

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/44840328>

Quality assurance and the role of accreditation: an overview

Article · January 2007

CITATIONS

19

READS

281

2 authors, including:



Michaela Martin

United Nations Educational, Scientific and Cultural Organization

48 PUBLICATIONS 247 CITATIONS

SEE PROFILE

Abstract

The paper starts by identifying the increasingly diverse range of users, providers and other stakeholders in higher education, which has led to concern for quality for the protection of the users. We then discuss the evolution of the concept of quality and define it in its various forms. We focus on fitness of purpose, fitness for purpose and standard-based quality, and justify concern for quality assurance. We discuss three quality assurance mechanisms: quality audit, quality assessment and accreditation. We then identify the purposes of accreditation: quality control, accountability, transparency, academic mobility and quality enhancement. Different types of accreditation for institutions and programmes are then identified and described, with seven broad categories and four sub-categories of coverage. Examples of good practices are provided in each category. The paper then describes the accreditation process, including general and specific criteria, means of verifying that institutions meet the criteria using quantitative and qualitative data, the decision-making process, the outcome report and follow-up actions. The management and affiliation of accreditation systems is then discussed, including the role of the state and accountability measures. Finally, we identify eleven issues at stake. The paper ends with some general strategies for effective accreditation at the national, agency and institutional levels.

INTRODUCTION: THE CONTEXT

The twenty-first century has begun with an explosion in the number of higher education students. According to UNESCO, enrolment has increased approximately from 72 million in 1999 to 133 million in 2004. Excluding North America and Western Europe, enrolment in the rest of the world more than doubled in these five years, with an increase from 41.1 million to 99.1 million. China alone increased its share from 6.4 million in 1999 to 19.4 million in 2004,¹ giving it the largest higher education enrolment in the world at more than 23 million in 2005. This massive expansion is taking place for at least two reasons: an increase in

social demand for higher education and an increase in the economic need for more highly educated human resources. We discuss these reasons below.

SOCIAL DEMAND FOR HIGHER EDUCATION: A MORE DIVERSIFIED CLIENTELE

The increase in social demand for higher education is a result of at least five factors:

1. Every country and consequently every citizen wants to become a member of the emerging knowledge society.
2. Higher education helps people get better jobs.
3. The democratization of societies and the availability of open distance learning, e-learning, part-time education and special needs education are attracting more students who would not otherwise be there.
4. In most industrialized countries, an increasing number of senior citizens are looking for higher education for its own sake (higher education for culture).
5. The 'Education for All' programme adopted by the UNESCO member states is also increasing social demand for higher education through expansion at lower levels.

The structure of the social demand for higher education has also changed among the student population, which requires different types of higher education institutions. The student population now consists of the following six categories:

1. Conventional successful completers of secondary education from the relevant age group.
2. Mature learners, who are often enrolled part-time in programmes related to an occupation or for pleasure (working people, housewives, retired citizens and so on).
3. Students who have already obtained a higher education qualification and are looking for highly specialized professional opportunities at an advanced level.
4. Students who wish to diversify their occupational activity (in areas such as computer

1.1

QUALITY ASSURANCE AND THE ROLE OF ACCREDITATION: AN OVERVIEW

Bikas C. Sanyal and Michaela Martin

science and management) in order to move into professional sectors. These students seek fairly general courses in such disciplines.

5. Students who would like to make themselves available for the global labour market and pursue education abroad (the number of such students is expected to quadruple by 2025).
6. Students who would like to alternate between education and work.

INCREASE IN THE ECONOMIC NEED FOR SKILLS REQUIRING HIGHER EDUCATION: THE NEED FOR A DIVERSIFIED HIGHER EDUCATION SYSTEM

Traditionally, for sustainable development, the economy needed higher education to provide:

1. Exploratory skills to explore natural and physical resources.
2. Exploitation skills to convert these resources into consumable goods and services.
3. Management skills to manage the exploration, production and distribution of goods and services.
4. Negotiation skills to establish fair work rules, a reward system and internal and external terms of trade.
5. Conservation skills to sustain development for future generations.
6. Moral and ethical skills.

The recent phenomenon of globalization has increased the importance of negotiation skills, while the dominance of the market-friendly consumerist society has increased the importance of conservation skills to protect the environment from future pollution, global warming and resource scarcity. The importance of moral and ethical skills to protect society from corruption has increased. The phenomenon of globalization has changed the structure of economic demand for higher education, as follows.

Information and innovation are two of the main bases of globalization. A new world information economy has emerged from the combination of developments in information and communication technology (ICT) and organizational changes at the global level, leading to a new international division of labour. This division is based less on the location of natural resources or cheap and abundant labour and more on the creation of new knowledge through ICT and its application to a wide range of human activities in ever-broadening space and time. As economies are integrated into the new information economy, industrialization increasingly depends on the development of more sophisticated ICT. The labour now required is highly skilled and highly educated in technology. The nature of jobs has also shifted towards more

high-technology assembly jobs in some areas and more customized jobs in others. As innovation becomes crucial to sustainable development, R&D personnel become crucial to economic development. Economic units today need to become learning organizations that continuously update their skill needs by calling for different types of higher education.

The following section discusses how higher education systems have responded to the new structures of social and economic demand for higher education.

THE DIVERSIFICATION OF HIGHER EDUCATION PROVIDERS AND THE RATIONALE FOR QUALITY ASSURANCE

While traditional institutions are still playing a dominant role in providing higher education to meet the aforementioned needs, they are also changing their roles as follows:

- They are becoming partners in regional and international consortia.
- They have engaged in different forms of transnational education.
- They have joined virtual university initiatives.
- They are building partnerships with industries.

New types of institutions, with an increased private sector role, have also emerged:

- Privatization of non-instructional activities and enrolment of self-financed 'private' students at public institutions.
- Establishment of private institutions with government support.
- Establishment of public institutions with private support.
- Self-financed private institutions of various types.

Moreover, institutions of higher education have found themselves obliged to build strategic alliances with each other and with related agencies in order to face challenges posed by emerging for-profit commercial higher education providers, which has given rise to the following types of institutions:²

- Corporate universities (both public and private).
- Media and publishing businesses that have established partnerships with traditional institutions of higher education.
- Educational services and brokers that bring together a group of partners to deliver new kinds of programmes to new types of students.

In addition, higher education companies – for-profit higher education providers – have become increasingly active around the world.

In short, a complex variety of higher education is

being delivered at the beginning of the twenty-first century. Some is driven by consumer demand, but some is driven by the newly emerging supply of producers. Some are commercial entities with little social commitment. What about their quality? How do students know that what they are getting is worth the time and money they have invested? How can governments check whether the money they provide is being used for a valuable purpose and whether these institutions are working for the public interest? How do employers in business and industry know that what they see on certificates is what they get in terms of qualification? How can institutions of higher education be sure that their self-presentation can be taken at face value? How do they know whether they are keeping their edge in terms of quality in the increasingly competitive world of higher education?

This becomes more important when a large number of these institutions work online or are located offshore and are vulnerable to corruption. To meet its social commitment, the higher education sector must protect the interest of its consumers (that is, students, employers in government and industry, society at large and also the institutions themselves). This phenomenon has generated growing concern worldwide regarding the quality of higher education inputs, processes and outcomes. New quality assurance systems are now emerging. The next section clarifies what we mean by quality.

THE DEFINITION OF QUALITY: FITNESS OF PURPOSE, FITNESS FOR PURPOSE AND STANDARD-BASED QUALITY

As mentioned above, the stakeholders in higher education are many and varied. Accordingly, the concept of quality also varies.³ We have identified ten definitions of quality: providing excellence, being exceptional, providing value for money, conforming to specifications, getting things right the first time, meeting customers' needs, having zero defects, providing added value, exhibiting fitness of purpose, and exhibiting fitness for purpose.⁴ The concept of quality has also evolved over time.⁵ According to Gola,⁶ the definition of quality, as applied to higher education by the International Organization for Standardization (ISO), could be 'specifying worthwhile learning goals and enabling students to achieve them'.

Specifying worthwhile learning goals would involve articulating academic standards to meet: (i) society's expectations; (ii) students' aspirations; (iii) the demands of the government, business and industry; and (iv) the requirements of professional institutions.

Enabling students to achieve these goals would

require good course design, an effective teaching/learning strategy, competent teachers and an environment that enables learning.

The quality of higher education is determined by the relevance (fitness of purpose) of its mission and objectives for the stakeholder(s) and the extent to which the institution/programme/course fulfils the mission and objectives (fitness for purpose). The quality of an institution/programme/course is also judged by the extent to which it satisfies the minimum standard set for inputs, processes and outcomes, which is called the standard-based approach to quality.

As indicated above, the objectives of the stakeholders vary, so quality has many interpretations with political implications, as described in a separate paper.⁷ As a basic requirement, the articulation of standards must find a common denominator if it is to consider all stakeholders and leave ample room for institutions to fulfil their specific objectives and priorities. In addition to ensuring the minimum quality standard, the standard-based approach may also indicate standards of good practice that express desirable situations towards which institutions should strive, thus making it a vehicle for quality improvement.⁸ This takes us to quality assurance mechanisms, which are discussed below.

QUALITY ASSURANCE MECHANISMS: QUALITY AUDIT, QUALITY ASSESSMENT AND ACCREDITATION

There are two types of quality assurance: internal and external. Internal quality assurance ensures that an institution or programme has policies and mechanisms in place to make sure that it is meeting its own objectives and standards. External quality assurance is performed by an organization external to the institution. The organization assesses the operation of the institution or its programmes in order to determine whether it meets the agreed-upon or predetermined standards, as mentioned above.

Quality assurance involves a variety of practices, among which three mechanisms can be distinguished. Quality assurance agencies often use more than one mechanism and apply them to different units of analysis (institutions, programmes and courses). The mechanisms are discussed below.

QUALITY AUDIT

Quality audits examine whether an institution or one of its sub-units has a system of quality assurance procedures and determines its adequacy. Audits are performed by individuals not involved in the subjects being examined.

Quality audits are the first step in the quality assurance procedure.⁹ Norway, Australia, New Zealand and South Africa use this approach.¹⁰

QUALITY ASSESSMENT

Quality assessment involves evaluating (reviewing, measuring and judging) the quality of higher education processes, practices, programmes and services using appropriate techniques, mechanisms and activities. The process of quality assessment takes into account the context (international, national, regional and institutional), the methods used (self-assessment, external peer review, reporting), the levels being assessed (system, institution, programme), the areas of assessment (academic, managerial, output and outcome) and the stakeholders' objectives and priorities.

Quality assessment leads to quality assurance, or lack thereof, for the stakeholders. Indeed, this process establishes confidence among stakeholders (although accreditation does this to a greater degree, because it provides a quality label, which quality assessment does not do).¹¹ France provides an example of this approach.

ACCREDITATION FOR QUALITY ASSURANCE: DEFINITION AND JUSTIFICATION

Accreditation is the most widely used method of external quality assurance. The historical and societal roots of accreditation are discussed in another paper of this volume.¹² It is the outcome of a process by which a governmental, parastatal or private body (accreditation agency) evaluates the quality of a higher education institution as a whole, or a specific higher education programme/course, in order to formally recognize it as having met certain predetermined criteria or standards and award a quality label.

Accreditation ensures a specific level of quality according to the institution's mission, the objectives of the programme(s) and the expectations of different stakeholders, including students and employers.¹³ The process usually results in the award of a recognition status (yes/no, a score on a multipoint scale, a combination of letter grade and score, an operating licence, or conditional deferred recognition) for a limited period.

The following factors have made the adoption of accreditation desirable for quality assurance today:

1. As higher education providers become increasingly diversified, the demand for certified education increases. Increasingly, students and their families, but also the labour market, seek to differentiate between higher education providers. A quality label can make this easier.

2. Threats to quality may come from different sources, including fraudulent providers. A degree awarded by an institution must come with a guarantee. Accreditation is one way of providing that guarantee.¹⁴
3. The growing number of higher education providers and suppliers of fraudulent documents also boosts the demand for an organization that can accredit institutions in order to maintain the required standards that qualify graduates for admission to higher or more specialized institutions or for professional practice in the employment market.
4. Institutions of higher education are confronted with an ever more competitive world. They have an interest in attracting the best students and transforming their qualifications into a convertible currency (including through credit transfer mechanisms, in order to enhance student mobility). They also have the potential to become learning organizations with ever-improving quality.

PURPOSES OF ACCREDITATION

Accreditation will ensure: (i) quality control (minimum standards) in higher education; (ii) accountability and transparency; (iii) quality enhancement; and (iv) the facilitation of student mobility. We discuss these issues below.

Quality control assures that higher education is in line with minimum quality requirements in terms of inputs, processes and outcomes. The massive expansion of higher education and the diversification of providers has raised questions regarding quality. These minimum requirements urgently need to be checked in order to protect the interest of stakeholders and safeguard national development objectives.

Accreditation is commissioned by a suitable and recognized agency and encouraged by stakeholders to ensure 'value for the money', that is, accountability through evidence of results. The accreditation process provides transparency in the functioning of the higher education system.

The identification of weaknesses through the accreditation process allows the system to adopt corrective measures and improve quality. The competitive spirit resulting from accreditation also helps enhance quality.

Finally, in the globalized economy, accreditation is important for the mutual recognition of credentials, which allows institutional, regional, national and international mobility among students, depending upon the scope of the accreditation.

However, as the interpretation of quality varies based on context, the purposes of accreditation for quality assurance are also varied. The next section explores the differ-

ent types of accreditation as they exist today, in order to facilitate the exploration of new types suitable for the changing contexts.

TYPES OF ACCREDITATION

We have identified seven major types of accreditation. One of them, accreditation by geographical coverage, has been subdivided into four categories. This issue is discussed below.

VOLUNTARY VERSUS COMPULSORY ACCREDITATION

One of the most important distinctions in accreditation is whether it is compulsory or voluntary. A compulsory accreditation system requires all institutions or programmes to periodically undergo accreditation. Such systems are generally concerned with verifying minimum standards, as in Hungary, Austria, the Netherlands and elsewhere.¹⁵ They are often established for licensing purposes or for types of programmes where the stakeholders (especially the government) have a special interest in quality assurance. Teacher training and programmes that prepare students for professions that are vital to national development and security – such as medicine, law, accounting and some types of engineering – usually require compulsory accreditation in certain countries, such as Argentina and Colombia, as discussed below.

However, most accreditation systems are voluntary. Institutions apply for accreditation for the reasons mentioned above. India, the United States, Nigeria and Colombia are examples of countries with voluntary systems. In Finland, accreditation is compulsory for new polytechnics and voluntary for non-degree professional courses.¹⁶

FITNESS-FOR-PURPOSE VERSUS STANDARD-BASED APPROACH

The fitness-for-purpose approach checks whether the higher education institution or programme is achieving its stated purpose (mission) and verifies whether the purpose itself is acceptable (fitness of purpose). As mentioned above, institutions and programmes cannot all be judged against the same standards since they serve specific clienteles and groups in a diversified system of higher education. For instance, a traditional university located in a major urban environment that heavily emphasizes excellence in research may not necessarily be judged against the same set of standards as a teaching-only institution that aims to train non-traditional student groups. The fitness-for-purpose approach is considered more appropriate for quality improvement, as evidenced in Norway, the United States and elsewhere.

However, some argue that in accreditation systems all higher education institutions must meet certain standards (minimum norms) and be held accountable. This takes us to the standard-based approach.

In the standard-based approach, very detailed standards are set for the various aspects of quality of an institution or programme. All institutions or programmes are expected to meet these standards. The evidence gathered is assessed in terms of overall patterns rather than each specific standard. This means that an institution/programme could be deficient in one area but have offsetting strengths in other areas and qualify for accreditation. The standard-based approach ensures that minimum standards are being met, which guarantees conformance with standards and accountability. In the standard-based approach, accreditation systems also ensure high-level or good-practice standards, especially in situations where institutions or programmes have relatively equal levels of quality and/or institutions enjoy a high degree of autonomy. Accreditation for high quality is based on a number of selected factors related to the input, process and output/outcome of institutions and programmes. In Colombia, which has such a system of higher quality, each factor is divided into a number of characteristics. Each characteristic includes indicators that measure the degree of compliance with respect to a benchmark. India has a system of this type. Characteristics may be assigned weights, which may vary depending on the type of institution being accredited (for instance, university or non-university).^{17, 18}

ACCREDITATION BY GEOGRAPHICAL COVERAGE

Quality assurance and accreditation cannot be discussed without taking into account the national context of the higher education system. In the rationale for accreditation, we indicated that accreditation must be contextualized. The next sections discuss accreditation systems at different levels of geographical coverage: sub-national, national, regional and international.

ACCREDITATION AT THE SUB-NATIONAL LEVEL

In a country like the United States, which has a varied system of higher education, accreditation has a secular tradition and is an extensive enterprise. As of April 2005, the country had eight sub-national ‘accrediting commissions’, each covering a specific cluster of US states.¹⁹

Although their objectives, procedures and criteria vary in some details, their core objectives are the same: (i) to provide accountability and evidence of student learning outcomes; (ii) to inform the public about the accredited status and quality of institutions and programmes; (iii) to assure the quality of distance learning; and (iv) to facili-

tate the mobility of staff and students between different parts of the country.²⁰

Most sub-national accreditation systems evaluate entire institutions and have detailed standards that include both general responsibilities that all institutions must meet and criteria by which to judge whether predetermined standards are being met. These agencies try to maintain a single set of standards and rules while also acknowledging important differences in institutional type and mission. Some sub-national accreditation agencies in the United States have created separate sub-units (commissions) for different types of institutions, which apply their own standards and monitoring policies.

Under this approach, the accrediting agency examines whether an institution has a clear and coherently stated mission, whether it is accomplishing that mission and whether it has the necessary resources to do so. Sub-national accreditation systems have some flexibility in observing strengths and weaknesses and can apply discretionary judgment in weighing the evidence so that a balanced judgment can be reached.

ACCREDITATION AT THE NATIONAL LEVEL

In most contexts, national accreditation agencies operate throughout a country and review entire institutions.^{21, 22} Based on contextual considerations, when national agencies accredit institutions, they may adjust the assessment process, the focus of the assessment, the link of the assessment outcome to decision-making, the policy related to its role in assessment decisions, the unit of assessment, the assessment outcome, the policy on the disclosure of the assessment outcome, and the period of validity. These factors all have underlying rationales that are combinations of the national context and the objectives for which the accreditation mechanism was established.²³ These agencies may be voluntary and private, as in Germany, Japan, the Philippines and the United States.

In the United States, 19 institutional and 62 programmatic organizations are currently recognized by the private Council for Higher Education Accreditation (CHEA) and/or the US Department of Education (USDE). The USDE-recognized organizations function as 'gatekeepers' to federal funds. There are also seven 'private career' accrediting commissions, which mainly review 'for-profit' institutions, and four 'faith-based' accrediting commissions, which review religiously affiliated institutions. In addition to the eight sub-national commissions, the CHEA recognizes four faith-based, two private career and 46 programmatic accreditation agencies.²⁴

In the Philippines, there are four different accreditation agencies for four different types of institutions. Each has its own accreditation criteria, processes and instruments,

and its own accreditors. However, the scope of the review, based on the areas covered by the standards, is almost identical for all of them.²⁵ They do not derive their authority from the state, but the government does rely on accreditation to establish eligibility for various forms of funding.

Agencies may be state-controlled, as in most of Central and Eastern Europe. In Hungary, the accreditation bodies give their expert opinion and the government decides whether to award accreditation. In many countries, such as Argentina, Finland and India, the government has established autonomous or semi-autonomous agencies that are charged by law to accredit programmes and institutions.²⁶ Due to the complexity of higher education systems and policies, national accreditation agencies lack uniformity, although there is a trend towards convergence, as discussed below.

ACCREDITATION AT THE REGIONAL LEVEL

Quality assurance in general, and accreditation in particular, has become a global phenomenon and an intense area of international cooperation. In particular, networks of quality assurance agencies have been established in several regions of the world.

French-speaking Africa has a long-standing mechanism for regional cooperation and validation of academic decisions. Regional validation of accreditation is practised in the countries of the African and Malagasy Council for Higher Education (CAMES), which consists of 17 French-speaking African countries as of 2006. Selected programmes are accredited to facilitate inter-country mobility of students and academic staff.²⁷

In Europe, accreditation for quality assurance is tightly linked to the Bologna Process. To promote transparency, compatibility and comparability among the diverse higher education systems in Europe, the ministers of education of 29 countries signed the Bologna Declaration in June 1999. This document called for the establishment of a European Credit Transfer System (ECTS), which would facilitate mobility and quality assurance, thereby making the recognition of credentials simpler. The declaration encouraged a delicate balance between national autonomy in quality assurance and an integrated European approach. The result was the establishment of 'Standards and Guidelines for Quality Assurance in the European Higher Education Area' (which now includes 40 states), published by the European Association for Quality Assurance in Higher Education (ENQA). In light of the diversity of the systems, the monolithic approach was abandoned. The report provides general principles rather than specific requirements for accreditation. The general standards were expected to find general resonance at the national level in most signatory states. The standards and

guidelines focus on what should be done rather than how it should be done. They were set for internal and external quality assurance as well as for external quality assurance agencies specifically responsible for accreditation.

In December 2005, it was decided that a European register of ENQA-approved quality assurance agencies would be created in order to comply with the requirements of the Standards and Guidelines for Quality Assurance.²⁸

ACCREDITATION AT THE INTERNATIONAL LEVEL

Several developments in higher education have made an international approach to accreditation desirable. These developments include the increasing mobility of students and staff, the joint development of programmes from different countries, the need for international recognition of degrees, the rapid expansion of export and cross-border higher education with branch campuses, offshore institutions and franchising arrangements, multinational businesses active in higher education, and the development of distance education, virtual universities and e-learning across national, regional and continental boundaries.

The International Organization for Standardization (ISO), with headquarters in Geneva, is a worldwide federation of national standards bodies responsible for creating standards for each country. ISO initially started accrediting enterprises but now covers educational institutions as well. The ISO 9000 standard was created to ensure that the higher education provided by a country is globally recognized and accepted. ISO claims that the benefits of implementing the ISO 9000 are as follows:

- It enhances the institution's image with an internationally accepted standard.
- It demonstrates that the institution has a documented quality management system.
- It provides the foundation for a total quality management programme and reduces stakeholder complaints.
- It increases quality awareness, motivation and cooperation.
- It focuses training and professional development.
- It improves international communication.
- It ensures that the institution/programme is recognized globally; it satisfies clientele and society and provides graduates with employment opportunities; it sets a baseline for continuous improvement; it improves productivity and efficiency.
- It reduces time-consuming audits by regulators.
- It prepares the institution for future market requirements.²⁹

ISO 9000 is commonly used for the international accreditation of specific programmes. This process is being successfully implemented at an institution of higher education in the Philippines.³⁰ The latest version, ISO

14000, is being implemented at a private institution in India (see Quality assurance and accreditation in the Manipal Academy of Higher Education, this volume).

International accreditation is also offered by national accreditation agencies, for instance the CHEA in the United States. According to the latest available database, 31 countries/territories outside of the United States have accredited their higher education institutions through the CHEA. These countries include Australia, Canada, Germany, New Zealand, Singapore and the United Kingdom.³¹

Other bodies offer worldwide accreditation services in the areas of business studies and engineering. The European Foundation for Management Development, located in Brussels, operates globally under its European Quality Improvement System (EQUIS) scheme, which has covered 90 management institutions in 28 countries as of February 2006.³² ABET Inc., established in 1932 and located in Maryland, USA, offers accreditation services internationally in the areas of engineering and technology.³³

The International Network for Quality Assurance Agencies in Higher Education (INQAAHE), with its present secretariat in Ireland, was set up to collect and disseminate information on the current and developing theory and practice of accreditation for quality assurance in higher education at the international level.³⁴

ACCREDITATION BY CONTROL OF HIGHER EDUCATION

Should accreditation be applied equally to the public and private sectors? Public institutions are mostly financed and controlled by the state. In some countries, accreditation systems have only been set up for the private sector. Oman provides such an example. However, other countries are now questioning whether public institutions should also be accountable. The call for 'value for the money' raises the issue of appropriate mechanisms for accreditation. In addition to its eight sub-national accrediting commissions, the United States also has seven private career accrediting commissions and four faith-based commissions, which review religiously affiliated institutions.

Many countries are becoming aware that both private and public institutions should contribute to meeting national development objectives, and accreditation is perceived as equally important for both. With the introduction of the General Agreement on Trade in Services (GATS), the requirements for both public and private providers need to be similar (except for government funding requirements). Thus, accreditation should be required for both public and private providers.

ACCREDITATION BY TYPE OF HIGHER EDUCATION (UNIVERSITY AND NON-UNIVERSITY INSTITUTIONS OF HIGHER EDUCATION)

In some countries, accreditation is practised at both universities and non-university tertiary institutions. Since their objectives are different – one is academic and the other is often oriented to employment or applied training – the accreditation procedures and criteria may be different, and thus different accreditation agencies are required. Specialized accreditation agencies are also established throughout a given country to review certain single-purpose institutions and/or programmes. These organizations work closely with the government or established bodies on matters related to the licensing of individuals in different fields and professions. In the United States, there were 32 specialized and professional accreditation agencies in 2005. Most of them were accredited by both the CHEA and the USDE. In India, the All India Council for Technical Education, an autonomous body set up by the government, accredits technical and professional education programmes.

ACCREDITATION BY UNIT OF ANALYSIS

Accreditation may cover a whole institution and its programmes or a selected set of programmes. The areas of focus are different. Institutional accreditation focuses on assessing the following domains: mission, governance, academic programmes, teaching staff, learning resources, students and related services, physical facilities, and financial resources. Institutional accreditation looks at the institution as a system of which academic programmes are a part. It is therefore relatively general and only modestly considers differences among the different institutional sub-units. It checks whether the mission is appropriate, the resources are sufficient to accomplish the mission, and the standards of academic quality are achieved and likely to be achieved in the future. Institutional accreditation is preferred in cases where quality varies between institutions and managerial effectiveness is a concern.

Programmatic accreditation focuses on individual education programmes that prepare students for a specific profession, as in Germany and Italy.³⁵ This is necessary because each education programme may have its own admission requirements, teaching/learning strategy, evaluation methods and requirements from national qualification frameworks. Programmatic accreditation ensures that programmes meet expectations for entry into specific professions. It also ensures decisions to improve programmes of deficient quality at the basic unit, that is, the departmental level, as seen in Norway.³⁶

However, for institutional accreditation to be effective,

it cannot ignore academic programmes, just as programmatic accreditation cannot ignore whether the broader institutional environment is meeting its objectives. Both are complementary. Some countries use both institutional and programmatic accreditation in a single process.

In programmatic accreditation systems, compulsory accreditation may be required for certain state-regulated programmes because of their national importance. This is the case in Argentina and Colombia, for instance. Institutions that offer state-regulated courses in Argentina must be accredited by the national accreditation agency (CONEAU), whose decision is binding.³⁷ Non-state-regulated courses need not have CONEAU accreditation. Such courses may be taught with the ministry's authorization and proof of meeting certain minimum requirements, which are much less demanding than those for state-regulated programmes.³⁸

ACCREDITATION FOR DISTANCE-LEARNING HIGHER EDUCATION

Distance learning has gained an increasing share of higher education around the world and its quality has been questioned.³⁹ Higher education of this type crosses national borders and is often run by commercial enterprises. Thus, a special type of accreditation is required to protect the interests of the students and the countries. In her testimony to the US Congress on 1 October 2002, Judith Eaton foresaw this problem and suggested special criteria for the accreditation of this type of higher education. The procedures would verify the credibility of providers through critical analysis of content, method of delivery, student assessment and the learning outcome (employment). She mentioned 17 accreditation agencies that oversee the accreditation of distance-learning institutions and programmes in her country.⁴⁰

ACCREDITATION PROCESS^{41, 42}

The term 'accreditation' is widely used to mean different things and types of operation. While every accreditation system has its own specifics, collaboration networks of quality assurance agencies such as the INQAAHE have developed codes of good practice. This section discusses the INQAAHE's process of accrediting an institution, which can also be applied to programmes with minor adaptations.

According to the INQAAHE, the accreditation process starts with the establishment of an accreditation agency with nine principles of operation: (i) focus on the customer; (ii) good leadership; (iii) stakeholders' involvement; (iv) focus on indicators of inputs, processes and

outcomes; (v) evidence-based decision-making; (vi) recognizing continuous improvement; (vii) allowing institutional autonomy in academic matters; (viii) optimizing benefits to stakeholders; and (ix) ensuring follow-up improvement actions.

The INQAAHE also stipulates that the mission of a quality assurance agency is to ensure quality, continuous development, and the efficient performance of higher education institutions and their systems and programmes in accordance with their mission statements and goals so that they may gain the confidence of their relevant stakeholders. This mission is achieved through recognized evaluation mechanisms within an independent, neutral and transparent framework.

The strategic goals of a quality assurance agency are: (i) raising stakeholders' confidence in the outcomes of higher education; (ii) supporting the accreditation process for quality assurance in accordance with the internal requirements of the institutions and their programmes; (iii) helping institutions of higher education establish internal quality assurance systems through self-study; (iv) enhancing capacity building in quality assurance for accreditation; (v) facilitating the development and application of relevant reference standards (benchmarks) for academic programmes; (vi) integrating a sustainable process that combines institutions' quality assurance systems and external review and accreditation processes; (vii) supporting continuing quality improvement; and (viii) cooperating with other accreditation agencies.

There is a transitional period in which institutions are given support to develop quality assurance systems and improve academic standards while the agency is established and developed.

GENERAL ACCREDITATION CRITERIA

Institutions are expected to be generally regarded among the academic community and the other stakeholders as well-founded, cohesive, self-critical and worthy organizations that safeguard their mission, academic standards and commitment to the range of stakeholder interests. Some voluntary accreditation systems have established the precondition that higher education institutions undergo an eligibility phase. Upon successful completion of this phase, they are eligible for accreditation. The following are some general eligibility criteria for an institution applying for accreditation: (i) established institutions of higher education should already be offering the educational programmes to be accredited, and new institutions should be recognized by the relevant authorities and should already have been offering educational programmes for a specified period of time; (ii) institutions should be able to demonstrate that they have considered

all available strategic options for academic development and that they are committed to continuing improvement in their academic activities; (iii) institutions should be able to demonstrate that they meet the requirements of a quality audit, that is, they have established systems for internal review and for reporting academic activities, including the means to self-evaluate and commit to effective improvement plans (*self-study*), and they are prepared to be externally evaluated by relevant experts in the area (*peer review*).

SPECIFIC ACCREDITATION CRITERIA

As an integral part of quality assessment, institutions/programmes should meet the following accreditation criteria:⁴³

- *Mission*: Institutions should be able to demonstrate the existence of a mission statement with strategic objectives and a mechanism for reviewing and updating it.
- *Governance and administration*: The organizational structure and academic leadership should ensure that policies, systems and practices are effective, be responsive to changing priorities and emerging needs, and be able to transform the institution into a learning organization.
- *Human resources*: Detailed information should be available on academic and non-academic staff members. The institution should be able to demonstrate that they are capable of meeting the institution's objectives and explain staff development policies and practices for meeting emerging challenges.
- *Educational programmes*: Institutions should clearly define the quality of their educational programmes. They should also ensure that the bodies responsible for designing and reviewing their programmes have clearly defined roles. Their monitoring procedures should ensure that students are achieving learning outcomes in accordance with benchmark standards. Institutions should provide detailed statistics (for example number of educational programmes, indicators for admission to the different programmes, number of students registered, number of graduates of each programme, and so on) that identify cases in which they performed better or worse than expected and the factors responsible, and suggest appropriate measures. Institutions should provide details on the number of credit hours or courses per programme, the percentages of courses that make up the different components of each programme's academic structure, the availability of special programmes for outstanding and socially challenged groups, and the curriculum's adaptability to emerging economic, social and cul-

tural needs. Institutions should identify merits and shortcomings and suggest appropriate measures.

- *Academic standards:* These criteria ensure: (i) the achievement of academic standards in comparison with reference standards (benchmarks); (ii) the effectiveness of student assessment procedures; (iii) acceptable rates of retention, progression and achievement among students; (iv) the relevance of the programmes, including in terms of employment; and (v) external evaluation of student performance and proposals for remedial measures, if necessary.
- *Quality of learning opportunities:* Institutions should ensure that their facilities and resources are adequate (i) to achieve the intended learning outcomes and enable students to participate in all aspects of academic social life; (ii) to enable socially challenged students to pursue quality higher education; and (iii) to provide adequate facilities for high achievers. They should also provide (i) adequate teaching/learning strategies for different programmes based on benchmarks, and (ii) ensure suitable academic and pastoral support and adequate learning resources (physical facilities including lecture, seminar and tutorial rooms, libraries, laboratories, workshops and computers). They should demonstrate evidence of a suitable feedback and control mechanism used by students and other stakeholders.
- *Quality management and enhancement:* Institutions should demonstrate evidence of a quality enhancement vision and clear strategies for achieving it through a suitable monitoring and control system. They should also demonstrate (i) the extent of their engagement with relevant stakeholders in order to gain their confidence (ii) the effectiveness of the internal-review quality assurance system and (iii) the existence of any policies or procedures for assessing overall student performance. The institution should also have a feasible action plan for quality management and enhancement.
- *Research and other scholastic activities:* Institutions should have well-defined policies for creating an environment that enables academic staff to carry out research and a database of research conducted and published and research patents obtained. Each department should have an effective research plan with suitable implementation, evaluation and feedback mechanisms. They should collect information on the participation of teaching staff in research activity, research income from different sources, and ways and means of enhancing the research skills of the teaching staff. They should also have proposals for a future

action plan with clearly stated responsibilities and a time frame.

- *Community involvement:* Institutions should have clear policies for community services and mechanisms for measuring the real needs of the community and related stakeholders. They should provide information on the number of community service units within the institution, the number and types of community services at the national and international levels, for example training programmes, workshops and seminars, conferences, technical consultation and services, and other related activities. They should also have mechanisms for evaluating the quality of services provided and increasing their quality and quantity. Finally, they should have a proposal for an action plan with clearly stated responsibilities and a time frame.
- *Consolidated development plans:* Institutions should integrate the action plans for each criterion listed above, prioritize them, determine their cost and clearly define their outcomes, responsibilities and time frames.

Once the criteria have been established, the agency examines how the various institutions and programmes are meeting them. This is discussed below.

VERIFICATION THAT CRITERIA ARE BEING MET: USING QUANTITATIVE AND QUALITATIVE DATA FOR ACCREDITATION

The verification that standards or quality criteria are being met depends on both quantitative and qualitative data. Quantitative data allows the performance of different departments or institutions to be compared. It refers to the quantifiable inputs, processes, outputs and outcomes of the system. But many criteria, including the clarity of policies and the quality of the teaching/learning strategy, cannot be judged by quantity alone. They require qualitative analysis and judgment by peers using an appropriate set of references based on interviews and opinion surveys. The verification that accreditation criteria are being met therefore uses a combination of quantitative and qualitative data and human judgment. However, a quantitative framework is sometimes provided for qualitative judgments. Quantitative categories are applied to qualitative aspects and scores are attached to them. This provides transparency and a degree of 'perceived objectivity'.⁴⁴ (See also Steps to setting up an accreditation agency, which gives a list of indicators for accreditation, this volume.)

The two methods most frequently used to verify whether an institution or programme meets the above accreditation criteria are a self-assessment report (or self-

study) and a peer review involving a site visit. We discuss these methods below.

Self-assessment is the central element of most accreditation procedures. The institution carries out three steps:

1. Provision of basic data and information on the criteria mentioned above, Specific accreditation criteria.
2. Analysis and evaluation of the existing situation in accordance with the criteria.
3. Preparation of a report on the degree to which the criteria were actually met.

Indeed, self-assessment involves a SWOT analysis (strengths, weaknesses, opportunities, threats) by which the institution determines its strengths, weaknesses, opportunities and threats with regard to the stipulated areas of assessment and the related quality criteria.

The self-assessment report informs an onsite peer-review process conducted by a group of experts external to the institution. The agency must organize a team of experts that share the language, expertise and codes of the discipline or profession of the programme or institution being assessed (that is, they are 'peers'). The team of experts may include both members of the profession and student representatives. Peer review is commonly an essential element of the accreditation process. The accreditation agency recruits the members and head of the review team based on specific predetermined criteria and sometimes in consultation with the institution with respect to the expertise and size of the team and the proposed period for site visits. The agency also informs the members of their tasks and the code of conduct. In addition to academic experts relevant to the main activities of the institution, the team may include members who practise the discipline professionally and members with regional and international experience. A facilitator should represent the institution during the site visit.

Special Contribution 1.2, Steps to setting up an accreditation agency, shows the details of the peer review tasks during the site visit and the steps to set up an accreditation agency.

A review report is prepared based on the results of the site visit. This report evaluates key strengths and discusses any weaknesses and/or issues to be addressed. Some accreditation mechanisms require reviewers to express their judgment in terms of indicator scores against a predetermined maximum or benchmark for each indicator. The team sends the report to the institution for their comments and revises if necessary. The final version is submitted to the agency, which reaches a decision and reports the outcome. This stage is discussed below.

DECISION-MAKING AND REPORTING THE OUTCOME

Based on the review team's report, the agency makes the final decision or recommends that a public authority (the ministry of education, for example) make a certain decision. All accreditation mechanisms publicly disclose some aspect of the outcome. In some cases, only the final outcome is disclosed; in others, both outcome and report are disclosed.

The decision may take the form of approval/denial, conditional accreditation or a grade. In the last case, as in India, the agency uses the reviewers' scores to calculate the institution's grade on a scale.⁴⁵ If the institution receives a score below the predetermined minimum, it is not accredited.

Once the decision has been taken and reported, the accreditation agency performs certain follow-up tasks.

FOLLOW-UP ACTIONS

If the accreditation is valid for a limited period of time, the focus and date of the next re-accreditation review are decided. The institution is also given recommendations for improvement.

If the accreditation is conditional, a follow-up inspection is carried out on an agreed-upon date in order to check that the conditions have been met and a decision is reached.

If the accreditation is postponed, the agency informs the institution of the corrective measures required and prepares a plan for the next inspection in consultation with the institution.

If the institution is denied accreditation, the institution is informed of the appeals process and the necessary action is taken.

THE MANAGEMENT OF THE ACCREDITATION SYSTEM

The governance and organization of the accreditation system is the subject of a separate paper.⁴⁶ The management of accreditation agencies with respect to their affiliation and accountability is discussed below.

AFFILIATION OF THE ACCREDITATION AGENCY: THE ROLE OF THE STATE

In the current setup, accreditation agencies for quality assurance initially started with private, voluntary and institutional initiatives, as in the United States in the industrialized world and the Philippines in the developing world. Although they worked closely with the government and served the national interest, they remained independent of the government. With time the situation changed. Today, most accreditation systems are initiated by the gov-

ernment and serve governmental quality control functions. For professional disciplines, the government and institutions may not have any role in accreditation; in this case, the most important stakeholders are often professional organizations. However, accreditation procedures should always remain objective and be conducted with autonomy if not independence, without interference from the government, academic institutions or professional councils. The different types of accreditation described above call for different types of affiliation mechanisms, which can be classified in four groups:

1. The agency may be a government agency – a ministry unit, for example, as seen in Hungary or the USDE – with responsibility for part of the country’s higher education sector.⁴⁷
2. The agency may be fully independent of the government in terms of its establishment and to a large extent in its functioning, as with the Federation of Accrediting Agencies of the Philippines (FAAP), which coordinates four private accreditation agencies, and the CHEA in the United States, which covers eight sub-national accreditation agencies.
3. The agency may be a buffer body or be established under a local buffer organization. The government may have a role in its initiation to serve governmental functions, but it is governed independently (India, Egypt).
4. Professional associations can be established without the government or institutions of higher education playing any role.

Several points should be noted here. First, the quality of higher education is a national concern and government must play a role in the way it is assured by any agency. The degree of the role may differ depending on the discipline and type of accreditation.

Second, higher education is now crossing national borders. In most cases, government has the organizational and logistical capability to assure quality through accreditation. It should do so, especially in developing countries.

Third, because higher education is included in the GATS of the World Trade Organization, the government must negotiate the terms of free movement of higher education. This does not mean, however, that the agency must belong to the government. The CHEA, a private agency in the USA, is recognized internationally for its accreditation services. Although it is not a government agency, it receives support from the government and some government funding decisions depend upon it.

When the purpose of accreditation is an academic or professional requirement, the government’s role should

be merely regulatory, and institutions and agencies should play the dominant role.

ACCOUNTABILITY OF THE ACCREDITATION AGENCY

If an accreditation agency is to be effectively managed, it must demonstrate accountability to its stakeholders. The ENQA recommends the following accountability procedures:⁴⁸

- A published policy for the quality assurance of the agency should be made easily available to the stakeholders.
- The agency should demonstrate that: (i) its activities and results reflect its quality assurance mission and goals; (ii) it enforces a ‘no-conflict-of-interest’ mechanism in the work of its external reviewers; (iii) if it subcontracts any part of its accreditation work, especially the production of materials, it has mechanisms to ensure quality; (iv) it has internal quality assurance procedures, including an internal feedback mechanism (that is, the means to collect feedback from its own staff and governing board), an internal reflection mechanism (that is, the means to react to internal and external recommendations for improvement) and an external feedback mechanism (that is, the means to collect feedback from experts and the institutions it reviews for future development) in order to inform and underpin its own development and improvement.
- A mandatory periodic external review of the agency’s activities should be conducted by the appropriate authority.

This paper has given an overview of the role of accreditation in quality assurance of higher education with all of its emerging complexities. Obviously, no accreditation agency can be perfect in this complex sector. Below, we discuss some of the issues that the accreditation system faces.

ISSUES AT STAKE

- The first issue in accreditation is the definition and measurement of quality. Quality means different things to different stakeholders. It is difficult to reconcile all of them, so the definition of quality is in itself a political process.
- Regardless of the quality model adopted, there are many methodological problems involved in measuring quality. Many characteristics of quality are not measurable and must be assessed through proxy variables. Scores on ordinal scales are imprecise, and so are opinionated judgments. Under these circum-

stances, it may be unfair to link accreditation to financial rewards.

- Data on student learning outcomes is often unavailable. Employability statistics and information on the social usefulness of an education are difficult to collect and compare with intended learning outcomes. Similar problems are encountered with research, other scholastic activities and community involvement. Providing accurate information to stakeholders about the accredited status and quality of institutions and programmes is a serious methodological challenge.
- The self-assessment component of the accreditation process is liable to be biased and uncritical in a competitive world.
- The selection of ‘peers’ to act as external reviewers may be manipulated by the institutions to be accredited.
- Despite best efforts, accreditation procedures have so far been unable to control corruption in commercial higher education.⁴⁹ In the most effective accreditation system of the world, the inspector general of the USDE testified in May 2005 that 74 per cent of his fraud cases involved for-profit schools.⁵⁰ Accreditation services themselves may be conducted in a fraudulent fashion. In some countries, it is more cost-effective to ‘buy’ an accreditation decision than undergo a cumbersome and sometimes bureaucratic process.
- Developing countries face serious problems in setting up effective accreditation mechanisms because they lack capable human resources and adequate financial resources. Setting up an accreditation mechanism for cross-border higher education is almost impossible for poor developing countries, which mainly receive cross-border education, because the rich providers are shrewd negotiators.⁵¹
- Accreditation mechanisms (dominated by the local lobby of higher education institutions) may have a hidden agenda aimed at keeping new and sometimes capable institutions out of the mainstream.
- It is imperative to keep accreditation agencies autonomous of the government in order to maintain their credibility, but this has not always been easy. Governments often try to control agencies formally (by sitting on their governing bodies) or informally.
- Lee Harvey expressed serious reservations about accreditation when he stated: ‘Accreditation is neither neutral nor benign; it is not apolitical. Quite the contrary, the accreditation route is highly political and is fundamentally about a shift of power but a shift concealed behind a new public management ideology cloaked in consumerist demand and European conformity.’⁵² If the shift of power does not assure quality, then accreditation becomes a futile exercise.

- The accountability of accreditation agencies is another important issue at stake. ‘Some organizations that say they accredit are bogus themselves ... “Quid custodiet ipsos custodies” – who shall guard the guardians?’⁵³

STRATEGY CONCLUSIONS

We shall discuss this at the national level, the agency level and the institutional level.

NATIONAL ACCREDITATION STRATEGIES

- All governments should have a national accreditation policy.
- Governments should facilitate the establishment of accreditation mechanisms for quality assurance of their higher education systems in the context of: (i) massive expansion; (ii) globalization; (iii) the GATS; (iv) diversified higher education providers, contents and methods of delivery; and (v) portability of credits and credentials.
- Governments should share responsibility for accreditation with voluntary and private entities, but it should not interfere with academic matters while overseeing regulatory aspects (see above for the role of the state). Public and private institutions and onsite and online higher education should follow the same accreditation standards and focus on learning outcomes. The standards should be the same, but the criteria and methods of assessment may vary depending on the type of accreditation, as described above.
- Governments should establish a rigorous monitoring system and an effective public information mechanism for transnational providers with respect to their impact on national systems, credibility and usefulness in protecting the interest of the national academic community, especially students. In this respect, inter-departmental linkage within the government and with external accreditation agencies should be enforced. Governments should give due consideration to the guidelines prepared by UNESCO/OECD, the INQAAHE, and the European Association for Quality Assurance in Higher Education in order to safeguard national interests.
- With respect to transnational higher education, governments should ensure that the programmes exported by foreign providers are accredited in their own countries. They should use their missions in the providing country to verify the credibility of institutions and programmes.
- Governments should establish an umbrella agency to oversee the functioning of accreditation agencies.

STRATEGIES FOR ACCREDITATION AGENCIES

- Agencies should have explicit, clearly defined goals and objectives.
- They should have an established legal basis, receive recognition from competent public authorities and ensure adequate resources.
- They should maintain autonomous responsibility for their operation, conclusions and recommendations so that they are not influenced by any third party such as institutions of higher education, stakeholders or the government.
- Agencies should have clearly defined, transparent accountability procedures, as described above.
- Their design criteria should: (i) redefine the concept of 'institution' to include all kinds of providers; (ii) emphasize course and programme certification to facilitate portability of credits and credentials; (iii) incorporate transnational requirements; (iv) emphasize evidence of results; (v) allow the development of alternative accreditation reviews, for example electronic review and rapid-response review for rapidly emerging providers; and (vi) address maintaining quality assurance in a period of massive expansion.
- Agencies should redefine the criteria for assessing teaching staff to take into account their changing roles, for example preparation of Internet courseware, shared decision-making within and across institutions, employment across institutions.
- Agencies' design criteria should ensure the necessary personal contact between teaching staff and students in emerging electronic communities where ideas can be shared through real support centres and with real counsellors for virtual courses.
- The design criteria should include assessment of both affective and cognitive learning.⁵⁴
- Agencies should establish effective linkages with relevant government authorities and institutions.
- Agencies should have an effective public information policy for stakeholders.

STRATEGIES FOR INSTITUTIONS

- As competition increases among providers and accreditation becomes an increasingly popular means of quality assurance, institutions of higher education should develop a policy for accrediting themselves and their programmes.
- They should establish mechanisms for assessing their programmes and related activities in accordance with the criteria established by the agency, especially in terms of: (i) mission, goals and objectives; (ii) quantity and quality of educational programmes; (iii) academic standards; (iv) quality of

learning opportunities, including staff quality; (v) managerial effectiveness; (vi) quality enhancement; (vii) research and other scholarly activities; (viii) community involvement, including cooperation with industry; and (ix) future plans.

- They should fully cooperate with the accreditation agency by providing everything it needs for a transparent and fair evaluation of their activities for accreditation.
- They should develop an appropriate information system for internal use and for use by accreditors.
- They should have a public information policy to provide stakeholders (especially potential students) with correct and verifiable information.
- They should ensure adequate human and financial resources to satisfactorily prepare the self-assessment report for accreditation.
- When they are involved in twinning or franchising arrangements with transnational higher education institutions, they should critically examine the quality of the partner organization to make sure that the programmes meet the national accreditation criteria.

NOTES

- 1 UNESCO (2006) EFA Global Monitoring Report 2006: Literacy for Life, Table 9A, UNESCO, Paris; UNESCO Global Education Digest (2006), Table 8, UNESCO Institute for Statistics, Montreal, and Wang Libing: Accreditation of higher education in China, this volume.
- 2 Robin Middlehurst (2002) *The Developing World of Borderless Higher Education: Markets, Providers, Quality Assurance and Qualifications*. Paris, UNESCO.
- 3 Bikas C. Sanyal (1994) Excellence and evaluation in higher education: An international perspective, *Journal of Educational Planning and Administration*, 3(3), 1994.
- 4 IIEP (2006) Training Course on Organizational and Methodological Options in External Quality Assurance. Module 4.
- 5 Francisco Lopez-Segrera (2006) *Vision of the Concepts of Quality and Accreditation in the UNESCO World Conference of Higher Education* (Paris, 1998) and follow-up meetings, GUNI Secretariat, Barcelona.
- 6 M. M. Gola (2003) Premises to Accreditation: A Minimum Set of Accreditation Requirements, in: *Accreditation Models in Higher Education Experiences and Perspectives*, in: *ENQA Workshop Reports 3, European Network for Quality Assurance in Higher Education*, Helsinki. pp. 25–31.
- 7 Stamenka Uvalić-Trumbić (2006) The International Politics of Quality Assurance and Accreditation, this volume.
- 8 M. Martin and S. Antony (2006) *External Quality Assurance Systems and Accreditation in Higher Education*, IIEP-UNESCO, Paris (Mimeo).
- 9 J. S. Levy (2005) 'Quality Audit in Norway', paper presented in the IIEP Policy Forum, June 2005, Paris.
- 10 Mala Singh (2006) The Governance of Accreditation, this volume.

- 11 M. Levasseur (2005) 'Using evaluation for joint planning and creating more transparency: The case of France', paper presented at the IIEP Policy Forum, June, 2005. Paris.
- 12 Colin Brock (2006) *The Historical and Societal Roots of Regulation and Accreditation of Higher Education for Quality Assurance*, this volume.
- 13 National Quality Assurance and Accreditation Committee, NQAAC, (2004) Ministry of Higher Education, Egypt, Cairo.
- 14 G. Hernes (2005) Successful creature or endangered species? Introduction to the IIEP Policy Forum, June 2005 Paris.
- 15 T. Kozma (2003) *Accreditation in the Higher Education System in Hungary, a Case Study for International Comparison*, IIEP, Paris.
- 16 Kirsi Mustonen and Sirpa Moitus (2004) Accreditation Models in Higher Education in Finland: Experiences and Perspectives, in: *ENQA Workshop Reports 3*, Helsinki; Karl Dittrich, (2004) The Netherlands: Accreditation in the Netherlands, ENQA, *ibid.*
- 17 J. R. Revelo, C. A. Hernandez (2003) *The National Accreditation System in Colombia, Experiences from the National Council of Accreditation (CAN)*, Bogotá, Colombia.
- 18 A. Stella (2002) *External Quality Assurance in India, Case Study of the National Assessment and Accreditation Council (NAAC)*, IIEP, Paris.
- 19 CHEA, Council for Higher Education Accreditation (2005) Database of Institutions and Programmes, CHEA, Washington, and personal communication from Dr Judith Eaton, president of the CHEA, dated 5 May 2006.
- 20 E. El-Khawass (2001) *Accreditation in the United States, Origins, Developments and Future Prospects*, IIEP, Paris.
- 21 NQAAC, *ibid.*
- 22 Ministry of Higher Education, Oman (2004) *Requirements for Oman's System of Quality Assurance (ROSQA)*, Muscat.
- 23 A. Stella (2005) *Quality Assessment in Massive and Diverse Systems: The Indian Experience*, IIEP, Paris.
- 24 CHEA, *ibid.*, and personal communication from Dr Judith Eaton, president of the CHEA, dated 5 May 2006.
- 25 Phelps (2003) *In pursuit of continuing quality in higher education through accreditation: the Philippine experience*, IIEP, Paris.
- 26 Dirk Van Damme (2000) Accreditation in global higher education. The need for international information and cooperation. Outline of an IAUP approach, International Association of University Presidents (IAUP), Ghent University, Belgium.
- 27 CAMES (2006) 22ème session ordinaire du Conseil des Ministres, Ouagadougou, Burkina Faso, 2005.
- 28 European Association for Quality Assurance in Higher Education (ENQA) (2005), Helsinki, Finland.
- 29 N. Mariun: Assuring Quality in Engineering Education via Implementation of ISO 9000, Faculty of Engineering, University Putra Malaysia, Malaysia. <http://www.simplyquality.org/quality%20in%20engineering%20education.htm>
- 30 A. A. Arcelo (2003) *In Pursuit of Continuing Quality in Higher Education through Accreditation*. UNESCO-IIEP, Paris.
- 31 M. Martin (2006) *Making basic choices for external quality assurance systems*, IIEP, Paris.
- 32 European Foundation for Management Development (EFMD) (2006), Brussels.
- 33 ABET, Inc. (2006) Maryland, USA.
- 34 INQAAHE (2006) <http://www.inqaah.org>.
- 35 Hans-Uwe Erichsen (2004) Quality Assurance and Accreditation in Germany, in: *ENQA (2004) Workshop Report 3*, Helsinki; C. C. Buonauro and P. Di Nauta (2004) An Approach to Accreditation: The Path of the Italian Higher Education, in: ENQA (*ibid.*).
- 36 Tove Blytt Holmen (2004) Quality Assurance in Norwegian Higher Education, in: ENQA (*ibid.*).
- 37 E. Villanueva (2005) *Transnational Commercial Provision of Higher Education, the Case of Argentina*, IIEP, Paris.
- 38 M. Martin and A. Stella (2006) *External quality assurance systems and accreditation in higher education: What are the options?* UNESCO-IIEP, Paris.
- 39 *International Herald Tribune* (2006) Congress gives boost to online colleges, 2 March 2006, Paris.
- 40 Judith S. Eaton (2002) Testimony of Dr Judith S. Eaton 'Assuring Quality and Accountability in Postsecondary Education: Assessing the Role of Accreditation' on 1 October 2002, at the US House of Representatives, Washington DC.
- 41 National Quality Assurance and Accreditation Committee (2004) *The Quality Assurance and Accreditation Handbook for Higher Education in Egypt*, Giza, Egypt.
- 42 International Network for Quality Assurance Agencies in Higher Education (INQAAHE) (2005) *Guidelines of Good Practice*, INQAAHE Secretariat, Dublin, Ireland.
- 43 NQAAC, *ibid.*
- 44 M. Martin and A. Stella, *ibid.*
- 45 A. Stella (2002) *External Quality Assurance in Indian Higher Education*. Paris: IIEP-UNESCO.
- 46 Mala Singh (2006) *The Governance of Accreditation*, this volume.
- 47 CHEA (2005) *ibid.*
- 48 European Association for Quality Assurance in Higher Education (2005) *Standards and Guidelines for Quality Assurance in the European Higher Education Area*, Helsinki, Finland.
- 49 J. Hallak and M. Poisson (2006) Academic Fraud, Accreditation and Quality Assurance: Learning from the Past and Challenges for the Future, this volume.
- 50 *International Herald Tribune* (*ibid.*).
- 51 Jane Knight (2006) Cross-border Higher Education: Quality Issues and their Implications for Accreditation, this volume.
- 52 Lee Harvey (2004) The Power of Accreditation: Views of Academics, in: *Accreditation Models in Higher Education Experiences and Perspectives, ENQA Workshop Reports 3*, ENQA, Helsinki, Finland.
- 53 G. Hernes (2005), *ibid.*
- 54 J. Eaton (1998) 'Make It So': Life After Accreditation-As-We-Know-It, Annual Meeting of the North Central Association of Colleges and Schools, Commission on Institutions of Higher Education, 29 March 1998, Chicago.