven effective when complemented with training and support strategies, sourced internationally and, of increasing importance, locally.*

Keywords: Oman; national system; classification of education; quality assurance; standards; quality audit; accreditation; training; network

Introduction

Higher education provision in the Sultanate of Oman has undergone strong growth in a relatively short period of time. Prior to 1970, there was no formal post-secondary education. For the purposes of this paper, the term 'higher education' shall be used synonymously with formal post-secondary education. In 2008, there were over 60 institutions providing post-secondary diploma or degree programmes, serving a total population of over 2.34 million people (Ministry of National Economy, 2003). Two thirds of these were public institutions, operated through various ministries, particularly higher education, manpower, health and defence.

Since the mid-1990s, and in order to cope with the rapid escalation in demand for higher education, much of the growth in capacity has been in the private sector. The

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government developed a model whereby locally-owned institutions could offer foreign programmes in conjunction with credible international affiliate universities, which confer the degrees. In addition to local diploma and degree programmes, there are now over 200 diploma and degree programmes currently on offer in Oman, sourced from over a dozen countries.

Capacity to accommodate demand for higher education places remains a challenge. In 2007–2008, there were 47,607 applicants for fully or partially government-funded places; 14,151 (29.7%) received offers for fully- or partially-funded places (HEAC, 2008). About 2500 additional places were made available on a private fee-paying basis, although many of these were not taken up. Capacity continues to grow, particularly as more private providers and programmes come on stream, but so too does demand and the social culture has not yet fully embraced private fees as a desirable option for closing this gap.

Indeed, the importing of programmes has been a very successful strategy for rapidly expanding the sector. However, ‘one of the consequences is that Oman imported not only a diverse range of educational opportunities, but also a diverse range of quality assurance systems, including wide variances in standards, data, approval mechanisms, transnational quality assurance mechanisms and transparency’ (Razvi & Carroll, 2007, p. 2). Combined with the developing local provision, this resulted in a post-secondary education sector with constraints on its ability to strategically maximise the potential benefits from its new-found capacity. Greater systematisation of the sector was required.

In 2001, His Majesty Sultan Qaboos bin Said established (Royal Decree No. 74/2001) the Oman Accreditation Council (OAC), sending a very clear signal to the sector about the importance to be placed on the quality of higher education. The OAC is tasked with accrediting institutions and programmes through the use of standards, information, reviews and quality improvement processes, and with maintaining the national qualifications framework.

In 2006, the OAC Board commissioned an international consultant to undertake an analysis of progress to date, and to make recommendations for further development. The result of this analysis was drawn up into a draft *Plan for Omani Higher Education Quality Management System* (OAC, 2006), commonly known as the *Quality Plan*. This paper details some of the extensive progress made by the OAC over the past two years against four strategic areas in the *Quality Plan*:

- infrastructural policies and frameworks;
- institutional quality assurance;
- programme quality assurance;
- quality enhancement and capability development.

Infrastructural policies and frameworks

International benchmarking carried out by the OAC suggests that, in order for a national quality management system to operate effectively, a number of infrastructural policies and frameworks are required. In Oman these include, but are not limited to, the Oman Qualifications Framework (OQF), a standard classification of fields of study, an institutional classification framework, and a bilingual glossary to assist the sector with the plethora of terms used in higher education quality management.

The methods used to develop and approve these frameworks are, in themselves, an important factor in the development of the quality management system as a whole. Brief critical

analyses of the development of two frameworks are provided below, in the chronological order of their introduction. The first case concerns the Oman Standard Classification of Education framework and shows the advantages and limitations of importing frameworks. The second case summarises a current initiative to develop a bilingual quality glossary, and considers the potential to address this and other such frameworks at a regional, rather than national, level.

Oman Standard Classification of Education Framework (OSCED)

A standard classification of education is a framework used to classify all subjects that can be studied. Its primary purpose is to facilitate the collection and analysis of statistical information about education provision, although it has a wide range of other uses, such as identifying gaps in education provision.

In 2006, the need for a standard classification of education framework was identified, partly through benchmarking foreign national higher education systems to identify the core elements of an effective system, and partly as a predictable consequence of the increasing complexity in national data requirements.

A national working group was convened to undertake international benchmarking and to ensure that sectoral concerns informed the benchmarking process itself, rather than being limited to reacting to the benchmarking results. The working group took cognisance of the *International Standard Classification of Education Framework* (ISCED), developed by the United Nations Education Scientific and Cultural Organization (UNESCO, 1997). However, this framework was becoming dated and lacked the sophistication and comprehensiveness of other systems. After considering nearly 20 national classification frameworks, the Australian solution (Australian Bureau of Statistics, 2001) was settled upon as the benchmark because of its robust structure. It consists of 'broad fields' of study demarcated by common theoretical constructs and purpose; each including a number of 'narrow fields' demarcated by the object of interest; which, in turn, each include a number of 'detailed fields' demarcated by the methods, techniques and tools of study. The Australian framework was then 'Omanised' through further consultation with the sector, including other ministries that may have an interest in the application of such a framework, such as the Ministry of National Economy.

One of the major findings of this consultation was a confirmation that frameworks are value-laden rather than value-free, and therefore certainly not universal constants. This is particularly challenging, when dealing with what is in theory, an ontologically-constructed framework with profound epistemological ramifications. Such frameworks can be influenced by: the way disciplines are culturally conceptualised; treatments of concepts by different languages; the different approaches used for constructing national frameworks and policies (based on perceived need, customary practice and applied competencies); national priorities for knowledge development; and the way they are utilised by governments and institutions.

Some of these challenges were relatively easily accommodated, such as the re-ordering of fields of study at the same level, to give the perception of prominence to localised issues. For example, the order in which the narrow fields of English and Arabic were listed was reversed from the benchmark so that Arabic comes first. This makes no difference to the conceptual structure but provides greater comfort for users in Oman, at the acceptable cost of adding some further complexity to the conversion tables, which are required for maintaining international comparability.

Other examples are more challenging, and range from a reluctance to recognise fields of study as legitimate, such as wine making, to a conflict between theological and ontological approaches to the structuring of fields of study, which would imply not only reordering fields of study within the same level, such as the narrow field, but vertically from one level to another, such as making Islamic Studies a narrow, or even broad, field rather than a detailed field.

The challenge is to contextualise OSCED without compromising its conceptual integrity or functional resemblance to international benchmarks. The fact that complex conceptual issues, such as those mentioned above, are emerging in the debate about this contextualisation is an encouraging indication of the growing sophistication of Oman's approach to systems development.

English–Arabic Glossary of Quality-Related Terms

Language reflects and influences praxis. Quality management in Omani higher education cannot be pursued only in English, as this would disenfranchise much of the sector. Similarly, it cannot occur only in Arabic, because many of the programmes are taught in English, and because much of the existing knowledge about quality management has been developed in English.

One of the projects the OAC has recently commenced is the development of an English–Arabic glossary of the many terms used in higher education quality management. The method involves: identifying the terms in English and Arabic; agreeing upon conceptual definitions in English and Arabic; and providing contextual and linguistic boundaries for each definition. This is challenging in a single language, because many terms have multiple meanings internationally, and some of these meanings are in conflict with each other. It is considerably more challenging in two languages, because one must add linguistic and cultural differences in conceptualisation and expression.

The project involves a team which is currently assembling a wide range of quality-related glossaries. The *Analytic Quality Glossary* endorsed by INQAAHE (Harvey, 2004–2008) has been taken as the starting point, along with literature already produced by the OAC.

It is acknowledged that the English-speaking world is further advanced in its higher education quality management than the Arab-speaking world. However, an important factor in this project is to ensure that the development of the glossary does not assume that all authoritative quality terms will be found in the English language. For example, the concepts of a 'Royal Decree' *مؤمر* and a 'Ministerial Decision' *قرار* play a significant role in quality management in Arab countries, and have no direct equivalents in western higher education. Similarly, there are English terms, such as 'quality' and 'probation', which as yet have no direct Arabic translation. A primary conclusion from this is that quality management concepts do not easily translate, let alone transfer, from one country to another. Therefore, significant emphasis on developing mutual understanding between cultures is an essential aspect of international quality management.

An opportunity exists to take this project to a regional level. Arabian countries have been watching with interest the progress in Europe with the Bologna Accord. The rationale behind that accord and its subsequent agreements could be equally shared between many Arabian countries; particularly the members of the Gulf Co-operation Council (GCC). There is a significant amount of student and worker mobility between the GCC member countries. This mobility would be greatly facilitated by common quality assurance frameworks, such as a common qualifications framework and standard education

classification. However, given that Arab countries are at earlier stages of development in higher education quality management compared with Europe, an appropriate first phase of collaboration for Arabian countries may be the development of a common glossary.

The establishment of the Arab Network for Quality Assurance in Higher Education provides a potential mechanism for pursuing this and other such propositions. Concerns about regional collaboration include that the time to completion would be longer; the process would highlight potential areas of disagreement as much as areas of agreement; and the result may be a glossary that represents the lowest common denominator (that is, what all member countries could agree upon) rather than leading edge thinking and praxis. It is inevitable that some terms will not achieve a common meaning throughout the GCC, at least in the short term, simply because they are concomitant with variances in national structures or systems. However, advantages might include achieving improved communication and greater collaboration on other frameworks and quality assurance processes, potentially leading to a more rapid development of the sector and the social and economic benefits that this would engender.

It is anticipated that progress on the development of a national, and perhaps regional, English–Arabic glossary can be reported early in 2009.

Institutional quality assurance

Between 2001 and 2004, OAC prepared, with international assistance, a set of standards for higher education institutions and processes for institutional and programme accreditation. These were collated, along with the first iterations of the OQF and an institutional classification system, and published as the *Requirements of Oman's System of Quality Assurance* (ROSQA) (OAC, 2004).

All higher education institutions were invited to apply for accreditation in accordance with ROSQA. The invitation caused some unease in the sector, because most higher education institutions were unfamiliar with the standards and unprepared for accreditation. Four institutions submitted their applications. Due in part to limitations in workload capacity at the newly established OAC, and in part to a preliminary assessment of the applications, two were selected for the full accreditation process. These took place between 2004 and 2006. One institution was awarded 'provisional accreditation', a precursor to full accreditation, and the other was not accredited.

These results and feedback from the sector led the OAC Board to commission the previously mentioned comprehensive review of ROSQA and relevant regulations and decrees in 2006. The review concluded, amongst other things, that the sector found the institutional standards to be too difficult to meet given the sector's stage of development; introduced with insufficient consultation with the sector; and inadequately tailored to the Omani context. Most of the higher education institutions were not ready for accreditation and required training and support in order to design and build internal quality management systems. Proceeding without changing the system presented the OAC with two unpalatable options: (a) to lower morale in the sector by failing many higher education institutions; or (b) to lower the standards, thereby weakening the purpose of accreditation.

After further consultation and international benchmarking for appropriate solutions to this conundrum, a new system was proposed whereby institutional accreditation would consist of two stages: quality audit (a formative evaluation against internal and external goals), followed some years later by standards assessment (a summative assessment against external

standards). This system creates a developmental pathway towards international standards, whilst maintaining an appropriate balance with the need for public accountability.

Institutional Quality Audit

Starting from 2008, the first stage in institutional accreditation involves each higher education institution undergoing a quality audit. The emphasis of quality audit is on evaluating the effectiveness of an institution's quality assurance and quality enhancement processes against its own stated goals and objectives, as well as requirements set by government and other external sources (such as professional bodies or affiliate institutions). Quality audit is useful for determining the institution's capacity and capability to achieve its aspirations and to continually improve. It involves a self-study of the institution's activities, resulting in a *Quality Audit Portfolio*, and then external verification of that portfolio by an external audit panel convened by the OAC. The panel produces a public *Quality Audit Report* containing, amongst other things, commendations, affirmations and recommendations. There are no pass or fail results, grading, certification or other summative results from a quality audit. This model is based upon numerous international examples, including that of the Quality Assurance Agency for Higher Education (QAA) in the United Kingdom and the Australian Universities Quality Agency (AUQA).

The introduction of quality audit as a concept initially met with a mixed reaction from the sector. At one end of the spectrum, institutions were resistant to quality audit because they were focused on having accredited institution status, particularly for use in promotional campaigns. At the other end, higher education institutions were of the view that it was too soon to introduce any form of independent review. Neither of these two extremes was informed by robust self-assessments; the national study mentioned earlier established that internal reviews and information tracking within institutions were rare. To address these concerns, international experts, from countries with mature quality audit systems, held numerous workshops with the sector on quality audit and on related quality enhancement and quality assurance strategies and tools. The workshops were specifically designed to ensure that participants were able to contribute, discuss and debate new ideas in the context of the Omani sector. Also, extensive consultation was undertaken in the development of the quality audit process. Evaluations conducted at these workshops indicated that they have been helpful in promoting deeper awareness of the issues, and in fostering constructive collaboration within the sector.

The OAC released its *Quality Audit Manual* (OAC, 2008a) in March, 2008. To make the quality audit process as transparent as possible, the manual jointly targets institutions and external review panels. In addition to detailing the protocols and processes for external quality audits of higher education institutions, the manual also provides a range of tools to assist institutions with their preparations for audit.

To ensure that quality audits are undertaken by persons with appropriate skills and experience, a *Register of External Reviewers* has been established. To qualify for membership on the register, a person must meet certain criteria, evaluated through a rigorous refereeing process, and either participate in the OAC's two-day training programme or have equivalent experience or training in review methods from another recognised jurisdiction. The register currently includes 59 members from within Oman, nominated by local higher education institutions, and 62 from outside the Sultanate, invited largely through connections with other external quality agencies. The OAC's quality audit panels are comprised exclusively from persons listed on the register. Each panel includes members from inside

and outside Oman. For the first few years the balance will emphasise international membership, although as local reviewers gain experience it is expected that this balance will alter.

The involvement of local and international experts in Omani quality assurance is both essential and challenging. Higher education in Oman is a developing sector. As such, an empathy with the social, political and economic contexts, and the manner in which these contexts facilitate and limit developmental opportunities, is vital. At the same time, the Omani sector desires parity of esteem within the international higher education community. Quality audit provides an organic pathway to parity, although it is acknowledged that more summative comparisons will eventually also be required, such as assessment against tangible international or regional standards.

Two pilot quality audits were conducted in 2008. These provided an opportunity to test the processes set out in the *Quality Audit Manual* and proved that they can be effectively used in Oman. In recognition of the developmental stage of both the quality audit process and the participating institutions, it was agreed that the portfolios and resulting reports from the pilot quality audits would not be released publicly. However, for full quality audits the resulting reports are made public in order to satisfy the demands for public accountability that are concomitant with a credible quality assurance system and encouraged, in manners appropriate to the local context, by the International Network for Quality Assurance Agencies in Higher Education (INQAAHE, 2007).

An ambitious national schedule has been published on the OAC website (OAC, 2006). It timetables the quality audits of 63 higher education institutions over a 6-year period. The first audits have commenced and the public reports are expected by early 2009.

Commensurate with international guidelines, the OAC's quality audits will be subject to an appeals process. An *Appeals Manual* (OAC, 2008b) was produced in accordance with the INQAAHE guidelines and using the OAC's usual processes of international benchmarking and consultation with the sector.

Institutional Standards Assessment

The second stage in institutional accreditation involves the higher education institution undergoing a 'standards assessment'. The emphasis of standards assessment is on empirically measuring whether an institution has met the institutional quality standards published by the OAC. The first set of these standards was published in ROSQA and was the basis on which the scope of topics for quality audit was established. An updated version of these standards will be published prior to the first standards assessments being undertaken.

Institutions that satisfy the standards will be awarded accredited status; institutions that do not will be placed on a probationary status to provide them time to address the OAC's recommendations prior to a reassessment.

Programme quality assurance

In Oman's new system, institutions and programmes undergo separate quality assurance processes. This is to ensure that their distinctive quality assurance issues are given due attention. All programmes, whether developed and awarded locally or through foreign providers, must be licensed by the Ministry of Higher Education before accepting student enrolments. The process of licensure is currently undergoing a significant evolution from bureaucratic registration to being a peer-driven, standards-based form of approval.

Programme Accreditation

Oman's first attempts at programme accreditation involved higher education institutions sending their programme curriculum and self-assessment to one or two international academicians for review. The review process included a site visit and interviews with staff and students. The result was a report with recommendations for programme improvement and a decision about the accreditation status of the programme. This output was certainly valuable but also highly subjective and, therefore, too contestable for an accreditation system. The aforementioned review of ROSQA concluded that this process could be improved in two ways. First, a larger number of academicians were required to ensure a broader and more balanced perspective. Second, a set of programme standards could be developed to ensure that peer opinion was grounded in common, explicit and internationally benchmarked academic standards. Just as a student expects to know on what basis their learning will be assessed, an institution needs to know against which standards their programmes will be accredited. These improvements would lead to greater consistency in accreditation decisions, thereby leading to greater public confidence in the system and the benefits that flow from this, such as greater student mobility and employability.

The new process for programme accreditation, still in draft form, involves a self-assessment prepared by the higher education institution against the appropriate OAC standards and then consideration of that self-study, and the programme curriculum, by an appropriately qualified panel of external reviewers drawn from the OAC's register.

Oman does not currently have its own programme standards. Student learning standards for narrow fields of study are being developed through a collaborative process of working groups, comprised of national and international academic, professional and industry experts. Where possible, the working groups source current and appropriate international standards, such as ABET Inc. for engineering, and contextualise these for Oman. The development of programme standards is intended to guide the processes of curriculum development, programme licensing and programme accreditation.

Programme Recognition

An interesting feature of the Omani higher education sector is the large number of foreign programmes being provided through local institutions. For these, the OAC is looking to develop an alternate quality assurance system called 'programme recognition'. The rationale is that these programmes have already been quality assured by a credible external quality agency according to the standards in their place of origin, this being a condition for bringing the programme into Oman, and have been brought to Oman precisely because they are valued in that form. To insist that these programmes conform to a second set of standards, which are potentially in conflict with the first, may damage their integrity. So, the quality assurance process in Oman involves examining the extent to which the programme, subject to any appropriate contextualisations, is maintaining the standards by which it is legitimately approved in its place of origin.

Quality enhancement

One of the most significant findings of the previously-mentioned analysis that led to the development of the *Quality Plan* was that the sector was enthusiastic about implementing appropriate quality assurance processes but suffered from a lack of quality assurance

know-how. The development of this know-how was stymied by a competitive culture across public and private providers, which prevented constructive collaboration and sharing of good practices. Therefore, it was apparent that any attempt by government to improve the national quality assurance system would be significantly bolstered by a corresponding commitment to collaborative quality enhancement strategies. Several such strategies are identified in the *Quality Plan*. For example, one strategy has been to develop and implement a National Quality Training Programme (OAC and Ministry of Higher Education, 2006) designed to raise the sector's awareness of quality management and to inculcate quality principles and skills-based training. Another strategy, and the one discussed in this paper, is the development of the Oman Quality Network (OQN).

Oman Quality Network

Upon close examination, the issue of competitiveness being a barrier to collaboration is more perceptual than tangible, and therefore not insurmountable. A greater obstacle was that there were almost no structural opportunities for representatives from the higher education institutions (particularly those with specific responsibilities for coordinating quality assurance processes or promoting quality enhancement activities) to meet and share problems and solutions.

In response, the OQN was established as a collegial and independent, not-for-profit network of higher education institutions, the Ministry of Higher Education and the OAC. According to its Chairperson, the OQN is concerned with developing:

...a strong and vibrant higher education sector by improving quality in higher education within the Sultanate of Oman. It aims to build a quality conscious, knowledge rich higher education sector through the sharing of ideas, strategies, research, and practices that inform the pursuit of quality improvement. (Heming, 2007)

The OQN includes two representatives from each higher education institution and is led by an executive committee elected from amongst the representatives. It was launched under the patronage of Her Excellency the Minister for Higher Education, in September 2006. This high-level endorsement provides the legitimacy essential for such initiatives in Oman. The supportive rather than directive nature of this patronage is of particular strategic importance; it sends a clear signal that the OQN is a collegial rather than hierarchical entity.

The OQN has been active in several regards. In most instances, it is the OQN representatives who attend the National Quality Training Programme workshops. In order to maximise the potential for pan-sectoral collaboration, the OQN is now assuming full responsibility for the National Quality Training Programme. Also, in October 2008, it held the inaugural Oman National Quality Conference, providing an opportunity for member institutions to showcase a wide range of good practices. The number of submissions was more than double the available spaces, indicating a strong level of enthusiasm within the sector for this initiative.

Also, the OQN has served as a valuable sounding board for the OAC as it develops various aspects of the national system. Drafts of new manuals, such as the *Quality Audit Manual* or the *Appeals Manual*, are circulated to the OQN for comment, and workshops are held with OQN representatives to explain the drafts and seek constructive feedback.

The introduction of an OQN has not been without its challenges. It involves concepts and practices that are not entirely consistent with normal aspects of the prevailing culture and traditions. For example, as an informal network it seeks to use email communication rather than the more formal process of official letters that must follow particular protocols for approval and dissemination. Also, the OQN is designed to make decisions by consensus; however, the national culture favours bureaucracies and hierarchical structures in which decisions are made by those in a higher level. So, in the early stages the executive committee acted in keeping with prevailing practices rather than in accordance with the OQN guidelines (OQN, 2006). A valuable lesson learned was that the introduction of concepts and structures that do not comfortably fit into the prevailing culture must be accompanied by extensive support and encouragement for changes in behaviour. After some initial difficulties, the OQN is now operating constructively.

Conclusion

Oman is a small higher education sector but, through its policy of importing programmes from various countries, as well as developing its own, it serves as an interesting microcosm of the challenges being played out in the broader international higher education community.

A comprehensive national quality management system for higher education involves a number of distinct but interrelated frameworks and processes, in much the same way that the human body requires the distinct but interrelated skeletal, muscular, respiratory, cardiovascular and digestive systems all working together. Until such time as all the essential elements are in place, the maintenance of quality education is heavily dependent upon *ad hoc* methods of human intervention and the limitations that come with them. As Oman's system evolves, individual elements need to be reviewed and recalibrated to align with the various iterations of the system as a whole. Each element needs to make sense on its own but also as part of the whole.

A key to success is the tandem strategy of benchmarking plus the involvement of many stakeholders through a range of consultative methods before, during and after the development and approval of the various system elements. Consultation beforehand helps identify and gain common agreement on the sector's needs. Consultation during development helps gain the sector's confidence in the proposed solutions; expands the pool of knowledge contributing to the solution; and helps set the ground work for post-approval implementation. Consultation after approval helps disseminate and explain final decisions, thereby leading to speedy implementation. Ultimately, 'the involvement of the sector strengthens the legitimacy of the system' (Razvi & Carroll, 2007, p. 12).

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