

Approaches of Assessing Quality in Higher Education Institutions¹

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Abstract

Despite all attempts to define it, 'Quality' is still a concept that lacks a common definition applicable in all fields, for every phenomenon or any subject. Yet, there is a universal consensus on the positive connotations of this terms that are conjoined with 'excellence', 'good practice', 'well-being', and so forth. As far as higher education is concerned, quality relates to all aspects of the teaching-learning process as well all aspects of the institutional performance. In this sense *quality* acquires as many meanings as there are aspects involved.

Apart from the terminological complexities of this issue, all those involved in higher education – whether students, institutions, faculty staff, or other stakeholders – pay great attention to the techniques, approaches, or mechanisms for assessing the various aspects of their academic and institutional performance.

In this paper, the writer explores the various approaches adopted for assessing the academic and institutional quality in the field of higher education. As the writer strongly rejects the 'One size fits all' approach in assessing higher education quality, an attempt is made here to show how each of the available approaches fits with different interpretations of the word 'quality' . However, the issue of defining quality needs to be settled as it is empirically impossible to assess something that cannot be defined or measured.

This paper seeks answers to the following key questions which conceal a considerable numbers of sub questions:

How can we assess the quality of education offered by an HEI?

How can all stakeholders be reliably assured that quality learning is taking place at an HEP?

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1.0. Introduction

In English, the term *quality* as an adjective has many definitions with reference to higher education all of which highlight the positive connotations of 'excellence', 'good practice', 'well-being', and so forth. Thus talking about a 'qualified' individual implies his/ her competency of doing something with an appropriate level of adequacy and skill. As a noun, it refers to an inherent or distinguishing characteristic; a property. (cf. Dictionary.com, <http://dictionary.reference.com/browse/quality>).

In Arabic, a distinction has to be made between two verbs from which two deceptively equivalent participles are derived, namely 'أُجِدُّ' 'granted' or 'awarded' (usually with generosity) and the individual who does so is known as 'جواد' (generous). The second verb is 'أَجِدُّ' 'did something quite well' and the individual who did so is said to be 'جَيِّدٌ' 'good' or even 'مُجَيِّدٌ' 'qualified'. Thus, it is this second equivalent that has to be thought of when interpreting the concept of quality.

Talking about assessing 'quality' implies that it is a gradable entity. Is it? In fact - and away from specified sense of the term - one may think of 'bad' quality and 'good' quality. This is a linguistic as well as a professional issue. If interpreted in this sense, then quality would be restrictively equivalent to 'type' or 'kind' which be bad, fair, or good. It is this kind of quality that is gradable in the proper sense. Thus, phrases such as 'quality enhancement' and 'quality improvement' entail the improvement of the type/kind of the service provided, the facility offered, or opportunity made available. It is only when such services are 'good', 'appropriate', 'adequate', 'sufficient', or even 'robust', one may think of 'quality improvement' and 'quality enhancement' as meaning 'maintaining quality'. Similarly, in Arabic we have to talk about 'تحسين النوعية' (literally: brand/type improvement) and 'تعزيز الجودة' (literally: quality enhancement) respectively as two mutually exclusive equivalents of the two English expressions.

Still, the term 'assessment' is used here in preference of the term 'measurement' so as to avoid the inherent quantitative implication the latter has. Quality in higher education is mostly assessed qualitatively rather than quantitatively; nevertheless, quantitative and numerical values that indicate quality are sometimes taken into consideration when assessing higher education institutions (HEIs) performance, e.g. the use of staff-student ratios, employment rates, etc. As a result, quality has to be taken as a relative rather than an absolute concept that admits discrete measurement and definition. However, we should not go that extent where Vroeijenstijn (1991:113) believes that "[it] is a waste of time to define quality precisely". He himself believes that: "there is quality of input, process quality, and quality of output. Quality assessment must take account of all these aspects" (ibid). This is what we shall try to explore in the rest of this paper.

1.1. Quality in Higher Education

Following Green, (1994:4-5), quality in higher education since the late 80's and into the 1990's had been about:

- External benchmarking with some outside 'best practices' ;
- Qualitative and quantitative static hconformance to internal specifications or standards;
- Developmental fitness for purpose with emphasis on specifications while recognizing that purpose might change over time thus requiring re-evaluation of the specifications appropriateness ;
- Effectiveness in achieving institutional goals;
- Meeting the stakeholders' needs.

In consequence, quality assessment refers to ensuring that a particular system, policy, procedure, or a mechanism is performing well, determining the level of that performance based on a number of standards or criteria. Sometimes, quality assessment is interpreted as equivalent to quality control, which in turn has to be kept distinct from quality assurance (QA). One subtle distinction between the two is that quality assessment tends to focus on the product whereas quality assurance focuses on the process.

In fact, the significance of assessing the quality of an HEI lies in the assumption that it keeps the decision-makers well informed of the status of the institution and therefore they make fairer decisions in the light of the assessment results. To us, and since quality is held to be the responsibility of all HEI's stakeholders, we hold the view that this impact should be extended to all these parties. However, we have to admit that that this impact is "perceived differently on the various levels of higher education" (Parri, 2006:110). According to Harvey (1999) quality assurance is based on three main principles: **accountability**, **control**, and **improvement**. To him, accountability usually requires meeting the preferences of politicians, outside parties, e.g. government bodies, families, and even society at large. Control means that the institution does not align expenditure of resources and also shows how quality is achievable with the existing resources. Improvement is probably the most widely spread aim of quality assurance. It enables the institution to get necessary input, refine the process, and raise the standards of output in order to meet its desired goals.

Green (1994) views quality in the field of higher education in terms of five perspectives: (1) exceptionality and highest standards; (2) conformity to standards; (3) fitness for purpose; (4) effectiveness in achieving institutional goals; and (5) customers' satisfaction. The implication of this proposal is that quality assessment is carried out with reliance on a number of approaches simulating these perspectives. These are discussed below.

1.2 Quality Assessment

Hernon (2002, cited in Parri, 2006:109) states that "quality assessment should meet the needs of people who benefit from this, as one of the aims of the assessment should be their improvement of activity within the institution under assessment."

Parri (2006:109) believes that "the whole topic of quality assessment could be concluded in the following way: define what quality is, set assessment standards, compare the latter with

the real outcome, and decide to what extent the standards are met.” According to her, “this approach to the external quality assessment anticipates three prerequisites: quality is definable, education level index and quality are interrelated and quantitative measurement, and assessment of quality is possible”.

Generally speaking, approaches of quality assessment fall into two main categories, namely process-based approaches and product-based approaches. Performance analysis, for example, represents the former, while outcomes analysis clearly represents the latter. However, and following (Harvey, 2002), this product-based approach in higher education results in the problem that only the institution is checked while the fact is that everybody who is working for the institution is responsible for the quality of the institution. This distinction is not being addressed in this paper. This goes in line with Parri's view that "We should also bear in mind that quality in higher education is affected by tightly interrelated factors and in order to give potentially the most adequate assessment to quality, one has to research as many factors as possible as necessary" (Parri, 2006:110). Both categories are explored here.

1.3 Approaches to Quality Assessment in Higher Education

Before moving to discuss approaches to assess higher education quality, two relevant issues have to be emphasized. First, the term ‘approach’ is used in this paper to refer to the theoretical framework underpinning the assessment process rather than the operation tools, procedures, and processes used for this purpose. Second, the reader has to keep in mind that none of the approaches being discussed here as “no one perspective of quality may be good by itself” (IIEP, 2007:13). Thus, the selection of a particular approach depends on the context in which quality is viewed, and in which the institution itself lives.

1.3.1. Standards-based Approach (SBA)

Standards – which are a term that came from industry – in higher education denote principles (or measures) to which an HEI conforms (or should conform) and by which the HEI’s (or any of its aspects) quality or fitness is assessed (cf. IIEP, 2007a:17). Thus, SBA is associated with norm criteria, or standard compliance and conformity. Furthermore, it has been a powerful methodology that quality assurance agencies have utilized for accreditation as well recognition purposes.

Despite the recognition of a HEI’s diversity, the argument has been made that certain standards (minimum norms) must be sought for all HEIs. This came in response to “the growing demand for international comparability, and, consequently, more and more system of quality assurance are moving towards a standard-based approach of accreditation” (IIEP, 2007b:46). SBA may also indicate ideal standards towards which HEIs should strive. If this objective is maintained, SBA becomes “predominantly a vehicle for quality improvement” (ibid. 32)

Standards can be expressed qualitatively as well as quantitatively and quality assurance agencies develop these standards in many ways. For instance, most of the standards developed by the Indian Council of Technical Education (AICTE: www.aicte-india.org) are about quality inputs that institutions are required to offer. Recently, more interest is being shown in competency-based standards focusing on the appropriate and effective application

of knowledge, skills, and attitude. Some QA agencies set standards for quality by identifying the processes and practices required in quality systems. Then these standards are used as benchmarks for relative judgment. In such a case the two terms 'standards' and 'benchmarks' are used interchangeably.

1.3.2. Benchmarking Approach (BMA)

INQAAHE³'s definition of a benchmark reads as follows: "A benchmark is a point of reference against which something may be measured." (<http://www.inqaahe.nl>)

There are many ways of benchmarking that serve different purposes. To understand the differences between these ways, the options available in the different types of benchmarking and methodologies should be considered. The Commonwealth Higher Education Management Service (CHEMS, 1998) provides four classes of benchmarks. These are:

- **Internal benchmarks** for comparing different units within a single system without necessarily having an external standard against which to compare the results;
- **External competitive** benchmarks for comparing performance in key areas based on information from institutions seen as competitors;
- **External collaborative** benchmarks for comparisons with a larger group of institutions who are not immediate competitors; and
- **External trans-industry** (best in-class) benchmarks that look across multiple industries in search of new and innovative practices, no matter what their source is.

McKinnon *et al.* (2000:7) distinguish between two types of benchmarks: **criterion reference and quantitative**. The former "define the attributes of good practice in a functional area" whereas that latter "distinguish normative and competitive levels of achievement".

Furthermore benchmarks can be quantitative (such as ratios) or qualitative (such as successful practices). They can be expressed as 'practices', 'statements' or 'specifications of outcomes', and all of which may overlap.

1.3.3. Value Added Approach (VAA)

This approach is also be called 'transformation' approach to indicate how students' capabilities, skills, or knowledge are improved as a consequence of their education at a particular HEI, a particular service has been provided, a particular system has been put in place, or a policy has been implemented. Harvey (1995) describes the process of transformation in higher education figuratively as he compares it to how water transforms into ice. In fact and as the name suggests, this is a student-based approach as it seeks to identify 'value added' changes that take place in students' overall capabilities as a result of their study in the HEI. To do so, two mechanisms of assessment have to be incorporated progressively: one *before* the service is provided or the system is implemented and the other

³ International Network of Quality Assurance Agencies in Higher Education

after service delivery or system implementation. Value added then is the difference between the results of the two stages. This goes with Bennett's (2001:3-4) definition of valued added as "the difference a higher education institution makes in their education." Since HEIs are quite complicated entities in terms of their organizational structure and the variety of their operational activities, value added must attend to a number of different dimensions of value. They try to develop an array of capabilities and skills into their students. Thus, they probably should develop several different measures of value added, and select the measures that reflect their intentions.

However, and though many people think that VAA is the most valid theoretical underpinning of quality in higher education, caution has to be taken with regard to some of potential limitations and difficulties (cf. Bennett, 2001).

First, the diversity of HEIs indicates that not all HEIs seek to add the identical or similar 'values' to its students. In other words, mission, vision, values, and in consequence strategic and operational planning, vary quite a lot from one institution to another, both nationally and transnationally. Thus, institutions have to be assessed against their own missions, values, aspirations, and visions. Any effort to do otherwise is fundamentally misguided.

Second, some consequences and effect may take too long to express themselves. This may restrict VAA to assess the quality of those aspects that have immediate impacts. This counts as an operational restriction of this approach.

Finally, one further restriction of VAA lies in the complexity and subjectivity of value added assessment. This is because it focuses on student learning while "higher education has not yet committed itself to developing reliable measures of the most important dimensions of a college education."(Bennett, 2001:4).

1.3.4. Fitness-for-purpose Approach (FFP)

FFP begins by analyzing a stated purpose of an HEI (its mission) or an academic program, while also asking whether or not this purpose as an acceptable purpose of higher education (IIEP. 2007b:45) or FFP approach indicates that we have to decide to what extent a service or a system an HEI offers meets the goals set for it. The quality of such aspects is assessed and presented through the mission statement and goal achievement. This approach concentrates on meeting the HEI's stakeholders' needs and expectations and it appears in many versions (cf. other approaches below). This is a potential recognition of the differences between HEIs instead of making them artificially resemble each other. For this reason, it is usually understood as being more appropriate for quality improvement. However, and following IIEP (2007a:11), "this approach begs the questions: 'Who will determine the purpose?' and 'What are appropriate purposes?'" Once again, "answers to these questions depend on the context in which quality is viewed" and "the purposes may be decided by the institution itself, by the government, or by a group of stakeholders" (ibid.). In this sense, FFP applies to a variety of HEIs that can define their purposes and achieve quality in their own terms (Woodhouse, 2006).

One version of the FFP approach is to assess the effectiveness in which institutional goals are achieved. Clearly, the purposes in this case are set by the HEI itself, i.e. its mission

statement. It is left to the HEI to decide on the way it sets its goals. In consequence, the HEI is judged as a high quality HEI if its mission is clearly stated and efficiently achieved.

Another version of this approach is meeting customers' stated or implied needs. In this case, the purpose to be sought here is the customers' needs and satisfaction. This implies the difficulty resembled by whether customers (students, families, government, and employers) really want or recognize what is actually good for them. According to IIEP (2007b:11), "families and students tend to become customers trying to optimize their investment without always having the necessary information on which to base their decision". "Employers" – on the other hand – "find themselves confronted with a plethora of new credentials whose value they cannot assess". The solution for this dilemma lies in the role of the states which has to "regulate the market, to create transparency, to ensure quality, and to inform different stakeholders" (ibid.).

The quality, of an HEI is 'fit for purpose' if: (a) there are procedures in place that are appropriate for the specified purpose(s); and (b) there is evidence that these procedures are in fact achieving the specified purpose(s).

1.3.5. Key Performance Indicators Approach (KPIs)

As the name suggests, KPIs are used to assess an HEI's status mainly in terms of quantitative data (such as faculty staff qualifications, financial resources etc). Qualitative data can be used to compare performance of several units within the same HEI or performance of a number of independent HEIs. They can also be taken as a guide toward improvement and enhancement. According to Palermo and Carroll (2006a:5), KPIs are related to goals or objectives and provide a means for tracking performance against that goal or objective. The authors believe that KPIs inform the HEI about its success towards its mission; represent a tool for tracking progress towards its strategic goals; and direct and prioritise behavior towards the achievement of these goals. This means that KPIs are used interchangeably with 'indicators of quality' (cf. IIEP, 2007a)

The HEFCE's Report (1985) list three categories of KPIs, namely : (1) Internal, such as teaching quality; graduation rates and classes of degrees; etc. ; (2) External, such papers read at conferences; graduates' destination; etc. ; and (3) Operational, such as staff-student ratio; library stock availability; etc. HEFCE uses these indicators to take funding decisions. Other uses of KPIs include their use to monitor, compare, evaluate, and improve HEIs' performance. This can be at the institution level or between a number of institutions.

Proponents of performance indicators argue that they help in the following ways:

- Useful to check accountability concerns;
- Help in comparing performances of similar institutions;
- Provide a range of information about performance to steer self-improvement and effective management strategies;
- Provide simple public information about the health of the institution in several areas of functioning; and
- Can shape policy formulations.

On the other hand, those who do not support the use of KPIs in quality assessment refer to the fact that HEI's performance or the quality of program delivery may be influenced by a variety of external and internal factors; hence, considering all these factors in assessing the institution or a program is not easy. In his attempt to solve this controversy James (2001:5) proposes five characteristics of indicators so that KPIs would fulfill its assessment role. These are:

1. They should be sufficiently provocative and relevant to encourage the commitment of resources to monitoring and action. Therefore, they should correspond with widely shared national and institutional values and priorities.
2. They should be capable of meaningful definition is across national and different systems without excessive caveats, and must be applicable in all diverging social and cultural contexts.
3. They should measure system-level quality rather than institutional-level quality; however, they should be sufficiently relevant at institutional level.
4. They should be easy to interpret for all entities.
5. They should be sufficiently detailed so that they can detect small developments over time. They also must be stable over time to allow continuity of measurement.

1.3.6. Inputs Approach (IA)

This approach resembles input indicators. These relate to the resources and factors employed to produce an institution's outputs (financial resources, physical facilities, and student and staff profiles). Traditionally, the quality of HEIs has been evaluated with "input" measures: how many books in the library, how many staff with PhDs, how high are the qualifications of incoming students, etc. However, around the world more attention is being given to an "outcomes" approach to evaluating the quality of higher education.

1.3.7. Outcomes Approach (OA)

Outcomes resemble output indicators. Outcome indicators are the effects of outputs (e.g. employment rates). Performance indicators provide measures of performance aspects which describe the outputs produced by institutions (products of teaching, research, and services). According to this approach, quality is simply assessed by measuring the outcomes of the HEI. It implies the evaluation of students as they graduate (or shortly after) on the skills and capabilities they have acquired or the recognition they gained as a result of their study in that institution. .

The most frequently used outcome indicator at present is the measurement of *retention rates*: what percentage of those admitted to a particular institution continues in the program or finally earn a degree? Retention rates tell us what percentage of an institution's students were satisfied enough to continue at the institution, and what percentage received the benefit of the institution's full program. However, retention rates do not tell us anything about what students actually learned or attained on their way to a degree. Thus, we need other indicators. We need outcome measures that assess students' attainments along a variety of dimensions: writing, quantitative abilities, problem solving, understanding of

their own culture and of the cultures of others, development of a sense of civic responsibility, and the like. If we had such outcomes measures, we could use them in the service of measuring value added(cf. Bennet, 2001)

Any measurement of students' products from an educational experience is a measure of a learning outcome. Outcomes can, of course, be rates of change and identifiable stages of qualitative improvement as much as numerical scores.

13.8. Internal Quality assessment: Self-assessment Approach (SA)

Typically, this refers to as self-assessment, which involves collection and revision of data about the HEI and its educational program, identification of strengths, areas of concern and opportunities, discussion of strategic planning to ensure sustainability of the strengths and ways of addressing problems and lastly, making recommendations for further quality enhancement (Shuib, et al, 2007:3).

The results of this process are provided in a self-assessment report known as technically known as a Portfolio. A Portfolio is a written document that covers the entire institution and explains its mission, vision, its special characteristics, and its context (Palermo & Carroll, 2006b). It provides a concise summary of the HEI's quality assurance systems for each function in addition to a robust analysis of the effectiveness of those systems. As its results, a Portfolio identifies the HEI's strengths and its potential areas for improvement.

In addition, a self-study ensures that the HEI formally and intentionally allocates sometimes to reflect on its current position and how well it is going towards its desired objectives. In this sense, it helps the HEI monitor how far its performance is aligned to its mission, vision, and strategic plan. To borrow from Psychology, a self-assessment resembles some kind of introspection on behalf of the concerned HEI. One further and major use of the self-study output, i.e. the Portfolio, is that it constitutes the main part of a submission for an external quality audit (ibid).

As for the content of self assessment reports, there a consensus that they basically should cover the nine key areas Following the procedure adopted by the OAC (Quality Audi Manual , 2008:39), a typical scope of a Portfolios includes the following nine key areas

1. Governance and Management
2. Student Learning by Coursework Programs
3. Student Learning by Research Programs
4. Staff Research and Consultancy
5. Industry and Community Engagement
6. Academic Support Services
7. Students and Student Support Services
8. Staff and Staff Support Services
9. General Support Services and Facilities

Each of the above areas can divided into sub-areas which cover various aspects of the HEI's institutional and academic performance.

1.3.9. External Quality Assessment: Quality Audit Approach (QA):

Quality audit of higher education investigates whether the process or activity is efficient (whether the goals are achievable). In other words, quality audit means checking whether relevant systems and structures within organisation support the goal of instruction. Quality audit can be internal as well as external. Quality audit checks whether HEI systems function and whether documents prove that (Hernon, 2002).

External quality assessment necessarily involves external review. Effective quality assurance processes involve one or more external reviewers who report on a site visit. External quality assessment or peer review serves to verify and validate the information generated from the internal assessment process. In addition, the assessment also assists institutions to improve standards and quality enhancement.

Carroll and Palermo (2006b) sees QA as method of public accountability; a formative evaluation, which can be used to help set a quality improvement plan for the HEI. It is based on a self study by the HEI (resulting in a Portfolio), which is then checked via external review by an independent panel of reviewers.

1.4. Conclusions

Quality in higher education encompasses quite a wide range of topics; and therefore cannot be assessed comprehensively by one single approach and from one single perspective. The scope of issues to be assessed come from external and internal sources. Quality in higher education is affected by tightly interrelated factors and in order to give potentially the most adequate assessment to quality, one has to research as many factors as possible and as are necessary. Overall, a holistic approach is need for more comprehensive and informative quality assessment.

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