Outcomes-based Education at Philadelphia University

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Abstract

Higher education in Jordan has witnessed over the last decade important changes in the design, provision and delivery of high-quality teaching materials, and in the development of quality assurance delivery and assessment mechanisms conducive to the enhancement of the teaching – learning process.

The focus of this paper will be on the theory and practice of outcomes-based education at Philadelphia University (PU) in respect of curriculum design, implementation and assessment with special emphasis on applying learning outcomes in the Jordanian national context, and relating them to the development of the nation's human capacity and knowledge society.

The paper will also present the outcomes-based model of education adopted by PU, and highlight its positive impact on the competence, performance, and employability of PU's graduates, as well as the University's visibility.

Keywords: Outcomes-based education, curriculum design, knowledge society, Philadelphia University

1. Introduction

Since 1980 the responsibility for higher education institutions in Jordan has been entrusted to the Higher Education Council, the Ministry of Higher Education (MOHE), the Accreditation Council, and/or the Higher Education Accreditation Commission (HEAC) established in 1980, 1985, 1998, and 2007 respectively. At present this responsibility is shared by MOHE and HEAC with the latter being responsible for:

" … improving the quality of Higher Education in the Kingdom and assuring its quality; encouraging institutions of Higher Education to open up and interact with international universities, institutes of scientific research, and accreditation and quality assurance agencies, and developing Higher Education through assessment criteria congruent with international standards" Article 4 of Law # 13 for the year 2009, (the amended version of The Higher Education Accreditation Commission Law # 20 for the year 2007).

The above responsibilities are informed by, and in harmony with provisions a, d, i, and k of Article Three of Law # 33 for year 2009: Higher Education and Scientific Research Law, which states the aims of higher education in Jordan. These provisions focus on the alignment of disciplines and qualifications with the needs of society; making available to the students an academic, research, psychological, and social environment conducive to excellence, innovation, and critical thinking; encouraging, supporting, and raising the standard of scientific research with special emphasis on applied research that contributes to the development of society; and establishing close links between academic institutions and the private and public sectors in order to develop these two sectors through academic consultation and applied scientific research carried out by competent Higher Education institutions.

In its quest for excellence, and in order to contribute to the development of Jordan's human capacity and knowledge society, MOHE, with the support of the King Hussein Fund for Excellence and the help of the British Quality Assurance Agency, developed the process of academic assessment and quality assurance and enhancement at Jordanian institutions of higher education.

Philadelphia University (PU) realized the importance and value of quality assurance, and adopted it in theory and practice because it holds institutions of higher education accountable to:

- the students and their parents as regards the quality of academic and professional training
- the government as regards investment and funding
- the society and nation as regards building the nation's human capacity, and contributing to the general welfare of society.

and because it focuses on:
- benchmarking of academic programmes.
- measuring success in terms of performance that is a function of competence through the realization of outcomes.
- identifying the institution's strengths, weaknesses, opportunities and threats through periodic performance analysis.
- measuring the degree of success in realizing the institution's intended learning outcomes, and the effectiveness of strategies adopted for realizing them.
- improving weak points revealed by the institution's self and peer review and evaluation.

Philadelphia University's adoption of an outcomes-based approach to Higher Education in curriculum design and implementation as an integral component of its quality assurance policy is informed by the provisions of the 2009 Higher Education Law, the 2009 HEAC Law, and MOHE's process of academic accreditation, validation and assessment. It is also underpinned by its mission statement, which aims at developing Jordan's human capacity by providing the market with competent university graduates trained in an academic, cultural, professional, and social environment contributive to the development of citizens who are knowledgeable, open-minded, reflective, caring, balanced, principled, life-long learners, successful communicators, entrepreneurs, and risk takers.

Another reason why PU adopted an outcomes-based approach to university education has been in response to the fact that most Higher Education stakeholders (students and their parents, university academic staff, university administrations, accrediting boards, Ministries of Higher Education, and employers) consider the educational system lacking in preparing students for real life and market demands and are calling for improved curricula, teaching/learning materials and methodologies, evaluation procedures, and rigorous tools of accountability.

A third reason has to do with PU's focus on:

- providing excellent education informed by the most-recent findings of research and scholarship.
- playing a major role in the development of Jordan's human capacity.
- providing students with the appropriate academic, cultural, professional, and social environment conducive to the development of their knowledge and intellect.
- contributing to student employability and mobility.
- working toward establishing a national, and regional area of education.
- contributing to the internationalization of education.

2. History and characteristics of OBE

2.1 History of OBE

OBE is not as recent and revolutionary as many educationists think. The use of intended learning outcomes (ILOs) to measure the acquisition of educational competence and performance by students goes back to 1930 when Ralf Taylor pioneered an objectives – based approach to education in the United State of America. As Maher (2004:46) points out, outcomes-based curriculum development was underpinned by Bloom's *"A Taxonomy of Cognitive Objectives, 1956",* which influenced curriculum development and quality assurance across time and space with its emphasis on the classification of student thinking and learning into six major taxonomies: knowledge, comprehension, application, analysis, synthesis, and evaluation.

These taxonomies greatly influenced the British Quality Assurance Agency with its emphasis on "benchmarking, programme specifications and institutional audit, that pushed the HE sector as a whole towards a learning outcomes approach" (ibid: 47).

In 2008 the panel of the Bologna Seminar on "Learning outcomes-based higher education: The Scottish experience" held on February 21-22, 2008 at Heriot-Walt University in Edinburgh endorsed learning outcomes as " the basic building blocks of the Bologna package of educational reforms" and that this methodological approach is at heart of the paradigm shift from teacher to student-centered learning"(Roberts 2008:9).

Judith Vincent at the University of West Scotland argued that "Learning outcomes .. had resulted in enhanced coherence of the learning experience, greater transparency, increased dialogue with stakeholders, more opportunity for students to manage their own learning, and better support for transitions into and

out of learning programmes at points that suited the needs of the students" (ibid: 1).

Jill Little of the "National Union of Students Scotland" focused on the impact of learning outcomes on the students, and argued that they "provided students with a clear idea of what was expected, helped them to identify their own personal and professional development, increased their sense of ownership of their educational experience and encouraged them to engage more actively in their learning…. [and facilitated] the process of recognition and mobility between study programmes and institutions … [and] enhanced employability by providing clearer information to potential employers about what an applicant had learned" (ibid: 2).

2.2   Characteristics of OBE

The major distinguishing characteristics of outcomes-based curriculum design and implementation are as follows:

- It underscores the educational experience being learner-centered, interactive, and activity-based instead of being teacher and content based.
- It focuses on formative ongoing assessment albeit not to the exclusion of summative   assessment.
- It considers lecturers / instructors as mediators between students and learners rather than dictators or mere facilitators: " we teach to facilitate; we do not facilitate so as not to teach"; we are tasked with creating opportunities for active learning for our students, this is not at all the same as thinking it is alright to leave students to "get on " with learning on their own" (SAIDE: 15).
- It follows a design-down approach in the provision of knowledge.
- It follows an up-ascending process for the realization of outcomes.

- It underscores the importance of improvement through evaluation and feedback.
- It contributes to the higher education institutions' transparency and visibility.
- It contributes to the mobility of both academic staff and students.
- It contributes to the employability of the graduates of higher education institutions as it provides them with candidate profiles specifying the required professional and practical skills, interpersonal skills, and communications skills required for the job.
- It enables parents and students to choose the appropriate line of study.

3. Adoption of Outcomes-based Education by PU:

As part of its quality assurance process, and after its Faculty of Information Technology participated in the quality assurance process (initiated by MOHE) and was awarded the King Hussein Fund for Excellence (KHFE) first prize among all participating public and private universities in 2003, it adopted the quality assurance process and culture for all its programmes.

In order to manage and enhance the QAP, it established The Development and Academic Training Center (DATC), and The Accreditation and Quality Assurance Office (AQAO), with the following responsibilities:

DATC's terms of reference are as follows:
- Improving the overall scope and quality of instruction.
- Organizing and conducting seminars and workshops to promote excellence in teaching and research.
- Cooperating with PU faculties in improving programme structure, delivery, evaluation, and modification in the light of internal and external reviews and reports.

AQAO's terms of references are as follows:

- Managing the University's QA process.
- Developing and implementing measures for promoting, coordinating and monitoring the effectiveness of self-evaluation, and external audit reviews.
- Sharing and disseminating good QA practice within and outside the University.
- Liaising with MOHE and KHFE in respect of matters relating to accreditation and QA.
- Reporting to the University QA committee on current practice, and future developments.

The outcomes-based curriculum design and implementation model in effect at PU is indicated in Figure 1, which informs its action plan indicated below.
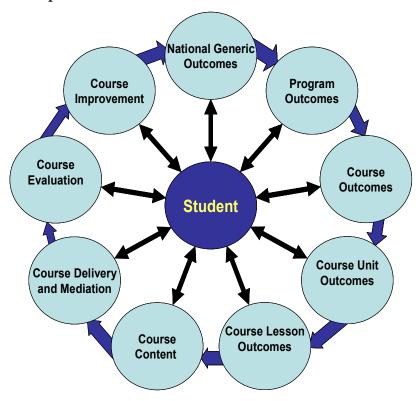

Figure 1: Outcomes-based curriculum design and implementation diagram

PU's action plan for using the outcomes-based curriculum design and implementation comprises the following steps:

Step 1: Conducting needs analysis aimed at establishing students learning needs, i.e. national inter-programme outcomes.

Step 2: Establishing the learning outcomes for BA programmes in the faculties of Arts and the Humanities, Administrative and Financial Sciences, Science, Law, Engineering, Information Technology, Pharmacy, and Nursing, with emphasis on knowledge and understanding, critical thinking, practical skills, professional skills, self–managed learning skills, communication skills and computer literacy skills.

Step 3: Establishing the learning outcomes for the programme courses, the course units, and the course lectures and presentations.

Step 4: Reviewing and restructuring the curriculum in order to align it with the new learning outcomes.

Step 5: Agreeing course content as regards both printed, and audio-visual material on the one hand and required and support material on the other hand.

Step 6: Delivering the programme and course content through lectures, tutorials, seminars, debates, labs, working groups, self-learning, e-learning and web-based learning.

Step 7: Assessing student achievement through formative quizzes, tests, homework assignments, reports, research projects, and summative examinations.

Step 8: Determining and reflecting upon learning outcomes acquired and internalized by students and comparing them with the intended learning outcomes.

Step 9: Making the necessary changes, modifications, and/or emendations, and improvements in the light of data provided in step 8 above.

In order to manage the implementation of the above action plan, PU formed QA committees at the different management levels comprising its top level administration, faculties, academic departments, working

groups, faculty members and students, and also established the lines of communication among them, and between them and relevant faculty and department councils, academic staff members, and students as indicated in Figure 2.
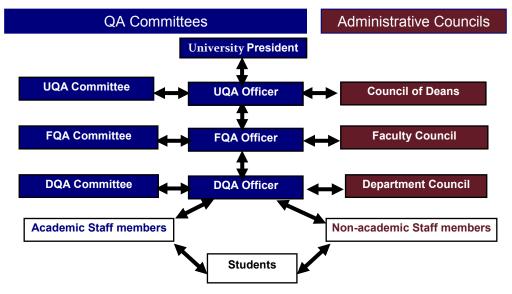

Figure 2: General layout of the overall QA management process

Following the design-down approach, the line of communication between QA committees and other university, faculty, and department councils is as indicated in Figure 3.
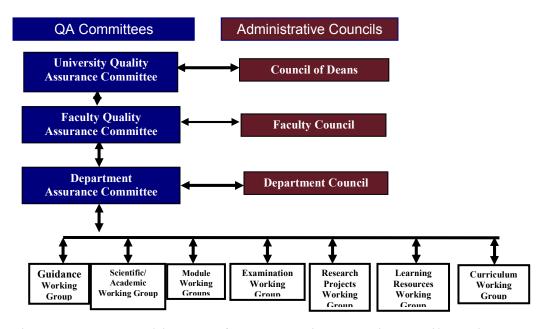

Figure 3-a: General layout of QA committees and councils at the University level
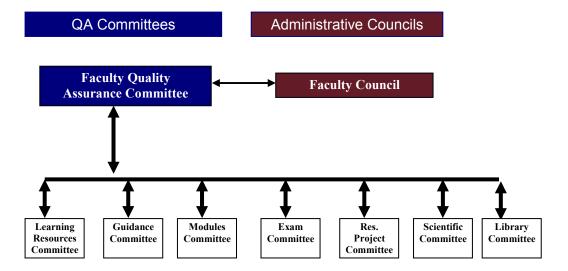
QA Committees	Administrative Councils

Faculty Quality Assurance Committee	⟷	Faculty Council

Learning Resources Committee	Guidance Committee	Modules Committee	Exam Committee	Res. Project Committee	Scientific Committee	Library Committee

Figure 3-b: Layout of QA committees and councils at the faculty level

QA Committees	Administrative Councils

Department Quality Assurance Committee	⟷	Department Council

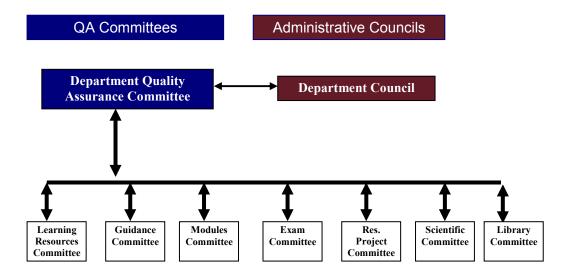| Learning Resources Committee	Guidance Committee	Modules Committee	Exam Committee	Res. Project Committee	Scientific Committee	Library Committee

Figure 3-c: Layout of QA committees and councils at the department level

4. Enhancement of QA at PU

Enhancement of the QA process at PU comprises the following measures:

- Induction training to all faculty members in curriculum design; writing, review, and modification of outcomes; testing and evaluation.
- Using the following course syllabus outline for all courses on offer by the different faculties.

Course Syllabus Outline

Philadelphia University course syllabus outline (for all courses offered by the different faculties)
- Course description
- Expected learning outcomes:
    - Knowledge and understanding
    - Cognitive skills
    - Communication skills
    - Practical/ professional skills
- Study calendar:
    - Weekly course material
    - Mid-term exam
    - Final examination
- Referring to the course material and other sources:
    - Citing material from the course
    - Plagiarism (definition and strategies for avoiding accidental plagiarism)
    - Listing sources in a bibliography
    - References list styles
- Answering questions in an assignment:
    - What to do if the question is not clear or seems ambiguous
    - What to do if you disagree with the arguments being put in the course material
    - Should personal experience and material from other sources be included?
- Marking criteria for assignments, tests, and final examinations:
    - The relevance of the answer to the question
    - Knowledge and understanding of course material
    - Ability to discuss and evaluate explanations and arguments
    - Ability to present and pursue an argument
    - Ability to express oneself clearly using appropriate academic conventions

(Two samples of detailed course syllabi are included in Annex 1 and relate to a course offered by the English Department, and another course offered by the Computer Engineering Department).

- Preparing and adopting a template for program specifications for all BA and MA programmes in the university.

(Annex 2 includes two samples of programme specifications: one sample for the English Language and Literature Programme, and another for the Computer Engineering Programme)

- Discussing, agreeing, and adopting a standard QA semester agenda (QASA) for all courses. As indicated in annex 3, the agenda provide a detailed road map for all steps necessary for the proper provision, evaluation, and emendation of courses, and also establish the responsibility, and line of authority among the different parties involved in the teaching learning process comprising:
  - Deans, sub-deans, and faculty committees.
  - Chairpersons of academic departments.
  - Different department committees and working groups.

They also establish the time line for the submission of reports to the relevant authorities and committees on the progress of course content provision, evaluation, and improvement.

- Creating PU's Quality Assurance Handbook
- Creating PU's Alumni Office
- Preparing and publishing PU's *Undergraduate Students Handbook* for each academic programme
- Designing and using questionnaires for receiving feedback from students and employers.

5. Enhancement of PU visibility due to emphasis on QA and outcomes-based curriculum design and implementation:

- In 2001 an external review was conducted by the British QAA for Computer Science programmes at Jordanian public and private universities, and was reviewed in 2003. The CS programme offered by the PU Faculty of Information

Technology was awarded the KHFE first prize among all participating public and private universities.

- In 2004 the Business Administration programme was reviewed by a British Quality Assurance team, and received 21 points on a scale of 24 points.

- In 2006 the Law programme was reviewed by a British QA team, and subsequently awarded the first prize by the KHFE among all participating public and private universities. The Accounting programme was also reviewed in 2006 but by an American Quality Assurance team. Although it was not awarded the first prize, it was highly praised by the team.

- In 2007 a follow-up process was conducted on the CS programme. The reviewers' report was highly complimentary and referred to the QA process for the programme as being the only robust and mature process among all participating institutions.

- In 2008 The Finance and Banking Sciences programme, and the English Language and Literature programme were reviewed by an American Quality Assurance team. The team's reports were highly complimentary.

- PU was the only private university in Jordan to appear in the 2008 webometrics ranking of the top 100 universities in the Arab World. It was also the only private university in Jordan in the same ranking in 2007 in the Middle East and North Africa.

- In 2005/2006 PU was the only private university in Jordan to receive official permission to start two post-graduate programmes in Computer Science, and English Language and Literature.

A final and important indicator of PU's success in living up to its mission and vision is that its graduates usually have little difficulty in securing good jobs as indicated in the table below.

PU graduates employment statistics

Faculty	Number of Graduates	Number of Graduates Employed	Percentage of Graduates Employed
Faculty of Arts	1279	870	68 %
Faculty of Science	1695	1241	73 %
Faculty of Administrative and Financial Sciences	6317	5304	84 %
Faculty of Law	1400	979	70 %
Faculty of Pharmacy	802	710	86 %
Faculty of Engineering	1610	1390	86 %
Faculty of Nursing	403	251	62 %
Faculty of IT	2073	1760	85 %
Total	**15579**	**12505**	**80 %**

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