Quality Assurance for Competence-Based Higher Education: Context of Jordan

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Competence-based higher education:

- Student-competency is an outcome of the teaching/learning process.
- Student-centered learning environment.
- Intended learning outcomes (ILOs) at the program level.
Fig. 1 Internal Quality Management (IQM): Competence-Based Higher Education Model

Source: Handbook for IQM-HE, Erasmus
http://ec.Europa.eu/programmes
Internal Quality Managements (IQM):

- The Bologna process lead to reforms of the commons framework for quality and guidelines in European Countries for Bachelor-Master-PhDs.

- Strategic and academic cooperation among HEIs in the Arab region is common standard of competence-based higher education.

- Three steps of developing IQM:
  - Define the competence level of intended learning outcomes (ILOs).
  - Construct an alignment with the outcomes with curriculum, teaching pedagogy, assessment, learning strategy and context.
  - Develop a benchmark of measures of quality enhancement and assurance achieved with gap analysis of the ILOs.
Three main QA of the Bologna Process:

1. Common set of Internal and External QA and QA agencies standards and guidelines.
2. Adoption of recognition and transparency tools.
3. Establishing Quality Assurance Registry to register quality assurance agencies (QAAS) through external reviews and compliance with norms and standards.
Standards and Guidelines Framework:

- Responsibility lies in HEIs for QA.
- QA needs to respond to diversity of higher education, programs and students need.
- QA to support creation of quality culture.
- QA responds to students, stakeholders and society needs.
- QA requires an innovative learning and research environment.
- QA should deliver entrepreneurs and innovators to develop the marketplace.
I. Standards for Internal Quality Assurance (IQA)

1. Policy for quality assurance (QA):

Standards:

Institutions should develop a policy for quality assurance and be integrated with the strategic management.

Guidelines:

- Policies and processes form the main pillars of institutional quality assurance system.
- This will contribute to accountability and develop a culture of QA.
- QA policy should cut across the institution.
- QA policy should reflect the relationship between research and learning/teaching, it should support.
  - Organization of QA system.
  - Departments, faculties, leadership, staff and students to engage.
  - Academic integrity, freedom, vigilant against academic fraud.
  - Guarding against intolerance and discrimination against any staff or student.
2. **Design and approval of programs:**

**Standards:**

- Programs should be designed to meet the objectives of intended learning outcomes (ILOs).
- Qualifications should be communicated to the national qualification framework.

**Guidelines:**

- Study-programs are at the heart of the institution mission.
- They provide students with knowledge and skills to influence career development.
Programs:

• Designed with overall objectives and institutional strategy.
• Explicit intended learning outcomes (ILOs).
• Involve students and stakeholders.
• Designed to enable smooth student progression.
• Adhere to the mission and objectives of the institution.
• Benefit from external professional experience.
3. **Student-centered learning, teaching and assessment:**

**Standards:**
Institutions should ensure that programs are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach.

**Guidelines:**
- Student-centered learning to stimulate motivation, reflection and engagement in the learning process.
  - Respects and use flexible ways of learning accordingly.
  - Use different modes of delivery and pedagogical methods.
  - Autonomy of the learner, with adequate guidance from the teacher.
  - Promotes mutual respect within the learner-teacher relationship.
  - The assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary, is linked to advice on the learning process.
4. **Student admission, progression, recognition and certification:**

**Standards:**

- Institutions should publish regulations covering all phases of the student “life cycle”, e.g. student admission, progression, recognition and certification.

**Guidelines:**

- Providing support for students to make progress in their academic career. It is vital to have fit-for purpose admission, recognition and completion procedures.
- It is important that access policies, admission processes and criteria are transparent.
- Institutions need to collect, monitor and act on information on student progression.
- Fair recognition of higher education qualifications, periods of study and prior learning.
- Graduation represents academic achievement.
- Students need to receive documentation of the qualification gained, period of study, including achieved learning outcomes level, content and status of the studies that were pursued and successfully completed.
5. Teaching staff:

Standards:

Institutions should assure the competence of their teachers. They should apply fair and transparent processes for the recruitment and development staff.

Guidelines:

- The teacher’s role is essential in creating a high quality students experience and enabling the acquisition of knowledge, competences and skills.
- Stronger focus on learning outcomes require student-centered learning and teachers who update themselves with skills and pedagogy.
- Supportive environment to work effectively.
  - Set up transparent and fair processes for staff recruitment.
  - Offer opportunities to promote the professional development of teaching staff.
  - Strengthen the link between education and research.
  - Innovation in teaching methods and the use of new technologies.
6. **Learning resources and student support:**

**Standards:**

Institutions should have appropriate funding for learning and teaching activities and ensure that adequate support of accessible learning resources.

**Guidelines:**

Institutions provide a range of resources to assist student learning, physical resources such as libraries, study facilities and IT infrastructure to human support in the form of tutors, counsellors and other advisers.
7. **Information management:**

**Standards:**

Institutions should ensure that they collect, analyze and use relevant information for the effective management of their programs and other activities.

**Guidelines:**

Reliable data is crucial for informed decision-making and for knowing what is working well and what needs attention.

- Key performance indicators.
- Profile of the student population.
- Student progression, success and drop-out rates.
- Students’ satisfaction with their programs.
- Learning resources and student support available.
- Career paths of graduates.
8. **Public information:**

**Standards:**

Institutions should publish information about their activities, including programs.

**Guidelines:**

To provide the intended learning outcomes of these programs, the qualifications they award, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students as well as graduate employment information.
9. **On-going monitoring and periodic review of programs**

*Standards:*

Institutions should monitor and periodically review their programs to ensure that they achieve the objectives set for them and respond to the needs of students and society.

*Guidelines:*

Regular monitoring, review and revision of study programs aim to ensure that the provision remains appropriate and to create a supportive and effective learning environment for students.

*Include:*

- ensuring that the program is up to date.
- changing needs of society.
- students’ workload, progression and completion.
- effectiveness of procedures for assessment of students.
- student expectations, needs and satisfaction in relation to the program.
- learning environment and support services and their fitness for purpose for the program.

Programs are reviewed and revised regularly involving students and other stakeholders.
10. Cyclical external quality assurance:

**Standards:**

Institutions should undergo external quality assurance on a cyclical basis.

**Guidelines:**

External quality assurance in its various forms can verify the effectiveness of institutions’ internal quality assurance, act as a catalyst for improvement and offer the institution new perspectives.

Quality assurance is a continuous process does not end with the external feedback. Therefore, institutions ensure that the progress made since the last external quality assurance activity is taken into consideration when preparing for the next one.
II. Standards for External Quality Assurance (EQA):

1. External quality assurance:

   **Standards:**
   
   External quality assurance should address the effectiveness of the internal quality assurance processes.
   
   **Guidelines:**
   
   Quality assurance in higher education is based on the institutions’ responsibility for the quality of their programs and other provision. To ensure the link between internal and external quality assurance, external quality assurance includes standard of internal QAS.
2. **Designing methodologies fit for purpose:**

*Standard:*

External quality assurance should be defined and designed specifically to ensure its fitness to achieve the aims and objectives.

*Guidelines:*

- bear in mind the level of workload and cost that they will place on institutions.
- take into account the need to support institutions to improve quality.
- allow institutions to demonstrate this improvement.
- result in clear information on the outcomes and the follow-up.

The system for external quality assurance might operate in a more flexible way if institutions are able to demonstrate the effectiveness of their own internal quality assurance.
3. **Implementing processes:**

**Standard:**
- a self-assessment or equivalent;
- an external assessment normally including a site visit;
- a report resulting from the external assessment;
- a consistent follow-up.

**Guidelines:**
External quality assurance does not end with the report by the experts. The report provides clear guidance for institutional action. Agencies have a consistent follow-up process for considering the action taken by the institution.
4. **Peer-review experts:**

*Standards:*

External quality assurance should be carried out by groups of external experts that include student members.

*Guidelines:*

- are carefully selected;
- have appropriate skills and are competent to perform their task;
- are supported by appropriate training and/or briefing.

The agency ensures the independence of the experts by implementing a mechanism of no-conflict-of-interest.
5. **Criteria for outcomes:**

**Standards:**

Any outcomes of the result of external quality assurance should be explicit and published.

**Guidelines:**

Outcomes of external quality assurance are based on pre-defined and published criteria, which are evidence-based.
Standards for External Quality Assurance (EQA):

6. Reporting:

Standards:

Full reports by the experts should be published, clear and accessible to the academic community, external partners and other interested individuals.

Guidelines:

- context description.
- description of the individual procedure, including experts involved;
- evidence, analysis and findings;
- conclusions;
- features of good practice, demonstrated by the institution;
- recommendations for follow-up action.

The factual accuracy of a report is improved if the institution is given the opportunity to point out errors of fact before the report is finalised.
II. Standards for External Quality Assurance (EQA):

7. Complaints and appeals:

**Standard:**

Complaints and appeals processes should be clearly defined.

**Guidelines:**

Ensure fair decision-making, external quality assurance is operated in an open and accountable way.

A complaints procedure allows an institution to state its dissatisfaction about the conduct of the process or those carrying it out.
III. **Standards Quality Assurance Agencies (QAAs)**

1. QAAs should be subject to external reviews to ensure the involvement of stakeholders. Should have explicit objectives and mission statement.

2. Should be established on legal basis and recognized by competent public authority.

3. Independence and autonomous without third party influence.

4. Should be subject to thematic analysis

5. Adequate resources.

6. Internal quality assurance and integrity of their activities.

7. Subject to cyclic external reviews.
**IV. ABET Criteria for QA:**

ABET accreditation is not a ranking system, but a form of quality assurance for programs in applied science, computing, engineering, and technology. Accreditation of QA is offered to program only. It is based on the following criteria:

1. Students
2. Program educational objectives
3. Program outcomes and assessment
4. Continuous improvement
5. Curriculum
6. Faculty
7. Facilities
8. Institutional support and financial resources
9. Program criteria: describe how program satisfies application.
V. UK Quality Assurance Agency (QAA) Evaluation of Quality Education:

QAA-based on the following criteria:

1. Aims and intended learning outcomes (ILOs).
2. Curriculum design content and organization.
3. Teaching, learning and assessment.
4. Student progression and achievement.
5. Student support and guidance.
6. Learning resources.
7. Quality management and enhancement.
VI. Jordanian Evaluation of the Quality Education: Accreditation and Quality Assurance Commission for HEI’s in Jordan

• Jordanian Quality Assurance Standards:
  1. Strategy planning.
  2. Governance.
  3. Academic program.
  4. Research and innovation and scholarship.
  5. Financial and human resources.
  8. Quality management and enhancement.
To Produce Quality Graduates:

Intended students outcomes (ISOs) in student-centered educational environment:

- Critical thinkers.
- Skills.
- Innovators and entrepreneurs.
- Able to communicate.
- Ethical and well mannered.
- Adapt to other cultures and workplace.
What Do We Need?

No-way, except for higher education to deliver:

- Quality
- Relevance
Quality:

- Dynamic graduates to innovate
- Guarantee quality of HE structure based on the triangle input-process-output
Relevance:

• To fit the workplace.

• To innovate to make-a-place.

• Be flexible, adapt to a new-place.

• Outcome- ILOs, what students expected to learn to fill-the-gap, where is needed.
Input:

- Sound admission policy.
- Admission on merits.
- Foundation course to raise new comers up to the standard.
Output:

- Sandwish-training with industry.
- Skilled IT.
- Flexible to shift career.
- Highly skilled (disciplines & interdisciplinary).
- To produce innovators and creative thinkers.
The process:

- Taught by hi-quality faculty.
- Up-dated curricula.
- Inducing-innovative learning environment.
- High quality learning resources.
- Students support and excellent education facilities.
- Blended and interactive learning environment.
Simply a straight forward Scheme:

- Hi-Quality Graduates fit for the marketplace
The Educational Cycle

Closing The Loop

Program Educational Objectives

Intended Student Outcomes ISOs

Assessment

Course Work

Surveys

Continuous Improvement
## New Trends in Higher Education

<table>
<thead>
<tr>
<th>Old Trends</th>
<th>New Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control the brain</strong></td>
<td><strong>Engage the brain</strong></td>
</tr>
<tr>
<td><strong>Spoon feeding knowledge</strong></td>
<td><strong>Competencies to construct knowledge</strong></td>
</tr>
<tr>
<td><strong>Closed source material (books)</strong></td>
<td><strong>Open source (electronic, internet)</strong></td>
</tr>
<tr>
<td><strong>Teaching-Centered</strong></td>
<td><strong>Student Learning-Centered</strong></td>
</tr>
<tr>
<td><strong>Knowledge based learning outcomes</strong></td>
<td><strong>Intended learning outcomes (skills)</strong></td>
</tr>
<tr>
<td><strong>Assessment knowledge driven</strong></td>
<td><strong>Assessment competencies and skills</strong></td>
</tr>
<tr>
<td><strong>Class lectures, at home homework</strong></td>
<td><strong>Class homework, learning at home</strong></td>
</tr>
<tr>
<td><strong>Teaching and research are mutually disjointed</strong></td>
<td><strong>Teaching and research are mutually complementary</strong></td>
</tr>
<tr>
<td><strong>Learning is directed to individual students</strong></td>
<td><strong>Teaching and learning is collaborative and team oriented</strong></td>
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QA in the Arab Region

Positives:

1. Arab region has accomplished 14 national commissions for QA. Some universities created accreditation and quality assurance for self-assessment unit on its campus.

2. Gulf universities created a partnership with universities abroad for recognition and quality assurance.

3. Association of Arab universities (AArU) established standards for accreditation and QA.

4. Arab network on quality assurance launched in 2007 as independent, not-profit NGO provides platform on QA.

5. UNESCO and world bank launched global initiative for QA policy capacity building.

6. UNDP funded regional initiative in 14 Arab countries, 73 programs in QA evaluation.
Negatives:

1. Outdated curriculum and contents
2. Lack of life-long learning culture
3. Lack of extra curricula activities and training
4. Lack of proficiency in language and skills
5. Outdated pedagogy and weak use of computer aided instructions and use of the multi-media instruction in the learning process.
6. Programs are oriented toward accreditation and quality control rather than quality assurance.
7. Centralized governance and rigid regulations under the domain of ministries of higher education.
8. Lack of Benchmark to judge program and institutional performance.
QA in Jordan Context:

- An agreement with UK quality assurance agency (QAA) for assessing higher education in Jordan was signed. Six UK-QAA criteria were used in the methodology of assessment to achieve **aims** and **intended learning outcomes** (ILOs) of academic programs at universities in Jordan:
  1. Curriculum design, content and organization.
  2. Teaching, learning and assessment.
  3. Student progression and achievement.
  4. Student support and guidance.
  5. Learning resources.
  6. Effectiveness of quality management of enhancement.
• The first program which was reviewed critically at universities in Jordan (2001-2003) was the computer science for the six aspects each having 4.0 points of total higher grade point 24.
• 8 universities were judged as satisfactory.
• 6 universities were judged as acceptable of international standards.
• Jordan University of Science and Technology (JUST) and Philadelphia University attained the highest grade in computer science, each attaining 21/24 of QA criteria.
• QAA assessed later Jordanian Universities in Business, Law, Nursing, English Language and Literature, Banking and Finance.
• QAA-UK, has triggered the competition for quality assessment across the universities in the country.
• ABET was achieved later by UJ, JUST, Sumaya, University of Petra in Engineering and IT programs.
VII. Jordan HE Accreditation Commission (HEAC) has set eight quality institutional indicators:


University of Petra (UOP) has achieved the institutional QA as the 1st and only university in Jordan so far.

HEAC also put standards and guides for QA in every academic program offered by Jordanian Universities. Many academic programs are under process for assessment and evaluation for HEAC standards indicated earlier in this paper.

Knowledge Economy in the Arab world is so dependent on reforms of higher education to develop and deliver competitive quality and relevant human capital to innovate the marketplace.
### Annex QAA-Jordan (2003):

**QAA Evaluation of Computer Science across Universities in Jordan 2002-2003**

<table>
<thead>
<tr>
<th>Date</th>
<th>University</th>
<th>Total/24</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2003</td>
<td>Al al-Bayt University</td>
<td>18</td>
</tr>
<tr>
<td>January 2003</td>
<td>Zarka Private University</td>
<td>22</td>
</tr>
<tr>
<td>January 2003</td>
<td>The University of Jordan</td>
<td>21</td>
</tr>
<tr>
<td><strong>January 2003</strong></td>
<td><strong>Philadelphia University</strong></td>
<td><strong>23</strong></td>
</tr>
<tr>
<td>February 2003</td>
<td>Al-Ahliyya Amman University</td>
<td>21</td>
</tr>
<tr>
<td><strong>February 2003</strong></td>
<td><strong>Jordan University of Science and Technology</strong></td>
<td><strong>23</strong></td>
</tr>
<tr>
<td>February 2003</td>
<td>Princess Sumaya University of Technology</td>
<td>22</td>
</tr>
<tr>
<td>February 2003</td>
<td>Al Isra University</td>
<td>17</td>
</tr>
</tbody>
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Annex QAA-Jordan (2004):

Business Administration  
2003-2004

<table>
<thead>
<tr>
<th>University</th>
<th>Total/24</th>
</tr>
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<tbody>
<tr>
<td>Applied Science University</td>
<td>21</td>
</tr>
<tr>
<td>Hashemite</td>
<td>21</td>
</tr>
<tr>
<td><strong>The University of Jordan</strong></td>
<td><strong>22</strong></td>
</tr>
<tr>
<td>Mutah University</td>
<td>22</td>
</tr>
<tr>
<td>Philadelphia University</td>
<td>20</td>
</tr>
<tr>
<td>Zarka University</td>
<td>16</td>
</tr>
<tr>
<td>Al Zaytoonah University</td>
<td>18</td>
</tr>
<tr>
<td>Yarmouk University</td>
<td>20</td>
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</tbody>
</table>
Annex QAA-Jordan (2005):

**Schools of Law at the University of Jordan & Philadelphia University** have achieved the highest grade point average of 24/24 in Law, while other universities such as **Yarmouk University** achieved (23), **Motah University** achieved (22), **Applied Science University** achieved (22), **Al-Zaytoona University** achieved (21), **Al-Isra University** achieved (17), and **Jarash University** achieved (17).
my motto:

ICID
Initiate, Create
Innovate, Disseminate

Thank you For Listening

شكراً