

References

1. Brookes, M. & Becket, N. (2007), "Quality Management in Higher Education: A review of international issues and practice". International Journal of Quality Standards, 1(1), pp. 85–121.
2. European Foundation for Quality Management (EFQM) Excellence Model, 2013.
3. Haug, G. (2003), "Quality Assurance/Accreditation in the Emerging European Higher Education Area: a possible scenario for the future". European Journal of Education, Vol. 38, No. 3.
4. Materu, Peter (2007), "Higher Education Quality Assurance in Sub-Saharan Africa: Status, Challenges, Opportunities, and Promising Practices". The World Bank, Washington DC.
5. Murad Ali and Rajesh Kumar Shastri (2010), "Implementation of Total Quality Management in Higher Education", Asian Journal of Business Management 2(1): 9-16.
6. Srikanthan, G. and Dalrymple, J. (2003), "Developing alternative perspectives for quality in higher education", The International Journal of Education Management; 17, 2/3; p.126.

Based on the results from a quality audit, student feedback, faculty appraisals, the HoD shall recommend training for faculty development.

The Department is to report on the attainment of the program outcomes to the College Board at the end of every session. Based on these reports, the College decides on the improvement necessary to achieve the outcomes.

Challenges

The main challenges are in the mindset of certain individual faculty that are unwilling and hesitant to improve implementation of new academic quality processes which quite often may result in inconsistency and loop holes within the system across the HEI. Secondly, the culture of students and their seriousness in providing accurate reflective feedback on faculty and courses is another challenging factor in applying TQM in the education sector in the HEI as the results could be ineffective and inaccurate for continuous improvement. In addition, the mechanism of providing feedback on the student feedback is another challenging task for quality improvement at the UoN.

Another foremost challenge is the growing need to enhance awareness and knowledge about TQM across the spectrum of the employee's at the university, especially those in appointed leading roles. With regard to resources, the UoN needs to diversify its resources to meet the growing demands of academic development and build on the required resources of the new campus to best meet student needs and thus further enhance TQM in every scope of education and the institution.

The University will need to adapt to the educational dynamics by creating a quality culture that is intertwined in the fabric of all its values. In building on overcoming these challenges; continuous quality improvement, awareness, education through practice, adoption of strong leadership and a desire for success will effectively benefit the HEI, students and in turn society as a whole.

Conclusion

The UoN has introduced clear and transparent systems to ensure fulfillment of TQM and in turn striving to achieve and surpass university expectations. Applying TQM at the institution will add great value to educational framework benefiting all stakeholders and in the end the graduate. Embracing TQM will become intertwined within the university culture which in turn will be reflected in the graduate attributes and society satisfaction.

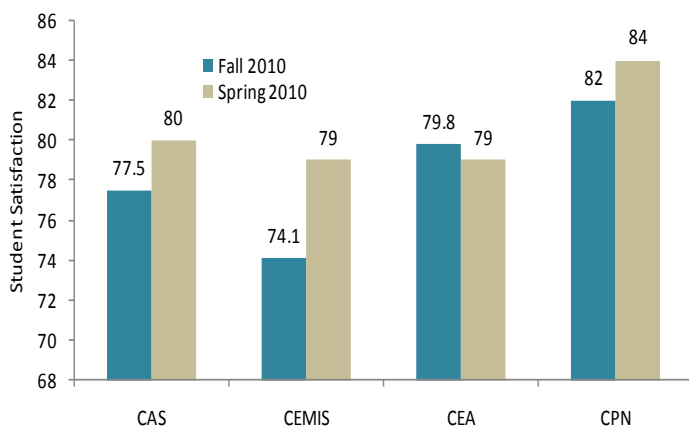


Table 3: Results for Student Feedback and Achievement of Different Courses

Instructor Name	No. of Semesters	No. of Courses	Course Evaluation	Instructor Evaluation	Mean Mark	% of student pass
	4	10	86.47%	88.26%	65.06	78.77%
	4	10	84.13%	86.56%	66.54	81.61%
	3	5	85.36%	86.21%	60.97	67.11%
	4	8	76.85%	79.27%	59.69	73.45%
	4	8	76.72%	78.39%	58.75	66.63%
	3	9	73.02%	74.23%	59.59	64.47%
	4	12	70.39%	70.60%	71.13	91.41%
	4	10	85.94%	87.94%	64.47	78.46%
	4	13	87.43%	87.85%	74.04	91.79%
	4	9	84.06%	85.32%	69.96	80.34%
	2	5	71.71%	71.14%	67.10	84.44%
	3	4	59.20%	64.57%	76.25	93.96%

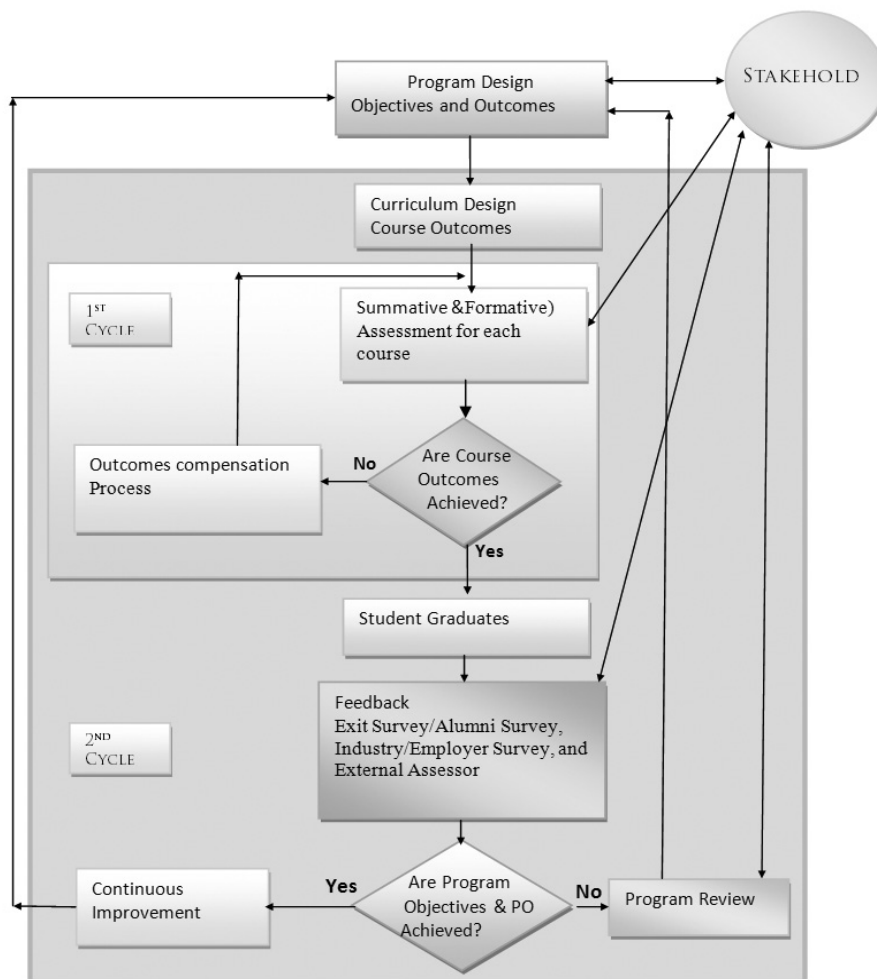


Fig. 4: Curriculum Assessment at the UoN

One of the most important quality measures is student feedback, which is obtained via course and teaching evaluation by students. At the UoN it is a compulsory online task for all students in week 13 of the semester. Report for student feedback is issued at university, college, department and instructor levels. The DAEQM will analyze and suggest improvement with proper documentation. Both the Executive Board and University Academic Council receive a summarized report and any related improvement or decisions are taken. Figure 5 shows the summary of student evaluation at college level. At the departmental level, the results are linked with course outcome achievement for a number of semesters to build up a solid conclusion as shown in table 3 in which the results are presented along with the grade results for the courses, average student grades and percentage of students passed.

6	Evaluation by Students	Students
7	Course Outcomes Analysis	Faculty, HoD
8	External Assessors	Dean/External Assessor(s)
9	Regular Review and Monitoring of Overall Student and Faculty Performance	Student Affairs, Chancellor's Office, Deans, Executive Board, UAC

Assessment of the achievement of course outcomes and program outcomes are performed in two cycles as illustrated in Fig. 4. In the first cycle the continuous improvement involves assessment of course outcomes and is ensured by summative and formative assessments. This includes internal assessment (exams, written reports, analytical essays, assignments, presentations, projects, etc) and external assessment. The later involves external examiner and professional exit exams. The second review cycle includes students and stakeholder feedback on the achievement of graduate attributes, program objectives and program outcomes. This cycle includes exit, alumni, and employer surveys, external assessor reports etc.

In the first cycle, quality measures are adopted to ensure fair and reliable assessment as summarized in Table 2.

Table 2: Quality Measures for Assessment

Admin. Level	Quality Measure	Responsibility
Department Level	1.Approval of Assessment Plan 2.Approval of Exam Questions 3.Vetting of Mid- term & Final Exam Questions 4.Double Blind Marking	HoD HoD Peer Review, HoD Peer Review, HoD
College Level	1. Moderation of Assessment Results 2. Auditing Course Portfolio 3. Student Appeals	College Board Quality Audit Committee Appeal Committee
University Level	1. External Examiners, External Assessors 2. Overall Academic Performance	Chancellor/Vice Chancellor R&R

Quality Teaching Procedure

- Teaching and Assessment Plan (T&A plan)
- Guidelines to Faculty on Teaching Implementation.
- Quality Control for Teaching
- Delivery & Assessment of Coursework
- Responsibilities & Role of the Faculty, HoD and Dean in Quality Teaching
- Documentation Process
- Details of the Course Portfolio
- Final Exam Procedure
- Role of Invigilators
- Role of Academic Advisors
- Copyright, Cheating & plagiarism
- Text/Reference Book Selection & Use
- Field/Site Visits

At the implementation stage, the QTMS was introduced to faculty in different workshops at the college and university levels and followed up by the DAEQM through conduct of periodic quality audits and self-assessments.

Furthermore, the UoN has implemented Outcome Based Education (OBE) which requires adoption of different teaching and learning strategies that are largely student-centered, including lectures, tutorials, problem based learning, practical exercises, projects, and site visits. These different mechanisms of acquiring knowledge, skills and values are specified in the Teaching and Assessment Plan (T&A plan) of each course. Implementation of the T&A plan is monitored internally through the audit of course files and externally by external assessors.

The UoN maintains standard teaching portfolios for all courses. These are kept in the department for at least two semesters. The QTMS also covers the implementation and quality control of the teaching activities as summarized in Table 1.

Table 1: Quality Measures for Teaching and Learning

No	Quality Control	Responsibility
1	Teaching Appraisal for New Faculty	Senior Staff
2	Midterm Exams	HoD, Dean
3	Course Portfolio	Quality Management Committee
4	Vetting Final Exam Questions	HoD
5	Second Grading Concept (checking)	HoD

Tqm-Teaching And Learning

Teaching and learning is selected to demonstrate the Academic Quality Management process at the UoN. The UoN has developed a comprehensive pedagogic framework called "Quality Teaching Management System" (QTMS) to manage the quality of student teaching and learning and assessing student's performance. The system was introduced to the faculty and staff, and includes the teaching procedure, the role of faculty and students, responsibilities of the Head of Department (HoD), Deanship of Registration & Records (R&R), the Dean, and quality management on the implementation of teaching at the UoN. The QTMS include

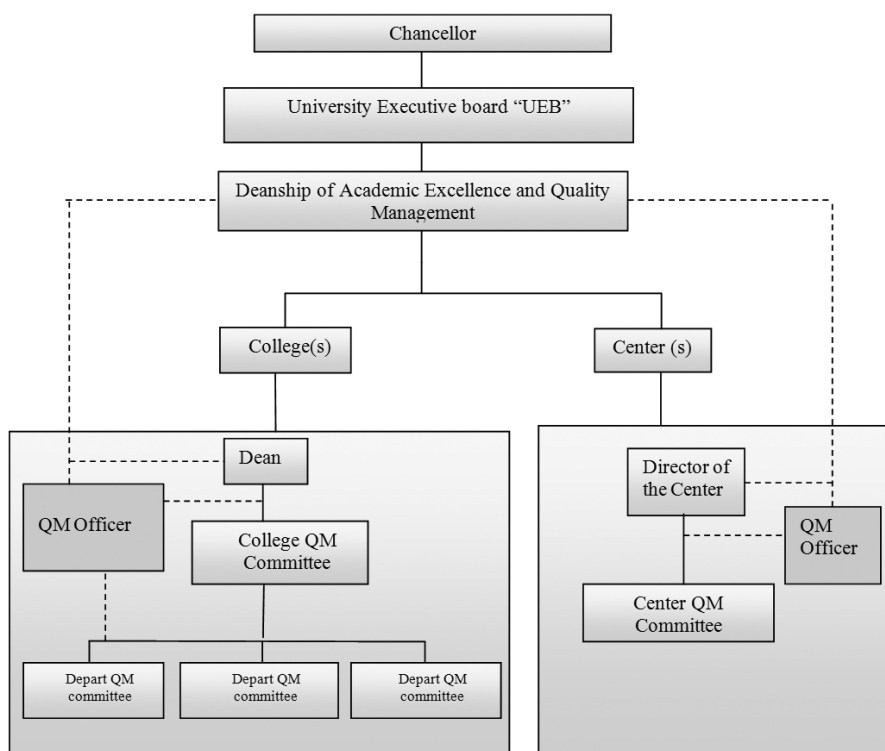


Fig. 3: The role of the DAEQM at the UoN

The administrative role of the Deanship for Academic Excellence and Quality Management in the organizing structure of the university is shown in Figure 3. The Dean for the DAEQM is one of the senior executives ensuring the effectiveness of TQM in the university. The Deanship is composed of the Dean, Quality Admin Director, 3 Assistant Deans, Quality Management Officers, and Administrative Officers.

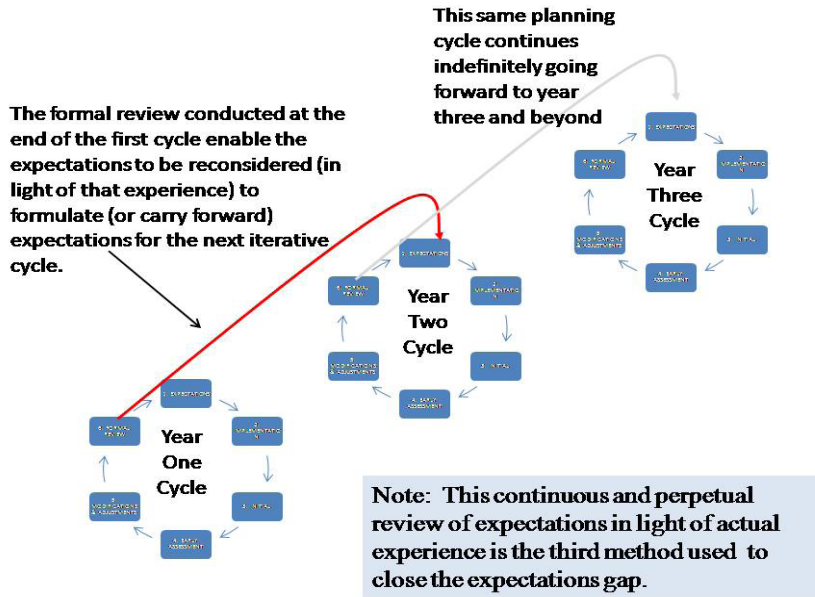


Fig. 2: UoN Cyclic implementation of EFQM Excellence Model

The Deanship is linked to different colleges and service centers at the university as shown in the same figure to ensure robust communication with the college deans/center directors in regard to quality management. The primary role of the Deanship is to develop an integrated system of continuous monitoring and evaluation of different policies and procedures at the University and suggest improvements based on periodic assessments and feedback obtained from staff, students and stakeholders.

TQM has been championed at all levels of the University of Nizwa. The Board of Trustees has been responsible for overseeing the fulfillment of the vision, mission and core values. The University Academic Council evaluates all academic processes, and directs units to means of enhancement. The University Executive Board and the Deanship for Academic Excellence and Quality Management oversee adherence (consistent implementation) to quality at all levels, while all faculty contribute to Quality management through institutionalization.

The Uon Quality Model

Many quality models exist and are proposed for use in higher education sector in the Gulf region. The UoN adopted the European Foundation for Quality Management (EFQM) Excellence Model. A comprehensive overview of the EFQM Excellence model (or TQM) is available on www.efqm.org [2] and the structure of the model is shown in Fig.1. The EFQM was introduced at the beginning of 1992 as the framework for assessing applications for the European Quality Award. It is the most widely used organizational framework in Europe. Some of the benefits of EFQM Excellence Model in the higher education institution are: to understand and anticipate students' needs and expectations; demonstrate visionary and inspirational leadership; involve staff; develop beneficial relationships, perform self-assessment etc.

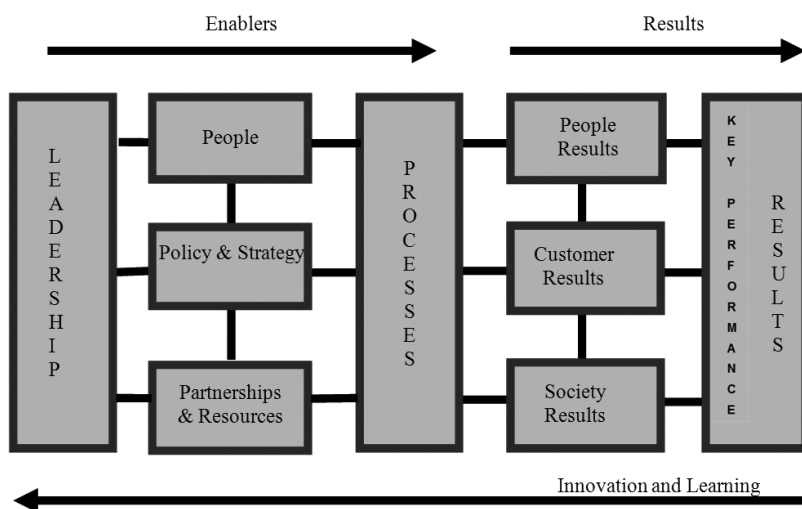


Fig. 1: EFQM Excellence Model

The UoN implements the TQM model in a cyclic manner as shown in Fig. 2. At planning stage, the university develops the necessary policies and procedures to achieve the strategic plan of the university covering the three aspects of the HEI; teaching and learning, research and services. At this stage the executive leadership (Chancellor, VC, Deans, and Heads of Departments) play a significant role as well as the faculty in different colleges and directors of service centres.

At the second stage, the UoN started implementing the policies and procedures. The Center for Academic Excellence and Quality Assurance (CAEQA) was established in 2008 to monitor implementation of policies and procedures in managing the quality processes at the UoN. Thereafter, the Centre has expanded to the current Deanship for Academic Excellence and Quality Management "DAEQM" in 2012, it aspires to achieve quality excellence at all levels and functions at the UoN and thus will become internationally-recognized for quality practice standards.

Introduction

In Oman, the Ministry of Higher Education is highly concerned with the quality of teaching standards, student entry-level qualifications, campus conditions and quality of the teaching and learning experience. On the other hand, the Oman Academic Accreditation Authority established in 2001 started implementing a two stage, eight year accreditation process for all Omani HEIs in Sultanate. The initial accreditation Stage 1: Quality Audit ensures that the institute meets the international learning standards. At the same time provides clear systematic guidance in "Quality Management" to continuously improve the quality of the HEIs. Furthermore, Stage 2: Standards Assessment will be a collective valuation of the HEI against the national Omani standards.

Quality management systems have been present in higher education institutions "HEIs" over the last two decades worldwide. This has led to a significant level of debate among HEIs and with stakeholders on the relevance of such system to higher education [1, 3, 4 and 6]. Total Quality Management "TQM" is defined as a comprehensive management approach which requires contribution from all participants in the organization of work towards long-term benefits for those involved and society as a whole [5].

The University of Nizwa "UoN" is a nonprofit university in Oman, established in Nizwa in 2004 and currently has over 6,500 students from all regions of Sultanate of Oman and surrounding countries. The University has four colleges; Arts and Sciences, Economics, Management and Information Systems, Pharmacy and Nursing, and Engineering and Architecture. From the start the UoN focused on quality as stated in the vision of the university i.e. The University of Nizwa aspires to be a beacon (minaret) of knowledge and enlightenment as a prominent higher education institution of excellence. It is to achieve a worldwide reputation for the quality of its programs and graduates and international distinction for innovation, progress and development.

The University Comprehensive Plan (2000) and University Strategic Plan (2009) named academic excellence, leadership through research and technology, quality management, and sustainable development as the core values of the emerging institution.

The UoN has adopted the European Foundation for Quality Management "EFQM" excellence model as a non-prescriptive framework that establishes nine criteria (divided between enablers and results), suitable for any organization to use to assess progress towards excellence accordingly. However, the major challenge within the educational framework at the University has been acceptance and understanding among academicians on the implementation of TQM in the university structure. Faculty have seen quality management as an addition to work duties, commenting on the restriction of academic freedom, innovation, and mainly increasing the volume of work. Whereas other staff have seen that the HEI will benefit from forward planning, effective change in work management, higher academic standards, increased staff and student satisfaction, and therefore encompassing TQM effectively in the long run.

This paper presents the UoN experience with TQM in different phases from planning, implementation, results and improvement highlighting the difficulties faced and challenges ahead.

Abstract:

The competition between Higher Education Institutions (HEIs) and growing mandates for accountability by national and international accreditation associations, funding bodies are among the reasons behind the growing needs to focus on quality for higher education providers. Hence, the major concern among the HEIs is to implement Quality Management. The UoN adopted the European Foundation for Quality Management (EFQM) Excellence Model. Total Quality Management "TQM" has been championed at all levels of the University of Nizwa. The Board of Trustees has been responsible for overseeing the fulfillment of the vision, mission and core values. The University Academic Council evaluates all academic processes, and directs units to means of enhancement. The University Executive Board and the Deanship for Academic Excellence and Quality Management oversee adherence (consistent implementation) to quality at all levels, while all faculty contribute to Quality management through institutionalization. The UoN has developed a comprehensive pedagogic framework called "Quality Teaching Management System" (QTMS) to manage the quality of student teaching and learning and assessing student's performance. The system includes the teaching procedure, the role of faculty and students, responsibilities of the Head of Department, Deanship of Registration & Records, the Dean, and quality management on the implementation of teaching at the UoN. Applying TQM at the institution will add great value to educational framework benefiting all stakeholders and in the end the graduate. Embracing TQM will become intertwined within the university culture which in turn will be reflected in the graduate attributes and society satisfaction.

Keywords:

Teaching & Learning, Total Quality Management, Higher Learning Institution, University of Nizwa, Sultanate of Oman.

Quality Management System at The University of Nizwa, Sultanate of Oman

Waleed A. Thanoon
Ahmed K. Al
Abul Aziz Al Kindy
Rose Bahou