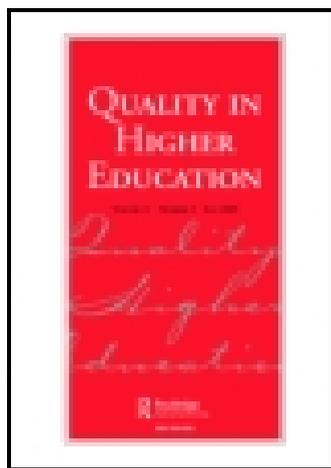


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The Status of Quality Assurance and Accreditation Systems within Higher Education Institutions in the Republic of Yemen

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ABSTRACT *The purpose of this paper is to provide an overview of the status of quality assurance and accreditation systems within higher education institutions in Yemen. The paper initially describes the stages of development and changes that have occurred in the field of quality and accreditation in Yemeni higher education. The paper shows that no formal mechanisms for quality assurance and accreditation processes have been fully developed within higher education institutions in Yemen. In addition, the discussion reveals that the continuing efforts exerted by the Ministry of Higher Education and Scientific Research (MHESR) to establish the quality assurance and accreditation systems in higher education institutions have resulted in increased awareness among university officials, academic staff and administrators about the quality concepts, quality standards and quality assurance system. The paper concludes by exploring the lessons learned about the changes in quality and accreditation nationally and institutionally. The conclusion may provide some opportunities for reflection by quality assurance experts and officials in universities and the MHESR for continuous development of quality assurance and accreditation systems at national and institutional levels.*

Keywords: quality assurance; quality assurance system; accreditation system; higher education; higher education institutions; Ministry of Higher Education and Scientific Research; Yemen

Introduction

All over the world, there is an increasing interest in establishing quality assurance and accreditation systems in higher education. The fields of quality assurance and accreditation of higher education in Yemen are relatively young. This is true, because the higher education system in Yemen is rather new and can be traced back only three and half decades.

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During this period, education in Yemen went through several challenges, such as the rapid increase of numbers of students at all levels. In order to trace the progress of higher education, the historical period is divided into three stages based on the type of changes and the developments that characterised each stage.

The first stage was the period before the unification of Yemen, 1970 until 1989. During this period, higher education was represented by two universities: Sana'a University (SU) in the north and the University of Aden (UA) in the south. Throughout this period, SU and UA were the main providers of university education (HCEP, 2005). The second stage is the period after the unification of Yemen in 1990 until the year 2000. During this period, several changes happened especially in the higher education sector, including a rapid increase in the number of public and private universities. The Ministry of Higher Education and Scientific Research (MHESR) was established in 1990 but it was abolished in 1994 to be under the umbrella of the Ministry of Education (MoE) (MHESR, 2007).

The third stage is the period from 2001 to 2008, which was started by the re-establishment of MHESR in 2001 (MHESR, 2007). This represents the real start of building the quality assurance and accreditation systems for higher education in Yemen. This paper discusses the status of quality assurance and accreditation of higher education throughout these stages, with a major focus on the third stage.

The first stage: higher education before the unification of Yemen: 1970–1989

Prior to 1989, there were two educational systems in the two Yemeni states, with a MoE in Sana'a, which was established in 1962, and another one in Aden, which was established in 1967 (Alagbary, 2003). The higher education system in Yemen was under the responsibility of the MoE in each state. The systems were very limited and had depended solely on SU and UA. The number of Yemeni academic staff in SU and UA were limited; consequently, both universities depended heavily on expatriate academic staff, mostly from Egyptian universities. The number of Yemeni academic staff and teaching assistants increased dramatically from 130 (28 in SU, 102 in UA) in 1978, to 1073 in the year 1990–1991 (426 in SU, 647 in UA) (MHESR, 2007).

Although there is no indication of the existence of a formal quality assurance system at that time, the situation of SU can be considered as the 'golden period' in its history. The number of high-school graduates who enrolled in each programme was very limited and the admission regulations were very strict. Since most of the professors who were teaching at SU were Egyptians, they mostly performed tasks based on the academic rules of Egyptian higher education. Academic programmes at SU were developed based on the experience of those professors, who held various educational backgrounds. They were educated in different institutions in Egypt, the United Kingdom, the United States and other countries around the world. Based on such various experiences, academic programmes at SU were developed and improved in appropriate ways. In addition, material resources assigned to the programme, such as classrooms, libraries, laboratories and technical equipment were of a sufficient quality and quantity to enhance students' achievement. Consequently, graduates from SU received respect from the society due to the skills they reflected in their professions.

An additional strong point that was evident during that period was the ability of SU to select many graduates who showed excellent achievement and recruit them to be teaching assistants. The university provided scholarships for teaching assistants to pursue graduate studies in advanced countries around the world. Most of these graduate students came back

to Yemen holding PhDs in various disciplines and joined SU as part of its academic staff. Some of them have been selected to be government ministers and others are now hold high-ranking positions in the government.

The second stage: more higher education institutions in Yemen: 1990–2000

After the unification of the country, the government established the MHESR in 1990. The MHESR continued monitoring higher education until it was abolished in 1994. The responsibility for higher education came under the umbrella of the Ministry of Education, where a new section for higher education was established within it. The higher education section continued to perform tasks from 1994 until the end of the year 2000 and ‘this period witnessed very rapid development and changes in higher education’ (MHESR, 2007, p. 26). The higher education sector faced new challenges to cope with the changes and development that occurred in higher education during that period. As an example, the rapid increase of secondary/high-school graduates during the period from 1993 to 1996 led the government to establish five public universities. Due to the financial difficulties facing Yemen during that period and the absence of an adequate number of community colleges and higher technical institutes that could attract high-school graduates, the government eventually decided to involve the private sector in taking part in higher education. There is an absence of an adequate number of community colleges and higher technical institutes that could attract high-school graduates. Therefore, seven private universities and one college were established between 1993 and 1996.

Reviewing what has been written about the higher education sector and its accomplishments during that period provides no clear indication as to what led to minimal accomplishments in quality assurance across it. Nevertheless, reflecting on the situation at that period suggests some possible reasons behind the barriers to success. First, there was an absence of explicit policies as well as no quality assurance system that could be used by the higher education sector to monitor higher education institutions. Second, due to the rapid increase of the Yemeni population, student numbers had increased during the period from 1993 to 2004. As stated by Al-Omari (2008, p. 2) ‘in 1975, Yemen’s population was only 7 million; the number increased to reach 21 million in 2004’. Consequently, the demand for higher education increased dramatically to the degree that public universities could not cope with the huge number of high-school graduates looking for admission to the available programmes.

As a consequence, the society started to show discomfort about the quality of higher education outcomes, especially when the private sector was invited to invest in higher education. The final report by the National Academic Recognition Information Centre (NARIC) indicated that: ‘the process of approval involved obtaining a letter of acceptance from an appropriate ministry’ (NARIC, 2007, p. 101).

However, little had been done by the higher education sector to create suitable standards for quality assurance and accreditation for evaluating these universities. The analysis of the available literature on quality assurance in Yemen during this stage reveals that the most important activity related to quality in higher education was the conference organised by SU in March, 1997 and held at the same time as the 30th meeting of the Arab Universities Union Board. The directors and presidents of the universities who were attending the 30th meeting had the chance to participate in the conference activities, which focused mainly on quality assurance issues and the effect of globalisation on higher education. Some of the papers presented in the meeting introduced quality assurance as one of the topics that needed to be addressed urgently.

The third stage: efforts to establish accreditation and quality assurance systems in higher education, 2001–2008

The MHESR was re-established in 2001 with full responsibility over universities and colleges. It was obvious from the previous discussion that quality assurance and accreditation systems had not yet been fully introduced to Yemeni higher education institutions. Therefore, the following discussion of this stage focuses on four topics related to the status of quality assurance and the efforts exerted to establish quality assurance and accreditation systems.

Evaluation of Quality Assurance Activities at National Level

The MHESR took into account issues of quality assurance and accreditation by conducting many activities to spread the culture of quality assurance and accreditation within higher education institutions. Some researchers in quality assurance consider the notion of the 'quality culture' as the corner stone for implementing a successful quality assurance system within any organisation. As an example, Berry (1998, p. 7) indicated that 'quality culture' could include many aspects such as: 'planning throughout the organisation; system for implementing plans; a system for audit and review; a system for benchmarking the performance of various processes; a system for measuring performance improvement; training and development throughout the organisation'.

The continuing efforts exerted by the MHESR since 2001 to establish the quality assurance and accreditation systems in higher education institutions resulted in increased awareness among universities' staff and administrators about the quality concepts, quality standards and quality assurance systems. In 2002, the MHESR organised a workshop on accreditation and quality assurance of higher education, attended by the rectors, vice-rectors and other officials from higher education institutions across Yemen. In 2006, two training workshops were conducted for officials in MHESR as well as university rectors and other staff. They discussed the establishment of an Accreditation Council for Higher Education and the implementation of internal quality assurance processes (NARIC, 2007). The value of MHESR activities for higher education institutions could be their ability to spread some of the aspects of quality culture.

The involvement of the British Council Project *Excellence in Higher Education*, of NARIC from the United Kingdom (UK) and of the German Academic Exchange Service (DAAD) are among the activities that can be considered as the nucleus for building a rigorous quality assurance and accreditation system in Yemeni higher education. The MHESR signed a contract in 2002 for consultants' services with the NARIC in partnership with DAAD to conduct activities related to quality assurance and accreditation. This decision was to initiate the process for establishing an accreditation system as well as encouraging higher education institutions to build quality assurance systems.

This activity was part of a larger project funded by the World Bank called the Yemen-Higher Education Learning and Innovation Project, which was a four-year project, from 2003 to 2006. The objective of the project was to provide:

assistance to the two pilot universities (SU and UA) in order to initiate a process of self-evaluation and improvement and to develop agreed standards which could be applied by other public sector universities, as a basis for future accreditation; and to perform internal assessment of a selected private institution. In addition, the

project will help the MHESR to prepare for the early extension of accreditation to Yemen's private universities, based on rigorous and transparent quality standards. (World Bank, 2002, p. 7)

Another objective of the Yemen-Higher Education Learning and Innovation Project is to assist in developing capacity in the new MHESR in the areas of governance, financing and the quality of instruction (World Bank, 2002).

As stated in the World Bank Report (2002), the important feature of this project is related to raising awareness among higher education institutions about quality assurance of academic programmes and creating a norm for establishing a national accreditation system. The stated objective of this project focuses on evaluating, modernising and piloting of programmes in medicine, education and commerce at SU and UA. In addition, the MHESR received a donation from the Netherlands, to implement several projects aimed at capacity building of MHESR, as well as helping some higher education institutions to develop academic programmes and to provide assistance in using ICT in teaching and learning.

Another significant change occurred in April 2005 when a new law was approved. According to the final report by NARIC, the April 2005 law seemed to:

represent a milestone in moving the university sector forward in a quality-assured context within Yemen in order to complement developments in other national systems across the Arab Region. (NARIC, 2007, p. 28)

As indicated by the Ministry of Legal Affairs (MLA, 2005), Article 18 in the 2005 law explicitly determines the roles of the newly-established Supreme Council for Yemeni Universities (SCYU), which is chaired by the Prime Minister. As indicated in Article 18, some of the tasks of the SCYU are to suggest general policies and educational plans, coordinate education in higher education institutions, authorise the establishment of universities, approve programmes and accredit certificates and terminate the study in any programme within the college or university if it cannot meet the demand of this law.

The 'National Strategy for the Development of Higher Education in Yemen' (MHESR, 2006, p. 13) argued that 'the SCYU has not played an effective role in the steering, development and reform of the higher education system'. According to MHESR (2007), four reasons were responsible for the shortcomings of the SCYU:

the absence of obvious responsibilities, no clear role for each ministry represented in the SCYU, the meetings of this council did not convene regularly and SCYU has no executive board to follow up its decisions.

Due to these circumstances, it could be argued that the existence of this Council makes the role of MHESR ambiguous, because the current arrangement put the SCYU above the MHESR.

The MHESR has developed expertise in developing an ambitious strategy for developing accreditation and quality assurance systems. In addition, there is widespread feeling that the existence of SCYU has affected the autonomy of universities, especially if one takes into account that the rectors and vice-rectors of public universities 'are appointed by the president of the country and deans by the Prime Minister (both in his capacity as Prime Minister and as Chairman of the SCYU)' (MHESR, 2006, p. 18). This situation may lead the rectors and deans to feel that they are not accountable to their universities but to the high decision-makers in the government.

The feeling escalated among owners of private universities that the establishment of SCYU has a great influence on their existence, especially after SCYU took a very critical decision by endorsing the closing down of all faculties of medicine at all private universities, except the one in the University of Science and Technology (UST) (NARIC, 2007). This decision was based on the legal regulation of April 2005, which mainly focused on a set of procedures for general and special accreditation of private higher education institutions in Yemen (MLA, 2005). The reaction to this decision ranged from high satisfaction to strong reservations. For example, one rector of a private university argued that: 'no specific criteria were provided for closing the faculties' (NARIC, 2007, p. 105). It could be argued that the absence of a national independent accreditation association and quality assurance agency at that time made the decision appear unjustified.

The evaluation of medical faculties at private universities at that period was not conducted on a clear internal and external review procedure. As a consequence, stakeholders in the society felt a need to establish an accreditation system that could be used to assess the quality of higher education programmes in private and public universities. Therefore, MHESR took this issue very seriously and started to prepare for building an accreditation system for higher education.

Quality Assurance Activities of the Excellence in Higher Education Project in Yemen

The MHESR participated in most activities conducted by the British Council *Excellence in Higher Education* project. The project has conducted seminars and workshops on quality systems, as well as training support for quality assurance agencies and teams, through partnerships with quality assurance stakeholders. In addition, the *Excellence in Higher Education* project has 'offered academics from quality assurance agencies, ministries and higher education institutions the opportunity to attend workshops led by experts in quality management, study tours to the UK and seminars covering priority topics in quality assurance' (ANQAHE, 2008, p. 5). This paper briefly discusses only three *Excellence in Higher Education* project activities.

First, in 2007, the project organised a seminar in Kuwait entitled 'Quality Assurance Seminar: The Methods and Approaches to Institutional Audit'. Three staff from the Quality Assurance Agency for Higher Education (QAA) in the UK participated by presenting the QAA experience and its approach to institutional audit. The participants were representatives of ministries of higher education in the Gulf States as well as three representatives from Yemen, nominated by MHESR; one was from MHESR, the second was from SU and the third was from the UST. Following the Kuwait workshop, the University Educational Development Center (UEDC) at SU organised a forum about quality assurance in higher education. Based on the experience and knowledge gained from the Kuwait workshop, a brief introduction about QAA methods and approaches to institutional audit was presented in the forum. Many other topics related to quality assurance in higher education were discussed. This forum paved the road for conducting several workshops at SU about quality issues during the year 2007–2008.

The second *Excellence in Higher Education* project activity of significance for Yemen was the study tour in London in 2007. Two representatives from Yemen represented SU and UA. During this study tour, the participants visited six higher education institutions and met with quality assurance experts and officials, who gave an overview about the quality assurance model that is in use in these institutions. Based on the information gained from the study tour, a brief report was written and submitted to presidents of SU and UA. In

addition, a research paper was developed about the British model for quality assurance in higher education (Anaam & Kwairan, 2008), which was presented in the Second Conference for Higher Education in Yemen in 2008. The report and the paper stimulated the discussion among SU staff about QAA models, which encouraged the UEDC to establish a biannual refereed journal that focuses on quality assurance in higher education. Three issues of this journal have been published up to now.

The third *Excellence in Higher Education* project activity of note was the workshop entitled 'A Program for Quality in Higher Education: Academic Paper-Writing' held in Bahrain in 2008. During this workshop and the follow-up work, the project offered academics from the Gulf States, including Yemen and Iraq, the opportunities to network and share institutions' experiences as part of the communication and networking activities. The main goal of the workshop was to provide information and experience for the participants to develop academic research papers about quality assurance in higher education in their countries. The project will provide support for this activity by offering experts as editors for all produced papers.

Changes to the Quality Systems in Higher Education Institutions

Currently, there are 8 public universities, 12 private universities and 2 colleges operating in Yemen. There is a rapid increase in the number of enrolled students in public universities, especially if we compare the total number of enrolled students in the years of 1970 and 1990, with the total number of enrolled students in 2007. It was indicated in the statistics of MHESR (2007, p. 32) that the numbers were 278 students in 1970, 39,990 students in 1990 and 195,023 students in 2007. The private sector has also witnessed an increase in the newly-established private institutions during the period from 1994–2008. In addition, the total number of students who enrolled in private universities has increased during that period. As indicated in the statistics yearbook of MHESR (2007, p. 38), 'the total number of students who enrolled in private HE institutions was 841 students in 1995. However, this number has increased to 45,496 students (33,150 males and 12,346 females)'.

Another challenge is related to the effect of the growth in student numbers on the quality of teaching and learning. As stated in the World Bank Report (2002, p. 3):

given rapid enrolment growth, the student: instructor ratio has increased from 24:1 to 40:1, without any compensatory expenditure on instructional materials. Library stocks, a proxy for quality, represent two volumes per student...reflecting both a failure of instructors to keep up with their subjects and a style of teaching which favours formal lectures, rather than individual study and research.... Further, the absence of a culture of self evaluation, by staff and students and the absence of an operational accreditation system make quality assurance elusive.

In parallel to the rapid increase of the number of students, there is also an increase in staff numbers, especially in public universities. For example, the number of academic staff at SU has increased from 28 in 1978 to 426 in 1990 and 1739 at the end of 2007 (MHESR, 2007, p. 33). The total number of SU students at all levels was 97,146 (of which 21,371 are female (22%)) (Sana'a University, 2007). The ratio of students to academic staff is 56:1, which can be considered as a high ratio when compared with the international quality standards.

Some higher education institutions have made efforts to spread a culture of quality assurance and to prepare themselves for the accreditation processes, which will be introduced in the near future by the Accreditation Council for Higher Education. Introduction of the

quality assurance system at SU, UA and the UST will be discussed in this section as case examples.

SU and UA have engaged in activities aimed at spreading a 'quality culture'. UA organised a conference in 2003 that focused on quality assurance in higher education, where several papers about quality assurance in Arab universities were discussed, which emphasised the importance of introducing quality issues in higher education in the region. The UST was the only private university that made a good start in developing a quality culture among its staff. It also made some attempts to establish a quality system by establishing a central quality assurance unit in the university in the year 1999–2000. In 2002, UST established quality assurance units in its colleges.

The important activity related to quality assurance during this stage was the participation of SU, UA and UST in a project funded by the United Nation Development Programme (UNDP)/Regional Bureau for Arab States (RABS). Leading higher education institutions were selected from 12 Arab States, including Yemen, to participate in this project. Participation in this project was seen as an eye-opener for the officials in these universities, because it allowed them to get involved in a vivid process of programme evaluation based on QAA standards. The UNDP programme is also seen as an important activity because it helps in training some staff to become experts in the academic review process. According to the UNDP/RABS (2005, p. 3) report, the goal of the project 'is to assist a core group of leading public and private Arab universities to develop and apply the methodologies and benefit from three independent instruments of quality assurance and enhancement'. Such instruments can be summarised as follows.

- *Conducting two consecutive review cycles of programme evaluation using internal and external peer-evaluation processes.* During the first cycle (2002–2003) SU and UST were selected to represent Yemen in the review of computer science programmes. During the second cycle (2003–2004), UA was selected to represent Yemen in the review of business administration programmes.
- *Conducting international tests to measure students' performance in the reviewed programmes.* Two parallel consecutive cycles of student testing were conducted. Students from SU and UST participated in the Arabic-based computer science programme test. Whereas, students from UA participated in an Arabic-based business administration programme test.

What is unique about this project is the adoption of a model for reviewing computer science and business administration programmes, which is based on the Academic Subject Review Method of the UK QAA with some adaptations (UNDP/RABS, 2005, p. 9). In addition, a comprehensive handbook was prepared by training consultants to be used as a guide for all aspects and stages of the review process. According to the procedures described in the *Handbook for Academic Subject Review* (UNDP/RABS, 2003), major aspects of programme evaluations are academic standards, quality of learning opportunities and quality assurance and enhancement.

Abu-Sharar *et al.* (2007) summarised the steps that were undertaken in each university by the UNDP/RABS project during the evaluation process. These steps are noted as follows:

Representatives from those universities were trained in specially-designed workshops on quality assurance procedures and on writing self-evaluation documents. Special workshops were also conducted for the representatives in order to train them

on how to become external reviewers in their own subjects. Teams of external reviewers were formed from both UK experts and project-trained Arab reviewers. The teams, then, visited various participating universities and externally audited them.

Lessons Learned about the Changes in Quality and Accreditation Nationally and Institutionally

Derived from the literature review of higher education in Yemen and the analysis of the current practices with regard to quality assurance and accreditation, some important lessons can be learned for the future.

- Despite the significant growth of higher education institutions, it is apparent that no formal mechanisms for quality assurance and accreditation processes have been fully developed within Yemeni higher education institutions.
- Yemeni higher education institutions face many challenges in developing quality assurance and accreditation systems nationally and institutionally, such as the rapid increase of the student population, the hasty increase in the number of universities and the financial difficulties facing Yemen.
- Continuing efforts exerted by the MHESR since the year 2001 to establish the quality assurance and accreditation systems in higher education institutions have increased awareness among higher education institutions about the quality concepts, quality standards and quality assurance system.
- Experiences gained by SU, UA and UST through the participation of the self- and external evaluations of academic programmes based on the UK QAA model should be utilised to evaluate programmes within these universities.
- The activities conducted by the *Excellence in Higher Education* project for the participants help in spreading some aspects of quality culture and introduced the UK quality assurance models and standards.
- To keep up with the new demands that have been placed on higher education institutions in Yemen by the various stakeholders, higher education institutions should make more effort to establish quality assurance systems based on the best available practices around the world.
- Yemeni higher education institutions must shift focus from quantitative developments to the real development that puts more emphasis on quality assurance and enhancement of higher education.
- MHESR in Yemen should speed up the process of initiating an accreditation system and establishing an Accreditation Council for Higher Education.
- Yemeni higher education institutions should be encouraged to build quality assurance systems and to establish proper educational and administrative policies based on quality assurance standards. This kind of provision can assess and ensure the continuous step-by-step improvement of academic programmes and lead to the development of long-term quality assurance and enhancement practices.
- Many workshops and seminars should be conducted nationally and institutionally by MHESR in order to fully address all the topics related to quality culture.
- The discussion of changes during the three stages of higher education shows that there are attempts from SU, UA and UST to address some of the quality issues through various activities. However, clumsy implementation of quality assurance systems reveals that quality assurance is still far from effective.

- With regard to other private and public universities, there is a need to spread the quality culture as well as accreditation requirements. MHESR should provide assistance for universities to establish quality assurance systems and to build a pre-set clearly focused vision and mission statement that defines goals, aims and the reasons for their existence.

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