External Quality Assurance for Higher Education in CIS and South-East European countries

Module 4

Understanding and assessing quality

United Nations Educational, Scientific and Cultural Organization

International Institute for Educational Planning

External quality assurance: options for higher education managers

These modules were prepared by IIEP staff and consultants to be used in training workshops or by individuals as self-study materials. IIEP is also using this material for its distance education courses.

The set of modules is available at www.iiep.unesco.org

Also available on IIEP's web site:

- Quantitative research methods in educational planning
- Reforming school supervision
- HIV/AIDS and education
- Using indicators in planning Education For All

Other sets will be available soon.

International Institute for Educational Planning (UNESCO)
7-9 rue Eugène-Delacroix
75116 Paris
Tel.:+33 1 45 03 77 00 Fax: +33 1 40 72 83 66
E-mail: info@iiep.unesco.org
Web site: www.iiep.unesco.org

These modules were typeset using IIEP's computer facilities and printed in IIEP's printshop.

Credit photos: IIEP/UNESO

PRD/40/Guide

Module 4

UNDERSTANDING AND ASSESSING QUALITY

List of abbreviations

AACCUP	Accrediting Agency of Chartered Colleges and Universities of the Philippines
ACSCU-AAI	Association of Christian Schools, Colleges and Universities Accrediting Agency
AICTE	All India Council for Technical Education
APQN	Asia-Pacific Quality Network
AQF	Australian Qualifications Framework
AQIP	Academic Quality Improvement Program
ARACIS	Romanian Agency for Quality Assurance in Higher Education
ACSCU-AAI	Association of Christian Schools and Colleges and Universities Accrediting Agency Incorporated
AUQA	Australian Universities Quality Agency
AVCC	Australian Vice Chancellor's Committee
BAN-PT	*Badan Akreditasi Nasional - Perguruan Tinggi* (National Accreditation Board for Higher Education, Indonesia)
CA	Chartered Accountant
CEEN	Central and Eastern European Network for Quality Assurance in Higher Education
CHE	Council of Higher Education (South Africa)
CICA	Canadian Institute of Chartered Accountants
CNA	National Council for Accreditation (Colombia)
CNAP	*Comisión Nacional de Acreditación* (National Commission of Accreditation, Chile)
CSE	*Consejo Superior de Educación* (Chile)
DEST	Department of Employment, Science & Training
DFL	Distance & Flexible Learning courses
EQA	External Quality Assurance
FFP	Fitness for Purpose
FOP	Fitness of Purpose
FTE	Full-time Equivalent
HEI	Higher education institution
HEQC	Higher Education Quality Committee (South Africa)
IIEP	International Institute for Educational Planning
INQAAHE	International Network for Quality Assurance Agencies in Higher Education
KPI	Key Performance Indicators
MCEETYA	Ministerial Council of Employment, Education, Training & Youth Affairs
MSCHE	Middle States Council for Higher Education (USA)
NAAC	National Assessment and Accreditation Council (India)
NBA	National Board of Accreditation (India)
NCAC	National Council of Accreditation in Colombia

OED	Oxford English dictionary
PAASCU	Philippine Accrediting Association of Schools, Colleges and Universities
PACU-COA	Philippine Association of Colleges and Universities – Commission on Accreditation
PI	Performance Indicator
QA	Quality Assurance
QAA	Quality Assurance Agency (UK)
UFE	Uniform Evaluation
UK	United Kingdom
USA	United States of America
USP	University of South Pacific

List of boxes

Presentation of the module

Welcome to Module 4 “Understanding and assessing quality” of our distance course on External Quality Assurance.

Objectives of the module

This module will:

- describe the various ways of defining or understanding quality;
- define basic concepts used in the assessment of quality such as standards, criteria, indicators and benchmarks;
- explain the areas generally analyzed in quality assessment;
- discuss the various methods of quality assessment; and
- highlight the characteristics of the various understandings and methods of quality assessment.

Outcomes

On completion of this module, you are expected to be able to do the following:

- appreciate variations in the definition of quality;
- understand the areas analyzed when assessing quality;
- identify the focus and methodologies of various approaches to quality assessment; and
- analyze the characteristics of the understanding and method that would be effective in your national context.

Questions for reflection

1) What should be the main emphasis in my country’s definition of quality?
2) What are the five most important areas that the quality assurance agency in my country should look into and for what reasons?
3) Which understanding and method of quality assessment would be most suitable for my country?

Module 4

UNDERSTANDING AND ASSESSING QUALITY

Introduction

Modules 1 and *2* gave the broad background of the quality assurance scenario and the options available to the quality assurance (QA) agency to plan its mechanisms. *Module 3* paid specific attention to the actual establishment, functioning and role of the agency and the various steps it encounters in its operation. Following on from this, *Module 4* will discuss the various ways of understanding quality. It will also consider the methods of assessing it.

Quality assurance (QA) agencies differ greatly in the way in which they define quality and the methodologies they put in place to assess it. The difference starts from the meaning they give to quality and the assumptions that underlie their quality assurance policies. Consequently, the methodologies they adopt for assessing quality vary. Some agencies follow the 'fitness-for-purpose' definition of quality and look into the ways in which higher education institutions (HEIs) or programmes fulfill the objectives they aim to achieve. Attention is paid in this approach to the goals and objectives of HEIs or programmes, as well as institutional diversity. There are QA agencies that emphasize pre-determined sets of standards for the HEIs or the programmes they quality assure. Compliance to norms becomes the focus here.

Again, in some instances, quality assurance aims to ensure only the minimum requirements for a particular status. Such approaches are generally meant for compliance purposes. The outcome has implications for approvals and sanctions. On the other hand, some QA agencies set standards of high quality. In these cases, the frame of reference for assessment is 'excellence' and not just fulfillment of minimum requirements. Such standards usually co-exist with other mechanisms that ensure the minimum requirements.

Some QA agencies set standards for quality by identifying the processes and practices required in quality systems. They then use these as benchmarks for relative judgment. Others identify indicators against which the performance of a system can be measured. In these approaches, the terms 'performance indicator' and 'indicator of quality' (like 'standards' and 'benchmarks') are used interchangeably. Indeed, the same term can be used by different bodies to refer to different measures. In general, well-developed systems with strong internal quality assurance mechanisms rely more on the indicators and benchmarks HEIs set for themselves than on externally set ones. In those systems, improvement towards higher levels of performance and peer assessment are central to the quality assurance framework. In emerging systems where there is a mix of accountability and self-improvement concerns for HEIs, QA agencies use both quantitative indicators and peer review carefully.

The unit of quality assurance can also vary. While some QA agencies follow the institutional approach, others follow the programme approach (see *Module 1*). Although the unit of quality assurance might vary, it must necessarily cover aspects such as academic programmes, students, academic staff, internal quality control, infrastructure, research, outreach, organization and management. For example, the institutional accreditation of the National Assessment and Accreditation Council (NAAC) of India; the regional accreditors' standards in the United States of America (USA); and the programme accreditation of Indonesia's National Accreditation Board for Higher Education (BAN-PT) all cover the above-mentioned areas. The difference lies in the level of detail the agencies look for, as well as in the focus and extent of reliance on quantitative indicators vs. peer assessment.

The need for quality assurance to use peer assessment or the judgment of higher education practitioners is well recognized. This is true even of approaches that rely more on indicators and quantitative norms. This module will discuss these issues, with examples and case studies.

Understanding quality

In *Module 1*, you were briefly introduced to some of the complexities in the debate on the quality of higher education. Indeed, QA agencies differ greatly in the definition of quality they adopt and the methodologies they put in place for assessing quality. The difference starts with the mandate they are given. It ranges from the quality-related aspects they wish to consider within the given mandate and the assumptions that underlie their quality assurance practices.

1. Different understandings of quality

Many sectors have debated how to define quality. A commonly quoted remark in discussions about quality is: "Quality…you know what it is, yet you don't know what it is" (Pirsig, 1974). Another common quote is: "Some things are better than others; that is, they have more quality. But when you try to say what the quality is, apart from the things that have it, it all goes poof".

Chambers dictionary defines quality both as "grade of goodness" and as "excellence". This indicates the ambiguity in its meaning: namely, that it can mean both 'good' and 'how good'. Similarly, among other things, *Webster's* dictionary describes quality, as a "degree of excellence" and "superiority in kind". The *Oxford English Dictionary* (OED) gives similar definitions – the "degree of excellence of a thing", "general excellence" and "of high quality". 'Degree of excellence' implies that you can talk about something of good quality or poor in quality. The other definitions imply that 'quality' itself means excellence (as in 'quality product' or 'their work has quality'). Such ambiguity leads to many interpretations. It is therefore necessary to describe what is meant by the term in any particular context.

Historically, the concept of quality assurance evolved from the manufacturing sector (*OED*, 2006). In this sector, quality is about minimizing variability and ensuring that manufactured products conform to clear specifications. The essence of this concern is that customers could expect the product to perform reliably. Quality therefore means '**zero defects**'.

While manufacturing companies focus on controlling product variability, service businesses have a more comprehensive view of quality. They are concerned not only with minimizing defects, but also with managing emotions, expectations and experiences. Service businesses are now shifting the focus from 'zero defects' in products to 'zero defections' of customers. In the service view of quality, businesses must recognize that specifications are not just set by a manufacturer who tells the consumer what to expect. Instead, consumers may also participate in setting specifications. Here, quality means '**consumer satisfaction**'.

In software and information products, the concept of quality usually incorporates both the conformity and service views of quality. On the one hand, there are a basic set of features that must always work. On the other hand, when customers have problems using a software package, they define quality according to the technical support they experience. The idea of quality in software products has yet another dimension. Software users expect a continuous stream of novel features: upgrades; high performance and reliability; and ease of installation, use and maintenance. Their perception of quality consists of a **synthesis of conformity, adaptability, innovation and continuous improvement**. In many

ways, this is the way quality is perceived in higher education – as a synthesis of a range of expectations of many stakeholders.

2. Quality in higher education

Many stakeholders in higher education would find it difficult to define quality precisely. In reality, it is a relative concept that means different things to different people. For instance, while discussing the quality of an HEI, students may focus on the facilities provided and the perceived usefulness of education for future employment. Teachers, on the other hand, may pay attention to the teaching-learning process. Management may give importance to the institution's achievements. Parents may consider the achievements of their children. Finally, employers may consider the competence of the institution's graduates. Each stakeholder has a different approach to defining quality. It is not possible, therefore, to talk about quality as a single concept. Any definition of quality must be defined in terms of the context in which it is used. In the case of HEIs, we should bear in mind that an institution may be of high quality in relation to one factor or in the perspective of a category of stakeholders, but of low quality in relation to another.

Considering these factors, Harvey and Green (1993) and Green (1994) have identified many approaches to the viewing of quality. Green (1994) lists five different approaches to quality in the field of higher education. She considers that it can be viewed:

- in terms of the exceptional (highest standards);
- in terms of conformity to standards;
- as fitness for purpose;
- as effectiveness in achieving institutional goals; and
- as meeting customers' stated or implied needs.

Quality as exceptionality

This is the more traditional concept of quality. It is associated with the notion of providing a product or service that is distinctive and special, and which confers status on the owner or user. In higher education, an institution that demonstrates exceptionally high standards is seen as a quality institution.

This approach may be applicable for 'excellence awards' or to identify a very few high-level institutions. But it poses a practical problem for QA agencies. A QA agency may commend institutions that demonstrate exceptional standards. However, it is not possible for the agency to condemn all other institutions. That would not serve accountability or self-improvement purposes. Therefore, a 'quality as exceptionality' approach is not generally in vogue among QA agencies. However, there may be areas in higher education where this approach is necessary. This could include, for example, evaluating doctoral programmes or cutting-edge research. There may even be some institutions within a system which choose to be assessed against criteria of excellence (such as flagship universities). Thus, while it cannot be used across the higher education system, excellence cannot be dismissed as one of the ways in which quality is defined.

Quality as conformance to standards

This view has its origins in the quality control approach of the manufacturing industry. Here, the word 'standard' is used to indicate pre-determined specifications or expectations. As long as an institution meets the pre-determined standards, it can be considered a quality institution fit for a particular status.

This is the approach followed by most regulatory bodies for ensuring that institutions or programmes meet certain threshold levels. Conformity to standards may result in approval to start programmes or recognition for a particular status or funding depending on the context. Of course, the issue of standards becomes crucial here. Sometimes they are defined in a formal way. This could be, for example, the number of full-time professors, the percentage of them with final degrees, or the number of articles published per full-time equivalent (FTE) faculty member. While this makes assessment fairly easy, it may also make it irrelevant. Indeed, it is usually possible to comply with formal requirements without paying attention to the substantive issues they are meant to safeguard.

Quality as fitness for purpose

This approach is based on the view that quality has no meaning except in relation to the purpose of the product or service. Obviously one does not need a super computer to do basic multiplications. What may be considered a quality system for basic computation is different from what is required for scientific experiments. However, this approach begs the questions: 'Who will determine the purpose?' and 'What are appropriate purposes?'. The answers to these questions depend on the context in which quality is viewed. The purposes may be determined by the institution itself, by the government, or by a group of stakeholders.

Quality as effectiveness in achieving institutional goals

This is one version of the 'fitness-for–purpose' approach mentioned above, in which the purposes are determined by the institution. In this approach, a high quality institution is one that clearly states its mission (purpose) and is efficient in achieving it. This approach may raise issues such as the way in which the institution might set its goals (high, moderate or low), and how appropriate those goals could be.

Quality as meeting customers' stated or implied needs

This is also a variation of the fitness-for-purpose approach. This is where the purpose is customer needs and satisfaction. The issue here is whether customer satisfaction can be equated with what is good for the customer. Are 'needs' the same as `wants'? In higher education, this would mean that what students want may not be the same as what is actually good for them. It is more reliable to consider different groups such as government, students and parents in determining 'customer needs' and 'customer satisfaction', rather than a single category of customers, such as students.

Phrases or notions such as 'value for money', 'added value' and 'transformative process' are also used to define quality in higher education. In the 'value for money' point of view, something has quality when it meets the expectations of consumers in relation to the amount they pay for it. Quality therefore corresponds to the satisfaction of consumers. These consumers may be students (who are direct consumers and invest their active time in learning), parents (who pay for the educational services of their children) or the government (that sets national policies and invests public money for educational services). From the 'added value' point of view, an institution that enables a student to enhance his/her knowledge, competence and employability is seen as successful in its efforts and therefore in generating quality. The transformative process considers how higher education plays a role in developing a variety of generic competences in students, apart from providing them with a body of academic knowledge.

While Harvey and Green (1993) and Green (1994) have explored and differentiated every possible definition of quality, there has been criticism that the ramifications of so many definitions of the term might be unhelpful. For example, the 'transformation', 'value added', and 'value for money' definitions of quality prompt criticism that they are all characteristics 'expected as outcomes' of processes. If one does not pay attention to 'what is expected', the definitions will coil back, rendering them meaningless. It is here that 'fitness for purpose' FFP is seen by some quality assurance experts as a meaningful way of defining quality. *Box 1* explains how quality viewed as FFP can embrace all the definitions described above.

Box 1. Quality = fitness-for-purpose (FFP): the definition for all seasons

We have a historic meaning of quality as exceptionality, and a gradual shift in usage to refer, sometimes but not always, to serviceability. In the early 1990s, there was much debate over the meaning of the word 'quality', particularly as it applies to higher education, and several lists of alternatives were produced. Some protagonists attempted to argue for a single meaning, while others preferred to use a group of meanings. The proposed definitions include transformation, value-added, value-for-money, and customer perception.

One commonly-proposed definition was that quality is 'fitness-for-purpose' (FFP). It can be argued that this is not just 'one definition among many' but rather that 'fitness-for-purpose' is a definition that includes (almost) all the others, and therefore provides an 'organizing principle' for approaches to the achievement and checking of quality. It is, furthermore, a principle that acknowledges the difficulties inherent in defining and achieving quality in complex systems and addresses these in an appropriate way. It explicitly separates from FFP the prior concept, namely 'fitness-for-purpose'.

If you set out to do something exceptional, then Q=FFP aligns quality with being exceptional; set out to transform students and Q=FFP becomes quality as transformation; set out to add value, and Q=FFP becomes quality as value-added. For a complex organization, the 'purpose' is likely to be a composite concept, set out in a range of statements, such as the mission, goals, objectives, specifications, and so on, but the concept of first identifying the purpose, then setting out to achieve it, is conceptually the same.

FFP embraces the different types of institution, with their different goals: the special-purpose university, the general university, the vocational college, the institute of technology. All can define their purpose(s) and achieve quality on the same definition but in their own terms. Within one institution, the multiplicity of purposes can be acknowledged, as the institution provides a context in which different people can move differently and achieve different personal goals.

Defining quality as FFP is a liberating idea because of its enormous flexibility. It does not restrict us to a prior notion of what quality should be, but encourages the identification of a whole range of purposes, and then a striving to achieve them. In a bicultural and multi-cultural society, in a society that must be conscious of its place in a wider world, this is a valuable concept.

In some cases, it is not easy to specify a precise 'purpose'. However, this does not undercut the definition of quality as fitness for purpose. Rather, it shows that the specification of purpose is essential before we can meaningfully investigate quality. In fact, some people choose to define quality as 'fitness-for-purpose', to emphasize that a trivial or useless purpose is not going to result in good quality. However, a good purpose,

badly implemented, is equally unsatisfactory. Thus, ensuring fitness for purpose is essential to achieving quality.

One can say therefore that Q=FFP embraces all the other definitions.

Source: Woodhouse, 2006.

It is important to note that there is no one right definition for quality. All the concepts above (and others) are valuable. However, when a QA agency chooses a particular definition, it must be clearly specified. When we discuss different approaches to quality assurance in the latter part of this module, we will see that no one perspective of quality may be good by itself. Indeed, agencies must synthesize different understandings to suit their purposes.

Activity 1:

1. Fill up the blanks:

Quality is.....; but.....
Quality may be .....; but .....
Quality can be .....; but.....
Quality ought to be .....; but.....
Quality is not necessarily.....; but.....
Quality is.....as well as.....

2. Read the following references to enhance your understanding of the `quality debate'

- Woodhouse, D. 2006. *Quality = Fitness for Purpose (FFP): Definition for all seasons*, Paper presented in the APQN Conference on Cooperation in Quality Assurance, Shanghai, 1-4 March 2006.
  Available at: www.apqn.org/events/past/details/32/presentations

- Green, D. 1994. *What is quality in higher education?* Buckingham: SRHE and Open University Press. (Listed in the bibliography)

3. Reflect on the scenario of your country and list three priority items that should be considered to define quality in your national context.

3. Defining the basic terms

QA agencies develop their procedures for quality assurance from the notion of quality. To do so, they use a variety of terms, such as statistics, indicators, criteria, standards and benchmarks. Agencies use the terms 'indicators', 'performance indicators' and 'indicators of quality' rather loosely. The same is true of the terms 'criteria', 'standards' and 'benchmarks'. Often, the same term is used by different bodies to denote different understandings and measures. This module may be more useful to readers if we are consistent in using terms. In the following pages, an attempt is made to define the terms distinctly as well as in relation to one another. Most of the definitions are drawn from the background note prepared by the author for the APQN project on "Indicators of Quality".

Statistics and indicators

We know that 'statistics' is a branch of mathematics that deals with the systematic collection, organization and analysis of data. **Statistical data relates to facts and items treated statistically, or collected and organized systematically that can be analyzed**. Simple forms of statistics have been used since the beginning of civilization, when pictorial representations or other symbols were used to record numbers of people, animals and inanimate objects on skins, slabs, sticks of wood, or the walls of caves. Before 3000 BC, the Babylonians used small clay tablets to record tabulations of agricultural yields and of commodities bartered or sold. The Roman Empire was the first government to gather extensive data about the population, area, and wealth of the territories that it controlled. During the Middle Ages in Europe, some comprehensive censuses were taken. These are all examples of systematic collection and organization of data. From those simple beginnings, statistics has grown in significance to become a reliable means of systematically collecting data on various aspects of economic, political and sociological importance. Moreover, it serves as a tool to correlate and analyze such data. **Very often, the term statistics is used to denote statistical data. In this module, statistics means statistical data.**

QA agencies collect data on many aspects of institutional functioning or programme delivery. Data collected systematically – primary and derived – are called 'statistics' with or without any value-addition. They are the building blocks of all the value-added specific terms we will come across later, such as performance indicators. For example, details like student enrolment, the academic calendar and fee structure are statistics. When they are interpreted and used to indicate something, they become indicators. Statistics by themselves are insufficient to make judgments. They must be analyzed within a specific context, or against a specific norm. This is what turns them into indicators.

Indicators can be either qualitative or quantitative. They can be measures of many aspects of quality of an institution or programme. While an indicator is a statistic, not all statistics are indicators. Indicators are value-added statistics about something that is being measured. Moreover, there is a reference point against which to interpret the indicator. In other words, indicators differ from statistics in that they are measures of aspects under review.

Some QA agencies distinguish between Input Indicators, Process Indicators and Output Indicators. They thus assume that the education process resembles a production process that transforms inputs with processes into outputs and outcomes. Input indicators relate to the resources and factors employed to produce an institution's outputs (financial resources, physical facilities, and student and staff profiles). Process indicators relate to the ways in which resources and factors are combined and used in order to produce an

institution's output (management of teaching, research and services). Output indicators describe the outputs produced by institutions (products of teaching, research and services). To these may be added Throughput Indicators and Outcome Indicators. Outcome indicators are the effects of outputs (e.g. employment rates). Performance indicators provide measures of performance aspects.

Performance indicators (PIs)

The indicators used to evaluate an institution, or to judge the effectiveness of a programme, are often referred to as 'performance indicators'. The idea of performance evaluation in higher education has been borrowed from economics. In this sense, the success of a system or institution is related to its productivity in terms of effectiveness and efficiency. As a result, one may often come across Effectiveness Indicators and Efficiency Indicators in discussions on performance indicators. Effectiveness indicators deal with the extent to which an activity fulfils its intended purpose or function. This could include completion rates, graduate employment rates and student satisfaction, among others. Efficiency indicators deal with the extent to which an activity achieves its goal while minimizing resource usage. This could include, for example, staff-student ratios, unit costs, space utilization, or time to graduation.

Box 2 lists the performance indicators used by the University of South Pacific in Fiji.

Box 2. Performance Indicators (PIs) used by the University of South Pacific (Fiji)

Selected Key Performance Indicators (KPIs) will be used to assess the extent to which USP is successful in maintaining and enhancing quality. The KPIs proposed here have been chosen due to their achievability and significance to USP goals and objectives. These will be finalized after scrutiny by the Senate and subsequently by the Council. The Planning and Development Office will closely examine the agreed KPIs on an annual basis, and a summary report will be compiled for the consideration of senior management and approval by the Council.

- Student satisfaction with support services
  Survey to be conducted of students in order to ascertain student satisfaction in the range of support and administrative services and processes
- Staff satisfaction with support services
  Survey to be conducted of staff in order to ascertain staff satisfaction in the range of support and administrative services and processes
- Number of PhD students
  When numbers warrant it this indicator could be replaced with one such as 'time to completion'
- Student pass rates
  Clear definitions and sources of data need to be determined
- Retention rates
  Clear definitions and sources of data need to be determined
- Graduate destinations
  Continuation of Graduate Destination Survey introduced in 2003
- Percentage of courses by level offered in DFL
- Staff retention and qualifications
  Definition of staff retention and determination of which staff to be included in the qualifications indicator
- Non-government funding
  Percentage of funds obtained from various sources

> Ultimately institutional performance at USP will be assessed by a comprehensive set of broad indicators in the major areas of the University, carefully chosen to provide quantitative and qualitative data that can be used to inform decision-making in key areas.
>
> *Source:* The USP Quality Strategy document

The basic purpose of a PI is obviously to evaluate the performance of a system, institution or organizational structure. The indicator may be used for various purposes: to monitor, support decisions, compare, evaluate and improve. PIs help to identify problems. However, they are not able to establish causal relationships. An institution may like to use PIs to compare its performance on certain aspects with a similar institution. A QA agency with an 'improvement' agenda may like to draw the attention of the institution or the government to areas needing further improvement. Depending on the use to which PIs would be put, QA agencies use a combination of approaches. Using performance indicators for quality assurance is complex. We will discuss this further in the latter part of this module.

Standards

This is also a term that came from industry. Standards are sets of characteristics or quantities that describe the features of a product, process, service, interface or material. 'Standards New Zealand' defines standards as specifications that define materials, methods, processes or practices. In industry, standards provide a basis for determining consistent and acceptable minimum levels of quality, performance, safety and reliability. For example, the format of credit cards that enables them to be used anywhere in the world is defined by international standards.

In higher education and quality assurance, 'standard' denotes a principle (or measure) to which one conforms (or should conform), and by which one's quality (or fitness) is judged. It also has other meanings, such as the 'degree of excellence required for a particular purpose', and 'a thing recognized as a model for imitation'. There are also contexts in which standard means 'basic', without any value-addition features, or 'average quality' or minimum requirements. Standards can be expressed in many ways – quantitatively and qualitatively. We will discuss this further below. In this module, standards refer to 'the specification of aspects, elements or principles to which one should conform or by which quality is judged'.

Criteria

A criterion is an aspect or element by which a thing is judged. The International Network for Quality Assurance Agencies in Higher Education (INQAAHE) glossary (www.qualityresearchinternational.com/glossary) defines criteria as "the specifications or elements against which a judgment is made".

The difference between criteria and standards must be mentioned here. While the criteria indicate the elements or aspects, the standards set the level. The Australian Universities Quality Agency (AUQA) glossary indicates that a "function of standards is to measure the criteria by which quality may be judged".

In practice, the terms criteria and standards are used interchangeably by QA agencies. The National Assessment and Accreditation Council (NAAC) of India differentiates between

criteria and criterion statements. This may be worth considering. In the NAAC's framework, criteria are the broad aspects on which the quality of the institution is assessed. The Council has identified seven criteria. The criterion statements are similar to the standard statements used by the regional accrediting agencies of the USA. These statements set the level or standards to be achieved under the criteria.

Box 3 gives examples of different usages of the terms 'criteria' and 'standards'. You will notice that the criteria spelt out by the NAAC are related to aspects, while the criteria spelt out by the Higher Education Quality Committee of South Africa are in the form of statements. The Romanian Agency for Quality Assurance in Higher Education (ARACIS) uses a terminology referring to fields and criteria.

Box 3. Standards and criteria: USA, South Africa, India and Rumania

Characteristics of excellence: Middle States Council for Higher Education (MSCHE)

(The MSCHE has developed 14 standards, and standard 10 is on 'Faculty'.)

Standard 10: Faculty

The institution's instructional, research, and service programmes are devised, developed, monitored and supported by qualified professionals.

Criteria for institutional audit: Higher Education Quality Committee (HEQC)

Criterion 9

Recruitment, selection, development and support policies and procedures facilitate the availability of suitably qualified and experienced academic and support staff to deliver the programme. Staff capacity in relation to programme needs is regularly reviewed.

Criteria for assessment: National Assessment and Accreditation Council (NAAC)

The NAAC has identified the following seven criteria to serve as the basis of for its assessment procedures: curricular aspects; teaching-learning and evaluation; research, consultancy and extension; infrastructure and learning resources; student support and progression; organization and management; and healthy practices.

Under teaching-learning and evaluation, it lists eight criterion statements and the following three are related to Faculty:

- The institution has an efficient mechanism to recruit qualified and adequate faculty.
- The institution has an open and participative mechanism for evaluation of teaching, research and work satisfaction of the faculty.
- The faculties have opportunity for continued academic progress and professional advancement.

Criteria for assessment: ARACIS

ARACIS elaborated a methodology for external evaluation, standards, standards of reference and list of performance indicators, which was approved by Government Decision No. 1418/2006 in which the mission specified is fully stated.

According to this "methodology", quality assurance in education makes reference to the following fields and criteria:

A. Institutional capacity, as a measure of the internal organization and management, of the infrastructure available and which is defined through the following criteria:

a) the equipment and assets made available;
b) the institutional, administrative and managerial structures;
c) the human resources.

B. Educational effectiveness, that refers to the mobilization of resources with the purpose of attaining the expected training output, and that entails the following criteria:

a) the contents of the training programmes;
b) the training output;
c) the scientific or didactic research activity, as the case may be;
d) the financial activity of the organization.

C. Quality management, referring to the following criteria:

a) strategies and procedures for the purposes of quality assurance;
b) procedures related to the initiation, monitoring and regular review of programmes and activities carried out;
c) objective and transparent procedures to assess the training output;
d) procedures for the regular assessment of the trainers' quality;
e) accessibility of the training resources;
f) systematically updated database on the internal quality assurance;
g) transparency of the information of public interest on the training programmes, and on the issued certificates, diplomas and qualifications, as the case may be;
h) operation of education quality assurance structures in the conditions set forth by the law.

Sources: MSCHE, CHE, NAAC and ARACIS websites.

Agencies thus vary in the use of the terms 'criteria' and 'standards'. However, they all mean aspects – with or without the levels or specifications – that should be considered in assessing quality.

Benchmarks

A benchmark is a point of reference to make comparisons. A benchmark was originally a surveyor's mark on a wall, pillar, or building used as a reference point in measuring altitudes. Today, the term is used in all activities that involve comparisons. The INQAAHE glossary gives the following definition: "A benchmark is a point of reference against which something may be measured.

In the simplest definition, benchmarking is the process of learning by making comparisons. For centuries, comparisons have been made in many informal ways. Today, benchmarking has come to mean a formal process of comparison as a way of generating ideas for improvement; preferably improvements of a major nature. The American Society for Quality defines benchmarking as an improvement process in which an organization is able to measure its performance against that of the best-in-class organizations, determine how those organizations achieved their performance levels and use the information to improve its own performance. The INQAAHE glossary defines benchmarking as "a process that enables comparison of inputs, processes or outputs between institutions (or parts of institutions) or within a single institution over time" There are many ways of benchmarking that serve different purposes. To understand the differences, the options available in the different types of benchmarking and methodologies should be considered. The Commonwealth Higher Education Management Service (1998) in its publication *Benchmarking in higher education: an international review* (available at: www.chems.org) makes the following classification:

- *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 transindustry (best in-class) benchmarks* that look across multiple industries in search of new and innovative practices, no matter what their source.

Box 4 presents another classification.

Box 4. Types of benchmarks

Two kinds of benchmarks can be readily distinguished — **criterion reference** and **quantitative**.

The **criterion reference** approach simply defines the attributes of good practice in a functional area. A university wishing to benchmark its success in that area will assess whether it has achieved the criteria. In the financial area, for example, a university's liquidity ratio ought to be positive. If it meets that criterion the university is meeting the benchmark. The benchmark could be simply a checklist of essential attributes constituting good practice. A large number of universities may achieve good practice on this type of benchmark. But levels falling short of good practice, i.e. missing or sub-standard attributes may also be distinguishable, signaling the need for improvement.

Quantitative benchmarks, on the other hand, inevitably distinguish normative and competitive levels of achievement. These distinguish where practice is quantifiably different in some institutions. Often the differences will signal good practice; sometimes the differences, such as the proportion of postgraduate students within the total enrolment, will be as much matters of choice and policy as good practice. Both approaches to the formulation of benchmarks are important.

Source: McKinnon *et al.*, 2000.

There are many more types in the literature on benchmarking. There are also many methodologies that can be adopted to develop these benchmarks. For example, the 'ideal type standards' (or 'golden standards') approach creates a model based on idealized best practice. It is then used to assess institutions on the extent to which they fit that model. On the other hand, vertical benchmarking is an approach that seeks to quantify the costs, workloads, productivity and performance of a defined functional area. *Activity 2* will familiarize you with more developments regarding benchmarking.

The discussions above indicate that benchmarks can be in many forms. They can be quantitative (such as ratios) or qualitative (such as successful practices). They can be expressed as 'practices', 'statements' or 'specifications of outcomes', all of which may overlap. In particular, benchmarks can be either 'practices' or 'metrics'. Metrics are the expression of the quantified effects reached once practices have been implemented. For the purposes of this module, we will not go beyond these details.

Keeping in mind the above discussions, we will use the following definitions in this module:

- Statistics – Statistical data or data collected in a systematic way
- Indicator – Data or statistic that indicates or signals something
- Performance Indicator – Data that signals some aspect of performance
- Criterion – Aspect or element against which a judgment is made
- Standard – Specification of aspects or elements or principles to which one should conform or by which quality is judged
- Benchmark – A point of reference to make comparisons

Activity 2

1. Browse the websites of HEQC (www.che.ac.za), QAA (www.qaa.ac.uk) , CICA (www.cica.ca) and NAAC (www.naac-india.com) and analyze how agencies use the terms "indicator", "criterion" and "benchmark".

2. Reflect on the different usages of the terms discussed above in your country. What similarities and differences do you observe?

Similarities:

-

-

-

Differences:

-

-

-

Approaches to quality assurance

Based on the various understandings of quality and the context, QA agencies adopt a particular definition of quality to develop their procedures. In the following pages, we will discuss two sets of different understandings of quality that may be adopted by QA agencies.

1. Standards-based vs. fitness-for-purpose

As was discussed in *Module 1*, some QA agencies build their understanding of quality taking the 'self-defined' goals and objectives of the institution or programme as the starting point. Other agencies determine quality with reference to a set of standards, specifications or expectations set externally. The agencies of the latter group define quality externally. They may not care what an institution means to do. Rather, they demand that at the very least it does A, B or C, which are set as external requirements. There are also differences in the levels set by the agencies to demonstrate quality – whether these are minimum requirements or high standards. We will see these variations in the following pages.

Standards-based understanding of quality

In the 'standards-based' understanding of quality, institutions must demonstrate their quality against a set of pre-determined standards. Adherence to standards developed externally by a reference group is seen as a threshold level of quality. Compliance to norms, accountability, adherence to rules and regulations and adopting codes of practice are predominant here. This is also the practice where the outcomes and competencies acquired are important, as in the case of licensing for professional practice.

It may be noted that standards are not necessarily quantitative. To judge whether standards are met, some level must be agreed on or set. This level may be quantitative (e.g. student-teacher ratio) or qualitative (adequate, competent and qualified faculty). From the examples given within brackets, it is clear that issues perceived to be quantitative can have a qualitative basis. Most qualitative aspects can be given a quantitative expression. We talk about the student-teacher ratio based on the assumption that a particular ratio is necessary for good teaching and learning. Similarly, competent and qualified faculty can be expressed in terms of academic qualification, years of experience, publications record, student evaluation of faculty, etc. However, quality assurance today has changed. While in the past quantitative criteria was enough to demonstrate that a standard had been met, more qualitative criteria is now incorporated and institutions may thus be able to more easily maintain their individuality.

Standards may also be qualitative statements, such as in the case of the regional accreditation agencies of the USA. Some agencies develop standards based on good practices required in quality institutions or programmes. There are also agencies that spell out detailed specifications to be fulfilled. These rely more on quantitative specifications. There are thus widely different approaches or models that quite a large number of agencies have adopted.

The set of standards developed by the Commission on Institutions of Higher Education, New England Association of Schools and Colleges, USA is an example of the former. The standards developed by the All India Council for Technical Education (AICTE) is an example of the latter.

AICTE has a set of standards that must be fulfilled for the establishment of new institutions wishing to offer undergraduate degrees in engineering and related areas. The standards set by AICTE are meant to check whether institutions have the potential and adequate facilities to offer quality programmes. For certain aspects, AICTE has spelt out quantitative standards. These include, for example, student intake, land area, carpet area, funds, faculty size and the library requirement. Details for one item – Central Library - are given in *Box 5*:

Box 5. Quantitative and qualitative standards

Quantitative standards for the establishment of an institution to offer new degree programmes in engineering and technology

Central library

The central library for an admission of 240 students per year will have a carpet area of 400m².

At the time of establishing a technical institution with three branches, there should be a minimum of 4000 volumes in the Library distributed as below:

i. Each branch will have 250 titles with four multiple copies.
ii. In subjects like Mathematics, Humanities, Physics, Chemistry, etc. there should be total of 1000 volumes.

There should be a minimum of 12 technical journals – 6 Indian and 6 International for each branch of engineering. While this is essential for institutions offering P.G. programme, the number of International Journals may be relaxed, though preferred for those offering only U.G. Programmes.

Accordingly, the norms for the initial stock of books, yearly addition of books and the number of journals to be subscribed are as given below:

SNo	ITEM	MINIMUM
1.	Initial Stock of Books for three branches in Institution	4000
2.	a. Each Branch of Engg. (A)	1000
	b. Mathematics, Applied Physics Applied Chemistry, Humanities, Social Science and Management Science (B)	(in each branch)
3.	Yearly addition of Books (Average)	
	a. For (A) 1 title per student admitted to the branch	
	b. For (B) 0.2 title per student admitted per year	
4.	Number of Tech. Journals	
	a. For (A) 12 (6 National + 6 International)	
	b. For (B) 12 (6 National + 6 International)	

Source: AICTE website

Qualitative approach to standards

Standards for accreditation; Commission on Institutions of Higher Education, New England Association of Schools and Colleges

Standard one: Mission and purposes: The institution's mission and purposes are appropriate to higher education, consistent with its charter or other operating authority, and implemented in a manner that complies with the Standards of the Commission on Institutions of Higher Education. The institution's mission gives direction to its activities and provides a basis for the assessment and enhancement of the institution's effectiveness.

Standard two: Planning and evaluation: The institution undertakes planning and evaluation appropriate to its needs to accomplish and improve the achievement of its mission and purposes. It identifies its planning and evaluation priorities and pursues them effectively.

Standard three: Organization and governance: The institution has a system of governance that facilitates the accomplishment of its mission and purposes and supports institutional effectiveness and integrity. Through its organizational design and governance structure, the institution creates and sustains an environment that encourages teaching, learning, service, scholarship, and where appropriate research and creative activity. It assures provision of support adequate for the appropriate functioning of each organizational component.

Standard four: The Academic Programme:...
Standard five: Faculty:...
Standard six: Students: ...
Standard seven: Library and Other Information Resources:...
Standard eight: Physical and Technological Resources:...
Standard nine: Financial Resources;...
Standard ten: Public Disclosure:...
Standard eleven: Integrity:...

Source: Commission of Higher Education Institutions website (New England Association of Schools and Colleges)

In the case of the standards-based understanding, the examples above show that whether something is of quality depends on whether it conforms to externally-derived standards.

Contrary to this perspective, the 'fitness-for-purpose' understanding of quality begins with the institution's purposes.

Fitness-for-purpose (FFP) understanding of quality

In the 'fitness-for-purpose' approach to quality, an organization or object is 'fit for purpose' if:

1. there are procedures in place that are appropriate for the specified purpose(s); and
2. there is evidence that these procedures are in fact achieving the specified purpose(s).

In this sense, an institution that achieves the goals and objectives it has set for itself is considered a quality institution. The goals and objectives of the institution or programme become the lens through which the QA agency analyzes the quality of the institution or programme.

Whether the purpose of the institution may be mandated from outside – by the government or by other stakeholders – is debatable. This is what would be called the 'fitness-of-purpose' approach. In this approach, a person determines which purposes are acceptable. These purposes are then measured against external standards. But 'fitness-for-purpose' implies that we are talking about the purposes set out by the institution itself. Once the institution incorporates the mandate into its purposes, they all become 'self-defined' purposes of the institution. This is true even in cases where the mandate of the institution is given by external stakeholders. The institution is then measured against those purposes.

This is suitable in systems where other mechanisms ensure that pre-determined or threshold-level standards are met by the institutions or programmes. It is also effective in systems with good self-regulation mechanisms, where institutional diversity is promoted (as against conformity to standards) and where institutions of higher education are granted a high level of autonomy. The Australian Universities Quality Agency (AUQA) is specific about its 'fitness-for-purpose approach'. The AUQA does not impose an externally prescribed set of standards upon auditees. Instead it uses each organization's own objectives as its primary starting point for audit. This approach recognizes the auditee's autonomy in setting its objectives and in implementing processes to achieve them. The core task of AUQA audit panels is to consider the auditee's performance against these objectives.

Within the same country, different QA agencies might have a different understanding of quality depending on their mandate. For example, professional bodies that look into the quality of professional areas of studies build their understanding of quality around the competence of the graduates to practice the profession. In the same country, the agency responsible for monitoring the establishment of new institutions would have different expectations. Very often, QA agencies use a combination of these understandings as required by the context in which they have to operate. They then develop their quality assurance practices around this. The stand of the HEQC of South Africa is an example of this, as illustrated in *Box 6*.

Box 6. Balancing the different emphases of quality: the Higher Education Quality Committee of South Africa

In view of the prevailing higher education policy and educational context, the HEQC's understanding of quality encompasses fitness for purpose, value for money, and individual and social transformation, within an overarching fitness of purpose framework. (...)

- Fitness for purpose is examined in the light of the institution's mission and goals and definition of its identity.
- Fitness of purpose is examined with regard to the manner and extent to which an institution's mission and academic activities are responsive to national priorities and needs.
- Value for money is assessed by considering the extent to which efficiency, effectiveness and economies of scale are embedded in the quality management of the core functions of the institution.
- Transformation is assessed with regard to the development of individual students as well as the country's requirements for social and economic development.

Source: HEQC Institutional Audits Manual 2007

The ‘fitness-for-purpose’ vs. ‘standards-based understanding’ determines the broader approach followed by the QA agency. For example, audit is more open to the use of the ‘fitness-for-purpose’ approach, while accreditation is more commonly ‘standards-based’. The fitness-for-purpose approach has been criticized because it undermines the ‘fitness of purpose’. For instance, when evaluating performance against aims and objectives defined by the institution itself, the review team may find that the self-defined aims and objectives have been fully met. However, this tells us nothing about the academic worth of the aims and objectives. Indeed, these may have been pitched, deliberately, at a modest level. This has led to criticisms on ‘set aims and objectives’ and measuring standards against these.

However, one can argue that it is difficult to separate the two definitions. Practically, it is not possible to have an absolute ‘fitness-for-purpose’ understanding of quality. Some amount of what is ‘acceptable and appropriate’ to be considered as quality can be found in all understandings of quality. There are certain non-negotiable national development requirements within which HEIs must determine their mission. This takes care of the appropriateness of purposes, even if the QA agency chooses ‘fitness-for-purpose’ as its focus.

For example, the University of Western Sydney defines quality in its Quality Assurance Framework as ‘fitness for moral purpose’. This recognizes that purposes should be appropriate. Although the national quality agency of Australia, the AUQA, follows the fitness-for-purpose approach for its audit scheme, all Australian HEIs are subject to the provisions of a broad quality assurance system that consists of the following actors (in addition to the AUQA):

- the Federal Government, through the Department of Employment, Science & Training (DEST);
- the Ministerial Council of Employment, Education, Training & Youth Affairs (MCEETYA);
- the Australian Qualifications Framework (AQF);
- the National Protocols, devised by MCEETYA and enacted by each state and territory; and
- the Australian Vice Chancellor's Committee (AVCC).

In other words, appropriateness of purposes is well regulated by the other mechanisms in the higher education sector. This makes it possible for the AUQA to focus on fitness for purpose. Looking at this issue from another point of view, all HEIs function under certain regulations and guidelines. They get their approval to function by agreeing to follow certain rules and codes of practice. To the extent that the regulations and recommendations are accepted by institutions, they become part of the institution’s policies (and implicitly, therefore, part of an institution’s objectives). The AUQA may thus consider whether an institution has adopted or adapted such guidelines, and investigate the extent to which the institution’s objectives are being met in this regard. The AUQA’s *Audit manual* (www.auqa.edu.au) has more details on this.

The Chilean QA agency uses a definition of quality that combines both aspects and highlights the need for HEIs to take responsibility for their quality. *Box 7* explains the Chilean case.

Box 7. The Chilean QA Agency's stand

In this case, quality is defined as the combination of two main elements:

- External consistency, which means the way in which a programme or an institution adjusts its operation to the requirements set by its academic, disciplinary or professional reference group (the university community defines what is expected of a university, the architectural community defines what is expected of a program of architecture). It is important that these requirements are kept to the essential core of competencies or functions that must be fulfilled.
- Internal consistency, which means the way in which the institution or the programme adjust to the priorities and guidelines that follow from its mission statement and its definition of purpose. Thus, while all architects will have the same basic competencies, the architects of university A will be quite different from the architects of University B, because they will adhere to a different set of priorities.

In the case of programmes, this is translated into a graduating profile, which clearly states the expected learning outcomes of students, and the commitments the institution makes when enrolling them.

Source: CNAP, Handbook for Self Assessment, 2006 (Translated from Spanish)

2. Minimum requirements vs. standards of high quality (or good practice)

While virtually every QA agency would claim that they are aiming at the improvement of quality, some quality assurance models ensure only that the minimum requirements are fulfilled for a particular status. Such models are generally meant for compliance purposes. The outcome has implications for approvals and sanctions. Within the context of diversification and privatization, most developing countries are confronted with many low level providers and have no system in place for dealing with them. Thus, minimum standards are now frequently the priority. The case of Chile in the 1990s, described in *Box 8*, is an example of a regulatory approach to ensuring quality.

Box 8. Licensing of new private institutions in Chile

The purpose: To make sure that all new institutional proposals comply with basic quality requirements, that they have the necessary resources to operate, and that during their initial years, there is a consistent advance towards the implementation of the initial proposal. At the end of the process, institutions are either certified as autonomous, or lose the public recognition that entitles them to grant valid degrees and must close down.

The agency: The Consejo Superior de Educacion (CSE), created by a constitutional law in 1990, has nine members from higher education institutions and other social organizations. It is chaired by the Minister of Education, and has joint funding: part of it comes from the national budget, and part from fees paid by the institutions that apply for licensing. It has technical staff, and operates mainly through the work of consultants and evaluators hired for specific purposes.

The procedure: The CSE reviews all proposals for new, private institutions. It evaluates each proposal and either approves it or points out the reservations it may have. In the latter case, the proposal goes back to the institution, which has two months to modify its proposal and re-submit it. The CSE takes a final decision on approval or rejection. If it rejects the proposal, the institution cannot be opened. If it is accepted, then it is legally recognized and may start operating under CSE supervision.

During the first six years of operation of an institution, it must submit a set of institutional data every year (including academic and financial information). Students may be tested by external examiners sent by the CSE, and at least twice, the institution is visited by a team of external assessors who analyze the development of the project and the degree to which it is fulfilling its goals. During this time, new programmes and degrees must also have the approval of the CSE. Every year, the CSE sends the institution an action letter pointing out the perceived strengths and weaknesses, and the actions the institution must take. At the end of the sixth year, assessment is global, and if the institution is considered to have developed adequately, the CSE certifies its autonomy. If not, supervision may be extended for a period up to five years, after which the institution is either certified as autonomous or closed down.

The CSE may also, during the period of supervision, close down an institution if it considers that the institution is not acting on its recommendations.

Source: Lemaître, 2005.

Complementing the above approach, within the same country other initiatives emphasizing 'improving institutions' do not follow this regulatory approach. Sometimes, the same agency may have two different approaches. One ensures minimum requirements, while the other pays attention to high standards.

Depending on the stage of development of the higher education system, QA agencies may set standards of high quality. Moreover, the frame of reference for assessment may be 'high quality' and not just a fulfillment of minimum requirements. The Middle States Commission on Higher Education, USA calls its standards for accreditation 'characteristics of excellence of higher education'.

This discussion may appear to present contradictory approaches to quality assurance. But it should be remembered that quality assurance deals with institutions and programmes of varying levels of quality. Moreover, the quality concerns of countries vary greatly. Within the same country, many mechanisms may co-exist to address different quality concerns. There should be co-ordination between these various quality assurance efforts. In general, those QA agencies that look into minimum standards and those that go beyond the minimum requirements in the same system complement each other. Mechanisms are required to ensure a threshold level of quality as well as to enhance quality among institutions having crossed the threshold level.

Areas of quality assessment

Areas or aspects considered by QA agencies have a lot in common. Indeed, while they may have different names, or follow different organizational structures, most quality assurance agencies look at the same things. Certainly, they may have different emphases. For example, four QA agencies in the Philippines accredit programmes. *Box 9* highlights how similar they are in their scope of quality assurance. The areas considered by QA agencies that accredit institutions are also similar.

Box 9. Standards for quality assurance – programme accreditation by the four accrediting associations of the Philippines

The (accreditation or quality assurance) agencies engage qualified faculty members and professionals to develop detailed criteria specific to each programme or course of study. The criteria may differ from one agency to another, as might their application, but the scope of the review based on the areas covered by the standards of each agency is almost identical.

S. No.	ACSCU-AAI	PAASCU	PACU-COA	AACCUP
1	Purposes and Objectives	Purposes and Objectives	Purposes and Objectives	Mission, goals and objectives
2	Faculty	Faculty	Faculty	Faculty
3	Instruction	Instruction	Instruction	Curriculum & programme studies
4	Library	Library	Library	Library
5	Laboratories	Laboratories	Laboratories	Physical facilities and laboratories
6	Physical plant and facilities	Physical plant and facilities	Physical plant and facilities	
7	Student personnel services	Student services	Student personnel services	Students
8	Social orientation and community involvement	Social orientation and community involvement	Social orientation and community involvement	Extension and community
9	Organisation & research administration	Administration	Organisation & administration	Administration

Source: Phelps, 2001

In Pursuit of Continuing Quality in Higher Education through Accreditation: The Philippine Experience, IIEP case study, 2003

Certain areas are key to assessing quality. This is true in all agencies, regardless of differences in the country context in which they operate and the unit of quality assurance,

In August 2002, the UNESCO Asia-Pacific Regional Bureau of Education, Bangkok sponsored an experts meeting on 'Indicators of Quality & Facilitating Academic Mobility Through Quality Assurance Agencies' for the Asia-Pacific region. The meeting was well attended by quality assurance and higher education experts from eight countries. Participants at the meeting agreed that the following areas are key to quality:

1. integrity and mission;
2. governance and management;
3. human resources;
4. learning resources and infrastructure;
5. financial management;
6. student profile and support services;
7. curricular aspects;
8. teaching-learning and evaluation;
9. research, consultancy and extension; and
10. quality assurance.

Participants also identified the areas to be considered under the key areas. These were:

1. <u>integrity and mission:</u> honesty and transparency in policies and procedures; interaction with the community and stakeholders; a clearly formulated realistic mission; aims and objectives known to all constituents of the institution; equity and reservation for disadvantaged groups;

2. <u>governance and management:</u> autonomy of governance; organizational structure; delegation of powers; institutional effectiveness; strategic plan; documentation; modernization of administration;

3. <u>human resources:</u> recruitment procedures; adequacy, qualification and competence of staff; awards, honours, membership, prizes, medals of learned societies of staff; retention; staff development; recognition and reward; staff workloads; welfare schemes; grievance redressal;

4. <u>learning resources and infrastructure:</u> land and buildings; ownership; labs and lecture halls; library and information technology facilities; library spending per student; spending on computing facilities per student; health services, sports and physical education and halls of residence; campus maintenance; optimal usage; community use of institutional facilities; commercial use of institutional facilities;

5. <u>financial management:</u> funding sources; ownership of resources; sustainability of funding; resource mobilization; resource allocation; accountability; liquidity; budget for academic and developmental plans; unit cost of education; strategic asset management; matching of receipts and expenditure.

6. <u>student profile and support services:</u> admission procedures; student profile – gender, age, social strata, geographical distribution, foreign students, enrolment by levels of study, age ratio, staff/student ratio, out-of-state enrolment, distribution of entry grade; drop out and success rate; progression to employment and further studies; student achievement; student satisfaction; personal and academic counselling; participation of staff in advising students; merit-based scholarships; other scholarships and fellowships; informal and formal mechanisms for student feedback; student representation; student complaints and academic appeals; student mobility; recreational activities for students;

placement rate of graduates; employer satisfaction with graduates; graduate earning by field of study; alumni association and alumni profile;

7. curricular aspects: conformity to goals and objectives; relevance to social needs; integration of local context; initiation, review and redesign of programmes; programme options; feedback mechanism on programme quality; interaction with employers and academic peers; demand for various course combinations;

8. teaching-learning and evaluation: teaching innovations; use of new media and methods; co-curricular activities; skill and competence development; projects and other avenues of learning; linkage with institutions, industries and commerce for teaching; linkage for field training; monitoring student progress; continuous internal assessment; use of external examiners; examination schedule, holding of examinations, evaluation, declaration of results; remedial and enrichment programmes;

9. research, consultancy and extension: institutional support for research; staff active in research; research students by field of study; number of PhDs awarded per academic staff; number of research projects per academic staff; research projects sponsored by industry; public sector research funding; ratios of research expenditure and income; research assistantships and fellowships; staff supported by external research grants; existing research equipment; usefulness of research results for education; social merits of research; interdisciplinary research; student involvement in faculty research; research quality - citation of publications, impact factors, patents and licenses; benefits of consultancy to industry and the public; community-oriented activities; and

10. quality assurance: internal quality assurance; institutional research on quality management; co-ordination between the academic and administrative functions; outcomes of external quality assessments; academic ambience; educational reforms.

These areas indicate how a group of QA agencies have identified key areas with a bearing on the quality of institutions. You will notice that some of them could be linked to quantitative expressions while some are qualitative. While the above example highlights the areas of assessment for institutional quality, the case of the Philippines presented in *Box 9* highlights the point of view of programme quality. The two examples indicate that the areas of assessment overlap for institutional and programme accreditation. However, there are differences in terms of focus and scope. While the curricular aspects under institutional accreditation may be more concerned with the overall policies and practices of the institution, programme accreditation would look more closely into the quality of the curriculum of the programme under review. Institutional accreditation might also look at the quality of one or more programmes to seek evidence for the evaluations. However, the purpose is not to pass judgment about the quality of the curriculum of that programme. Rather, it aims to make inferences about the overall curricular aspects of the institution.

Activity 3

1. Browse the web sites of a few quality assurance agencies and identify common areas of assessment they consider. Do a similar analysis for programme-level quality assurance.

2. In the context of your country, which focus would be of immediate priority – 'minimum standards' or 'standards of high quality'? What would be useful in the long term?

3. If your country needs a quality assurance agency to look into 'minimum standards', what priority areas should be addressed?

4. If a quality assurance agency is established in your country with 'high standards' as its focus, what type of institutions or programmes in your country will benefit from it?

Quality assurance decision-making

QA agencies must build up a framework for translating their notion of quality into 'quality assurance decisions'. Indeed, evaluative guidelines or a framework against which the agency can make decisions are a critical element in quality assurance. A quality assurance process may examine many academic and administrative aspects of the institution or programme being reviewed and collect data on those aspects. However, the information gathered does not speak for itself. An evaluative judgment must be made, and the evidence gathered must be interpreted in light of some prior questions. This may be done in a rather explicit fashion, where both quantitative and qualitative benchmarks are set for desirable achievements and the reviewer simply establishes the evidence. However, there are also systems in which the assessment is based on the professional judgment of the reviewer. This use of evidence, judged against a quality assurance framework, leads to decisions with important consequences. Agencies do this in many ways. Some develop standards. Others agree on a set of indicators, while yet others define benchmarks. While some agencies develop specific indicators, others develop broad standard statements against which quality is assessed by experts.

1. Different approaches to using standards

QA agencies adopt different ways of developing and using standards. The standards prescribed by the AICTE (see *Box 5*) mostly relate to 'inputs' to the institution required to offer a quality programme. Some agencies have shifted their focus to 'outcomes'. In most programme accreditation in professional areas of studies, standards relate to good institutional procedures and practices. A practice-focused perspective is adopted in these cases. These agencies interpret quality in terms of how effectively new entrants to the profession have been prepared for their responsibilities. In recent years, this has resulted in many professional bodies paying attention to competency-based standards. These focus on the appropriate and effective application of knowledge, skills and attitudes. They emphasize the relationship between formal education and work outcomes. This means that they are concerned with the ability to apply relevant knowledge appropriately and effectively in the profession. The agencies that adopt this understanding of quality generally require institutions and programmes to demonstrate the 'output' of the programme rather than the 'input'. The focus is therefore on developing competence among students to become good professionals, rather than on the number of hours of tutorials or hands-on experience provided. The development of competency-based standards in the USA is described in *Box 10*.

Box 10. Move towards competency-based standards of professional bodies (USA)

The evolution of standards for programmes in architecture provides an illustration. As early as 1902, following the procedures established in law and medicine, practitioner groups had developed an examination system in Illinois for graduates of fourth-year programmes in architecture. By 1914, minimum standards for architecture programmes were established. In 1940, a national board was created in order to oversee accreditation of schools of architecture on a national basis. While numerous revisions of this basic approach occurred over the next several decades, a significant new approach was adopted in 1982. The board's new mandate was to apply "achievement-oriented performance criteria" in its evaluation of architecture programmes. Under this approach, each school "…is responsible for seeing that each graduate completes a liberal studies

requirement and attains the necessary achievement for each of the major areas" of the programme. Criteria are grouped under four major headings: Fundamental knowledge; design; communication; and practice. Levels of accomplishment are stipulated for 54 different areas of practice.

Source: El-Khawas, 2001: 63-64.

Professional regulation bodies develop their methodologies based on competency-based standards in many ways. For example, the Canadian Institute of Chartered Accountants (CICA) has developed 'The CA Candidate's Competency Map' for its qualification (recognition or registration) process of Chartered Accountants (CAs). CICA together, with the CA institutes, represents approximately 68,000 CAs and 8,000 students in Canada and Bermuda. It has identified two types of competencies: pervasive qualities and skills (that all CAs are expected to bring to all tasks); and specific competencies. The specific competencies are grouped into six categories. The competencies listed by CICA for the category 'Taxation' (competencies related to taxation planning, compliance and reporting for various entities) are given in *Box 11*.

Box 11. The competency map: Canada

The specific competencies – taxation

1. Analyzes the entity's tax profile and identifies overall tax issues
   - 1.1 Understands the entity's tax profile
   - 1.2 Identifies and advises on compliance and filing requirements
   - 1.3 Describes other types of filing requirements
2. Prepares and files necessary returns in accordance with legal requirements
   - 2.1 Calculates basic income taxes payable for an individual
   - 2.2 Calculates other income taxes payable for an individual
   - 2.3 Calculates basic taxes payable for a corporation
   - 2.4 Calculates other taxes payable for a corporation
3. Practices effective tax planning to maximize after-tax returns
   - 3.1. Identifies, analyzes, and advises on specific tax planning opportunities for individuals
   - 3.2 Identifies, analyzes, and advises on specific tax-planning opportunities for shareholders of closely-held corporations
   - 3.3 Identifies, analyzes, and advises on financial and estate-planning opportunities for individuals and families
   - 3.4 Analyzes tax consequences for non-residents
   - 3.5 Identifies, analyzes, and advises on tax consequences or planning opportunities associated with certain corporate transactions
   - 3.6 Analyzes tax consequences of other corporate restructuring transactions
4. Prepares information to respond to assessments, file objections and appeals

Source: CICA, the UFE candidates competency map

In addition to different ways of using standards, the decision-making process allows for varying levels of professional judgment. Most QA agencies have some level of specifications and reliance on quantification. In some quality assurance frameworks, peers are freer to make judgments against a broad framework. In most other systems, peer judgment is guided by explicit considerations, such as quantitative specifications and indicators.

2. Reliance on quantitative assessment

QA agencies may rely on quantification at various levels. Some of the ways are: requiring institutions to demonstrate that they fulfill certain quantitative norms; requiring peers to assess whether the norms are fulfilled; requiring peer assessment to be recorded on a quantitative scale; and requiring the final outcome to be expressed on a quantitative scale. This raises the question: 'Can quality be assessed against quantitative measures?'

Several points of view exist on this fundamental question. Indeed, quality assessment is necessary and inevitable for several human activities. However, the techniques employed may be quite subjective. For instance, we depend to a large extent on human sensory perceptions for assessing aspects such as beauty, music, tea, comfort levels in air-conditioning and perfumes. It is also well recognized that we do not have clear measures for measuring many things in life such as feelings, intellect and emotion. It is widely believed that quality, like beauty, is an elusive characteristic.

Earlier, we discussed quality as an idea that is complex and multi-dimensional. There is no doubt that there are many other things of significance. These include, for example, development, growth, excellence, democracy and religion. We have learnt to deal with these. In this sense, there have been many efforts to assess quality. Some of these efforts rely more on quantitative methods, while others depend on qualitative ones.

Some agencies base their decisions mostly on quantitative data. Mexico's accreditation agency for engineering is a case in point. When there is an emphasis on consistency, compliance or agreement on expected levels of performance, QA agencies tend to develop quantitative norms. They then use them as the frame of reference for quality assurance. The AICTE's standards (see *Box 5*) are an example. At the same time, some agencies seek to ensure minimum standards that are not expressed quantitatively. The set of eligibility criteria of the accreditation agencies of the USA is an example. On the other hand, some agencies rely on quantification to consider the excellence of institutions. For example, the National Council of Accreditation in Colombia (NCAC) has 'excellence' as its focus. It defines quality as the integration of 66 characteristics. For each characteristic, a series of qualitative and quantitative variables have been spelt out. *Box 12* below highlights how the variables and indicators for one of the characteristics have been spelt out.

Box 12. Variables and indicators of a characteristic (Colombia)

Characteristic 16: In compliance with institutional objectives and relevant programme specificities, faculty size is adequate and teachers have both the commitment and training the programme requires.

Description: It points to the fact that, to achieve the institution and programme objectives, the required number of teachers should be available, their level of qualification appropriate and their commitment to the institution and to the programme in question adequate. Likewise, efforts are made to find out whether the number of teachers attached to the programme and their training and commitment come close to the ideal situation sought after for the specific programme and institution. The above examines the quality of education in one of its core aspects.

Variables:

- Adequacy to programme requirements of faculty commitment and of their specific training and level of qualification.
- Academic quality of faculty attached to the programme

Indicators:

- Training (graduate, postgraduate, Master's, Doctoral), rating on the promotion ladder and commitment of teachers to institution and programme.
- Other educational experiences of the teachers relevant to their performance in the programme
- Period of time teachers have worked in the institution and programme, as well as any other academic and professional experiences of faculty involved
- Relationship between the number of students enrolled in a programme and the number of teachers involved. A comparison should be established with regard to full-time commitment.
- Assessment by outstanding members of academic communities of faculty committed to programme.
- Assessment of programme students with regard to both the quality and sufficiency of the number of students enrolled, and of the commitment of teachers involved in the programme.

Source: Revelo Revelo and Augusto Hernandez, 2003: 47-48.

In other words, quantification can be relied on irrespective of whether the agency seeks to ensure minimum standards or standards of high quality. QA agencies that seek to ensure objectivity and reduce subjectivity of peer assessment, especially in systems where identifying competent peers might be challenging, opt to use quantitative measures. They claim that quantitative measures help to ensure that the quality assurance process is transparent. A predominant way of carrying out quantitative assessment is using performance indicators.

Use of performance indicators

Using PIs in quality assurance is still debated. However, it has gained acceptance in some accountability-related decision-making. In the UK, it came as a response to market forces demanding better products from universities. In Australia, PIs were developed so that education institutions could respond more positively to government priorities. In the Netherlands, PIs have been used to impose fiscal responsiveness and discipline. And in the USA, its use enabled institutions to obtain more autonomy from state legislatures (Gaither *et al.*, 1994).

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

1. PIs may be useful to check accountability concerns.
2. PIs help in comparing performances of similar institutions.
3. PIs can provide a range of information about performance to steer self-improvement and effective management strategies.
4. PIs can provide simple public information about the health of the institution in several areas of functioning.
5. PIs can shape policy formulations.

In other words, PIs are seen to help HEIs in planning and managing for self-improvement, in providing public information, and in making comparisons and setting benchmarks. It might help the government as a measure of accountability and for policy formulations. While many are willing to accept PIs for the purposes of self-improvement, they are afraid that it may be used to control institutions. Davis (1996) sums up the situation in this way: "Where performance indicators become most controversial is, where the emphasis shifts

from their use as one of many inputs into effective decision-making to using them as a ranking device, to allocate esteem and funding differentially".

Those who do not support PIs in quality assurance point to the fact that institutions' performance or the quality of programme delivery may be influenced by a variety of factors. Moreover, assessing the institution or programme considering all those factors is not easy. *Box 13* gives the example of the variety of indicators for one aspect of an institution's functioning: research.

Box 13. Research indicators

Inputs are researchers, postgraduate students, resources (such as time, money through grants and fellowships, equipment, consumables and so on); throughputs include research projects, research training, candidacy applications and research supervision; and outputs are reports, commercial products, publications, theses, conference papers and presentations. To these, efficiency and effectiveness indicators may be applied. Effectiveness indicators include:

1. level of infrastructure, grants, external funding to support research
2. number of staff with research training
3. number of new appointments with research training
4. demand for postgraduate places
5. level of postgraduate student satisfaction, and earnings of post graduates
6. number of new technology transfer ventures

For these, short- and long-term targets and specific measures should be established. Standard research effectiveness indicators include:

- Annual research performance index points by range of programmes
- Annual research income compared with other similar programmes and aggregated to compare with like institutions
- Annual publications by individual, programme and institution compared with others.

Efficiency indicators usually provide information about costs or productivity levels, e.g.

1. Research expenditure per research index point
2. Research performance points per full-time equivalent (FTE) academic staff member
3. Research income per `n' (e.g. ten) FTE academic staff compared with other like institutions
4. Number of publications per `n' FTE academic staff compared with other like institutions.

Source: Liston, 1999.

Box 13 shows how performance and quality in one specific aspect can be affected by a number of indicators. It also indicates how assessing quality is a complex task that must be balanced with peer assessment.

Quantification to guide peer assessment

Reviewers may be required to follow certain guidelines related to quantitative measures within which the qualitative judgment must be made. For example, the accreditation methodology of the NBA (India) requires reviewers to express their judgment in terms of indicators, with the maximum score for each indicator being predetermined by the NBA (see *Box 14*). This is despite the NBA's methodology being oriented towards peer assessment.

Box 14. Quantification to guide peer assessment: NBA (India)

Each of the eight criteria has been broken down into parameters, and weightages have been assigned to these parameters by the NBA. The parameters and the weightages assigned to them, which are different for diploma, undergraduate (UG) degree and postgraduate (PG) degree programmes are given below:

PARAMETERS		MARKS		
		Diploma	Undergraduate	Postgraduate
I. ORGANISATION AND GOVERNANCE		(30)	(80)	(50)
A	Planning and Monitoring			
B	Recruitment Procedure & its Effectiveness			
C	Promotional Policies/Procedure			
D	Leadership			
E	Motivational Initiatives			
F	Transparency			
G	Decentralization and Delegation & participation of faculty			
H	Constitution of GC/GB			

Source: National Board of Accreditation web site.

Quantification in reporting the outcome

In the case of the NAAC, the scores given by the reviewers are used to calculate the institutional scores in percentage form. The institution's score determines its grade on a nine-point scale: Grade C denotes the score range 55-60; C+ denotes 60-65; C++ denotes 65-70; B is 70-75; B+ is 75-80; B++ is 80-85; A is 85-90; A+ is 90-95; and A++ is 95-100. Institutions that do not get the minimum 55 per cent are not accredited.

Reliance on quantification, which is however relatively unusual in its pure form, has been debated by different stakeholders for various reasons. It may help an agency to ensure consistency in its approach and minimize inter-team variance among the review panels. It might also be very useful in emerging systems to assure transparency, and perhaps enhance credibility. However, the relationship between numbers and objectivity is questionable. Numbers only help when certain assumptions operate. That is, they operate when you can be sure that the difference between 50 per cent and 60 per cent is the same as the difference between 75 per cent and 85 per cent, for example. This is not usually the case in practice. Quantitative measures give a misleading sense of objectivity, hiding the real subjectivity involved in setting the scores.

Reliance on quantification has been debated by different stakeholders for various reasons. It may help an agency to ensure consistency in its approach and minimize inter-team variance among the review panels. It might also be very useful in emerging systems to assure transparency. However, it may encourage HEIs to report simple quantitative measures that benefit them instead of truthful qualitative assessments. Or, it may encourage them to chase the measures themselves, rather than what they represent. Fears have also been expressed regarding the relevance, accuracy and efficacy of many measures that have been, or are likely to be, employed by the QA agencies. Reliance on quantification and quantitative indicators becomes most controversial when the emphasis shifts from their use as an input in decision-making, to their use as a ranking device. Much depends on how the reliance on quantifications is balanced with peer assessment.

3. Reliance on professional judgment

Some QA agencies do not provide explicit norms and quantitative targets because they feel that once the norms are made explicit, they might become counter-productive to 'institutional diversity' and the 'fitness-for-purpose approach'. This does not mean that compliance to standards is not important. However, other mechanisms may ensure compliance. Once the threshold level is already ensured, the agency checks how well the HEIs are performing in their own way to achieve their goals and objectives. Considering diversity is important here and relying on quantitative assessment may not help. Professional judgment adhering to the quality assurance framework of the agency is central here.

Agencies that do not want to be very prescriptive do not require institutions to comply with specific quantitative targets. But they may provide detailed guidelines (or standards) on issues such as demonstrating adequacy and efficiency. For example, an agency may not insist that there be a teacher for every 10 students. Similarly, it might not insist that postgraduate programmes be handled only by doctoral degree holders. But it might say in general language that it should have adequate and competent faculty to run the programme under review.

For example, the AUQA gives only the indicative areas to be covered. It is the professional judgment of peers that is important (see *Box 15*).

Box 15. Indicative scope: AUQA

The AUQA pays particular attention to the academic activities carried out in the institution's name. Indicative scope of an institutional audit includes:

- organizational leadership and governance, planning;
- teaching and learning (all modes); processes for program approval and monitoring; comparability of academic standards in on-shore and off-shore programs;
- research activities and outputs, including commercialization;
- community service activities;
- internationalization, including contracts with overseas partners;
- support mechanisms for staff and students;
- communication with internal and external stakeholders;
- systematic internally-initiated reviews (e.g. of departments, themes), including the rigour and effectiveness of the review mechanisms employed; and
- administrative support and infrastructure.

Source: Audit Manual, 2008 from the Australian Universities Quality Agency website

Agencies that rely more on the professional judgment of a review team must be aware of the subjectivity that might creep into the quality assurance process. QA agencies handle this concern by developing manuals and guidelines to guide peer assessment. As discussed in earlier modules, a rigorous training strategy is key to ensuring reliable peer assessment. An interesting strategy that helps enhance the objectivity of a peer review team's judgments is the requirement that they reach their conclusions by consensus, not by vote. Thus, objectivity is ensured through a measure of inter-subjectivity, as extreme views are dismissed. What prevails is what all the members of the team agree on. The composition of teams, and the way in which they cover different views and disciplinary approaches, are also important factors in making sound decisions.

As the discussions above have revealed, QA agencies generally rely both on quantification and on peer assessment. To suit the context and their mandate, they must choose an appropriate stand. The options discussed above are not to be seen as clear-cut options. Rather, they are approaches that may be used in combination, because they bring different strengths and weaknesses to the fore.

Finally, it should also be mentioned that standards for quality assurance relate increasingly to other tools used by governments to introduce both an improved comparability and readability of qualifications, which are part of the national higher education system, i.e. qualifications frameworks and/or subject benchmarks. Qualifications frameworks indeed provide reference as to the generic competences that should have been acquired by a graduate at a certain level. Subject benchmarks, while also relying on level, do make statements on the contents and competences to be acquired by a graduate in a certain discipline. When quality assurance is conducted at the programme level, it is certain that such statements do provide a valuable frame of reference for both internal and external quality assurance processes.

Box 16. The linkage between the NQF and QA (CEEN countries)

The Bologna Process has influenced the structure in all Central and Eastern European Network (CEEN) national higher education systems. As a consequence, all CEEN agencies are increasingly involved in the assessment of the new Bachelors and Masters programmes.

The Dublin descriptors are in the majority of cases not (yet) the formal reference point for the assessment of levels of degrees. A number of agencies state (a) that they informally make use of them, (b) that the Dublin descriptors shall serve the programme providers as reference points, (c) that the Dublin descriptors were taken into account when the National Qualifications Framework was drafted, or (d) that the Dublin descriptors serve as a reference point for the recognition of foreign degrees.

The European Ministers of Education committed themselves in Berlin, 18-19 September 2003, "to elaborate a framework of comparable and compatible qualifications for their higher education systems, which should seek to describe qualifications in terms of workload, level, learning outcomes, competences and profile. They also undertake to elaborate an overarching framework of qualifications for the European Higher Education Area. Within such frameworks, degrees should have different defined outcomes. First and second cycle degrees should have different orientations and various profiles in order to accommodate a diversity of individual, academic and labour market needs. First cycle degrees should give access, in the sense of the Lisbon Recognition Convention, to second cycle programmes. Second cycle degrees should give access to doctoral studies." As the CEEN agencies' responses make transparent, a number of national systems are currently developing a National Qualifications Framework or will soon implement one (Albania, Austria, Germany, Lithuania). Hungary has recently implemented a National Qualifications Framework for the new Bachelors programmes. Where there already exists such a framework, its function for quality assurance varies: in Poland, Romania and the Russian Federation the compliance of programmes will be assessed against these (minimum) standards. In the Czech Republic, it serves so far only statistical and comparative international purposes.

Source: Hofmann, 2006

4. Flexibility to suit the context

QA agencies should also address the issue of flexibility in the appreciation of quality in both self-assessment and the review framework. The fitness-for-purpose approach is one way of introducing flexibility to take into account specific missions relating to local circumstances. Basically, the agency must ask itself whether it can use the same set of standards and criteria for different types of institutions and different types of programmes.

Flexible approaches to self-assessment

The QA agency may initially develop a general framework for self-assessment of the institutions or programmes. As the methodology develops, however, it must consider fine-tuning its approaches. One of the issues it might consider is awareness of 'institutional diversity'. It must also make self-assessment more relevant and useful to institutions. In any system of higher education, institutions have varying characteristics. For example, they may be research-intensive, teaching-oriented, young, old, specialized and/or multi-faculty. Whether the same set of guidelines, criteria and expectations for self-assessment are adequate is an issue in these systems.. Some agencies provide different sets of guidelines and manuals to help different categories of institutions. In some cases, innovative approaches have been tried to introduce flexibility.

In the USA, where accreditation has a long history, there are many examples of flexible approaches to self-assessment. This is partly in response to the growing diversity of institutions. It also partly relates to complaints from institutions about the burden of repeated accreditation visits. Some regional accrediting agencies offer different options for conducting a self-study (self-assessment). For example, the Middle States Commission on Higher Education (MSCHE) has four major models for self-study: the comprehensive model; the comprehensive model with special focus; the selected topics model; and the alternate self-study model. The New England Association is also flexible in its approach to self-study. *Box 17* describes how two models of the MSCHE show flexibility in the self-assessment model and its usefulness to HEIs.

Box 17. Flexibility in self-assessment: USA

The Selected Topics Model: This model involves more concentrated attention to certain selected areas, units, or aspects of the institution (such as curricular review). Compared to the comprehensive model, the selected topics model is more narrowly focused but the selected topics should encompass the entire institution, to the extent possible, although giving less in-depth coverage to the comprehensive categories outside the selected topics.

The Alternate Self-study Model: This option is available only for accredited HEIs. Accredited institutions may propose to have their own accreditation reaffirmed through the alternate model they may discuss with the MSCHE. Except for institutions that are undergoing self-study for initial accreditation or those that are seeking to have their accreditation reaffirmed for the first time, any institution may request approval to use an alternate approach to self-study. Research universities often are best served by devising a self-study approach which addresses a specific theme that is institutional in nature but focused on a current issue. Another approach to the alternate model may be related to the specialized nature of the institution – such as colleges of art or music; seminaries; or other institutions that include specialized programs.

Source: El-Khawas, 2001.

Some regional accrediting agencies have introduced projects to lead to accreditation being continued. These may be seen as variations of flexibility in the approach to self-study. However, they would require more concerted effort and serious commitment to the project. The AQIP discussed in *Module 3* is an example of this. With the AQIP, an institution has the opportunity to demonstrate that it meets the Higher Learning Commission's accreditation standards and expectations. It can do so through sequences of events which naturally align with ongoing activities that characterize organizations striving to improve their performance.

Flexibility in the definition of standards and the self-assessment exercise

Perhaps the most common and effective way of being flexible is the use of qualitative descriptions of standards. Many standards require institutions to provide evidence that they have *sufficient* resources for doing something. Or, they may require institutions to provide *adequate* facilities, develop a *significant* level of research, or use *appropriate* teaching methodologies. It is then the responsibility of the institution to show that what they have is sufficient, adequate, significant, and/or appropriate to carry out their work well. This helps institutions really think about what they are actually doing. In particular, it forces them to consider whether the resources they have, or the way in which they do their work, is really what they need.

Of course, in order for this approach to be effective, institutions must provide relevant quantitative and qualitative supporting information. This will enable them to demonstrate, to the satisfaction of the external review team and of the agency, that what they are doing is right (see *Box 18*).

Box 18. Flexibility in the definition of standards

The CNAP (Chile) uses qualitative standards to assess programmes. Programmes are expected to provide quantitative data and qualitative evidence (including opinions by faculty members, students, graduates and employers) about the fulfillment of given expectations, such as the following:

Human resources

The programme must prove that it is adequately staffed regarding its academic personnel —in terms of the number, dedication and qualifications— so as to perform the entire range of functions defined in its purposes. The unit must have clear and established criteria for selecting, hiring, providing further training and evaluating its academic and administrative staff.

This formulation is followed by more detailed specifications, including a description of what is meant by adequate qualifications.

Source: Lemaître, 2005.

What is adequate for a law programme, in terms of the number of faculty members or percentage hired on a full-time basis, may be totally inadequate for an architecture programme or a dentistry programme. On the other hand, what is sufficient for a teaching institution may be quite insufficient for a research institution.

Flexibility in the assessment framework

When institutions of different types fall under the purview of an agency, the quality debate often raises this question: 'How can the same set of standards apply to all institutions or programmes?' Some agencies rely on peer assessment to take note of institutional diversity. Some have successfully addressed this issue by developing differential frameworks. *Box 19* provides an example of the criteria for assessment having different weights depending on the type of institution.

Box 19. Flexibility to suit the institutional context: NAAC

India has a diverse and complex system of higher education where institutions differ in their governance, funding pattern, freedom they have to innovate in curriculum, locality, target group they serve, mission and vision and the like. While it is not possible to evolve a different framework for each type of institution, the major differences have been taken care of by considering three major classifications – university and university-level institutions, autonomous colleges, and affiliated/constituent colleges. The NAAC's methodology takes care of the differences among these categories at two levels – differential frame of reference and differential criterion weightage. The differential framework is explained in the manual and, for each category of institutions, the NAAC has developed a separate manual with guidelines.

Taking cognisance of the difference in the goal and functioning of the institutions, different criteria have been allotted differential weightages as shown below:

Criteria	University	Affiliated / Constituent college	Autonomous college
Curricular aspects	15	10	15
Teaching-learning and evaluation	25	40	30
Research, consultancy and extension	15	05	10
Infrastructure and learning resources	15	15	15
Student progression and support	10	10	10
Organization and management	10	10	10
Healthy practices	10	10	10

As can be seen, the weightage differs among the different types of institutions for the first three criteria. In view of the limited freedom an affiliated college has in curriculum design, the weightage is only 50 whereas for teaching-learning, which is fully under the control of institution, it is 450. Similarly, since many affiliated colleges are undergraduate colleges without a strong research component, as a means to initiate the research efforts, weightage of 100 has been allotted for the research, consultancy and extension dimension of affiliated colleges. However, for autonomous colleges, in view of the research orientation they are expected to promote under the autonomous status, the weightage for the same criterion has been raised to 150.

While the example cited above gives different weightages depending on the type of institution, the case of the NBA given in *Box 14* is an example of differential weightages to suit the type of programme irrespective of the type of institution. To cite another example, the NCA of Colombia uses weightages to take into account whether an institution is research intensive or not.

Source: Stella, 2002, and NAAC Manual for Assessment and Accreditation for Universities, 2007.

Role of peers in contextualizing the assessment

Each entity has a unique characteristic. Indeed, the agency cannot possibly cater to all the differences by developing differential frameworks. But agencies consider this an important issue to which the reviewers are sensitized or oriented. Training programmes and orientations usually discuss contextualizing the assessment. Furthermore, agencies facing the issue of 'institutional diversity' and 'contextualization' constitute review teams carefully. They do so by choosing reviewers who will bring relevant experience and expertise to the team. This helps the team to understand the context without compromising the quality assurance framework and agency's consistency of approach. If reviewers do not differentiate between 'understanding the context' and 'excuses for non-performance', the credibility of the agency and objectivity of the assessment will be damaged. QA agencies must have appropriate training programmes and safeguards in place if they wish to introduce flexibility through peer assessment.

The discussions above considered the various approaches to quality assurance. Each method has its advantages and disadvantages, depending on where it is used, how it is implemented and for what purposes. It is essential to carefully analyze the various factors in order to make an appropriate choice. The discussions and case studies illustrated above may be useful to broaden the understanding of the various options available. But no one approach will offer a perfect solution to the problems of your country. Indeed, any strategy must be aware of the context. However, when the quality assurance strategy is being developed, the experiences of other countries are always useful. The discussions in this module should be viewed with this understanding.

Activity 4

1. Browse the Internet and look at the different approaches followed by quality assurance agencies to assess quality standards.

2. What type of combination of approaches would be suitable in your country?

3. Reflect on the flexibility that would be required for quality assuring institutions/programmes in your country.

4. Analyze the safeguards agencies establish when they rely more on professional judgment and reflect on the safeguards you need in your country.

Lessons learnt

Lesson 1: Understandings of quality depend on the context. Indeed, there is no one way of defining quality. However, depending on the purpose of quality assurance, the agency must establish a suitable definition for the term 'quality'.

Quality assurance agencies vary greatly in their understanding of quality. This is mostly due to the context in which they operate and their mandate. For an agency that regulates higher education providers and keeps watch on questionable providers, adherence to externally-set standards becomes 'quality'. In a well-regulated system with institutional autonomy, the quality assurance agency may have a different understanding of quality. As quality is a complex and relative concept that is different for different stakeholders, it is difficult to have a tight definition of it. The more one defines quality, the less space is left for innovation and creativity. This is not necessary in mature systems where institutional autonomy has the potential to enhance quality by bringing innovation and creativity. However, concerns about accountability cannot be underestimated. It is necessary to have fair and credible ways of measuring it. Thus, defining quality for quality assurance requires a broader understanding of the national context and the mandate of the QA agency.

How quality will be understood in a specific context must also be explicitly stated. If it is not, implicit assumptions begin to operate. These can bring out a number of contradictory elements. This could jeopardize even the best-meaning efforts at self-assessment, external assessment or quality assurance.

Lesson 2: Defining basic terms such as indicators, standards and benchmarks in quality assurance discussions is necessary. This is the case even though quality assurance agencies use the terms interchangeably. Once the definitions are settled, it is also necessary to ensure consistent usage of the terms.

Quality assurance agencies develop their procedures for quality assurance starting from the notion of 'quality'. In this process, they use a variety of terms such as 'statistics', 'indicator', 'criterion', 'standard' and 'benchmark'. The agencies use these terms loosely. Indeed, 'indicators', 'performance indicators' and 'indicators of quality' are used interchangeably, as are 'criteria', 'standards' and 'benchmarks'. The same term is used by different bodies to denote different understandings and measures. However, the following definitions may be broadly acceptable in the quality assurance context:

Statistics – statistical data or data collected in a systematic way

Indicator – Data or statistic that indicates or signals something

Performance indicator – Data that signals some aspect of performance

Criteria – Aspects or elements against which a judgment is made

Standards – Specification of aspects or elements or principles to which one should conform or by which quality is judged.

Benchmark – A point of reference to make comparisons

Lesson 3: In some systems, whether something is of quality depends on its conformity to externally-derived standards. There are also systems where the goals and objectives of an institution are the starting point to understanding the quality of the institution. Some systems combine the two. This makes it necessary for a programme or institutions to conform to external standards. At the same time, they can do this on their own terms, invoking their own principles and priorities.

When compliance to norms, accountability, and adherence to rules and regulations become predominant, institutions must demonstrate their quality against a set of pre-determined standards. These standards may be quantitative or qualitative. In most programme accreditation policies in professional areas of study, standards relate to good institutional procedures and practices with a practical perspective. These agencies interpret quality in terms of how effectively new entrants to the profession are prepared for their responsibilities. In recent years, this has resulted in many professional bodies paying attention to competency-based standards to understand quality.

It may, however, also be argued that accountability is important for virtually all agencies, although there may be differences in view as to whom agencies should be accountable (government, the higher education community and/or the public at large).

Contrary to this perspective, the 'fitness–for-purpose' understanding of quality starts from the institution's purposes. Adopting the fitness-for-purpose or standards-based approach will determine the broader approach followed by the quality assurance agency. For example, the audit is more naturally based on fitness-for-purpose. Accreditation, on the other hand, is standards-based. Fitness for purpose is suitable in systems where other mechanisms ensure that pre-determined or threshold-level standards are met by the institutions or programmes. It is also effective in systems with good self-regulation mechanisms, where institutional diversity is promoted (as against conformity to standards) and where institutions of higher education are granted a high level of autonomy.

There are also criticisms of the fitness-for-purpose approach. These are based on the assumption that it undermines the 'fitness of purpose'. However, one can argue that it is difficult to separate the two approaches (FFP and FOP). Practically speaking, it is not possible to have an absolute 'fitness-for-purpose' understanding of quality. Some amount of 'what is acceptable and appropriate' to be considered as quality can be found in all understandings of quality. There are certain non-negotiable national development requirements within which HEIs must determine their mission. This takes care of the appropriateness of purposes, even if the quality assurance agency chooses 'fitness for purpose'. Many agencies use a combination of the fitness-for-purpose and fitness-of-purpose approaches.

Lesson 4: Quality may mean reaching at least a threshold level in the case of some agencies. In others, it might require standards of high quality (or good practice). In most systems, different complementing mechanisms ensure both minimum requirements and high standards.

Some quality assurance agencies aim to ensure that only the minimum requirements are fulfilled for a particular status to be granted. Such approaches are generally meant for compliance purposes. The outcome has implications for approvals and sanctions. Within the context of diversification and privatization, most developing countries are confronted with many low-level providers. Yet there is no system for dealing with low-quality providers. In these cases, minimum standards are the priority. This approach has been called 'quality

control'. Contrary to this approach, there may be other initiatives within the same country that emphasize 'improving institutions'. These initiatives therefore may not follow the regulatory approach. In these cases, quality assurance agencies set standards that focus more on the fitness-for-purpose model and require institutions to develop a strong self–regulation ability. They therefore value the capacity of an institution to identify its strengths and weaknesses, and to develop realistic and verifiable improvement plans. A few agencies have also set standards of high quality, rather than just fulfillment of minimum requirements. In general, most systems have a complementary approach in which some mechanisms may focus on minimum requirements (monitored by regulatory bodies), while others ensure constant improvement.

Lesson 5: The areas of quality assessment are broadly the same in most quality assurance agencies. However, the focus, scope and depth of assessment of those aspects might vary.

The areas or aspects considered by quality assurance agencies have a lot in common. Indeed, there is agreement on the areas that are key to assessing quality. This is true even among agencies that differ in terms of the country context in which they operate and the unit of quality assurance. These key areas include aspects such as: academic programmes; students; academic staff; internal quality control; infrastructure; research; outreach environment; organization; and management. When an institution is being accredited, curricular aspects may be more concerned with the overall policies and practices of the institution. Accreditation of a programme, on the other hand, looks more closely into the quality of its curriculum. Similarly, institutional accreditation might also look at the quality of one or more programmes to seek evidence for the evaluations. However, the purpose is not to pass judgment on the quality of the curriculum of that programme. Rather, it aims to draw inferences about the overall curricular aspects of the institution. In other words, the areas of concern for quality assurance are the same for most purposes of quality assurance, but there are differences in terms of focus and scope.

Many systems are beginning to recognize that it is not enough to focus on inputs and processes. These are easier to measure and represent the bulk of the standards and criteria applied by most QA agencies. Yet there is also a need to focus on results and outcomes. This has led to some indicators being identified (progression, drop out and graduation rates, employment figures, graduate satisfaction, employer satisfaction). Some of these indicators are not always available and may need special surveys but they provide a much better view of the actual impact of a programme or institution on the society it serves.

Lesson 6: A critical element in quality assurance is the use of evaluative guidelines or frameworks against which the agency can make decisions. Agencies do this in many ways. Some develop standards and criteria. Others agree on a set of indicators, while yet others define benchmarks. Varying levels of reliance on quantification and professional judgment may be observed. Balancing quantification and peer assessment without compromising the objectivity of assessment is essential.

Well-developed systems with strong internal quality assurance mechanisms generally rely more on benchmarks they set for themselves. In those systems, moving towards higher levels of performance and peer assessment are central to the quality assurance framework. In emerging systems, there may be a mix of accountability concerns for basic

funding and self-improvement of HEIs. In these cases, quality assurance agencies use both quantitative indicators and peer review carefully. When there is an emphasis on consistency, or compliance or agreement on expected levels of performance, quality assurance agencies tend to specify minimum standards. They then use these as the frame of reference for quality assurance. This implies that institutions are required to provide specific quantitative data to support their judgments on how well they meet the agency's standards or criteria. On the other hand, some quality assurance agencies do not check compliance to standards. Nor do they provide explicit norms. This is because they believe that once the norms are made explicit they might become counterproductive to 'institutional diversity' and the 'fitness-for-purpose approach'. This does not mean that compliance to standards is not important. Rather, it indicates that there may be other mechanisms that ensure compliance. Once the threshold level is already ensured, the agency checks how well HEIs are performing in their own way to achieve their goals and objectives. Considering diversity is important here. Moreover, relying on quantitative assessment may not help. Not specifying standards does not mean that the quality assurance agency does not pay attention to them. Even those agencies that emphasize fitness for purpose give some indications as to what it means. They also provide information on how to tell whether an institution's actions actually fit its purpose.

Lesson 7: The quality assurance agency may initially develop a general framework for the self-assessment of institutions or programmes. However, as the methodology develops, it must consider fine-tuning its approaches. One of the issues it might consider is raising awareness of 'institutional diversity' and making self-assessment more relevant and useful to institutions.

Quality assurance agencies should also address the issue of flexibility in the appreciation of quality. This is necessary for both self-assessment and the review framework. The fitness-for-purpose approach is one way of introducing flexibility to take into account specific missions relating to local circumstances. Basically, it must consider whether it can use the same set of standards and criteria for different types of institutions and different types of programmes. In any higher education system, there are institutions with varying characteristics. Indeed, they may be research-intensive, teaching-oriented, young, old, specialized and/or multi-faculty. Whether the same set of guidelines, criteria and expectations for self-assessment are adequate is an issue in these systems. In general, agencies provide limited flexibility in planning and organizing self-assessment.

There are also examples where innovative approaches have introduced flexibility. This can be done through the flexible application of the same guidelines and criteria. In such cases, words such as 'adequate', 'appropriate' and 'sufficient' are used frequently. In addition, the institutions are asked to provide evidence that they fulfil these requirements. The reviewers then assess the validity and reliability of the institution's claims. The following steps are essential to ensure that the context is taken into account: train reviewers to take care of contextualization, but without compromising the objectivity of assessment; select appropriate reviewers who understand the contextual consideration without moving away from the quality assurance framework; and establish appropriate safeguards.

References and further reading

Australian Universities Quality Agency (AUQA). 2008. *Audit manual*. Available at: www.auqa.edu.au.

Arcelo, A.A. 2003. *In pursuit of continuing quality in higher education through accreditation: The Philippine experience*. Paris: IIEP-UNESCO.

Bottrill, K.V.; Borden, V.M.H. 1994. *Performance indicators: history, definitions, and methods*. New Direction for Institutional Research.

CICA, 2008. The UFE candidates' competency map: Understanding the professional competencies evaluated on the UFE. Ontario: CICA.

CNAP. No date. *Handbook for self-assessment*. Available at: www.cnap.cl (in Spanish).

Commonwealth Higher Education Management Service *1998. Benchmarking in higher education: An international review*. London: CHEMS. Available at: www.chems.org

El-Khawas, E. 2001. *Accreditation in the United States: Origins, developments and future prospects*. Paris: IIEP-UNESCO.

Davis, D. 1996. *The real world of performance indicators: A review of their use in selected countries*. London: CHEMS.

Green, D. 1994. *What is quality in higher education?* Buckingham: SRHE; Open University Press.

Harvey L.; Green D. 1993. "Defining quality". In: *Assessment and evaluation in higher education*, *18*(1).

Higher Education Quality Committee. 2007. Institutional Audits Manual. Available at: www.che.ac.za

Hofmann, S. 2006. "Mapping external quality assurance in Central and Eastern Europe". A comparative survey by the Central and Eastern European Network of Quality Assurance in Higher Education. Occasional Paper 8. Helsinki: ENQA. Available at: www.enqa.net/pubs.lasso

Kozma, T. 2003. *Accreditation in the higher education system in Hungary: A case study for international comparison.* Paris: IIEP-UNESCO.

Lemaître, M.J. 2005. "Between privatization and state control: Chile's experience of regulating a widely privatized system through quality assurance". Paper presented at the IIEP Policy Forum on Accreditation and the Global Higher Education Market, Paris, France, 13-14 June, 2005.

Liston, C. 1999. *Managing quality and standards*. Buckingham, UK: Open University Press.

McKinnon *et al*. 2000. *Benchmarking: A manual for Australian universities.* Canberra: Department of Education, Training and Youth Affairs.

National Assessment and Accreditation Council (NAAC). 2007. Manual for Assessment and Accreditation for Universities, Bangalore: India.

Naidoo, P.; Singh, M. 2005. "In the aftermath of liberalization: Designing a common framework for public and private providers to serve national development goals: South Africa". Paper presented at the IIEP Policy Forum on Accreditation and the Global Higher Education Market, Paris, France, 13-14 June 2005.

Oxford English Dictionary (OED). 2006. Oxford University Press. Available at: www.dictionary.oed.com/

Phelps, M. 2001. *Accreditation and the quality assurance system for higher education*. TA-3500-PHI: Education Sector Development Programme. Manila: Asian Development Bank; World Bank.

Pirsig, R.M.. 1974. *Zen and the art of motorcycle maintenance: An inquiry into values*. New York: William Morrow.

Revelo Revelo, J.; Augusto Hernandez, C. 2003. *The national accreditation system in Columbia: Experiences from the National Council of Accreditation (CNA)*. Paris: IIEP-UNESCO.

Stella, A. 2002. *External quality assurance in Indian higher education: Case study on the National Assessment and Accreditation Council (NAAC)*. Paris: IIEP-UNESCO.

Stella, A. 2004. *Quality assurance mechanisms in higher education in the Asia-Pacific.* Desk study overview commissioned by the Higher Education Division of UNESCO, Paris.

The University of South Pacific website. 2004. The USP Quality Strategy. Enhancement and excellence through a strategic quality framework. USP: Suva. Available at: www.quality.usp.ac.fj/fileadmin/files/academic/pdo/Quality.pdf

Woodhouse, D. 2006. "Quality = Fitness for Purpose (FFP): Definition for all seasons". Paper presented at the APQN Conference on Cooperation in Quality Assurance, Shanghai, 1-4 March 2006.

UNESCO.2002. Report of the Experts Meeting on indicators of quality and facilitating academic mobility through quality assurance agencies, UNESCO-Bangkok and National Assessment and Accreditation Council, India.

Web resources

All India Council for Technical Education (AICTE), India: www.aicte.ernet.in

Australian Universities Quality Agency (AUQA), Australia: www.auqa.edu.au

Canadian Institute of Chartered Accountants (CICA), Canada: www.cica.ca

Comisión Nacional de Acreditación (CNAP), Chile: www.cnap.cl

Commission of Higher Education Institutions of the New England Association of Schools and Colleges, USA: www.cihe.neasc.org/

Commonwealth Higher Education Management Service (CHEMS): www.chems.org

Council on Higher Education (CHE), South Africa: www.che.ac.za.

Council on Higher Education Accreditation (CHEA), USA: www.chea.org

Higher Education Funding Council of England (HEFCE), UK: www.hefce.ac.uk

International Network for Quality Assurance Agencies in Higher Education (INQAAHE): www.inqaahe.nl

Middle States Commission on Higher Education, USA: www.msche.org,

National Assessment and Accreditation Council (NAAC), India: www.naacindia.org.

National Board of Accreditation (NBA), India: www.nba-aicte.ernet.in

Quality Assurance Agency (QAA), UK: www.qaa.ac.uk

Romanian Agency for Quality Assurance in Higher Education (ARACIS): www.aracis.ro

University of South Pacific (USP), Fiji: www.quality.usp.ac.fj

The modules on External quality assurance: options for higher education managers in CIS and South-East European countries

Quality assurance has become a topical issue on the higher education policy agenda. More and more countries are questioning their existing structures and are introducing new mechanisms and structures for external quality assurance. They seek to ensure minimum educational standards across diversified higher education systems and to provide a lever for continuous quality improvement.

The present material was developed by UNESCO's International Institute for Educational Planning (IIEP). It targets decision-makers and managers in government departments such as ministries of education, buffer organizations of higher education and quality assurance agencies whose task it is to design or develop the national framework for quality assurance. These modules should provide support for their decisions on external quality assurance systems, while discussing options that have been tried out successfully in a variety of countries.

The modules are based on the outcomes of two IIEP case study research projects, one on "methodological and organizational options in accreditation systems" and another on "regulation and quality assurance of cross-border providers of higher education".

Accessible to all, the modules are designed to be used in various learning situations, from independent study to face-to-face training. They can be accessed on the IIEP web site www.iiep.unesco.org, and will be revised as needed. Users are encouraged to send their comments and suggestions.

About the authors and contributors

The materials were prepared jointly by Michaela Martin and Antony Stella. Michaela Martin is Programme Specialist at the IIEP and in charge of the IIEP training and research programme on external quality assurance. Antony Stella is currently Director of Audit at the Australian Quality Assurance Agency.