

The Participatory Approach in the Reform of Academic Curricula – Case Study of the Faculty of Dentistry at Damascus University – Syria

Mohamad Kayyal¹
Mayssoon Dashash²

Abstract

In 2005, the Higher Education Council at the Syrian Ministry of Higher Education passed a resolution requiring Public Universities to undertake a self-evaluation of their academic processes with the aim of improving the quality of higher education in Syria. Damascus University translated the concept of “quality in higher education” to signify “meeting the needs of stakeholders interested and affected by the educational processes”. Accordingly, the University embarked on a process to reform the academic, administrative and society outreach aspects of higher education in 2006. The process is carried out on two levels with the participation of students, academic members, administrative staff, and external stakeholders. At the University level, extensive surveys were conducted and a strategic plan was developed based on a redefined mission statement. At the faculties’ level, four pilot faculties were selected and detailed assessments of the current situation were conducted. In the mean time, trends in the academic fields and best teaching and learning practices with reference to leading countries from around the world were evaluated. Findings are being used to determine future orientations for the reform of academic curricula in accordance with the measures highlighted in the University strategic plan. In this paper, the participatory approach and good governance practices developed for the reform processes implemented in redefining the mission statement and in elaborating a strategic plan at the University level, along with outcomes achieved in the faculty of dentistry are presented. The purpose of this paper is to demonstrate the importance of involving various stakeholders for achieving a comprehensive curriculum reform that can be carried forward into the implementation phase in complex institutional and legal environments.

¹ Associate Professor in the Faculty of Civil Engineering and Head of the Centre for Quality Assurance in Damascus University. Ph.D. in Civil Engineering from the University of Texas at Austin, U.S.A. (1991), E-mail: mohamad.kayyal@qa-du.com

² Assistant Professor and Head of the Office for Quality Assurance in the Faculty of Dentistry, Damascus University. Ph.D. in Paediatric Dentistry from the University of Manchester, United Kingdom (2005), E-mail: mayssoon.dashash@qa-du.com

I. Background

In 2005, the Higher Education Council at the Syrian Ministry of Higher Education launched an initiative inviting all public universities to self-evaluate their academic programmes. The purpose of this exercise was threefold: (1) assess the performance of their academic and administrative processes; (2) highlight weaknesses in order to draft future strategies for improvement; and (3) establish criteria for performance assessment (Higher Education Council, 2005). By 2007, a wave of developments and an increased pace of change had occurred as part of the Government's reforms in higher education. These included the implementation of a reformed law for higher education; a strategic implementation plan at the Ministry based on the 10th five-year plan (SPC, 2006); new initiatives from the Ministry and other organizations; and outcomes of the Universities' self-evaluations coming on stream with implications for national policy. These have led to an intensive debate at the national level as to the definition and meaning of quality in higher education.

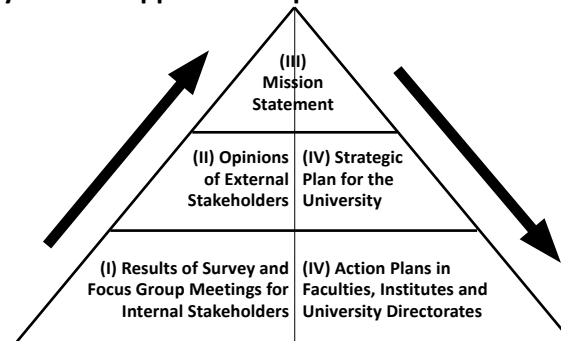
II. Defining Quality in Higher Education

In order to define quality, Damascus University was faced with the need to answer two basic questions: Who is interested in University quality? And who can make judgments on University quality? In 2008, and after having consulted various stakeholders including students, alumni, University staff, employees, and other institutions and organizations (Centre for Quality Assurance, 2007), the University came to the conclusion that there are no objective criteria to define quality. In fact, evidence had shown that the diverse stakeholder groups tended to emphasize the different aspects of the University quality according to their own particular interests. As a result, each group used its own concept to define quality. Concepts such as excellence, fitness of purpose, fitness for purpose, compliance, customer satisfaction, transformation, value for money, were all mentioned in one way or another.

III. Participatory Approach for Developing the University Mission Statement

Stakeholders' consultations and surveys allowed for the generation of an unprecedented amount of information, and yielded an in-depth analysis of Damascus University academic and administrative functions and relevant social influences of a critical nature on the quality of higher education. These findings served in the process for formulating the mission statement following a systematic approach as depicted in Figure 1.

Fig 1: a systematic approach adopted for curriculum reform



The surveys were conducted following participatory approach based on highlighting specific policies and practices to demonstrate their impact on quality in higher education. The surveys addressed crucial academic and administrative functions and social influences. Surveys were completed for undergraduate students, teaching staff, and key external stakeholder groups represented by alumni, parents of students and employers of graduates. Focus group meetings were also convened for administrative staff in faculties and University directorates. In total, about 8300 students, 700 teaching staff, 160 administrative staff, and 150 employers' representatives participated in this process between 2006 and 2007.

Survey findings provided clear evidence to the existence of challenging issues that require immediate attention, particularly in the fields of teaching and learning, and in resource management. On the other hand, survey results demonstrated positive aspects on social responsibility, such as the willingness of stakeholders to share the burden of improving quality of higher education in Syria, and their satisfaction and pride with Damascus University.

The evidence base provided by the surveys gave sufficient information for the University to redefine its mission statement and to elaborate a set of objectives leading to a strategic plan and a timetable for implementation. It also offered a baseline upon which the University can measure progress and impacts of the intended improvements. This evidence base was also supported by a consultative process of 80 internal and external stakeholders constituting a rainbow of people representing various socio-economic and geo-political groups in Syria.

The outcome of this process was a mission statement which focuses on academic programmes to support the economic and social development of Syria, and stresses the need to invest in people, organizational development, and strategic partnerships. The mission statement is worded so as to set direction, invite agreement and consensus, and unify members of the University. This was a crucial point as the redefined mission is the starting point for setting objectives for improvement, and constitutes a reference point for assessing success and performance. The mission statement of Damascus University is: *The mission of the University is to promote excellence in scientific research and academic programmes relevant to the economic and social development of Syria. It aims to produce graduates that are competitive in national and regional job markets, and capable of continuing their education and professional development. It does this through investment in people, organizational development, and also by strategic partnerships that support scientific research and campus-based teaching enhanced by community-based learning opportunities.*

The mission statement was subsequently presented to the University Council for review and approval. In March 2007, the University Council adopted the mission statement, and work proceeded to develop the strategic plan needed to achieve its strategic objectives.

IV. Development of the University Strategic Plan

The strategic plan of Damascus University was the product of the self-evaluation begun in 2006 and the extensive consultation with key representatives of faculties and administrative departments and directorates in the University. At least four workshops were convened in 2007 for key academic and administrative staff at the faculty level to discuss the contents of the plan. The primary purpose of the plan is to improve the quality of the full range of University activities. A secondary purpose is to provide clarity and focus for all staff members and employees of the University to share the mission, vision and priorities for improvement. Consequently, a strategic plan which incorporates the mission statement into a set of 12 strategic objectives dealing with University autonomy, improvement of academic and administrative processes, social outreach,

and development of a University-wide quality assurance system, was developed. Each objective is detailed into a number of measures, a time-table for implementation spanning from the 4th quarter of 2007 till the 4th quarter of 2010, and assigned responsibilities. The strategic plan also identifies key areas for early consideration in the University; adopts a phased approach moving in stages to more advanced and challenging objectives; and identifies potential financial resources and technical support required to achieve its objectives (Centre for Quality Assurance, 2007). Today, the strategic plan is viewed to provide a flexible framework that enables all University faculties and departments to formulate their own operational plans, and to estimate necessary human and financial resources required for implementation. The strategic plan was adopted by the University Council in October 2007.

V. Developing the Framework for the University's Quality Assurance System

In order to develop its quality assurance system, the University adopted an approach based on the national policy reforms that is best summarized as follows (Brown, 2008):

- Establishing sustainable systems within the University in order to:
 - place responsibility and the necessary authority within the faculties and other equivalent units;
 - raise the level of confidence among all stakeholders in the quality of the University's education and its supporting administrative services; and
 - ensure continuing improvement.
- Mission-related, meaning that mission statements in each faculty determine the detailed preparation of specifications that in turn inform self-evaluation of the degree of success.
- Outcome-related, meaning that these specifications focus of the quality of the learning and the outcomes.
- Securing relevance to society and economy in the curricula and related academic research activities.
- Using the national framework for ensuring that the University's internal quality assurance system secures the relevance and confidence of the range of stakeholders.
- Providing briefing, training and other support within an overall policy for professional and organizational development.

VI. Implementation Steps in the Pilot Faculties

Following the approval of the strategic plan by the University Council in October 2007, a Centre for Quality Assurance, directly tied to the University President, was established in January 2008. Briefings on the development and objectives of the Strategic Plan were conducted for the individual faculties whereby teaching staff and employees were informed of the contents of the plan. Faculties were requested to nominate quality coordinators to act as liaison officers between the Centre and their faculties. The coordinators attended a number of capacity building courses and seminars in order to increase their level of awareness and knowledge of quality aspects in higher education. At the same time, seven faculties volunteered as pilot institutions for implementing the second strategic objective concerned with the development of existing educational programmes. In order to validate these nominations, the Centre for Quality Assurance conducted individual visits; first to the dean, then the faculty/departmental

councils, and finally teaching staff to explain yet again the goal of the plan, and to ensure process ownership. As a result, the number of pilot faculties dropped to four. These were the faculties of Sciences (chemistry department), Dentistry, Pharmacy, and Medicine. The experiences of the four pilots are intended to inform the process when other faculties participate starting in academic year 2009 - 2010.

Pilot status was granted by the University Council to the four faculties, and four working groups were formed. The aim was to test pilot processes that would turn academic programmes from input-based teaching and learning to output-based curricula. Initial attempts in the first quarter of 2008 in the Chemistry department and Pharmacy faculty demonstrated the need for fundamental curriculum reforms. As a result, a process for reform of academic curricula was formulated and operationalized in two principal phases:

1. Desk study conducted by an external academic expert in the field to identify and analyze selected appropriate academic programmes from a scan of best international practices, with reference to leading countries from around the world including Europe, USA, Australia, Far East and Middle East.
2. Initial assessment conducted by the working group to review current programme structure and key features including SWOT analysis (strengths, weaknesses, threats and opportunities). The review includes assessment of the mission statement developed in consultation with teaching staff; assessment of current curriculum; assessment of research activities; assessment of market needs; and assessment of activities currently undertaken by the faculty in relation to outreach with society.

Assessment findings in the pilot faculties were published and subsequently presented in a general faculty meeting. The purpose of the meeting was to identify teaching staff to attend the faculty stakeholders' workshop. In the mean time, undergraduate and graduate students were recruited, and external stakeholders were invited to participate in the stakeholder workshop. Stakeholder workshops were organized as a single-day event whereby working groups were formed and asked to assess the faculty's mission statement and to express their opinions on four key issues:

1. The characteristics of the Damascus University faculty graduate
2. Faculty-community outreach
3. Key trends in practice and education that should be included in the undergraduate faculty curriculum
4. Opportunities for continuous professional development and knowledge transfer between the faculty and its stakeholders

Findings from the stakeholder workshops provided an evidence base to validate the faculty mission, and to create a road map for developing new programme aims and learning outcomes. A detailed action plan has been developed by the working group in each faculty which provides a road map for developing programme and courses specifications. The plan stresses the importance of validating the information collected from the stakeholders, particularly in the domains of transferrable and personal skills. The plan also provides for researching new curriculum models and curriculum mapping that focus on horizontal and vertical integration of course modules. It further requires that faculties assess potential accreditation criteria and develop curriculum models that fulfill these requirements. In order to assist the working groups in their work, three supporting groups were formed in each faculty with the aim of institutionalizing work in the faculty: A communication group to raise awareness; an organizational group to introduce institutional measures; and a capacity building group to provide the skills and knowhow to

accomplish the required tasks. The following are the outcomes of this participatory process in the faculty of Dentistry.

VII. Outcomes of the Participatory Process in the Faculty of Dentistry

1. Developing the Mission Statement

Following the presentation of the strategic plan at the faculty of Dentistry, a quality coordinator was nominated and a working group consisting of ten teaching staff members was formed. The first task mandated to the working group was to moderate the process for formulating the faculty mission statement. Workshops were held and the process for developing the mission statement was explained to faculty members. Specifically, faculty members were asked to answer six basic questions that constituted the building blocks of the mission statement:

- 1) *What* does the faculty do (e.g. educational programmes, research, etc.)
- 2) *Why* does the faculty undertake this work (e.g. meeting social and economic needs, providing better graduates for market, etc.)
- 3) *With* whom does the faculty work (e.g. strategic partners, etc.)
- 4) *Where* does the faculty work (e.g. campus-based, at the work place, community-led, etc.)
- 5) *How* does the faculty achieve its aims (e.g. more responsibility to learning with students, collaborative strategic partnerships, collaborative, decentralization, etc.)
- 6) *How well* (e.g. excellence model, average, etc.)

Based on answers collected from over 30 out of 70 faculty staff, a mission statement was developed and later approved by the faculty council. It reads as follows:

The mission of the Faculty of Dentistry is to promote excellence in producing a graduate who is highly qualified in the ethics, art and science of Dentistry, and to strengthen the faculty-community relationship by providing the best oral care to society. The Faculty of Dentistry also aims at excellence in scientific research, closely tied with the latest international developments, and relevant to society's needs and the economic and social development of Syria and the Arab World. The faculty accomplishes its mission through investment in people and by enhancing collaboration with healthcare sectors, in addition to strategic partnerships that support educational development, learning opportunities, and professional development.

The mission was later validated in the Stakeholder meeting, and received overwhelming approval from all stakeholders.

2. Assessment of the Current Situation

The current situation in the faculty was defined by collecting general information and data related to the faculty, its staff and students. A review of the current dental curriculum was also undertaken. The subjects and tasks required from students and data on the undergraduate and graduate programme such as number of graduates, admissions requirements and requirements for passing levels and grades were evaluated. A questionnaire indicating a list of personal and professional skills (implying effectiveness and continuing skills development to higher education standards) for dental graduates was designed to provide information specific to market needs of graduates. An assessment of the findings of market need analysis is underway. Scientific research undertaken by faculty staff was assessed. All activities in relation to outreach with society were addressed. A detailed report explaining the current situation and infrastructure of

the faculty was prepared and documented. The report was reviewed and approved by the dean of the Faculty.

In parallel, the faculty invited an expert³ in dental education and quality assurance in dentistry from King's College (University of London) to provide an assessment about international trends in dental education, in addition to offering guidance and advice to the working group during curriculum reform. The main findings from both assessments provided the following conclusions:

- The education of dental students in Damascus University consists of five years of professional (pre-doctoral) training. The building blocks are based on 74 subjects.
- The curriculum generally includes basic science and preclinical instructions in the first three years while clinical subjects are taught in the fourth and fifth years.
- Clinical experience can be obtained through attending and practicing dentistry in different clinics in the dental school. Practice in community clinics or outreach clinics is only available through two weeks camping in communities which suffer from insufficient healthcare services.
- Student exchange programmes with various countries are available for the top ten dental students each year. These are regulated by agreements between Damascus University and other Universities.
- There are no studies evaluating the competence and satisfaction of dental undergraduates or graduates. A questionnaire was designed to investigate this quality aspect. Data collection is underway.
- The curriculum of the faculty of Dentistry is traditional in that it is teacher-centered, discipline- and hospital-based.
- New teaching and learning methods such as "enquiry-based" learning, "case-based" activities, "course-assisted" learning, and use of "web-based" resources do not have a major role in learning and are not part of the programme.
- Problem-based learning (PBL) and clinical problem solving approaches are still in their fetal stage since inter-departmental collaboration is not strongly emphasized.
- Critically Appraised Topics (CAT) are not part of the programme.
- There are some projects and research activities undertaken by undergraduate dental students. These are optional as the faculty council has established the annual scientific research competition in order to encourage students to carry out research.
- Research undertaken is significant. The research portfolio is capable of promoting excellence, but a strategic approach would be advisable.
- Research funding is limited and directed to postgraduate students rather than research groups working to a strategic plan.
- There is no sound understanding between the Syrian Dental Association, Syrian specialist dental societies, and the Faculty to ensure a continuing dialogue related to their expectations of the graduate's skills and competence to practice dentistry safely in Syria.
- A number of faculty staff aspire to improving the learning environment for the student to attain better knowledge and clinical skills by engaging with modern educational methodologies.
- It is essential to reinforce the role of dental students and dental employers in curriculum reform, and to organize another stakeholder meeting before moving to the next phase.

³ Expert financed by the British Council



3. Stakeholder Workshop

The stakeholder workshop took place on 27 January 2009 to discuss the process of educational reform in the faculty of Dentistry. In addition to students and faculty members, participants representing the Ministry of Health, Ministry of Higher Education, military services, the Syrian Dental Association were in attendance. The meeting discussed and approved the mission statement adopted by the faculty, then proceeded to address the four broad questions related to curriculum reform.

The outcome of the stakeholder workshop at the faculty of Dentistry confirmed society's need for a dental graduate fit for the 21st century, who can fulfill the admission requirements of leading dental colleges from around the world. Stakeholders stressed the need to undertake the necessary measures by the faculty to improve the delivered programme in response to continued changes in dental knowledge; materials and equipments; methods of delivering oral health care; demands of dental students and graduates; and the ever-changing expectations of society for oral healthcare. Moreover, the stakeholders' message informed staff in the faculty of Dentistry about the need to address the issue of continuous professional development, and improving teaching and learning methods in order to create a new dental curriculum which emphasizes evidence-based dentistry.

These issues constituted a roadmap for the working group in the faculty in their subsequent task to define programme aims and intended learning outcomes necessary to produce a relevant, fit-for-purpose dental academic programme in the faculty of Dentistry in Damascus University.

4. Curriculum Models and Mapping

The report prepared by the external academic expert provided fertile grounds for intra-faculty discussions on the way forward. The main issue currently under discussion is how to select the appropriate curriculum model that best fulfills the faculty mission; stakeholders' requirements; and achieves excellence in teaching as noted in the University mission statement within the existing context environment and external limitations.

Research papers collected by faculty under the leadership of the quality coordinator were posted on the web site of the Center for Quality Assurance (www.qa-du.com) in order to provide faculty members with up-to-date information on this topic. To date, the web site has been accessed by most teaching staff in the faculty of Dentistry, and some articles registered over 250 hits. Published information opened the door for new topics which were never discussed previously in the faculty and amongst members of the working groups. Examples include:

- The Bologna Declaration and its merits in converging and harmonizing the higher educational system inline with the European countries.
- The role of the "Thematic Network (TNP) DentEd" funded by the EU in converging and harmonizing the various dental curricula, and for transferring expertise and activities, including site-visitation and quality assurance systems, to the "Association for Dental Education in Europe" (ADEE), (Plasschaert et al, 2005).
- The new model of curricular structure in dentistry developed by ADEE and DentEd (Plasschaert et al, 2006) which is organized in modules according to the European Credit Transfer System "ECTS" (Plasschaert et al, 2007).
- The ADEE and DentEd 14 requirements for quality assurance in dental education and their 'toolkit' which was developed for supporting dentistry faculties for meeting these requirements (Jones et al, 2007).
- The Profile Competence Document (PCD) which was revised in 2008 and published in the



ADEE website after consulting National and European Dental Associations (Cowpe et al, 2008).

- The profile of the new European dentist and its implications on the contents of the curriculum of the faculty of Dentistry in terms of graduating a dentist who:
 - has a broad academic and dental education and able to function in all areas of clinical dentistry
 - trained in biomedical science
 - able to work together with other dental and health care professionals in the health care system
 - has good communicative skills
 - prepared to undertake continuing professional development supporting the concept of life-long learning
 - able to practice evidence-based comprehensive dentistry through a problem solving approach, using basic theoretical and practical skills
- The possibility of:
 - changing the traditional curriculum structure and integrating basic, medical and dental sciences both vertically and horizontally (Snyman and Kroon, 2005);
 - offering student-centered learning (Oliver et al, 2008) that would inspire students to become life-long learners; and
 - adopting curricular requirements recommended by ADEE and DentEd from which some suggestions were formulated.

5. Future Tasks

The development of a suitable curriculum model will be accompanied by capacity building programmes for all faculty members in order to introduce the concept of developing intended learning outcomes on the course level. This will be followed by detailed instructions for completing course specifications including teaching and assessment methods for the elaborated learning outcomes needed to fulfill programme aims. It is hoped that these tasks will be completed by end of summer 2009.

VIII. Conclusions

The participatory approach which was adopted in early 2006 in Damascus University has offered a unique opportunity for involving all relevant stakeholders in the reform process; a sign of good governance. This approach created ownership amongst University staff and students and encouraged involvement and volunteer work. Response from external stakeholders has been overwhelmingly supportive. The University carries out general stakeholder meetings in the beginning of every year to explain its reform process, its achievements and challenges. Over 270 participants of about 400 invitees attended its third meeting held in January 2009. This number was 100 percent higher than that of the previous year.

At the faculty level, the participatory process is offering teaching staff the opportunity to actively participate in improving their academic working environment. A unique approach was adopted to encourage the participation of everyone, while skeptics were asked to judge the process in the future and to get on board when they believe that success will be achieved. Not a single directive was issued from the University President or Faculty Dean to force anyone to participate in this process. However, extensive efforts have been exercised by the Center for Quality Assurance



and the Faculty Quality Coordinator to convince people to join the working groups and to participate actively in the reform process. Ultimately, it is quite clear that future tasks cannot be accomplished without the full participation of all faculty members.

Finally, the participatory approach opened doors for frank discussions on issues which no one would raise in the past. The Bologna process, curriculum integration, non-traditional teaching and learning methods, alternative assessment methods, student-centered teaching and learning, self-evaluations and peer reviews, are some of the new concepts introduced which are changing the academic culture of Damascus University. The road to quality is long, but a thousand mile trip starts with the first mile.

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